NON-TECHNICAL SUMMARY (updated February 2018)

1. INTRODUCTION

This is an up-date of the Non-Technical Summary that accompanied the Halkshill and Blair Park Environmental Statement (2016). Changes are shown in red and which show further work on the project between September 2016 and February 2018 to reflect the results of the statutory consultation process and a range of other consultations throughout this period.

This NTS should be read in conjunction with the Environmental Statement (2016) and the FCS response to the statutory consultation.

This updated NTS deals with the residual significant issues identified at public consultation and which required further mitigation measures to ensure that any impacts are not assessed as significant. The residual significant impacts requiring further mitigation measures are:

- Landscape and visual impacts in relation to the Wild Land Area and the Local Landscape Character which included the Cauld Rocks;

- Public access and the impacts of planting along the Gogo Glen/Greeto Bridge Core Path area.

- Lack of sufficient information about the potential disruption to wetlands including peatland and Ground Water Dependant Terrestrial Ecosystems;

The Environmental Statement (2016) covered the potential impacts arising from a proposal to establish productive mixed woodland over a net area of circa 1400 ha on Halkshill and Blair Park Farms, North Ayrshire. The land has historically been used for extensive sheep grazing.

The overall objective of the Environmental Statement was to:

- Identify the main, or significant, environmental issues relating to the proposed woodland development.

- Identify the nature and scale of the environmental effects that are likely to result from

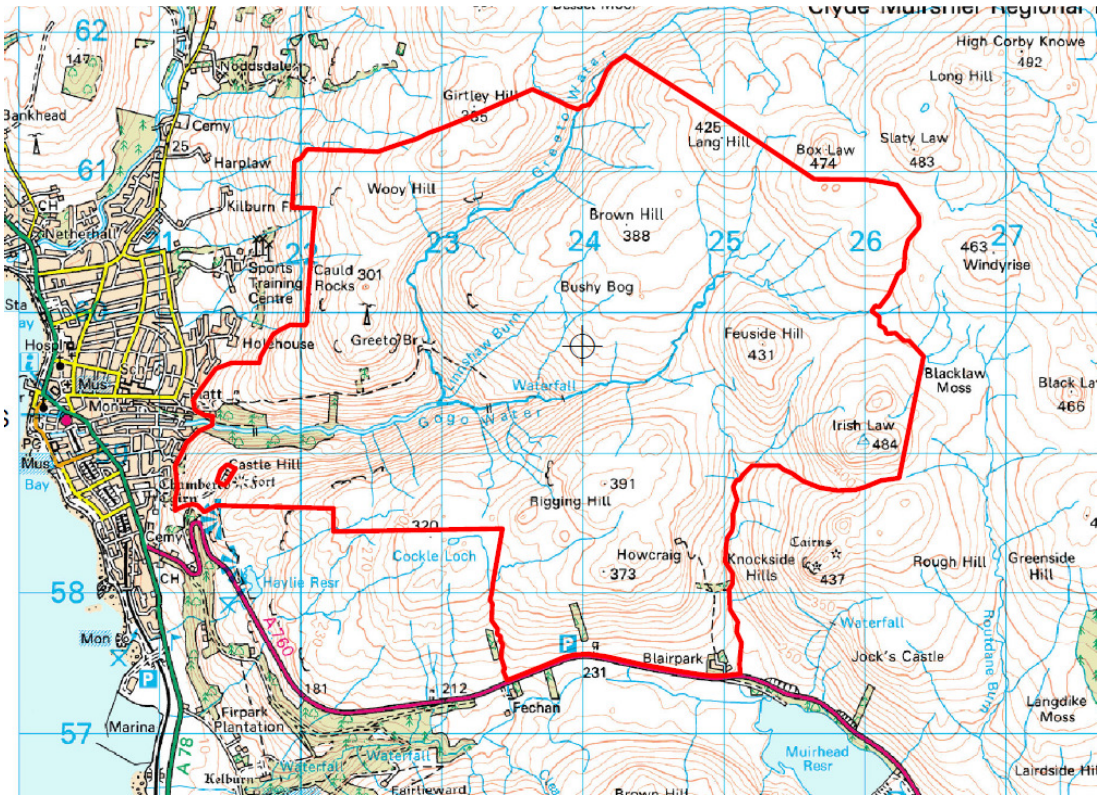
the establishment of mixed woodland.

- Identify areas where adverse impacts are minimised and positive impacts maximised.

Significant impacts likely to occur as a result of implementation of the woodland planting proposal, and the required mitigation, are summarised in Tables at the end of this document.

2. SITE CONTEXT

Halkshill and Blair Park are two large and adjacent upland livestock farms extending to 1,396.8 ha in total. Halkshill is located immediately to the east of Largs in North Ayrshire and extends to the east along the Greeto and Gogo Waters. Blair Park is located to the south of Halkshill and north of the A760 Largs to Kilbirnie Road, and extends northwards to the southern boundary of Halkshill.



Halkshill and Blair Park falls wholly within the Clyde Muirshiel Regional Park. This covers an upland area extending from Greenock in the north to Ardrossan in the south, an area of 281 square km and is the largest of Scotland's three Regional Parks. The focus of the Park is on maintaining and enhancing the natural heritage setting for the understanding and enjoyment of the countryside.

There are no statutory nature conservation sites on either property although the site does march along part of its north-eastern boundary with the Renfrewshire Heights SSSI and Special Protection Area (SPA) which qualifies under Article 4.1 of the Birds Directive by regularly supporting a breeding population of European importance of the Annex 1 species Hen Harrier (*Circus cyaneus*).

The land on which this proposed woodland is to be planted has been acquired by a new owner with the intention of afforesting the land, to sequester carbon and produce renewable raw material, as opposed to farming it - given the very difficult economic climate for upland sheep farming. In the *Ayrshire Landscape Assessment* (Scottish Natural Heritage Review No 111 1998) farming is described as *"at best, a marginal activity in these uplands".* Farming would require resources which are not justified in terms of current and likely future agricultural circumstances.

Both farms lie within an area that is defined, in agricultural terms, as land capable of use as rough grazings (Soil Survey of Scotland, Land Capability for Agriculture). Reflecting this limited agricultural capability, the site is composed of a range of upland vegetation types including extensive areas of blanket bog (491.8 ha), acid grassland (425.9 ha) and marshy grassland (382.8 ha). These habitats account for 93.1% of the site.

Other habitats include 29.7 ha of woodland, 14.6 ha of scrub, 35.8 ha of upland heath/acid grassland mosaic, 9.1 ha of bracken, 5.3 ha of neutral grassland and 0.07 ha of base-rich grassland. All of the habitats recorded on Halkshill and Blair Park are typical of an upland fringe setting and have been highly modified by long-term grazing and drainage, resulting in degradation of their semi-natural characteristics.

3. NATIONAL FOREST POLICY

Woodland expansion is a key objective of the Scottish Government to help meet strategic objectives, particularly in relation to counteracting climate change and to stimulate economic development.

The strategic vision for Scottish forestry is contained in the Scottish Forestry Strategy (2006) and the subsequent implementation plans e.g. the Scottish Government's Rationale for Woodland Expansion (2009). The Strategy has an aspiration to increase forest cover from 17.1% to around 25% of Scotland's land area by the second half of this century.

The Strategy identifies a number of woodland creation priorities for Scotland with those most relevant to Halkshill and Blair Park Farm being highlighted:

- **Helping to tackle greenhouse gas emissions.** (Carbon sequestration, timber and biomass production).
- **Restoring lost habitats and adapting to climate change.** (Forest habitat networks and new native woodlands).
- **Helping to manage ecosystem services**. (Sustainable flood management and protection of soil and water resources).
- **Underpinning a sustainable forest products industry.** (Consistent and reliable timber supply for timber processing and wood fuel investments).
- **Supporting rural development.** (Supporting rural businesses and farm diversification).
- **Providing community benefits.** (Provision of welcoming and well-managed woodlands in and around communities).
- **Enhancing urban areas and improving landscapes.**

According to figures published in The Scottish Government's Rationale for Woodland Expansion (2009), the Scottish forestry sector *"sustains 13,200 full-time equivalent jobs, plus around 17,900 full-time equivalent jobs in the tourism and recreation sectors attributable to woodland. Forestry currently makes up about 0.5% of the total gross value added for the Scottish economy, with a proportionally more significant contribution in rural areas".* As well as the £460 million gross value added (GVA) directly attributable to forestry, £209 million GVA of tourism and recreation is attributable to woodlands.

A recommendation of the Woodland Expansion Advisory Group (WEAG, 2012) is the creation of 100,000 ha (10,000 ha annually) of new woodland over the period 2012-22 "*created in ways that meet or exceed modern standards of good practice and deliver multiple benefits"*. The WEAG analysis shows that 46% of Scotland's land is largely unavailable for woodland creation (it is either unsuitable, already wooded or ruled out by policy considerations); and a further 20% is significantly constrained (in particular because of conservation designations). The remaining one third of Scotland's land has the most potential for woodland creation – much of this is farmland, in particular grazing land.

Woodland is a significant carbon sink with woodland creation offering a practical and readily achievable way to improve Scotland's greenhouse gas balance. Woods also provide a sustainable source of near carbon-neutral raw materials. The Scottish Forestry Strategy

(2006) states that *"forest management should contribute to climate change mitigation over the long-term through the net capture and storage of carbon in the forest ecosystem and in wood products".*

Creation of new timber producing forests over the next ten years would have a significant positive impact in sustaining timber production and providing long-term confidence for continued investment in the timber processing and wood fuel sector. This is particularly relevant to Ayrshire where there are a number of major timber processing facilities. However, *"current production forecasts indicate that, in less than 20 years, the region will experience a major drop-off in production – particularly from the National Forest Estate. This suggests that new planting of productive conifers will be required to maintain the local contribution to the sustainability of the region's primary and processing sectors"* (Ayrshire and Arran Forestry and Woodland Strategy*).*

4. THE FORESTRY PROPOSAL

The owner's objective is to establish a productive woodland, with the right species on the right soil, to maximise timber production and sequester carbon. Within the total area of some 1,396.8 ha, 501.5 (or 36%) is proposed for afforestation with 865.37 ha (62%) retained as open ground.

The primary aims of the scheme are:

- To establish multi-purpose mixed woodland on previously grazed hill land for wood and fuel production and to help underpin a sustainable forest products industry, as an alternative to upland sheep farming.

- To enhance the landscape and maintain and extend the existing areas of semi-natural woodland.

- To provide community benefits through new opportunities for responsible public access, recreation and interpretation of the cultural resource.

