

# Westfield Forest Design Plan 2014-2024

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Scottish Lowlands Forest District

Westfield

Forest Design Plan



Approval date: \*\*\*

Plan Reference No: \*\*\*\*

Plan Approval Date: \*\*\*\*\*

Plan Expiry Date: \*\*\*\*\*

# Westfield Forest Design Plan 2014-2024

## CSM 6 Appendix 1b

### FOREST ENTERPRISE - Application for Forest Design Plan Approvals in Scotland

#### Forest Enterprise - Property

Forest District:	Scottish Lowlands
Woodland or property name:	Westfield
Nearest town, village or locality:	Blackridge
OS Grid reference:	NS 863 677
Local Authority district/unitary Authority:	West Lothian & North Lanarkshire

#### Areas for approval

	Conifer	Broadleaf
Clear felling		
Selective felling		
Restocking		
New planting (complete appendix 4)	42.6 Ha	25.6 Ha

1. I apply for Forest Design Plan approval\*/~~amendment approval~~\* for the property described above and in the enclosed Forest Design Plan.

2. \* I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for afforestation\* /~~deforestation~~\*/ roads\*/ quarries\* as detailed in my application.

3. I confirm that the initial scoping of the plan was carried out with FC staff on

07 January  
2014

4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.

5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.

6. I confirm that agreement has been reached with all of the stakeholders over the content of the design plan and that there are no outstanding issues to be addressed. Copies of consultee endorsements of the plan are attached.

7. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed ..... Signed.....  
Forest District Manager Conservator

District ..... Conservancy.....

Date ..... Date of Approval.....

Date approval ends:.....

\*delete as appropriate

# Westfield Forest Design Plan 2014-2024

## CSM 6 Appendix 4

### FOREST ENTERPRISE - Application for Approval of Woodland Creation

#### 1. Forest Enterprise – Property

Forest District:	Scottish Lowlands
Woodland or property name:	Westfield
Nearest town, village or locality:	Blackridge
OS Grid reference:	NS 863 677
Local Authority district/unitary Authority:	West Lothian & North Lanarkshire

#### 2. Proposed areas to nearest tenth of a hectare

New Planting	68.2
Natural Colonisation	5.0
Open Ground	53.5
Total	126.7*

\* Figure is less 5.5 Ha Existing shelterbelt

#### 3. Special areas and protected land

Designation	Area Name or Number	Comments
N/A		

#### 4. Proposal details of woodland creation

Area Name or number	Gross Area (Ha)	P Year	Spp	Area (Ha)	Open Ground (Ha)	Comments
Conifers	35.0	2014	SS/ALP	30.4	4.6	
Alternative conifers	14.0	2014	MP/SES	12.2	1.8	
Mixed Broadleaves	13.1	2014	SYC/ASP/BE/SOK /DBi	11.4	1.7	
W4 Native Wet Woodland	13.5	2014	CAR/XWL/DBi	11.7	1.8	
Low growing shrub‡	2.9	2014	HAW/BLK/HAZ	2.5	0.4	

‡ Found within mixed broadleaves on the map

I apply for authority to create a woodland as above and as shown on the attached map.  
I undertake to obtain the necessary permissions from the appropriate statutory body before commencing work under any approval which is granted.

Signed ..... Signed.....  
Forest District Manager Conservator

District ..... Conservancy.....

Date ..... Approval Date.....

Date approval ends .....

# Westfield Forest Design Plan 2014-2024



**Forestry Commission Scotland**  
Coimisean na Coilltearachd Alba

## Environmental Impact Assessment

### Determination Enquiry Form

**Complete this form to find out if you need consent, from the Forestry Commission (under the EIA Regulations 1999), to carry out your proposed work.**

Section 1 Proposed work							
Please put a cross in the box to indicate the type of work you are proposing to carry out. Give the area in hectares and where appropriate the percentage of conifers and broadleaves.							
Proposed work	cross	Area in hectares	% Conifer	% broadleaves	Proposed work	cross	Area in ha
Afforestation	X	68.2	62.4	37.6	Forest roads	X	0.45
Deforestation					Forest quarry		
Location and District				Approx 3km west of the town of Blackridge in West Lothian just off the A89			

**Please attach map(s) showing the boundary of the proposed work and also give details of the operations.**

Section 2 Property details	
Property Name	Westfield
Grid Reference (e.g. AB 123/789)	NS 863 677
Local Authority	West Lothian & North Lanarkshire
Nearest Town	Blackridge

Section 3 Applicant's category (please put a cross in one box)					
PE	Personal occupier		PU	Public ownership	X
BU	Business occupier		OT	Other	
VO	Voluntary organisation		CT	Crofting tenant	

Section 4 Applicant's type (please put a cross in one box)					
LS	Lessee		OW	Owner	X
TE	Tenant		TR	Trust	

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Section 5 your agent or woodland manager's details					
Title	Mr	Initials	R	Surname	Clamp
Organisation	Forestry Commission Scotland – Scottish Lowlands Forest District				
Address	Five Sisters House				
Five Sisters Business Park					
West Calder			Postcode	EH55 8PN	
Tel No	01555 660190		Mobile	07801 213304	
Fax	01506 870 848		e-mail	robert.clamp@forestry.gsi.gov.uk	
Is this the address for correspondence?	yes	X	No		

Section 6 Applicant's details					
Title	Mr	Initials	S	Surname	Towers
Organisation	Forestry Commission Scotland – Scottish Lowlands Forest District				
Address	Five Sisters House				
Five Sisters Business Park					
West Calder			Postcode	EH55 8PN	
Tel No	01698 222 225		Mobile	07867 353 108	
Fax	01506 870 848		e-mail	stewart.towers@forestry.gsi.gov.uk	
Is this the address for correspondence?	yes	X	No		

Section 7 Sensitive Areas: Give the area of the proposal that is covered by any of the following designations	
Sensitive Area as listed in "Schedule 2" of the 1999 EIA Regulations Area (ha)	Area in hectares
a. Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special Scientific Interest (PSSSI) under the Nature Conservation (Scotland ) Act 2004	N/A
b. Land where a Nature Conservation Order has been made under Section 23 of the Nature Conservation (Scotland) Act 2004	N/A
c. a property that is a World Heritage Site	N/A
d. Scheduled Ancient Monument (SAM)	N/A
e. an area designated as a National Scenic Area	N/A
f. "Natura 2000" site - (European network of special areas of conservation and special protection areas under the Wild Birds Directive)	N/A
g. an area designated as a Special Area of Conservation under Regulation 10 of the Conservation (Natural Habitats etc) Regulations 1994	N/A
h. National Park – an area designated by a designation order made by Scottish Ministers under Section 6(1) of the National Parks (Scotland) Act 2000	N/A