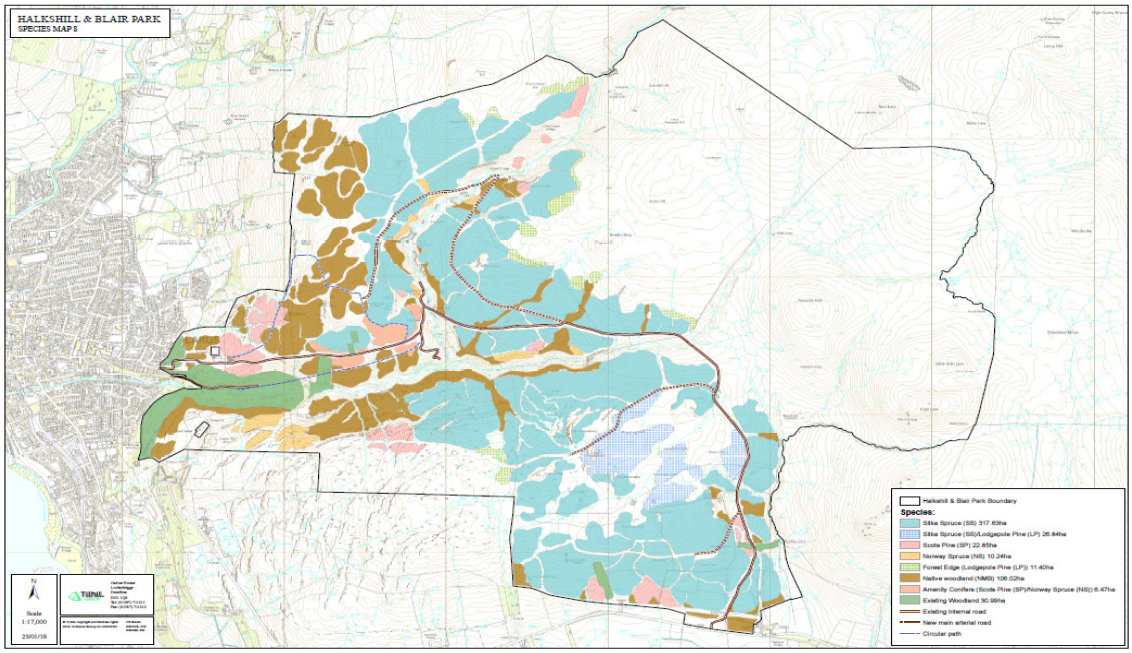
- To create a carbon sink and improve Scotland's greenhouse gas balance.

Of the total area of proposed afforestation, 354.7 ha is classed as productive in a commercial sense and 106 ha will be planted with native broadleaves, complementing the

31.0 ha of existing broadleaf woodland habitats. Broadleaves will be used to help develop a native woodland habitat network and a local amenity resource. The productive conifer woodland will be dominated by Sitka spruce (317.6 ha), silviculturally suited to the soils and exposure of the site. Norway spruce (10.24 ha) will be used as a secondary conifer. Other conifers include Lodgepole Pine as forest edge (11.40 ha) and Scots Pine (26.86 ha) for conservation and amenity purposes. Amenity conifers (at 6.6 ha) include Scots pine and Norway spruce and have been added to the planting proposal to address amenity issues around the Core Path.

Open ground within the proposed forest area has been planned to help safeguard areas of archaeological and ecological value, to protect water resources, to provide for internal and external landscape design and to accommodate deer management and public access.

The proposed woodland design (Design 8) is shown in the map below:



The Area Statement below is based on the total (gross) area of the proposal which is 1,396.72 ha. The woodland design submitted for consultation allows for 501.45 ha of productive and native woodland types plus 865.37 ha of unplanted ground. The managed open ground within the proposed forest has been designed to take account of issues relating to archaeology, landscape enhancement, ecology, hydrology and public access.

The Area Statement below compares the scheme as submitted in June 2016 and the current

revision as of February 2018.

Table 1: Halkshill and Blair Park: Comparison of ES submitted Design 6C and Design 8

	Design 6 June 2016 (Ha)	Design 8 Feb 2018 (Ha)	Change (Ha)
TOTAL PROJECT AREA	1396.72	1396.72	-
EXISTING WOODS – SEMI-NATURAL AND PLANTED	30.99	30.99	-
NORWAY SPRUCE (NS)	12.83	10.24	- 2.59
LODGEPOLE PINE (LP) (FOREST EDGE)	19.21	11.40	- 7.81
NATIVE WOODLAND	102.41	106.02	+ 3.61
SCOTS PINE (SP)	20.38	22.85	+ 2.47
SITKA SPRUCE (SS)	422.8	317.63	-105.17
SITKA SPRUCE (SS) / LODGEPOLE PINE (LP) **	34.78	26.84	- 7.94
AMENITY CONIFERS (SP/NS)	-	6.47	+ 6.47
UNPLANTED	752.32	865.27	+112.95

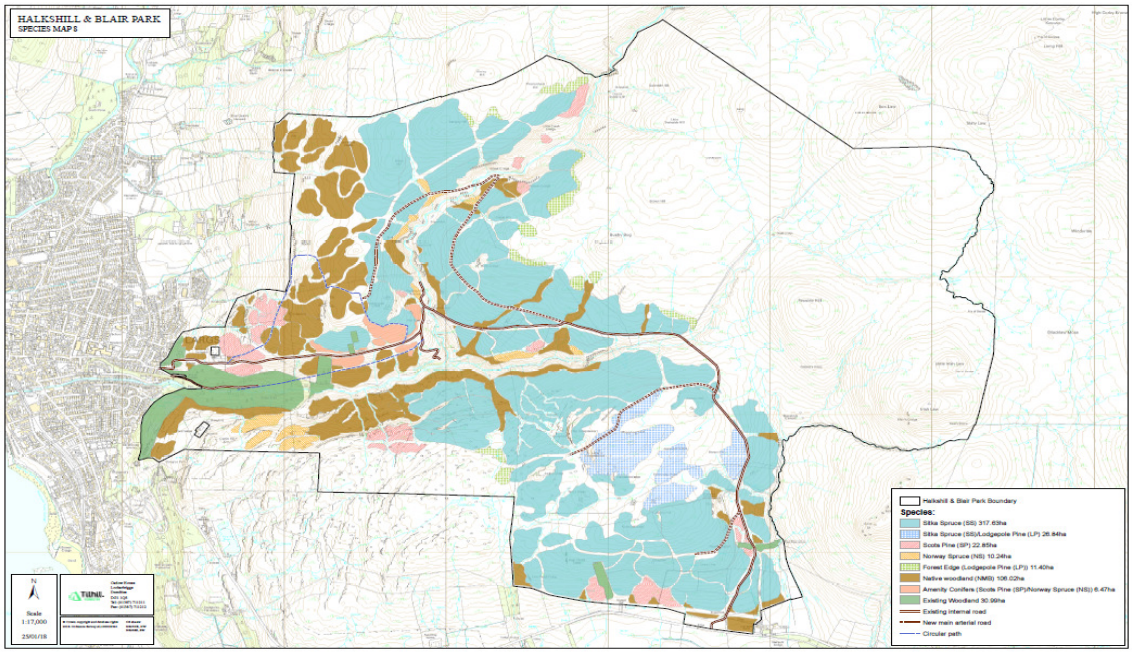
The property is serviced by the A760 Largs to Kilbirnie public road to the south of the site via which timber extraction will be managed on a new egress now in place as part of the approved Greeto and Gogo Hydro Power scheme. The new egress is located to the west of the current Blair Park egress to allow for improved sight lines. Forest roads will be constructed beyond those required for the Hydro Power scheme to facilitate forest establishment and management operations. A network of unplanted forest rides will be left for future forest road installation, ultimately creating a road network that will efficiently service the whole extent of the site and connect with the A760. The existing access from Largs (via Bellesdale Avenue) by paths and tracks along the Gogo Water will be retained for public access (see Addendum 2) and will link with the hydro road and the proposed forest road and ride network.

5. HYDRO POWER SCHEME

During the course of producing this Environmental Statement, a hydro power scheme was approved in 2015 by North Ayrshire Council. This project was subject to two Environmental Statements covering the Gogo and Greeto Water respectively. These and associated planning documentation can be found on http://www.eplanning.north-ayrshire.gov.uk/OnlinePlanning/.

This project has changed the baseline conditions of the site and therefore the forestry ES has

been updated to reflect this change. The line of the hydro power road (described as existing internal road) is shown below:



The revised scheme has resulted in a reduction of the required roading as summarised below:

Table 2: Comparison of roading requirements between the ES submitted design (Design 6c) and amended design (Design 8) following statutory consultation

	Roading requirement (m)	Future roading requirements	Reduction in future roading requirements.
ES submitted design	4590	8518	-
Post consultation ES design	4590	4898	3620

As a consequence of reduced roading requirements, the number of proposed borrow pits has also been reduced from 22 to 12 (see Addendum 3).

6. ENVIRONMENTAL IMPACT ASSESSMENT OF THE FORESTRY PROPOSAL

Environmental Impact Assessment (EIA) is a process (see Other Annexes/EIA Process) that considers how a proposed development would change existing environmental conditions and what the consequences may be. It therefore informs the project design and decision making processes.

The process, reported in full in the Environmental Statement, comprises the following stages;

- Scoping – to define the issues which are to form the basis of the EIA.
- Consultation – to supplement Scoping and agree any specific methodologies.
- Establishment of the site baseline using existing information and/or novel survey.
- Characterisation of the value or sensitivity of identified important characteristics of the environment (receptors.)
- Prediction of the potential change upon the receptors and potential consequences.
- Mitigation of potential impact.

Assessment of impact is based upon established methodologies, techniques and criteria, applied as appropriate.

As part of the EIA process a wide-ranging consultation programme took place. This included the formal Scoping Meeting of the 3rd September 2013. As the proposals developed, consultation continued thereafter with Forestry Commission Scotland, Scottish Natural Heritage, Largs Community Council, North Ayrshire Council, North Ayrshire Outdoor Access Forum, Clyde Muirshiel Regional Park (CMRP) and the wider local community. These meetings are listed below:

Table 3: Halkshill and Blair Park meetings.

27/11/12	Proposed scheme presented to CMRP.
15/2/13	Initial meeting with FCS Conservancy staff to discuss proposals.
22/3/13	Initial meeting with key consultees – CMRP, SEPA, NAC.
9/4/13	Meeting with SNH to discuss vegetation and bird survey methodologies.
18/4/13	Largs Community Council.
13/5/13	Community drop in day, Brisbane Centre, Largs.
3/9/13	Formal Scoping Meeting.
28/11/13	Meeting with NAC Councillors to discuss proposals.
13/1/14	Meeting with NAC Access Officer to discuss public use of site and improved future access.
13/1/14	Meeting with FCS and NAC to discuss proposals in relation to Ayrshire and Arran Forestry and Woodland Strategy
13/2/14	Meeting with SNH to discuss protected species.
20/2/14	Largs Community Council.
9/5/14	Community Drop-in Day, Largs
13/5/14	North Ayrshire Outdoor Access Forum, Ardrossan

20/10/14	North Ayrshire Outdoor Access Forum – draft access chapter discussed.
26/3/15	Meeting with NAC planners.
27/4/15	Meeting with NAC planners, elected officials and Largs CC.
10/6/15	Meeting with FCS to discuss ES draft 1, Hamilton.
14/12/15	Meeting with FCS to discuss ES draft 2, Hamilton.
16/1/16	Presentation to Largs CC/NAC of Gogo Glen visualisations.
26/1/16	Meeting with FCS to discuss outstanding issues, Dunblane.
27/1/16	Meeting with SNH to discuss Wild Land issue, Clydebank
11/2/16	Meeting with NAC North Area Committee to provide update on the proposal, Irvine.
7/3/16	Meeting with North Ayrshire Council, Local Councillors, Local MSP and Largs Community Council to provide update on the proposal, Largs.
24/4/17	Two drop-in sessions, Brisbane Glen Hotel.
13/6/17	Meeting with SNH to discuss Wild Land Area, Clydebank.
5/10/17	Meeting to discuss access opportunities, Brisbane Glen Hotel plus site visit.
25/10/17	Meeting with FCS to discuss revisions and next round of public consultation, Hamilton.
7/11/17	Presentation to Largs CC and wider community on revised scheme, Largs.

The Scoping Meeting, chaired by Forestry Commission Scotland, described the outline proposals and provided the opportunity for comment and feedback. Following this meeting all consultees were invited to make further comment and this was incorporated into the formal Scoping Report (see ES Other Annexes/Scoping Meeting) which provided the scope and direction for this Environmental Statement.

Following the Scoping Meeting and subsequent meetings, the main issues, or sensitivities, were identified and summarised in the Forestry Commission Scotland Scoping Opinion letter dated 17th January 2014 (see Other Annexes/Scoping Meeting). The potential issues are:

- impacts on cultural heritage, particularly the location and extent of archaeological features that may be affected by the proposal including the scheduled monument at Castle Hill Fort;

- landscape and visual impacts from agreed viewpoints; particularly those relating to the Clyde Muirshiel Regional Park Sensitive Landscape Area and the Waterhead Moor-Muirshiel Wild Land Area;

- impacts on the ecology of the site, particularly those relating to the loss of open ground habitats including Sites of Importance for Nature Conservation, areas of deep peat and associated impacts on the breeding bird assemblage and protected species; potential

impacts on the adjacent Site of Special Scientific Interest (SSSI)/Special Protection Area (SPA) designated for breeding Hen Harrier;

- impacts of drainage and afforestation on the hydrology of the site and the potential for exacerbating acidification, flood risk or reduced water yield to surrounding public water supplies;

- socio-economic impacts in terms of change of employment from agriculture to forestry and potential impacts on the tourist town of Largs and its appeal as a tourist destination, as well as the businesses that depend upon tourists and visitors to help sustain the local economy;

- impacts of future transport of timber and timber products from the forest particularly those relating to the public road system;

- impacts on the extant deer population and in particular the requirement to control the deer population to allow successful woodland establishment;

- impacts on the current public use of the site particularly Core Paths and honeypot areas and the implications of afforestation for wider responsible public access across the site.

These issues are addressed as part of the ES, a draft of which was issued to FCS for them to determine the competence of the document and to ensure that it addresses all the issues of concern. Once FCS felt the ES to be competent, the applicant is required to advertise the ES in the local press and thereafter for the ES to be subject to a 28 day statutory consultation period to allow consultees to comment on the ES in either digital or hard copy format. The 28 day statutory consultation period for the ES began on the 20th June 2016. The post-consultation period (September 2016 to February 2018) allowed for the residual significant issues to be addressed and for additional information to be provided. These can be found in the Addenda to this ES. These will be subject to a second round of public consultation. Thereafter FCS will be in a position to make one of three decisions:

- Grant consent subject to the standard conditions
- Grant consent subject to the standard conditions plus other conditions
- Refuse consent

The FCS decision is published in the same press that the original application was published. The applicant for consent can appeal the FCS decision as too can any person “aggrieved” by the granting of consent.

7. THE FORESTRY PROPOSAL AND THE ITERATIVE DESIGN PROCESS

The design of the proposed forest has evolved over time in response to ongoing consultee and/or community input and environmental information including the statutory ES consultation process. From the initial concept map produced in 2013, eight revisions of the planting design have been produced. Rather than a single post-design environmental appraisal of identified impacts (e.g. the impact upon views) potentially significant impacts have been identified during the iterative design process and every effort made to incorporate appropriate mitigation within the evolving design. This has usually resulted in a change to the forest design, e.g. the re-design of woodland on the escarpment above Largs or the Wild Land Area. This has ensured that the findings of surveys and the views of consultees and the local community have been used to inform the final proposed woodland design and thus achieve a "best fit" within the environment, rather than a final woodland design with little input and a long list of mitigation measures.

A sample of the iterative design process is included as Revised Document 3.

8. CONCLUSIONS FROM THE HALKSHILL AND BLAIR PARK ENVIRONMENTAL STATEMENT

This Environmental Statement, requested by Forestry Commission Scotland in their letter dated 17th January 2013, addresses issues outlined at Scoping and submits the following conclusions:

8.1 CULTURAL HERITAGE

The FCS EIA scoping opinion letter dated 17/1/14 raised the issue of the location and extent of archaeological features that may be affected by the proposal and the need to clarify potential impacts on Castle Hill Fort - a Scheduled Monument lying just outside the boundary of the site.

The commissioned cultural heritage report considered the likely impacts on the archaeology

and built heritage (historic environment assets) of the proposed woodland scheme. The assessment has been informed by a range of information sources including West of Scotland Archaeological Service (WoSAS) Sites, the National Monuments Record of Scotland (NMRS) and Historic Scotland's databases for Listed Buildings and Scheduled Monuments. To these were added data from aerial imagery, the Ayrshire Designed Landscape Survey and online databases of crashed aircraft.

The assessment was designed to identify and evaluate any historic environment assets within the proposed development site through examination of desk-based sources and detailed field survey.

Eighty-two historic environment assets have been identified within the proposed development site of which 28 were not previously known. One Scheduled Monument (Castle Hill Fort) and two out of three identified crashed aircraft sites are statutory sites and receive legal protection. The remaining sites are non-statutory sites mainly indicative of a pastoral farming landscape, comprising sheepfolds or animal enclosures, as well as shielings or shepherd's shelters.

Direct impacts to all cultural heritage remains may be caused by a range of activities during the construction and operational phase of the proposed development. These can occur during excavations, ground preparation, drainage, quarrying and forest road construction as well as movement of machines over vulnerable sites. The development of tree cover can obscure and/or prevent access to cultural heritage sites and tree root intrusion has the potential to damage buried cultural heritage resources. In addition, indirect impacts may affect the setting of cultural heritage remains, impacting upon their setting as the forest grows.

In the area surrounding Castle Hill Fort, the proposed planting scheme has been designed to minimise the potential for any adverse impact upon the setting of the monument. There is no planting proposed to the south of the site, while the topography and maintenance of open ground to the west ensures this will not impact upon views to or from the site. The prominent location of the site ensures that planting to the north and east will be low lying and will also not affect the prominence of the site, or the views from it. There is existing woodland to the north and any planting around this will be native woodland, akin to that which would have occupied the landscape at the time of the Fort's occupation. A large unplanted buffer will be maintained around the monument to preserve the current setting and also to preserve any landscape features not yet recognised which are directly associated

with the Fort. Even with careful forest design, there is judged to be an adverse impact upon the setting of the Fort, however this is not judged by Historic Scotland to raise any issue of national importance and is not considered significant. This impact will be offset to a degree by the placement of interpretation boards in the locality of the Monument, which will be agreed with Historic Environment Scotland.

Two of the three military aircrash sites on the property are protected by law and cannot be altered in any way without prior discussion with the Ministry of Defence. There will be no direct impacts on these sites from the forestry proposal as both lie outwith the footprint of planting. However, the creation of pathways and forestry tracks may lead to increased public awareness and access to these sites. There is a strong possibility that this will result in vandalism and removal of aircraft parts by souvenir hunters. The location of these remains will not be publicised. During the operational phase of the development, periodic monitoring will operate with a view to re-appraising the situation should damage occur. If, through time, it is felt such remains are being damaged, Tilhill Forestry will enter into discussions with the relevant authorities to discuss removal of the remains for their safeguard. With these measures in place, impact upon the aircrash sites is not judged to be significant.

Many of the identified cultural heritage remains are outwith the planting zone and will not be impacted by the proposal. However, for those within the planting zone, remains will be marked prior to the construction phase and an unplanted buffer of circa 5 m left around each site to avoid damage. Six non-statutory sites have the potential to be significantly adversely impacted by the planting proposal. A combination of mitigation measures to avoid direct and indirect impacts to these sites will be used, including larger buffer zones to preserve the setting of these remains and to protect them from damage during the construction and/or operational phases. All buffer zones will be determined and marked by the consultant archaeologist prior to construction and, where appropriate, remains will be fenced off. With proposed mitigation measures, the residual impact upon the six non-statutory remains is not judged to be significant.

In summary, there will not be any significant impacts upon cultural heritage remains as a result of woodland planting. All cultural heritage remains within the planting zone will be marked by a qualified archaeologist prior to construction and protected by an appropriate buffer zone. Aircrash sites will be monitored and action taken if increased public access results in significant damage.

FCS agreed with the assessment of impacts in the ES and concluded that impacts on

Cultural Heritage will not be significant.

8.2 LANDSCAPE AND VISUAL RESOURCE

Proposed Scheme and Policy Context

The FCS EIA scoping opinion of 17th January 2014 identified the potential effect of the proposals on the Sensitive Landscape Area of Clyde Muirshiel Regional Park and on the Waterhead Moor Wild Land Area together with the effect on local views and the setting of Largs as key issues to be addressed.