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Appendix IV: Land Quality Appraisal Survey Report  
Appendix V: Archaeological Survey Report  
Appendix VI: North Calder Water River Body Information Sheet  
Appendix VII: Habitat Survey Report  
Appendix VIII: Open Habitat Survey Report  
Appendix IX: Protected & Priority Species Survey Report  
Appendix X: Breeding Birds Survey Report  
Appendix XI: Objective Monitoring Document

## Support documents: Maps

1: Location & Context  
2a: Surface Geology  
2b: Soils  
2c: Land Capability for Agriculture  
2d: JHI Map Image - Land Capability for Forestry  
3a: Climatic Zone  
3b: Soil Moisture Regime  
3c: Soil Nutrient Regime  
3d: Detailed Aspect Measuring System  
3e: Open Habitat Survey  
3f (i-iv): Ordnance Survey Map Images – Westertoun Farm (Historical)  
3g: Coal Authority Map Image – Westertoun Farm Mining Extent  
3h: Existing Shelterbelts  
4: Analysis & Concept  
5a: Future habitats (Planting)  
5b: Oblique view (3D) Landscape View

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## Version History

Version	Date	Comments
1.0	14/03/2014	Initial draft
1.1	26/03/2014	Added heritage information
1.2	28/03/2014	Added detail to Appendix I
1.3	01/04/2014	Update to 3.4.1 & further update to Appendix I
1.4	01/05/2014	Update to 3.4.1, 3.6, 5.1, 3.2.2.4 & 5.2.1 change of Appendix V Archaeological Survey
1.5	26/06/2014	Update to 3.5.3 and addition of new 5.4 Heritage with amendment to subsequent section numbering. Amendment of Appendix V: Archaeological Survey Report

## Summary of Proposals

This is a new plan setting out Forestry Commission Scotland's proposals for the future management of the recently acquired area of previously agricultural land at Westfield in accordance with currently policy and practice.

The plan will set out the management objectives and prescriptions for the forest for approval for an initial 10 year period with outline approval for the period beyond this, fulfilling the requirements of the UK Woodland Assurance Scheme and the UK Forestry Standard.

## 1.0 Introduction:

Westfield Forest Design Plan is a 10 year management plan for the FES acquisition of land adjacent to Westfield Farm in West Lothian and North Lanarkshire. After 5 years the plan will be subject to review.

As the plan is for a new acquisition, it is in essence an establishment plan for afforestation; however it shall detail management of existing woodland and open space.

Creating a diverse matrix of woodland and open space, the plan shall deliver a number of the “Key Themes” of the Scottish Forest Strategy including Timber, Biodiversity and Environmental Quality; it shall also deliver towards the Scottish Government targets for Climate Change through Carbon Sequestration (see **Appendix III Brief and Objectives**).

### 1.1 Setting and context

Westfield is located to the East of Caldercruix just off the A89 between Airdrie and Bathgate. Lying between 200m and 250m above sea level on the Central/Slamannan Plateaux, Westfield is a recent acquisition to the National Forest Estate of former agricultural farmland surrounded by predominantly agricultural land as well as some areas of mixed woodland and bog. At 132.5 hectares in total Westfield is made up of two separate blocks, one located immediately to the northwest (Grid Ref.: NS 853 683) and the other to the east of Westfield Farm House, Caldercruix ML6 7RY (Grid Ref.: NS 863 677).

Table 1 Current land usage

Land use	Area (ha)	%age
Improved & neutral grassland	75.3	57.0
Bog, Lowland Fen & Lowland Raised Bog	50.7	38.3
Roads, tracks & drains	0.6	0.5
Shelterbelts & existing woodland	5.5	4.2
<b>Total</b>	<b>132.2</b>	<b>100%</b>
<i>of which</i>		
Wayleaves (OHPL & UG Gas)	12.7	9.6

#### Map 1 - Location

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## 1.2 History of the forest

The site's main land use over the past few hundred years has been as agricultural land for grazing which has incorporated some areas of tree cover as shelterbelts. For all intents and purposes therefore there has not been a forest history.

## 2.0 Analysis of previous plan

There was no previous plan

## 3.0 Background information

### 3.1 Physical site factors

#### 3.1.1 Geology, Soils and landform

The underlying geology of the site comprises Midland Valley Sill and Scottish Lower Coal formation across the majority of the site, overlaid with Till, Peat and some Alluvium deposits.

#### **Map 2a – Geology**

Mapping of soils was carried out by FES staff digging soil pits across the site in a systematic fashion, in accordance with Ecological Site Classification principles and FC site recognition protocols. The main soil types found are: Deep Peat, Brown earth, Man-made restored ground, Peaty surface-water gley and Surface-water gley.

#### **Map 2b – Soils**

Based on the James Hutton Institute Land Capability for Agriculture classification, Westfield is classified as follows:

Table 2 Land Capability for Agriculture

Class	Capability	Area (ha)	%age
3.2 - 4.2	Mixed Agriculture	60.6	46
5.1 – 5.3	Improved Grassland	69.4	52
6.1 - 7	Rough Grazing	2.2	2
		<b>132.2</b>	<b>100%</b>

#### **Map 2c - Land Capability for Agriculture**

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North West Block (c. 15ha, 200 – 220m ASL)

The smaller of the two land parcels (14.8 Ha) to the northwest is located within North Lanarkshire. Forrestfield Road forms the western boundary of this parcel an access road runs along the southern boundary. Overall this land parcel slopes gradually from north to south. Stooprigg Wood is located to the southeast. The fields are divided by hedges with gaps to allow for access.