The proposal is for the planting of 470 Ha of productive conifers, mainly Sitka Spruce and just over 100 Ha of native broadleaves on part of the 1400 ha estate formed by the farms of Halkshill and Blair Park to the east of Largs, North Ayrshire. Broadleaves are concentrated on the western edge and upper escarpment to the east of Largs and along the Gogo and Greeto Burns.

The proposals would affect an area of open moorland on the south western edge of the Renfrew Hills and within the Clyde Muirshiel Regional Park, recognised as a "Special Landscape Area" of regional importance within the North Ayrshire Local Development Plan. The core of the Renfrew Hills is identified as an Area of Wild Land by Scottish Natural Heritage and the eastern part of the project area falls within the western edge of this area. The Ayrshire and Arran Forestry and Woodland Strategy indicates that the western part of the scheme area would have some potential for new woodland but the type and scale of woodland that would be considered appropriate would be restricted, in part, by the landscape values.

The Existing Landscape Resource

The landscape context and current character of the area at both a regional and local level is described using existing studies, photographs and field visits and the value attributed to the landscape identified from current policies.

The majority of the proposal falls within the area identified as *Rugged Moorland Hills and Valleys* in the *Ayrshire Landscape Assessment.* It is described as an area of *"rounded moors and hills rising to form a dissected plateau"* The scale is large and moorland vegetation predominates with little woodland apart from a few small to medium conifer plantations on lower ground. The moorland plateau is bounded to the west by an escarpment which forms a prominent and distinctive backdrop to the town of Largs, characterised by craggy slopes with remnants of broadleaved and mixed policy woodlands.

No internationally or nationally protected sites would be directly affected but Wild Land Areas are recognised as a nationally important asset, although it is not intended that these form the

basis of a new designation. The sensitivity to change for this area was regarded as high. All parts of the project area have some recognition for their landscape value at a regional level being included in the Clyde Muirshiel Regional Park and the Special Landscape Area and these features were considered to be moderately sensitive to change.

FCS agreed with the sensitivity ratings assigned to the landscape resource in the LVIA.

Visual Resource

The potential visibility of the proposal was identified through the construction of a Zone of Theoretical Visibility. Nine specific views affecting different groups of people were selected at the scoping stage and computer generated visualisations of the proposals at year 30 compared to the visualisations from the same viewpoints at year one. The sensitivity of viewers at these locations was categorised according to the numbers and type of people potentially affected and the context and direction of the view. Residents are potentially sensitive to changes but near distant unobstructed views focussed on the site are not typical and none of the views were considered to be of high sensitivity in context.

On this basis, the sensitivity of views from the town was judged to be “moderate” and this concurs with the view of FCS.

Potential Impacts

The scheme presented at the scoping stage (Design Concept) was appraised against the UK Forestry Standard Guidelines, *Forests and Landscape* and potential short, medium and long term effects and identified. As a result of this analysis, further detailed survey information and discussions with both client and stakeholders including FCS, a number of alternatives were considered, incorporating mitigation measures into the design and the option which was considered to offer an optimal solution, taking all interests into account, was taken forward for evaluation.

During the initial “construction” phase, potential landscape and visual impacts would arise from ground preparation, fencing and activities associated with the construction of access roads and tracks. In the medium term canopy closure would result in the loss of some longer distance views from within the site and some small scale features would be obscured, replaced with the larger scale pattern of trees and open ground. As a result of the increased tonal contrast between areas of conifer and moorland, the external and internal shapes of the conifer stands would become more prominent. In the longer term, impacts would arise from the clear felling of the productive conifers and the upgrading of access roads.

Potential impacts on Wild Land arise from the introduction of elements of contemporary active land management and associated structures which may detract from the quality of wildness

and from the replacement of the open moorland ground cover.

Assessment of Landscape Impacts

Much of the proposal will not be easily seen by large numbers of people and landscape impacts were judged to be more significant than visual impacts. The proposal would create no major changes to landscapes valued at a national or international level. The introduction of a large area of forest into part of this open landscape is likely to be seen as somewhat discordant to current policy guidance and the established regional landscape character which underlies the Special Landscape Area. As a consequence, the impact of the project on these features was considered to significant and moderately adverse for a local part of the designated area. The creation of new broadleaved woodland on the valley slopes could be regarded as beneficial. However, there is often a bias towards retaining the "Status Quo" in studies and policies based on the current landscape character which doesn't easily accommodate a change of landuse.

The level of impact of the project on the Clyde Muirshiel Regional Park as a whole was judged to be low and not significant in relation to aspects of the landscape character key to the achievement of the overall park objectives.

At a local level, the majority of the planting would affect a lower part of the moorland plateau which forms a transitional landscape between the populated coastal plain and the high moorland of the Renfrew Heights. This is an area that was considered to lack the distinctive qualities that might limit capacity to change and appears currently valued mainly for its views and accessibility from Largs. While the resulting changes would be major in magnitude in that they would change the nature of the local landscape and were considered locally significant; they were neither clearly adverse nor beneficial and principle views and access routes are retained. There would be some short term adverse impacts associated with establishment, road construction and, in the long term, with harvesting.

A small part of the proposal lies on the escarpment which is prominent from Largs and has a strong sense of place and a distinctive character. While planting would affect part of the upper slopes and open skyline introducing a minor discordant element, the greater part of this area would not be affected and the scale and composition of the proposed woodland largely reflects that characteristic of this landscape. The level of impact was regarded as relatively low and not significant.

Assessment of Visual Impacts

It was not considered that there would be any major adverse visual impacts on viewers at any of the selected viewpoints. The level of impact from the more distant views looking towards the escarpment was considered to be low or low to moderate and slightly adverse but not

significant reflecting the fact that while some aspects might be seen as a somewhat discordant element in the context of the present day landscape, these would be fairly minor elements in a larger view with diverse foci.

From closer range, most of the new conifer woodland would sit on the mid and lower slopes linked to existing woodland in Gogo Glen where it reflects the shape, scale and patterns of the existing landscape. Scots Pine is planted on the spur above Holehouse and this would contribute to the semi-permanent forest structure and associate well with the existing scattered broadleaves. It would be compatible with the Forest and Landscape design principles and was considered to be neither clearly adverse nor beneficial. Although from some viewpoints, the scale of the new native woodland on the upper slope remains suboptimal, this would be a minor feature and the level of impact was considered to be relatively low and not significant. From Castle Hill changes would be more prominent and because of the relative potential popularity of this as a viewpoint, the impact was considered to be significant but largely neutral with some short term adverse impacts associated with establishment and in the longer term, with harvesting activities.

From within the plateau, (View 8) the changes would be prominent as a result of the simplicity of the landscape but would affect only part of the total view. These would be seen by few people and the level of impact was not regarded as significant.

The impact of the new primary roads to be constructed in the short term were assessed and the route shown diagrammatically on the year 1 visualisations. Generally, these roads would only result in a minor change to the selected views. From within the area, the impact would be moderately adverse in the short term but localised and decreasing over time. The longer term road proposals are indicative only at this stage and will generally be constructed on rides within the mature forest which would localise the potential impact of construction.

A deer fence will be required until the broadleaves are established but the alignment of this was not available at the time the LVIA was written. From the town, this will be seen backgrounded against the hill slope following the existing boundary wall or will be part screened by crags and existing broadleaves although visibility would vary with light direction and weather. The main impact would be on recreational users (see addendum 2) From Castle Hill it may be more visible but the alignment is likely to be subject to further amendment.

Assessment of Impacts on Wild Land.

The impact on the attributes of wildness varies over the Wild Land Area. The core area where the sense of wildness is strongest would be little affected and the level of impact on this area was considered negligible to minor and not significant. Similarly, there would be negligible impact on the watershed to the east which forms highest part of the area.

The main changes would be to the western periphery where the attributes of Wildness were judged to be less strongly developed and external influences are greater. Here forest management would re- introduce elements of contemporary active use into an area of declining hill stock grazing. The impact of the mature forest was considered locally moderate for this area and slightly adverse bearing in mind that the appreciation of wildness is greatly affected by an individual's experience, their perceptions of and preferences for landscapes of this kind. There would be a change to the western approaches to the Wild Land Area with the forest creating a wooded threshold contrasting with the open nature of the moorland but it was not considered that this change of landscape character would necessarily be perceived by the general population as significantly less wild. Perceived naturalness would decrease during periods of more intensive management, especially during harvesting. This would occur intermittently and the extent would be localised and while adverse, the impact was not considered to be significant for the area as a whole.

Assessment of Impacts on Core Path and Greeto Bridge

This is covered in the LVIA under para 5.2.2 "Other areas of key concern" but this was not part of the formal assessment. The LVIA concluded that changes attributable to the woodland proposal would be major but on balance, neutral with some beneficial aspects. There would be some adverse changes associated with establishment and harvesting. (See para 8.7).

Residual significant adverse impacts

Some measures to reduce potential adverse impacts identified during the iterative design process have been integrated into the design (paragraph 6.3 of LVIA).

The LVIA concluded that there would be residual significant and adverse impacts relate to the change in land use and character from open moorland to forestry over part of the area where a key value identified by current landscape policies for the Special Landscape Area and Landscape Character Area is the predominance of open ground.

Having considered the assessment of impacts in the ES and consultation responses, FCS concluded that the impact on The Special Landscape Area/Regional Landscape Character is acceptable and not likely to be significant and no further mitigation is proposed in relation to this.

However, they were of the opinion that the magnitude of the impact on the Local Landscape Character of the escarpment behind Largs would be higher than that predicted and that this would be significant and unacceptable without further mitigation.

FCS were also of the view that the magnitude of change on views looking towards the

escarpment was likely to be greater than stated in the LVIA (moderate rather than minor) largely as a result of the intrusion of spruce on the skyline and the potential masking of the characteristic craggy features of the escarpment and the resulting impact significant and unacceptable.

FCS considered the assessment of impacts in the ES and consultation responses and concluded that without mitigation a significant and unacceptable impact on the Local Landscape Character is likely. Mitigation in the form of a change to the planting design is required to reduce predicted impact to an acceptable level.

FCS was of the view that the impact of the proposals on the local amenity and cultural heritage had not been adequately assessed and considered the impact on these features and their use is likely to be significant and without mitigation unacceptable. Addendum 1 addresses these gaps within the LVIA.

Mitigation

Additional mitigation has been proposed as described in Addendum 1 to reduce these adverse impacts and summarised below:

Local Landscape Character

- Native woodland planting in the vicinity of Cauld Rocks is reduced in extent.
- The area of spruce above Laverock Castle is replaced by native woodland.