Eastern Main Block (c. 117ha, 200 – 210m ASL)

The larger parcel (117.4 Ha) is located within West Lothian and lies east of Westfield Farm. A track which runs through the northern area of the site and across the eastern boundary provides access to most of the parcel. The majority of the fields in this area have been used as grazing land for cattle. The land here slopes gradually from north to south. The eastern edge of the main body of the land is covered by a strip of dense mature trees. An area of poorly drained peat bog stretches along the northern edge. Field drains are present along the boundaries of most fields and along either side of the track. Areas of levelled made ground are present either side of the main woodland shelterbelt strip. This is presumed to be the footprint of the West Westertoun Farm buildings which were demolished pre-1980 and are understood to have been located in this area (see **Appendix IV – Westfield Land Quality Appraisal** and **Maps 3f(i-iv) Westertoun Farm old OS Maps**)

## 3.1.2 Water, Hydrology

North Calder Water flows south westerly between the 2 blocks which form Westfield and runs along the western boundary of the main block for approx. 250m. Westfield has had an extensive drainage network established over time allowing for more suitable conditions for agriculture. The drainage system feeds into North Calder Water which in turn feeds Hillend Reservoir located approx. 1km to the west. North Calder Water is currently classified by SEPA as 'poor' (primarily due to barriers to fish migration). (See **Appendix V – North Calder Water Body Information Sheet**)

## 3.1.3 Climate

Both blocks that form the woodland fall within the Cool, Moist climatic zone with a small area of the north western block also being within the Cool, Wet zone and the main eastern block also having pockets within the Warm, Moist climate zones. The Accumulated Temperature (day-degrees above 5 °C, a measure of growing season length) varies between 1168 and 1207 (1200 representing the dividing point between Cool & Warm). Soil Moisture Regime is Very Moist within the north-west block whilst within the main block it is fairly evenly split between Wet, Very Moist and Fresh. The Soil Nutrient Regime is predominantly Medium with a significant area being Very Poor.

## **Map 3a Climatic Zones, 3b SMR, 3c SNR**

### 3.1.4 DAMS

Detailed Aspect Method Scoring (DAMS) is a measure of windiness of a site using the angle to the horizon in the eight compass points, weighted towards the prevailing wind direction. Scores range from 0-24: The higher the score the greater the exposure, with scores below 13 regarded as sheltered and above 22 as too high for commercial forestry. DAMS on the site lie between 14 and 17 (13-15 = moderately exposed, 16-17 = highly exposed), with scores generally increasing with elevation.

## **Map 3d DAMS**

## 3.2 Biodiversity and environmental designations

### 3.2.1 Priority Habitat Types

PHT's are protected under the UK Biodiversity Action Plan and FCS policy is to protect, enhance and expand these habitats where suitable. There are a range of open space and woodland types.

A habitat assessment was undertaken in December 2011, with a follow up, more detailed, open habitat survey in August 2013. Both surveys have been appended for reference (see **Appendix VII Westfield Habitat Report** and **Appendix VIII Westfield Open Habitat Survey Report**).

Both surveys indicate that the site is generally low in species diversity; with little in the way of botanical interest however certain areas across the site were identified as being of ecological interest; those areas including areas of Lowland Raised Bog, Intermediate Bog and Lowland Fen.

## **Map 3e Open Habitat Survey**

### 3.2.2 Protected Species

European Protected Species are listed on the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (Habitats Directive) as species of European Community Interest and in need of strict protection.

A detailed species survey was conducted in October 2012 to assess the use and value of the site by protected and priority species (see **Appendix IX Westfield Farm Protected and Priority Species Report**).

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## 3.2.2.1 Badger

No signs of badger *Meles meles* were recorded during the survey. The majority of the open areas are too wet for badger setts.

## 3.2.2.2 Bats

No evidence of bats was recorded during the survey and habitats were unsuitable for roosting bats, but potential foraging habitat along plantation and wooded edges was present.

## 3.2.2.3 Red Squirrel

No evidence of red squirrels *Sciurus vulgaris* was found during the survey. The woodland areas are small and isolated leading to them being unlikely to host red squirrels.

## 3.2.2.4 Breeding Birds

All native bird species are afforded general protection under the Wildlife and Countryside Act 1981 (as amended). In addition some species are afforded extra protection via Schedule 1 of the Act or via the EC Birds Directive, referred to here as species with 'enhanced protection'. The site is likely to host a number of breeding bird species associated with upland farmland and moorland including snipe *Gallinago gallinago*, curlew *Numenius arquata* and lapwing *Vanellus vanellus*.

**Appendix IX** indicated that it would be advisable that a breeding bird survey be carried out to assess the sites interest for these species.

As advised a further breeding bird walkover survey was carried out in June 2013 (see **Appendix X: Westfield Breeding Birds Report**) which identified the following Birds of Conservation Concern (BoCC):

Table 3 Surveyed species

Red List	Amber List
Skylark	Curlew Meadow pipit

Whilst the Appendix X makes mention of the sightings of the species in Table 3 no nesting sites of any of the species listed were seen. None of the species listed would be expected to be adversely affected by the afforestation on the site as the plan conserves half of the total area of the site as open habitat which in turn conserves the areas preferred by these species. The creation of a broadleaved network through the site as detailed in the plan, it is hoped, will promote the diversity that provides nesting and feeding resources required by locally important associated woodland species.

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## 3.2.2.5 Other Species of Note

Other species of note recorded during the walkover survey consisted of brown hare *Lepus europaeus* a protected species capable of causing damage to young trees. If levels of hare browsing become an issue statutory agencies will be consulted to reach as solution.

## 3.2.3 Designations

There are no formal designations on the site itself however the site is located just under 250m and 1.5km respectively of the SSSI & SAC areas of Black Loch Moss to the north and Blawhorn Moss to the east. Blawhorn Moss is also a NNR. As there is a substantial distance between the areas planted within this design plan and the designated mosses, they are not hydrologically connected and there are already significant areas of commercial and non-commercial woodland between this design plan area and the designated areas not managed by Forest Enterprise; it is unlikely that this plan would have any impact on the designated areas. Shields Wood LEPO lies to the west. West Lothian Council have designated an area to the east encompassing Blawhorn Moss as an AGLV. To the west the LNCS's of Easter Snipe Wood, Shields Wood, Hillend Reservoir and Garrieston North Flushes.

## 3.3 The existing forest:

### 3.3.1 Age structure, species and yield class

In the north western block there is currently two wooded areas. Belt G, Stooprigg Wood (see Map 3h – Shelterbelts) is a predominantly a mature Scots pine and beach strip along the south eastern corner next to the road and an area of predominantly birch scrub woodland in the north western corner (Belt H) which gradually peters out as you travel east.

Within the main eastern block there are six wooded areas which all function as shelter for the grazing cattle. Two of these areas form significant shelter belts. The northern belt which runs more or less north to south (Belt A) is approx 35m wide and 280 m long above the track which runs through it east to west and here it consists of predominantly poor quality YC 4 wind-swept mature Scots pine cP1960's with occasional oak, hawthorn, birch and ash. Below the track it is mainly YC 4 Oak with some beech and hawthorn and some more Scots pine. The second significant belt which runs also more or less north to south (Belt B) is approx 55m wide and 450m long and consists mainly of Sitka spruce with residual lodgepole pine of the outer margins. There is also some suppressed birch within the crop. The strip is beginning to suffer from wind-blow within it. The crop is cP1983 (ring borer) with YC 24. Within this larger strip is a smaller,

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older strip to the south east which consists of cP1900 beech YC4 with some minor elements of Scots pine, oak hawthorn and birch scattered within.