Whilst native woodland on the upper escarpment is not part of the present day landscape, only a small part of the character area is affected and the woodland likely to be open textured with a limited and largely neutral impact on the key features of the escarpment.

Views:-

- The area of spruce above Laverock Castle is replaced with native woodland with the result that conifers would only be likely to be seen in more distant views (represented by view 1 & 6) where they would be seen in a broad landscape context. While this would still be adverse, the magnitude of impact would be low and not judged to be significant.
- The stand of Spruce in the lower Gogo Glen above the Core Path has been replaced with native broadleaves reducing any impact from longer term harvesting activity particularly from view 5.
- A new visualisation from View 4 (Holehouse Road) was prepared to demonstrate that broadleaves would be unlikely to mask the prominent crag features.

Wild Land Area:-

- The area of productive conifer in the Upper Greeto has been reduced with the consequent reduction in long term road requirements.
- Native woodland and unplanted ground replaces conifers on steeper slopes adjacent to Greeto.
- Planting is removed from slopes of Feuside Hill and Irish Law reducing the long term road requirements and adverse impacts on the Wild Land Area.

Core Path

- Native woodland and amenity conifers (SP and Norway spruce) replaces Sitka spruce adjacent to and between the Core Path and the Gogo Water, reducing long term harvesting impacts affecting this area

A more detailed analysis of opportunities and constraints for the Gogo Glen was prepared to provide a more transparent background to the decisions in this area and more realistic visualisations were prepared for key views including the area around the Greeto Bridge. These are shown in Addendum 2.

8.3. ECOLOGY

The FCS EIA scoping opinion letter dated 17/1/14 raised a number of issues in relation to ecology. The proposed development area lies next to the Renfrewshire Heights Special Protection Area (SPA) notified for its population of breeding Hen Harrier, therefore the proposals had to be assessed against the reasons for this designation. In addition, the vegetation, breeding birds and protected species required survey and any potential impacts assessed, including any impact upon the Gogo and Greeto Waters Local Nature Conservation Site.

8.3.1 Habitats

The main ecological impact of the proposed scheme is the loss of open ground habitats to mixed woodland habitat with concomitant effects on species that require open ground for all, or part of, their life cycle. On the other hand, the habitat condition of unplanted areas of open ground will improve as a result of reduced grazing pressure following removal of domestic livestock.

The proposed development has been subject to a full habitat survey according to standard vegetation survey methodologies agreed with SNH. Existing information and field work were

used to evaluate the current, or baseline, ecological value and assess the potential impacts of planting woodland on these habitats.

The area has historically been managed as extensive hill grazing land. The dominant vegetation type, occupying some 35.2% of the area (491.8 ha) is blanket bog and dry modified blanket bog. Unimproved and semi-improved acid grassland occupies 30.5% (425.9 ha) while marshy grassland occupies 27.4% (382.8 ha) of the site.

The mapped vegetation communities reflect the topography of the site; most of the hill tops are a mix of acid grassland with small patches of modified bog. Bog and modified bog occupy the flattest areas on the hilltops near Cockle Loch in the south and Rigging Hill in the SE, with any knowes emerging out of the bog supporting species-poor acid grassland. Wetter and more intact bog is present around Irish Law, and aerial photographs indicate a continuation of this habitat to the east over Blacklaw Moss. Smaller areas of organic soils are present on Rigging Hill.

Rush pasture/marshy grassland vegetates the mid to upper slopes, often intermingling with acid, neutral or base-rich flushes. The steepest slopes along the base of the two river valleys are generally a mix of grassland types with flushed marshy grassland. Rocky gorges are occasional along the rivers, and these support some tree cover and ledge vegetation. Along the Gogo Water, the valley sides are crenulated leading to marshy grassland in the hollows and acid grassland on the ridges.

Much of the habitat in the survey area is heavily grazed and drained and therefore ecologically degraded with the more accessible land bordering Largs being a mix of rough improved pasture and bracken.

The habitat interest of the site lies within the lower slopes of the river valleys where species-rich grasslands and species-rich flushed marshy grassland are present. This area is partly coincident with that defined as a Local Nature Conservation Site (LNCS). The sparse tree-covered cliffs along the valleys and the mid to lower slopes to the south of Rigging Hill support species-rich marshy grassland and fen communities.

Blanket bog, marshy grassland (Purple Moor Grass and Rush Pasture), base-rich grassland and unimproved neutral grassland are priority habitats within the UK Biodiversity Action Plan which is reflected in the Ayrshire Local Biodiversity Action Plan. Within the Ayrshire LBAP, the following habitats are identified as local priority habitats: blanket bog, purple moor grass and rush pasture, upland heathland and upland calcareous grassland, all of which occur on

Halkshill and Blair Park.

Blanket bog

There is some 491.8 ha of blanket bog occurring on the site. All areas of deep peat (>50 cms deep) will be retained as open ground habitat. The impact of afforestation on this habitat is therefore considered to be not significant.

Acid grassland

Within the Ayrshire LBAP, acid grassland is considered to be extensive with "large expanses of uniform, acid grassland occur in the uplands and are considered to have limited biodiversity interest" as a result of long-term and intensive sheep grazing.

Acid grassland is one of the most widespread and common habitat in the uplands with an estimate of the upland resource being in excess of 1,200,000 ha. Most having been derived from the ecological over-grazing of dwarf shrub-heath. It has been estimated that within this proposal some 249 ha (59%) of acid grassland will be subject to afforestation leaving a residual area of 176.7 ha (41%) unplanted.

Afforestation of 58% of this habitat is considered to have a moderate adverse impact.

Marshy grassland (including acid to neutral flushes)

Marshy grassland is a more limited habitat within the uplands (estimated at 56,000 ha) compared to acid grassland. The Ayrshire LBAP does not identify any of this habitat type within their area though the Habitat Survey for Halkshill and Blair Park considered the site to hold some 382.8 ha with 274.5 ha (72%) potentially subject to afforestation leaving a residual area of 108 ha (28%).

Afforestation of 72% of this habitat is considered to have a moderate adverse impact.

Upland heath

Upland heath forms an intimate mosaic with acid grassland. These mosaics have a high proportion of acid grassland which, in part, is a reflection of grazing induced conversion from heath to acid grassland.

Afforestation of 48% of this habitat is considered to have a moderate adverse impact.

Base-rich grassland

Within the UK there is an estimated 40,000 to 50,000 ha of this habitat. There are no figures for the area of this habitat within Ayrshire though the LBAP references a small area within the Clyde Muirshiel Regional Park. The habitat survey for Halkshill and Blair Park identified 0.07 ha of this vegetation community which will be protected from the afforestation proposals as part of the open ground component of the site. The ecological significance of afforestation on this habitat is therefore considered to be not significant.

Unimproved neutral grassland

Within the UK there is thought to be less than 15,000 ha of this habitat so the figure for Ayrshire is likely to be small. A discrete area of circa 5.3 ha was identified as part of the habitat survey for this site which will be protected from any proposed afforestation as part of the open ground component of the site. The ecological significance of afforestation on this habitat is therefore considered to be not significant.

Woodland

There is 9.65 ha of extant semi-natural and planted woodland on the site. All such areas will be managed to maintain and enhance their nature conservation value through a programme of expansion by natural regeneration and planting to enhance the native woodland habitat network within Halkshill and Blair Park.

Summary

There will be a significant adverse impact upon marshy grassland and upland heath habitat types within the area proposed for woodland creation.

The proposed planting plan will ensure that 54% of the site will remain as unplanted open ground resulting in the retention of the current range of vegetation types across the site. Acid grassland, marshy grassland and upland heath communities will occur as extensive habitats across the unplanted areas and also be retained as a ground layer below the areas of proposed native woodland. These areas will be free from stock grazing, allowing plant

species their full life-cycle of flowering and seeding and helping to underpin a more dynamic and successional ecosystem. There is judged to be a significant beneficial impact upon these habitat types within areas left unplanted.

Loss of open ground will have adverse impacts upon the LNCS although this was judged to be non-significant. Species-rich areas within the LNCS will be protected (see Addendum 3, Annex 5) and native woodland expansion will take place through planting and natural regeneration.

FCS considered the assessment of impacts in the ES and consultation responses and concluded that the impacts on acid grassland, upland heath, base-rich and neutral grassland and the LNCS is acceptable and not likely to be significant.

Impacts on marshy grassland and blanket bog were less clear and would require further work in relation to concerns raised by SEPA in relation to GWDTE (roads, quarries) and disturbance and reuse of peat. Further details and mitigation is provided in Addendum 3 and 8.4 below.

8.3.2 Breeding birds

The project area has been subject to a breeding bird survey to help forewarn of potentially adverse impacts that woodland creation might have on bird species presently occupying open hill ground and bird species that may benefit from the change in land use from agricultural open ground to woodland cover.

Breeding birds present on site

Breeding bird surveys were carried out in 2006 and 2013. A total of 43 species was recorded, 39 of which are likely to breed on site. Of these, 19 species are of conservation concern in the UK (Red or Amber List species). In a geographical context, none of the species recorded on site are of international conservation value, i.e. Annex 1 species. Ten are UK BAP species, ten are Scottish Biodiversity List species and four are LBAP species. In summary, the breeding bird assemblage is fairly typical of a historically grazed open acid grassland/moorland mosaic. Survey results suggest that the abundance of breeding passerines such as Meadow Pipit and Skylark is far lower than would be expected for a property extending to 1396.8 ha (5.4 square miles). Breeding waders are almost entirely absent, with only one pair of one species (Curlew) recorded in the eastern part of the site in

2006, and no wader species recorded in the western part of the site in 2013. No grouse or birds receiving special protection under Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) were recorded during breeding bird surveys in either survey year. Limited species diversity probably reflects a homogeneous habitat long modified and simplified by hill grazing.

The proposal is likely to result in a significant adverse impact upon one species – Skylark. Whilst the property does not support a high number of this species (89 pairs represents 0.006% of the UK population and 0.015% of the Scottish population), Skylark is a nationally declining species of high conservation concern. The design of the planting proposal means that areas with the greatest breeding density of Skylark, i.e. preferred habitat (areas of upland bog), are avoided. Whilst further mitigation measures for the displacement of a proportion of the Skylark population are not proposed, the remaining Skylark population is expected to benefit from the removal of sheep from the property, which will allow open ground habitats to recover from historical heavy grazing. In the long-term, habitat recovery in these unplanted areas (752 ha or 54% of the property) should provide improved habitat quality for Skylark. A predator control strategy will reduce predation pressure on all ground-nesting species, which is likely to contribute to improved breeding success.

Three species - Meadow Pipit, Curlew and Wheatear - are also likely to experience an adverse impact following proposed woodland planting, however, this impact was not judged to be significant. A further 12 species will not experience any significant impact (neither adverse nor beneficial) following proposed woodland planting.

Breeding birds that may recruit to the site as a result of woodland planting

The change in land use from agriculture to forestry is likely to have an impact not only on birds recorded during site surveys but also on those resident in the local vicinity, which may be attracted to the site as a result of woodland creation. Planting of open moorland with spruce has been shown to increase both the number of species and the density of breeding pairs per km^2. Following planting, the moorland community changes first to a scrub community and then to a woodland community. These communities are made up of different suites of birds to the open ground community, representing a qualitative change on site, but it is a change that increases both the diversity of species and the number of individual birds. Mixed woodland creation at Halkshill and Blair Park would benefit a range of bird species that prefer to inhabit scrub woodland, conifer woodland, new native woodland and forest edge habitats. As a result of proposed woodland planting, there is likely to be a significant

beneficial impact upon 13 bird species, seven of which were not recorded during the 2006 or 2013 bird survey but may recruit to the site as a result of woodland planting.

Three species not recorded during site surveys but identified as important at the Scoping stage may be affected by proposed woodland planting – Hen Harrier, Peregrine Falcon and Black Grouse. The potentially beneficial impact of the proposal upon Hen Harrier and Black Grouse was judged to be significant, both in terms of improved habitat condition following release from heavy grazing and subsequent improvements to potential foraging and nesting habitats. Whilst habitat improvements are likely to be greatest in the short-term prior to canopy closure of the planted crop (0-10 years), the inclusion of edge habitat on the forest/moorland ecotone is likely to provide suitable habitat for these species for a longer period. Any potential increase in predator numbers that may result from woodland planting would be mitigated through the use of a predator control strategy which would be agreed with relevant consultees, such as SNH.

Summary

On balance, the woodland planting proposal is assessed to be of significant benefit to the breeding bird assemblage as a whole.

FCS considered the assessment of impacts in the ES and the consultation responses and concluded that the impact on the breeding bird assemblage is not likely to be significant.

8.3.3 Protected species (mammals)

The main impact of the woodland planting proposal will be a change in habitat availability to protected mammalian species identified at Scoping (otter, water vole and badger resulting in an overall reduction in open hill ground and, over time, an increase in productive and broadleaved woodland cover.

Protected species may be affected by disturbance during forest establishment and felling. The risk of damage to breeding and resting structures is increased during forest operations.

The site was subject to an otter and water vole survey using standard methodology. This covered all water courses that were crossed by the proposed track system or where the proposed tracks fell within 250 m of watercourses. The aim of the survey was to identify places of shelter for otter and water vole which may potentially be impacted by the building

of tracks.

Otter

Evidence of otter, including temporary resting up sites and spraints, was recorded on the Gogo Water and Greeto Water and spraints were recorded on the Linnsham Burn and Rye Water. Three temporary resting up sites used by otter were recorded. No temporary resting up sites were recorded within 30 m of the existing or proposed tracks and no natal/juvenile sites were recorded within 250 m of the existing or proposed tracks. The low number of resting up sites suggest that the site is not heavily used by otter at present. No potential natal/juvenile sites were present.

To avoid any adverse impact to otters during construction or operation, a number of mitigation measures would be implemented. These include the briefing of site workers with site-specific Toolbox Talks instructing that all works in the vicinity of otter sightings/holts/resting places stop immediately on discovery of the presence of these protected species. With mitigation, no significant adverse impact upon otters as a result of woodland creation is expected.

There is likely to be a significant beneficial impact upon otter as a result of the proposal in terms of habitat improvement and increased foraging opportunities. Habitats are likely to improve for otter through increased connectivity of woodland along watercourses, the long-term presence of a shrub layer, and the creation of large areas of woodland cover. Fencing out of livestock and the control of deer on the property will allow the development of an understory of dense vegetation which provides habitat suitable for otter resting sites. All watercourses would be buffered to ensure that diffuse pollution does not compromise water quality, a key consideration in maintaining healthy fish populations for foraging otters.

Water vole

There was no evidence of water vole presence on the property. There is little suitable habitat for water voles on site due (in part) to topography - most watercourses are too steep and fast-flowing to provide suitable habitat for water vole. In addition, historical overgrazing of the field-layer by sheep has resulted in a field-layer structure unsuitable for water vole.

Badger

There was no evidence of any active or disused badger setts on the property and no foraging signs within the property were recorded. Limited signs evidencing use of the site by badgers was recorded during the protected species survey although an active latrine suggests that the site may form part of a badger clan territory. Provided that site-specific badger Toolbox Talks are briefed to all contractors and all relevant forestry-related guidance is followed with regard to actions if a sett is located during works, there is unlikely to be any significant impact upon badgers as a result of woodland creation.

No significant issues have been raised by FCS or consultees in relation to protected species.

8.4 HYDROLOGY

As part of the EIA scoping process and in subsequent correspondence both SEPA and Scottish Water provided detailed responses to the proposals in relation to water quality, water yield, flood risk and the potential for increased risk of acidification as a result of woodland creation. However, the ES (2016) contained insufficient information about the potential disruption to wetlands and Ground Water Dependant Terrestrial Ecosystems (GWDTE), disturbance and reuse of peat and borrow pit reinstatement. Addendum 3 addresses these gaps within the ES.

Baseline

Assessment of the hydrological baseline indicates that the Gogo and Greeto Waters are classified overall as 'Poor', with 'Poor' overall ecological status and a chemical status of 'Pass' (SEPA). Landslips are a feature along the Gogo Water contributing to diffuse pollution (sediment release) risk within the watercourse. Indeed, "*over-grazed banks allow pollutants to reach rivers or lochs rapidly*" (SEPA). The River Garnock catchment (which includes the Rye Water within the project area) is a Diffuse Pollution Priority Catchment that currently fails to meet water quality standards on account of diffuse pollution issues. The upper catchment is at lower risk from diffuse pollution as a result of livestock farming though it may contribute to "*potential sources of faecal, sediment and nutrient pollutants*" (SEPA).

The project area does not fall within the Freshwater Critical Loads Exceedance map that identifies areas at risk from the enhanced capture of acid pollutants from the atmosphere by forest canopies (Forestry Commission 2003). Nonetheless, the need for a Critical Load

Assessment was requested at Scoping. Advice received stated that "*the scheme does not drain to a water body that is failing, or at risk of failing, 'Good' Ecological Status due to acidification caused by acid deposition and therefore does not require a Critical Load Assessment*" (Nisbet 2014).

The project area also falls within a Potentially Vulnerable Area (PVA) in relation to flood risk with rivers accounting for two thirds of the flood risk. SEPA note in their site specific advice that the project area lies within the medium likelihood (0.5% annual probability or 1 in 200 year) flood extent of the SEPA Flood Map, and may therefore be at medium to high risk of flooding. SEPA regard this project as having the potential to increase flood risk by contributing large woody debris into water courses if not managed appropriately.

The PVA Data Sheet indicates that the catchment hydrology has a short peak flood flow response and very low catchment flood storage and attenuation capacity. This is partly due to the dense network of agricultural surface drains/grips across the site many of which discharge directly to watercourses.

Forestry proposals in relation to the hydrological baseline

Given the baseline hydrological conditions at Halkshill and Blair Park, it is clear that the Rye Water, Gogo Water and Greeto Water have the potential to be affected by any change in land use. It is likely that the sensitivity of these receptors has been increased by long-term grazing and drainage impacts that have simplified the structure of the vegetation with little scrub or woodland cover resulting in low hydraulic roughness; compacted both the vegetation and upper soil layers reducing infiltration rates; increased flood risk as the extensive hill drainage system connects directly to watercourses and increased the likelihood for faecal indicators to be present in watercourses.

Predicted impacts of the forestry proposal

Water quality

Reduced water quality might be caused by sediment release from ground preparation, drainage, track construction or chemicals used to assist tree establishment. Conversely, water quality within the catchment also has the potential to be favourably impacted by the proposal by cessation of potentially polluting agricultural activities such as water contamination by faecal indicator organisms from sheep and cattle grazing; sediment delivery plus associated

nutrient losses linked to soil poaching; soil compaction (leading to increased run-off) and damage to streamside areas by livestock and exacerbation of landslips due to long-term grazing impacts.

Water quantity

The proposed change of land use from open ground to mixed woodland is likely to reduce average stream runoff (via increased interception and transpiration losses) in the medium to longer term. This must be set against the impact of climate change which suggests a moderate predicted increase in rainfall (SEPA, PVA Data Sheet).

Some small reduction in water yield can reasonably be anticipated as a result of afforestation. Using the accepted figure of 1.5 to 2% reduction for every 10% of a catchment under mature conifer forest, then afforestation of 12% of the Camphill WTW catchment will equate to an estimated 1.7 – 2.3% water yield loss.

Flood risk

Flood risk may increase as a result of shallow ploughing and drainage in the short-term but may, in the medium to longer-term, reduce as a result of afforestation and improved catchment management. Research has shown that trees can help alleviate flooding; by their greater water use, due to the significantly higher infiltration rates of woodland soils, and by the greater hydraulic roughness of floodplain and riparian woodland. Ultimately, the proposed new woodland will dampen extreme variations in water run-off and therefore help address short peak flood flow response and very low catchment flood storage and attenuation capacity.

Significant impacts of the forestry proposal on site hydrology

Water quality

With regards to water quality it was assessed, given the sensitivity of the Rye Water, Gogo Water and Greeto Water, that there is the potential for a significant adverse impact during the construction phase. However, with appropriate mitigation measures in place, this impact is judged to be not significant. In the operational phase, the cessation of potentially polluting agricultural activities will result in a significant beneficial impact upon the Rye, Gogo and Greeto Waters.

Water quantity

With regards water quantity, i.e. reduction in water yield as a result of afforestation and flood risk the impact is assessed as minor adverse and does not require mitigation.

Flood risk

With regards to flood risk the impact of the proposal upon the Gogo Water and Greeto Water is assessed as potentially adverse and significant in the short-term covering the construction phase (ground preparation and drainage operations). However, with appropriate mitigation measures in place, this impact is judged to be not significant. In the longer-term (operational phase) the impact of woodland creation is assessed to be of significant benefit to the Gogo and Greeto Waters.

GWDTE

Road construction poses a risk to the hydrological integrity of GWDTE such as flushes, seeps and springs by disrupting the flow of water through these habitats. However, with appropriate mitigation measures in place, this impact is judged to be not significant.