There are four other much smaller woodland strips, 2 to the south and a 2 in the very south east. The strips to the south east (Belts C&D) are cP1996 mixed broadleaves, hybrid larch and Scots pine. The mixed broadleaves consist of beech, birch, ash, rowan and willow with YC4 whilst the conifers are YC12. Belt E is predominantly p1900 Beech with some c40 year old ash and oak with no regeneration below. Finally belt F is a very poorly stocked SS/SP mix p1994 YC 20 and 10 respectively.

Table 4 Current Species distribution

	Area (ha)	%age
Sitka spruce	1.9	35
Mixed broadleaves	1.7	30
Other conifers	1.9	35
<b>Total</b>	<b>5.5</b>	<b>100</b>

### 3.3.2 Access

The north western block can be accessed by 4x4 or ATV from Forrestfield Road on the western boundary via an existing farm entrance to the field. Above this access point runs an OHPL which needs to be minded when creating future timber haulage access.

The main eastern block can be accessed via two points, by car along the tarred access road leading from Forrestfield Road to Westfield farm and from there east as far as East Fardrum Wood or by 4x4 or ATV from the field entrance off of the A89 just east of Bedlormie Toll.

With regards future access for timber transport this is best considered from in or around the existing field access directly from the A89. This will require the construction of an improved entrance, a new section of road in the south of the main block which would link up with the existing road through the site and some suitable turning opportunities. The existing road and proposed new section of road should adequately serve deer management purposes with relatively short distances from roadside to deer glades.

### 3.3.3 LISS potential

At present the existing small amount of shelterbelt woodland will be retained for the period of this plan to protect the new planting areas, any operations would be small and low impact. The capacity for LISS will be assessed in detail, once the forest is established. Current DAMS scoring and soil data suggests that future LISS potential may be limited on this site.

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## 3.3.4 Current and potential markets

Currently the main species at Westfield is Sitka spruce for which the market for saw-logs, pallet wood and export pulp is still relatively good. In the future Sitka spruce will remain the main species produced from the site with an element of other conifers and mixed broadleaves providing saw-logs, pallet wood, chip-wood, and firewood for future markets.

## 3.4 Landscape and Land-use

### 3.4.1 Landscape character and value

Westfield and the surrounding area it sits within display a smooth landform with a visually diverse geometric pattern of agricultural enclosures, shelterbelts, settlements, road and rail links, power and gas lines as well as woodlands all of which are on a medium scale relative to that landform

As the site straddles two local authorities its landscape character has been described within the SNH's Landscape Character Assessment (LCA) of North Lanarkshire Council\* (\*described within the larger Glasgow & Clyde Valley LCA) and West Lothian's Landscape Capacity Study for Wind Energy Development of 2011 which replaces the LCA of 1998. Both reports describe the site as "Plateau" however the West Lothian report classifies their respective area as the unit "Blackridge Heights" within the Landscape Type "Lowland Plateaux" whilst the GCV LCA describes North Lanarkshire's respective area as "Plateau Moorland" within the larger Central Plateau.

The extract below from the Glasgow & Clyde Valley Landscape Character Assessment provides guidance for forestry on this landscape type:

- encourage the management of existing coniferous plantations in the Plateau Moorlands with the aim of developing more natural shapes and achieving more varied age and species composition;
- discourage significant expansion of existing conifer plantations in order that the balance between planted and unplanted land remains broadly constant;
- where new planting does occur, encourage designs which reflect and articulate local variations in topography and avoid the obscuring of local features such as burns, gullies, walls or archaeological sites;
- encourage forest developments to retain broad open space corridors which respect areas of historic occupation and cultivation where these occur;
- there may be opportunities to encourage the regeneration or expansion of broadleaf woodland and scrub along burn-sides and in gullies creating a closer integration of lowland woodland and the moorland landscape;
- support new woodland planting where appropriate to provide screening around land uses such as mineral extraction, and along the principal transport corridors.

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West Lothian's Landscape Capacity Study for Wind Energy Development assesses the landscapes sensitivity as follows:

## 5 LANDSCAPE SENSITIVITY ASSESSMENT

### Landscape Character

#### 5-5

- c) *Blackridge Heights* unit 5(v), lying within the Lowland Plateaux LCT. Extensive area of remoteness, wildness and stillness, with the distinctive, rare, unspoilt landscape of Blawhorn Moss (a National Nature Reserve, SSSI and cSAC) and embracing East Craigs Hill; and

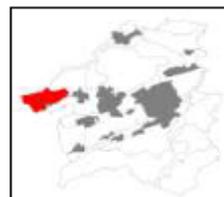
The West Lothian LCA goes on to provide the key characteristics of the landscape unit the site lies within:

#### Landscape Unit: 5(v) *Blackridge Heights*



#### Key Characteristics of the Landscape Unit

- As with the *Avonbridge to Armadale Plateau Edge* unit this area also represents an eastern extension of the Slamannan Plateau which extends within Falkirk district to the west, but is significantly different in character
- Blawhorn Moss, a National Nature Reserve of considerable nature conservation value, occupies a significant part of the unit
- Large scale, open, exposed, gently undulating moorland plateau
- Extensive areas of peatland and other poorly drained areas with a mosaic of mosses, heather, bog cotton and wet tussocky grassland
- Active raised mire/bog, watered from rainfall rather than via burns or rivers, which is rare in lowland Scotland
- Criss-cross of ditches shows past attempts at drainage for conversion to farmland
- Strong sense of place due to remoteness, wildness & stillness, with huge skies and wide horizons
- Historically an important viewpoint, with an infinite complexity of distant unobstructed views
- An important wildlife and recreational resource with public access across a boardwalk over the Blawhorn Moss National Nature Reserve
- Steep southern edge culminates in the prominent dolerite rocky outcrop scarp at Eastcraigs Hill providing a rugged and dramatic backdrop to Blackridge and the A89
- Almost devoid of settlement, buildings, roads, intensive agriculture or forestry, the only man-made intrusion within the 'Heights' being the Eastcraigs water tank complex alongside the minor road between Blackridge and Avonbridge



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Unlike the LCA of 1998 the current 2011 report does not provide a strategic aim for this landscape type.

The Edinburgh and Lothians Forestry and Woodland Strategy (p51) identifies the area (lowland hills, ridges and plateaux) on which this site sits as a “preferred area” for woodland expansion citing the “significant potential for new softwood forests on former mineral working areas and marginal land.”

## 3.4.2 Visibility

Set within a sparsely populated area the site is not overlooked by many surrounding properties. Due to the topography and existing screening provided by other woodland and hedges, existing views of the site are generally partial glimpses from short sections of Forrestfield Road, eastbound views from the A89 and from the rail line which runs parallel with to this. Despite the relative remoteness and seclusion of the site the planting patterns have been carefully considered to avoid geometric shapes on the landscape. Despite the presence of large field drains, power and gas lines and the different suitability of underlying soil types the design of the wood is such that as far as possible any linear features are avoided or screened by more rounded and organic shapes.

## 3.4.3 Neighbouring land-use

For the most part agricultural grazing ground for sheep and cattle surrounds Westfield along with areas of open moorland, small woodlands and shelterbelts. West of the site lies Hillend Reservoir, managed by Airdrie District Angling Club as a trout fishing loch. The reservoir also supplies water to the Forth & Clyde Canal. South-west of the site across the A89 lays Cairneyhill Quarry.

## 3.5 Social factors

### 3.5.1 Recreation

A high quality, tarmac, traffic free ~1km section of National Route 75 (Hillend Reservoir to Bathgate, part of The National Cycle Network) runs along the southern boundary with Westfield which is also a Right of Way (ROW). This same path is also part the local core path network. A second ROW runs through the site for ~1km accessed from Forrestfield Road along the existing tarmac road through the site exiting north of the spruce shelterbelt toward West Drumbeg Wood. Due to the nature of the site there is limited potential for a forest of great recreational value. Despite having a ROW through the site, being a working farm it hasn't been utilised by the public so there is no history of recreational use and this is unlikely to change significantly with the advent of tree planting other than perhaps the occasional local dog walker.

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## 3.5.2 Community

The immediate local community is made up of a several individual farm or ex-farm properties such as Westfield, Raiziehill, Whiteside, Drumbeg and Bedlormie. The nearest larger communities are found in the towns of Blackridge, Caldercruix and Limerigg which are located around 3-4 km away. As a grazing farm, Westfield has previously not been well used by the local community.

## 3.5.3 Heritage

There are no NMR or Relict land-use records for the farm according to the Historic Scotland data. The design plan area does contain a section of the former Westertoun Farm (most likely outbuildings) which was demolished to make way for opencast mining. The main farm house was found outside the design plan area and the outbuildings were situated underneath what is now a mature shelterbelt. A thorough desk based survey revealed the location of the farm; **Appendix IV** contains images of old ordnance survey maps showing the presence of Westertoun Farm from 1854 – 1956. From information available from The Coal Authority online imaging database the desk based survey also identified the extent of the mining on this land which extended over a large area which would have encompassed Westertoun Farm (see **Map 3g - Extent of current and past coal workings**). A thorough field based walkover survey was carried out on 14/12/2011 by an Environment and Heritage Forester to search for remnant structures of the former farm found no evidence of any remains of the old farm. A further professional archaeological survey was undertaken by Rebecca Shaw Archaeological Services in June 2014 and the report based on that survey can be found as **Appendix V**. This report details 6 sites of local importance each of either low or moderate significance, management of these sites is discussed in Section 5.4.

## 3.6 Statutory requirements and key external policies

The key policy documents influencing the FDP are:

- UK Woodland Assurance Standard 3.1
- UK Forestry Standard (3rd Edition)
- Scottish Forestry Strategy 2006
- Scottish Lowlands Forest District Strategic Plan 2009 – 2013
- Strategy for Lowland Raised Bog and Intermediate Bog on the National Forest Estate in Scotland 2012-2022
- Strategic Guide for the Conservation Management of Open Habitats on Scotland's National Forest Estate
- Central Scotland Forest Strategy
- The Edinburgh and Lothians Forestry and Woodland Strategy
- West Lothian Local Biodiversity Action Plan – Woodland Action Plan
- West Lothian Forest Habitat Networks

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- The North Lanarkshire Public Access Strategy
- The North Lanarkshire Biodiversity Action Plan (Broadleaved and Mixed Woodland Habitat Action Plan, the Bogs Action Plan and the Bean Goose Action Plan).
- SNH's Landscape Character Assessments for the Lothians and for Glasgow and Clyde Valley.

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## 4.0 Analysis and Concept

Using survey work and research a broad range of factors have been identified and considered to identify key features and from there identify the opportunities and constraints which exist within the design plan area. The analysis and concept map along with the table below summarise the main factors, opportunities and constraints to produce a concept of the aspirations of the design plan.

Table 5 Analysis and Concept

Factor	Opportunity	Constraint	Concept Development
Climate/Soils	<ul style="list-style-type: none"> <li>• Plant site suitable species to mitigate impacts of predicted future climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure and soils limit species choice</li> <li>• Climate change may impact commercial conifers due to drought</li> <li>• Large swathes of the site are dominated by peat bog</li> <li>• Relatively small areas where alternative species could be located</li> </ul>	<ul style="list-style-type: none"> <li>• Plant alternative conifer species in appropriate areas.</li> <li>• Utilise shelter from existing woodland</li> <li>• Plant broadleaves along southern fringes to provide long-term shelter for commercial conifer crop from prevailing wind and improve biodiversity.</li> </ul>
Species	<ul style="list-style-type: none"> <li>• Plant site suitable alternative conifers along with suitable established conifer species</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment and protection costs</li> </ul>	<ul style="list-style-type: none"> <li>• Main commercial crop should be Sitka spruce with Alaskan Lodgepole pine</li> <li>• Alternative conifer species such as Macedonian pine and Serbian spruce may also be planted in certain areas</li> <li>• Fence off areas containing palatable species</li> </ul>