Disturbance and reuse of peat

A series of surveys, including vegetation, soils and peat depth surveys, has allowed the scheme to develop in a way that avoids planting on deep peat. Avoidance of planting on deep peat areas means the impact is judged not to be significant.

Part of the new roading requirement coincides with areas of deep peat but roads will be floated across these areas (see Addendum 3).

Borrow pit reinstatement

Deep excavations (> 1m) pose a risk to GWDTE by disrupting groundwater movement. However, with restricting excavation to less than 1m, this impact is judged to be not significant.

Mitigation measures – water quality

A provisional Diffuse Pollution Control Plan (DPCP) has been drafted (and updated February

2018) to protect water quality during the construction phase (roading, drainage and ground preparation operations). This will be discussed and agreed with FCS and SEPA prior to any project implementation. The DPCP represents the application of forest industry best practice contained within the Forests and Water Guidelines including application of buffer zones and best practice for site preparation and drainage.

Mitigation measures – flood risk

Given the concerns of SEPA relating to the risk of large woody debris entering water courses, buffer zones have been increased (from those recommended in the Forest and Water Guidelines) along the Gogo and Greeto Waters to 30 metres either side of the water's edge. Tree planting will be confined to low stature broadleaves (e.g. Downy birch, Silver birch, Rowan, Goat willow, Hazel, Hawthorn and Bird cherry) and steep slopes (>30 degrees) will be avoided.

Mitigation measures – GWDTE, disturbance and re-use of peat and borrow pit reinstatement

GWDTE

The general principles that will be applied to the protection of GWDTEs during road construction include avoidance of GWDTE or, where this is not possible, floating roads and/or porous construction and/or culverts to ensure GWDTE remain hydrologically functional.

Disturbance and re-use of peat

The presumption against planting of deep peat (> 0.5m) at Halkshill and Blair Park means that in excess of 492 ha of modified and active blanket bog (including NVC M18, M19 and M20) has been excluded from the woodland creation proposals. No further mitigation is required.

Borrow pit reinstatement

Borrow pits will not exceed 1 m in depth. Scheme amendments, since June 2016, have

resulted in a reduced roading requirement of 3620 m and therefore a reduced number of borrow pits from 22 to 12. Approximately 30,000 tonnes of stone will be required from 12 borrow pits equating to 2,500 tonnes from each. Restricting depth will mean the area of each will be circa 0.25 ha (50m by 50m). Any runoff from borrow pits will be captured in sumps and filtered through vegetation.

Borrow pits will be fully reinstated at the end of the road construction period. Full reinstatement will include regrading of the landform, in particular the back wall of the pit; refill of material with excess material from other parts of the works; reinstatement of vegetation, usually through replacement of removed and stored turfs, though excess turfs from other parts of the works will also be used.

Summary

The risks to water quality in the short-term are deemed to be not significant through compliance with industry best practice and a Diffuse Pollution Control Plan. Water quality in the medium to long-term will improve as a result of riparian buffer zone development and removal of agricultural activities. There is no risk of enhanced acidification.

Water yield will be reduced as a result of project implementation but this is not judged to be significant.

Flood risk will be controlled in the short-term by application of buffer zones that exceed industry best practice and a Diffuse Pollution Control Plan. In the medium to longer-term, afforestation will cause peak flow flood response to lengthen and increase flood storage and attenuation capacity, thereby reducing the flood risk to Largs.

Gaps in the ES (2016) in relation to GWDTE, disturbance and reuse of peat and borrow pit reinstatement have been fully addressed in Addendum 3 and with avoidance and mitigation measures in place are deemed not to be significant.

8.5 SOCIO-ECONOMIC

The FCS EIA scoping opinion letter required that the ES assess the impact of the change in land use from upland agriculture to forestry on the local agricultural industry and with reference to Scottish Government policy. It should also consider the impact of the proposals on the community of Largs with particular regard to its status as a popular tourist destination.

Specifically the ES should consider the impact of the proposals on the tourist town of Largs, with particular regard as to how the proposals may impact on its appeal as a tourist destination, as well as the businesses that depend upon tourists and visitors to help sustain the local economy.

Agriculture versus forestry

Analysis by the Woodland Expansion Advisory Group of the impact of the Scottish Government's woodland creation target on livestock farming suggests that creating 100,000 ha of woodland over 10 years on such land would, at worst, cause a 2% reduction in livestock numbers.

Economic comparisons of agriculture versus forestry in upland situations has recently been made (Bell 2014). This showed that:

- Forestry produces three times the economic output of farming before subsidy.
- Forestry's spending in the local economy is double that of farming.
- Forestry trades at a significant surplus, farming at a loss before subsidy.

Furthermore, farming requires a public spend of £22,600 per FTE to survive - forestry receives a modest contribution (one sixth that of that of farming) towards the provision of public benefits.

The estimated stock carrying capacity for Halkshill and Blair Park is estimated to be between 1,500 and 2,000 ewes. If this agricultural capacity were lost in its entirety, the loss of capacity would not seem significant at a National or Regional level when compared with Scottish Government census figures showing the Scottish national breeding ewe flock totalling 2.6 million ewes of which the Ayrshire regional flock comprises 180,000 ewes. Within an Ayrshire context, loss of agriculture capacity at Halkshill and Blair Park would represent 0.8% to 1.1% of the ewe flock.

Farming at Halkshill and Blair Park currently involves the seasonal management of around 100 ewes and 50 cows. The 100 ewes are a part time interest for the now retired former tenant of Halkshill. The 50 cows wintered at Blair Park by the neighbouring farmer, who stated this was cheaper and less labour intensive than housing the cows on his own unit also require a fairly minimal labour input. Therefore, whilst the land may have the capacity of 1,500 to 2,000 ewes the lack of economic viability is the reason for their absence rather than the land being

held in limbo awaiting decisions on planting – sheep numbers were declining long before the woodland creation proposals.

Current employment in agriculture equates to perhaps less than 0.5 labour units. Detailed analysis by Bell (2014) concluded forestry supports the same number of direct and indirect jobs as farming once the forest approaches a "normalised" 40 year rotation but during the construction phase building up to this and during the felling and harvesting phase, a higher number of jobs would be created much of this being local. Forestry was shown to generate 11% more direct employment and 30% more total employment (direct and indirect) than agricultural use on an equivalent land area.

In the wider context, Halkshill and Blair Park are in close proximity to a number of key end users such as chipboard plants, sawmills, paper mills and biomass plants. There are 15 sawmills, one major sawmill, one chipboard mill and one paper mill within Ayrshire. Timber processing is a key industry within the region requiring secure and reliable supplies of softwood product to maintain current production and future investment.

In looking at the current base-line situation, the planting proposals would have an overall beneficial impact compared to sheep farming with regard to employment and overall economic activity. Within the wider context, projects such as this would help sustain employment in downstream timber processing against a prediction of declining timber volumes from 2025 onwards.

The impact of the woodland creation proposals on business prospects within or tourist numbers to Largs has been assessed using various data sources.

Business prospects

Turning to the socio-economic impacts of the woodland creation proposals, it is clear from the current agricultural baseline that very little economic benefit accrues to Largs form these agricultural businesses. Assessing future business prospects should the woodland creation proposals be implemented was assisted by data from the proposed Waterhead Windfarm proposal. This data shows that the proposed windfarm development would not significantly impact on business prospects. This sought respondents' opinion within Ayrshire (including businesses in Largs) on the likely impacts of the proposed wind farm on their business prospects. Of the 159 respondents, the vast majority considered that the proposed development would have no impact on their business (82%) and a further 7% indicated they

would expect it to have a low or minimal impact on business performance. Four per cent of respondents suggested it would have a positive impact on their business trading.

Tourist numbers

A further Ayrshire-wide survey involving 158 respondents looked at the impact of the wind farm proposals on Ayrshire tourism. The vast majority stated they felt it would have no impact on tourism or visitor numbers within Ayrshire (69%) with a further 13% considering any adverse impact would be low to minimal. Six per cent felt it may have a positive impact on tourism in the area. A medium adverse impact was expected by 6% of respondents and a further 6% stated it would have a high adverse impact on tourism.

Using this data in relation to the Halkshill and Blair Park woodland creation proposal

Compared to windfarm proposals woodland creation is well-supported in Scotland and generally less contentious compared to windfarm proposals. According to data provided in the Public Opinion of Forestry 2015 Scotland, there is public support for new woodland development. Respondents were asked whether or not they would like to see more woodland in their part of Scotland. Around three fifths (62%) of all respondents in 2015 said they would like to see more woodland in their part of Scotland.

It is concluded that the response to impacts on business prospects and visitors numbers from a proposed woodland development would be less adverse than those for a proposed wind farm development. Overall the impact on business prospects of this woodland creation proposal is assessed as minor beneficial as a result of increased economic activity, but is not judged to be significant.

FCS agreed with the assessment of impacts in the ES and concluded that impacts on agriculture will not be significant. They also considered that the potential impacts on Largs as a tourist destination are acceptable and not likely to be significant.

8.6 TIMBER HAULAGE

The FCS EIA scoping opinion dated 17/1/14 raised the issue of potential for damage to the local road infrastructure and disruption to road users from an increase in timber traffic levels associated with woodland establishment and with the eventual harvesting of the crop.

Halkshill and Blair Park Farms are currently run as hill farms both with low stocking levels of sheep. At present, there is a low demand for agricultural transport on and off the site. Should the woodland planting proposal proceed, it is likely that traffic to and from the property would increase.

A new access point to the property has been created onto the A760 to the west of the current Blair Park Farm entrance to facilitate the Gogo and the Greeto Hydro Power schemes. Associated with this is a newly constructed road system linking the A760 entrance with the Greeto Bridge. For the forestry proposal, heavy vehicles (e.g. low loaders, timber haulage trucks) would access and leave the property via this point on the A760 rather than use the existing track from the west. This access point (Bellesdale Avenue) will be for light vehicles (e.g. 4x4s, Transit-type vehicles) only.

The A760 and A78 are well-maintained roads with no known issues in relation to timber haulage. They are currently classed as an 'Agreed Route' by the Timber Transport Group (TTG) which are those that '*can be used for timber haulage without restriction other than as regulated by the Road Traffic Act 1988*'.