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			<ul style="list-style-type: none"> <li>• Unfenced areas to be managed by wildlife team with suitable access from forest road to rides and deer glades.</li> </ul>
Timber	<ul style="list-style-type: none"> <li>• Majority of the plantable area is suited to commercial conifer production which is within suitable distance from established markets</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure may limit thinning suitability</li> </ul>	<ul style="list-style-type: none"> <li>• Planting Alaskan Lodgepole pine in mix with Sitka spruce would act as a self thinning crop negating need for machine thinning, aiding crop stability</li> <li>• Plant broadleaf element at high densities to promote establishment.</li> <li>• Create a wind firm mixed broadleaf crop to provide not only shelter for conifers but a firewood element from thinnings during their rotation with a longer term aim to produce large boles, some of which can be felled for niche markets whilst retaining others as seed trees for continued cover, protection and natural regeneration.</li> </ul>
Habitat/Biodiversity	<ul style="list-style-type: none"> <li>• Improve broadleaf habitat connectivity</li> <li>• Maintain and protect important lowland raised bog and links</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure restricts species choice and utility buffer zones break up desired network</li> <li>• Risk of successional birch and commercial spruce seeding in to</li> </ul>	<ul style="list-style-type: none"> <li>• Link existing broadleaf elements on south east fringe as well as that within existing shelter belts with new broadleaf planting of exposure tolerant species</li> <li>• Use volunteers to remove seedlings from bog habitat should conifer or further</li> </ul>

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	to wider bog habitat out-with site	bog (cost of removing seedlings)	broadleaves begin to seed in.
Landscape	<ul style="list-style-type: none"> <li>• Sympathetically enhance the landscape character with new woodland</li> </ul>	<ul style="list-style-type: none"> <li>• Features such as utility pipes, cables and drainage networks oblige more formal linear planting in places</li> </ul>	<ul style="list-style-type: none"> <li>• Careful woodland design, in line with UK Forest Standard to fully utilise available plantable land whilst retaining a natural landscape character.</li> </ul>
Access	<ul style="list-style-type: none"> <li>• Improve operational access to the site</li> <li>• Incorporate deer management access into design layout.</li> </ul>	<ul style="list-style-type: none"> <li>• Prohibitive cost of improving A89 entrance; forest road construction and upgrading</li> <li>• Drainage network may complicate timber harvesting/extraction</li> <li>• Possible reduction in plantable area</li> </ul>	<ul style="list-style-type: none"> <li>• Careful woodland design, in line with UK Forest Standard to provide forest road and ride access to 'designed in' deer glades for deer management purposes.</li> </ul>
Water	<ul style="list-style-type: none"> <li>• Enhance North Calder Water system with riparian planting</li> </ul>	<ul style="list-style-type: none"> <li>• Limited direct contiguous border between site and North Calder Water</li> <li>• Risk of seed migration from riparian planting onto proximate bog habitat.</li> </ul>	<ul style="list-style-type: none"> <li>• Careful woodland design, in line with UK Forest Standard (in particular Forest &amp; Water Guidelines) to improve water quality and habitat of North Calder Water.</li> </ul>

Distil down for initial concept map →

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Analysis	Concept
<ul style="list-style-type: none"> <li>The site is most suitable for growing commercial Sitka spruce however DAMS score suggests the site is marginal for thinning suitability</li> </ul>	<ul style="list-style-type: none"> <li>Plant Alaskan Lodgepole pine in mix with Sitka spruce self thinning the crop improving stability, deer management to protect crop.</li> </ul>
<ul style="list-style-type: none"> <li>Certain areas suitable for alternative conifer</li> </ul>	<ul style="list-style-type: none"> <li>Plant species such as Macedonian pine and Serbian spruce in identified areas and protect with fencing</li> </ul>
<ul style="list-style-type: none"> <li>The site has a discontinuous woodland network both internally and with the surrounding woodland</li> </ul>	<ul style="list-style-type: none"> <li>Plant more broadleaves to link up existing native woodland element to improve habitat connectivity.</li> <li>Retain existing spruce strips to provide shelter. Windblown element of the spruce providing deadwood for biodiversity.</li> </ul>
<ul style="list-style-type: none"> <li>Relatively exposed site</li> </ul>	<ul style="list-style-type: none"> <li>Utilise exposure tolerant broadleaf species to create a wind-firm edge for long term retention also providing for local firewood and niche markets. Broadleaf fringe will also soften the impact of new commercial conifer crop on landscape</li> </ul>
<ul style="list-style-type: none"> <li>Site dissected by an overhead electricity power line, an underground gas pipeline and a substantial drainage network</li> </ul>	<ul style="list-style-type: none"> <li>Follow relevant guidance sympathetically planting around these constraints, utilise obligatory buffers for benefit of additional open space and deer management.</li> <li>Design planting of broadleaves so to soften harsh lines of conifer areas with regard to topography, lines of force and visibility of woodland on the landscape.</li> </ul>
<ul style="list-style-type: none"> <li>Large swathes of lowland raised bog as well as some intermediate bog habitat</li> </ul>	<ul style="list-style-type: none"> <li>Manage areas identified as important open habitat which link to wider bog habitats. Manage against the spread of conifer crop and broadleaves seedlings onto said habitat.</li> </ul>
<ul style="list-style-type: none"> <li>Existing partial access into the site from Forrestfield Road with issues over rights of way over section next to Westfield Farm House.</li> </ul>	<ul style="list-style-type: none"> <li>Investigate improving the access via the farm entrance off of the A89 and linking that with a section of new road to the existing forest (farm) road.</li> </ul>

## 5.0 Forest Design Plan Proposals

### 5.1 Management

As this site is a new acquisition and the majority of the site is unplanted farmland, management and restock coupes have not been created for this plan. The planting map shows the outline of the species choices and shapes within the site and these can be broken down into the following land uses and management types:

- Productive Conifer - These areas will be managed using the clearfell system. There will be no thinning due to exposure across the site. A mixture of Sitka spruce and Alaskan Lodgepole pine is proposed to allow the crop to self thin.
- Semi-Productive Mixed Broadleaves – These areas will be managed to provide continuous cover. It is envisaged that initially light thinnings will be undertaken as part of a future plan followed by a defined silvicultural system to be decided in a future plan. It is expected that the crop will predominantly produce a supply of biomass and potentially, eventually some niche market saw-logs
- Non-Productive Native Wet Woodland – These areas will be managed as Minimum Intervention there may be some re-spacing and light thinnings suggested in future plans which provide a small element of biomass.

The remaining areas can be broken down into the following land uses and management types:

- Open ground – Valuable Lowland Raised and Intermediate Bog Habitat as identified in the Open Habitat Survey (These areas will be managed accordingly as open ground which may involve some drain blocking and removal of trees seeding in etc.) Other areas of lower value wet open ground will be left unmanaged.
- Shelterbelts – Minimum intervention (The spruce shelterbelt will be retained as deadwood provision for biodiversity as trees suffer from wind-blow over time. If there is a catastrophic wind-throw event and the majority of the spruce belt blows over this plan would allow for the tidy up and extraction of these trees and restocking with species appropriate to those being planted either side.)

### 5.2 Future habitats and species

#### 5.2.1 Species Choice

The detailed planting pattern shown on the planting map has been produced based on detailed analysis of the site's climatic and soil conditions with the help of the Forestry Commission Decision Support System and the principles of Environmental Site Classification. The analysis undertaken along with

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consideration of the objectives for the site, climate change, neighbouring land-use, hydrology and the landscape effects have led to the species matrix within this plan.

Careful attention has been taken to utilise as much suitable ground for productive conifers. With Sitka spruce and Lodgepole pine being the species most suited. In readiness for predicted climate change two suitable areas are proposed with the alternative conifer species of Macedonian pine and Serbian spruce. Introducing these alternative species is designed to provide diversity in terms of landscape, habitat and produce providing options for the future at a time where other species e.g. Scots pine and larch are being affected by pests and diseases such as *Dothistroma Needle Blight* and *Phytophthora ramorum* to name but two.

For biodiversity and landscape benefit site suitable semi-productive broadleaves such as Sycamore, Aspen, Sessile oak and Beech are proposed. In accordance with the *Chalara fraxinea* prohibition notice of 21/12/2012 (ref. 0321007) no Ash will be planted. In the wetter areas W4 native wet woodland species such as Common alder, Willow and Downy birch are proposed. Low growing shrub species such as Hawthorn, Blackthorn and Hazel are proposed closer to overhead power lines than would otherwise be possible with other species. The broadleaf planting as a whole will function to link up the surrounding broadleaf habitat with the existing broadleaf shelterbelt trees and create a habitat network or corridor for the movement of species throughout. The planting will also function to soften the harder edges of the conifer element of the site and provide a natural appearance both within and from out-with the wood.

## 5.2.2 Establishment

On the areas of made up ground which were previously open cast the subsoil is compacted affecting the drainage and therefore appropriate ground preparation methods will be applied to alleviate this issue to ensure the trees are capable of reaching full rotation length. Deep forestry ploughing will not be permitted as a method of ground preparation to avoid sediment run-off and erosion. Shallow agricultural ploughing should not be used on slopes over 9%. Site sensitive ground preparation methods such as hand screefing and continuous mounding on slopes over 9%, will be adopted.

With regards drainage appropriate methods will be employed in accordance Forests & Water Guidelines (5<sup>th</sup> Edn) in areas of commercial crop and no drainage methods will be employed in areas of native wet woodland as these species depend on moist or waterlogged soils.

## 5.2.3 Deadwood

As the site is a new acquisition and the main future operation during the life of this plan is afforestation it is not practical to attain the UKWAS requirement for deadwood on this site. It is however the intention to retain the various shelterbelts throughout the site which contain various levels of deadwood within them. The largest shelterbelt containing mostly Sitka spruce and Lodgepole pine is already subject to wind-throw and as such is expected to continue to do so steadily over time providing an important deadwood resource for the food-chain throughout the site.

## 5.2.4 Management of open land

Open ground is incorporated into the planting design for the site in the form of rides between potential felling coupes, utility wayleaves and drains. There are also significant areas within the site which will remain unplanted for conservation purposes. The site contains valuable examples of rare Lowland Raised Bog and Intermediate Bog habitat and these areas will remain unplanted and managed to protect these important habitats. There are also areas of the site which have less valued bog habitat which contain few rare species and are hydrologically isolated and as such some such areas will remain as open unmanaged ground.

## 5.3 Deer Management

There is a healthy roe deer population in the vicinity of Westfield and it is expected that when livestock grazing ends on the site the vacuum created will soon be filled with an influx of roe deer from the surrounding areas. The vulnerability of broadleaved trees and soft conifers to deer browsing is recognised and control will aim to keep this to a minimum; fencing may be required in some instances.

## 5.4 Heritage

As discussed in Section 3.5.3 a small number of sites were identified within the commissioned Archaeological Survey of the site (**Appendix V**) as of local importance and low to moderate significance. Table 6 below lists the relevant sites identified in that survey and describes the appropriate mitigation for each. The mitigation follows the FES guidelines on historic environment categorisation which ensures that all important archaeological sites are evaluated and protected and demonstrates that reasonable steps have been taken as per UK Forestry Standard requirements. In particular Site 4 (Rigg & Furrow) as identified within the survey falls underneath the path of an overhead power line and therefore is not an area available for woodland creation and has not been identified as such within this plan.

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Table 6 Heritage Site Mitigation

Site No	Site Type	Category	Value	Action	During forestry management, harvesting and FCE operations
1	Farmstead	D	Other sites	N/A - Feature removed by open cast mining	N/A
2	Spoil heap (demolition debris)	D	"	No action Indicate on all constraints mapping if deemed necessary	Avoid if possible
3	Clearance cairn	C	Local Importance	Protect Indicate on all constraints mapping	Mark out if necessary (or possible) and avoid unnecessary damage. If necessary for forestry operations - 5m operation buffer applied
4	Cultivation remains (rig & furrow)	D	Other sites	No action Indicate on all constraints mapping if deemed necessary	N/A out-with planting area
5	Spoil heap (demolition debris)	D	"	"	Avoid if possible
6	Structure	D	"	"	Avoid if possible or remove

## 5.5 Access

The previous section regarding access details the current provision for access to and within the site. It is not envisaged that the entrance upgrade and connecting road length proposed earlier would be required during the life of this plan however in the event of catastrophic wind-throw to the spruce shelterbelt this situation may change and this plan will allow for the creation of a wider entrance and less than 0.45Ha of new forest road if such an event should occur to recover the fallen timber.