At the woodland project construction stage, when traffic is mainly linked with woodland establishment (years 0-10), the predicted change in light vehicle and HGV traffic flow on the A760 and A78 compared with the current baseline would be an increase of less than 1%. At the mid-rotation operational stage (years 10 to 30), traffic would mainly be limited to light vehicles associated with forest maintenance, with a predicted increase in current traffic flow levels of less than 1%. At the timber production operational stage (years 30-40), when traffic is mainly linked with timber harvesting and haulage, the predicted change in HGV traffic flow on the A760 and A78 compared with the current baseline would be an increase between 1 and 3%. These increases are considerably less than the 10% 'trigger' stated in the Guidelines for Environmental Assessment of Road Traffic. Potential changes in traffic flow are unlikely to create any discernible impact upon road users. Therefore, the impact of the woodland creation proposal upon users of the A78 and A760 public roads is judged to be not significant.

No significant issues have been raised by FCS or consultees in relation to timber transport.

8.7 PUBLIC ACCESS

The FCS scoping opinion noted that the ES should fully understand the baseline nature and extent of the public use of the site and assess the potential impacts that the proposals may

have on this use.

A wide-ranging public consultation took place which included Largs Community Council, the North Ayrshire Access Officer and the North Ayrshire Outdoor Access Forum. Information was supplemented by desk-based study and field survey to fully understand the current baseline use of the site for public access. This has ensured that the access requirements of users have been taken fully into account in the design of the proposed planting scheme. Access through the site was, by far, the most common issue raised during the public consultation process.

Key recreation areas most frequently accessed by the public and most likely to experience an impact as a result of the woodland planting proposal are: i) the open hill, ii) Greeto Bridge, accessed using the Core Path, and iii) existing woodland within the Gogo Glen above Largs. Potential impacts include impacts upon the public access provision and impacts upon visual amenity (views) from within the site as a result of woodland creation. Appropriate design of the proposed woodland and associated tracks is key to minimising impact upon the existing public access resource and visual amenity.

Site users identified by the desk-based study include walkers, runners, mountain bikers, geo-cache users, gorge-scramblers, climbers, swimmers / picnickers at the Greeto Bridge and those utilising existing woodland paths within the Gogo Glen woodland. Due to the nature of the previous land use, data availability relating to visitor numbers is very limited.

Woodland creation may impose restrictions upon public access but may also increase accessibility of the site to the public. It is anticipated that the type of user of the site may change, with those keener or confident in using defined tracks displacing those for whom an open, treeless landscape is the attraction. The main restriction to public access will take place at site establishment (years 0 to 1) and during harvesting and timber haulage (years 30 to 40). The potential impact of all public access restrictions can be kept to a minimum with appropriate mitigation. The duration of operations within identified locations frequently accessed by the public will be kept to the absolute minimum required. Signs at key access points onto the property will detail any public access restrictions and, where possible, alternative routes will be provided. During the operational phase, activities such as forest thinning or harvesting will come under a 20 long-term forest plan, which requires consultation on various issues prior to work programming, including public access. Deer fencing, which can reduce public access, is limited to the 80 ha native woodland area above Largs. Self-closing gates in appropriate locations will be incorporated into the fencing design. Otherwise fencing on the property will be stock proof only and follow existing fence lines.

The impact of the proposal upon public access to key recreation areas within the site is judged to be significant. However, with appropriate mitigation applied, the impact is reduced to not significant.

Conversely, an increase in public access would also be expected if the proposal goes ahead. The newly constructed Greeto and Gogo Hydro Scheme Road, which would be managed to service woodland creation and future harvesting (thereby minimising increased traffic flow in Largs) would maintain a link from Largs to recreation opportunities at Kelburn Windfarm and beyond. A proposed 2 km extension to the Greeto and Gogo Hydro Scheme road would include construction of a new bridge c. 1 km north from the existing Greeto Bridge would connect to open woodland rides and maintain access to the open hill beyond. The road extension would also create a loop suitable for those on foot and mountain bike from Largs via Greeto Bridge to an 80 ha new native woodland with managed loop walks. This woodland resource is intended to have nature conservation and recreational amenity benefits and to provide seasonal diversity in woodland colour. Native trees would be protected for a period of time by a deer fence, with self-closing access gates located in the most appropriate positions. Further loop walks would be accessible to the public in other areas of the site along designed open rides - tracks used for woodland establishment that would be retained and managed after woodland planting. These informal tracks would be managed if desire lines indicated that they were used by the public.

With regard to the potential impact of loss of views from within Halkshill and Blair Park it should be noted that the altitudinal planting limit is circa 400 m OD. In terms of long-distance views, this means that hill tops remain open both as areas of public resort and maintenance of views from the site. Other key areas used by the public were also identified and taken into consideration when designing the woodland, including the Scheduled Monument on Castle Hill, the Quad Rocks, Auchenmaid Hill, the Gogo Glen woodland and the area to, from and around Greeto Bridge. The experience from the Core Path to the Greeto Bridge in terms of visual amenity was considered in detail, with the aim to avoid creating a linear open corridor, retaining key views of Cumbrae to the west and a shorter distance views along the path itself.

Overall there is judged to be no significant loss of public access to or within the property and no significant loss of visual amenity from within the site. Public access opportunities would be significantly enhanced on site, with particular benefit provided by the retention and maintenance of the Hydro track linking Largs with the A760 via Blair Park, creation of open

woodland rides forming loop walks, a new bridge 1 km upstream of the existing Greeto Bridge, 80 ha of new native woodland above Largs incorporating managed loop walks which link to existing paths to the open hill and beyond.

Following the statutory consultation period, FCS agreed that impacts on access to the open hill would be minor.

Regarding public access to the Greeto Bridge and Core Path area, FCS stated that whilst the impact of the operational stage of the proposal had been assessed in the ES and the impact upon the visual resource of the area had been assessed in the LVIA (also see Addendum 1), the impact upon local amenity and cultural heritage had not been adequately assessed. Furthermore, community benefit was a clear concern in responses from the community back to FCS. As a result, FCS reassessed the impact upon public access as significant. FCS concluded that further mitigation for this impact would be required prior to their final decision on EIA consent or refusal for the woodland creation proposal.

Mitigation

Mitigation for impact upon the visual resource of the area has been assessed in the LVIA and Addendum 1. Mitigation for the impact upon local amenity and cultural heritage is described in full in Addendum 2, summarised below:

- The woodland has been designed to keep the Greeto Bridge area open, maintaining views and avoiding shading. Public access to this resource will continue as at present.
- Along the Core Path, a variable tree-free area of approximately 20 metres will be maintained either side where this will allow views to the Firth of Clyde and Cumbrae.
- A tree-free area designed around the Cauld (Quad) Rocks will ensure that this resource remains suitable for rock climbing and other outdoor pursuits as at present. This area will remain accessible to the public when approaching from the National Sports Centre and via other popular routes from Largs.
- A total of 3.3 kilometres (2 miles) of new formal waymarked paths will be created and managed for public use. Paths run through predominantly native woodland which are designed for amenity value and will not be felled.
- Picnic tables and wooden benches will be installed at agreed locations along the Core Path and new paths.
- The woodland design has taken account of a number of formal walking routes within the property, which will remain accessible.
- Vehicular access to the property by the public will not be permitted.
- Heavy forestry-related vehicles will use the access road from the A760 into Blair Park, avoiding the residential areas of Largs.

- The area of hard-standing at the newly created Blair Park entrance from the A760 will be retained for public parking, and as a potential location for future development of mountain bike facilities.

- A formal public access group will be established to discuss, refine and agree the detail of these proposals. This group will then provide advice to the Landowner.

With mitigation, the impact upon public access is re-assessed to be not significant.

8. SUMMARY OF SIGNIFICANT IMPACTS

Table 1 below outlines the impacts identified at public consultation (in red) for which further mitigation was required to ensure that any remaining residual impacts (in blue) were not significant.

Receptor			Significant residual impact?	Issue to be addressed	Mitigation Revised planting proposal shown in Annex 1 (Design 8).	Remaining residual impact significant?
Landscape & visual	Landscape resource	SLA / RLC	No	-	-	-
		Local Landscape Character	**Yes**	Planting of broadleaves too close to escarpment & planting of conifers on plateau behind escarpment unacceptable.	**Revised planting proposal.** Refer to ES Addendum 1 (p.4-5).	**No**
		Wild land area	**Yes**	Magnitude assessed to be higher than assessed in ES.	**Revised planting proposal.** Refer to ES Addendum 1 (p.5-6).	**No**
	Visual resource	Views 1-7	**Yes**	Planting of broadleaves too close to escarpment & planting of conifers on plateau behind escarpment unacceptable.	**Revised planting proposal.** Refer to ES Addendum 1 (p.6-7).	**No**
Public Access	Access to open hill		No[1]	-	-	-
	Core path & Greeto Bridge		**Yes**[2]	Impact on local amenity and cultural heritage not adequately assessed.	**Revised planting proposal.** Refer to ES Addendum 1 (p.7-8). Additional access opportunities are described in ES Addendum 2.	**No**
Ecology	Habitats	Acid grassland	No	-	-	-
		Marshy grassland	**Yes**	Presence, extent & location of GWDTEs not fully detailed or impact assessed. Some acid / basic flushes are within proposed planting area.	**Revised planting proposal.** Refer to ES Addendum 3.	**No**

Receptor			Significant residual impact?	Issue to be addressed	Mitigation Revised planting proposal shown in Annex 1 (Design 8).	Remaining residual impact significant?
		Upland heath	No	-	-	-
		Blanket bog	**Yes**	1. Planting area contains a mosaic of deep & shallower peat, some of which may be GWDTEs. 2. Soil survey indicates bog habitat within planting area.	**Revised planting proposal.** 1. Refer to ES Addendum 3. 2. Redesign took account of information provided by peat depth survey & soil survey.	**No**
		Base rich & neutral grassland	No	-	-	-
		LNCS	No[3]	-	-	-
	Birds		No	-	-	-
Hydrology	Flood Risk		No	-	-	-
	Diffuse pollution		No	-	-	-
Cultural heritage			No	-	-	-
Socio-economic	Employment capacity		No	-	-	-
	Existing tourist economy of Largs		No[4]	-	-	-
Silvicultural site suitability			**Yes**	Further soils & peat depth information required.	**Revised planting proposal.** Redesign following soil & peat depth surveys. Refer to ES Addendum 5 (Annex 6).	**No**

[1]Conditions requested by North Ayrshire Council: 1) agree an access plan, 2) agree deer fence & gates location and specification.

[2]FCS are likely to condition the establishment of a working group to agree future management of the site.

[3]FCS require acidic / basic flushes to be excluded from the planting area. Refer to ES Addendum 3.

[4]FCS require that the impact upon landscape & visual / public access are adequately addressed.