## 5.6 Critical Success Factors

To achieve the main objectives of the design plan the following should be completed:

1. Appropriate deer management to allow successful establishment of both conifers and broadleaves
2. Maintenance of managed open ground

## Appendix I: Forest Design Plan Consultation Record

Statutory Consultee	Date contacted	Date response received	Issue raised	Forest District Response
West Lothian Council	13/01/2014	31/03/2014	<p>West Lothian AGLV listed within incorrect SFS theme.</p> <p>1998 Landscape Character Assessment has been replaced by 2011 Landscape Capacity Study for Wind Energy in West Lothian</p> <p>Consideration to reinforcing existing shelter belts</p>	<p>Consideration of the West Lothian AGLV has been moved from the theme of Biodiversity to the more appropriate Environmental Quality</p> <p>The plan text has been amended to reference the more up to date Report</p> <p>The plan proposes the retention of the existing shelter belts for the retention of existing habitat, shelter, landscape character, biodiversity value and future habitat corridor provision. The new planting of conifer either side of the existing spruce belt may well in time merge with the spruce belt but this would not be likely for at least 30 years or beyond as the current crop is over 30 years old and will either have blown as anticipated over time to</p>

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				<p>provide deadwood habitat or be still standing and taller than the younger crop either side. It is anticipated that a future plan would either extend the broadleaf element of the belt north or new conifers will be planted to bridge the crops either side. This plan aims to encourage the growth of new trees underneath the existing pine, oak and beech belts be that by natural means or by underplanting. The creation a habitat corridor by way of new planting will in essence create new 'belts' of broadleaves which are located appropriately in the landscape based on soil conditions and surrounding constraints such as utilities and environmental factors such as Lowland Raised Bog.</p>
Falkirk Council	13/01/2014	29/01/2014	Landscape effect of conifer hard edges to views from north	<p>3D visuals have been produced to help inform the planting design and effect on the landscape from all views to the site. Due to the topography, location of roads and settlements there are little to no views of the wood from the north. The use of broadleaves for screening</p>

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				and softening has been incorporated where appropriate.
Historic Scotland	13/01/2014	27/01/2014	No issue	n/a
West of Scotland Archaeology Service	13/01/2014	21/01/2014	Consideration to former site of Westertoun Farm	Historic OS Maps of the location of the former farm have been included with the plan as has a map of the extent of the open cast mining from the Coal Authority. Text on the desk based survey as well as an onsite walkover survey on 14/12/2011 which found no remnant structures has also been included within the plan.
SNH	13/01/2014	23/01/2014	Proximity to Black Loch and Blawhorn Moss SSSI's and SAC's	SNH recognise that the FDP is unlikely to affect these interests however detail has been included within the plan text which explains the large distances between these areas and the FDP site as well as indicating the sites are not hydrologically linked and highlights the presence of other woodlands between these areas and this FDP site. SNH also appreciate that this FDP aims to maintain the integrity of bog habitat with the FDP area.

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<p>Neighbours (Mr &amp; Mrs Beattie – Westfield Farm)</p>	<p>20/01/2014</p>	<p>04/02/2014</p>	<p>Proximity of trees to Mr &amp; Mrs Beattie's house</p> <p>Operational timescales</p> <p>Operational noise levels</p> <p>Access</p> <p>Increased footfall</p>	<p>The operations forester and planning forester visited Mr &amp; Mrs Beattie and explained that due to the power lines the conifers would be at least 60metres from their house but there may be some low growing shrubs around 40m away. They were happy with this.</p> <p>The timescales of felling were discussed and the Beatties were happy that no felling is expected for 4-5 decades.</p> <p>The planting machinery was described and again the Beatties were happy that noise levels would be minimal.</p> <p>It was explained that operational access is likely to be from the A89 to the south and therefore won't pass their property which again they were happy with.</p> <p>The Beatties are aware that the track that passes their property is a ROW but were concerned that the woodland would mean a dramatic</p>
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<p>FCS Central Conservancy</p>	<p>13/01/2014</p>	<p>30/04/2014</p>	<p>Insects</p> <p>Carry out an archaeological walkover survey of the whole site.</p> <p>Make mention of the Edinburgh and Lothians Forestry and Woodland Strategy</p> <p>Describe drainage and ground prep proposals</p> <p>Elaborate on effects of FDP</p>	<p>increase in numbers of people using it. It was explained that SLFD encourage more visitors to their woods but in this location it was unlikely they would see a significant difference which satisfied them.</p> <p>The Beatties were concerned that woodland would encourage insects to the site. It was explained that with the exposed nature of the site insects should not be a major issue but I levels did increase it would not be for several years. The Beatties were satisfied with this.</p> <p>A professional archaeological survey has been carried out and is attached as Appendix V.</p> <p>Reference to the strategy has been added to 3.4.1 &amp; 3.6</p> <p>Extra information with reference to these has been added to 5.2.2</p> <p>Further information with</p>
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			on breeding birds  Rationalise proposed species choices	reference to this has been added to 3.2.2.4  Further information rationalising species choice has been added to 5.2.1
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## Appendix II: Tolerance Table

	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Windthrow response	Adjustment to road lines
<b>FC Approval not normally required (record and notify FC)</b>	<10% of coupe size.	Up to 5 planting seasons after felling (allowing fallow periods for hylobius).	Change within species group E.g. Scots pine to birch,  Non-native conifers e.g. Sitka spruce to Douglas fir,  Non-native to native species (allowing for changes to facilitate Ancient Woodland policy).	<b>Low sensitivity area</b> Where windthrow represents more than 60% of the crop the area including standing trees may be felled plus up to 5Ha beyond in order to seek a windfirm edge.	<b>Low sensitivity area</b> Creation of turning points/ loading bays. Deviation of <100m either side of the predicted centre line of the road/ track.  <b>High sensitivity area</b> Deviation <75m in either direction from centre of road/track.
<b>Approval by exchange of letters and map</b>	10-15% of coupe size.	5 years +	Change of coupe objective that is likely to be consistent with current policy (e.g. from productive to open, open to native species).	<b>Low sensitivity area</b> As above to include 5-10 Ha of standing crop to seek a windfirm edge. Areas where windthrow represents <60%.  <b>High sensitivity area</b> Areas where windthrow represents <60%.	<b>Low sensitivity area</b> Deviation of 100-150m in either direction from centre of road/track.  <b>High sensitivity area</b> Deviation of 75-100m in either direction from centre of road/track.
<b>Approval by formal plan amendment</b>	>15% of coupe size.		Major change of objective likely to be contrary to policy, E.g. native to non-native species, open to non-native,	<b>Low sensitivity area</b> As above. Windblown area + an area >10 Ha to find a windfirm edge.  <b>High sensitivity area</b> Felling of standing trees beyond the area of windblow.	Deviations exceeding the above.

## Appendix III: Design Plan Brief

### 1. Introduction

The work of Forestry Commission Scotland (FCS) is guided by the Scottish Forestry Strategy 2006, which sets out seven Key Themes:-

- Climate change
- Timber
- Business development
- Community development
- Access & health
- Environmental quality
- Biodiversity.

From this Strategy, Scottish Lowlands Forest District prepared a five year Strategic Plan for the period 2009-2013. This draws on the most important strands of the Key Themes relevant to the forest areas we manage and sets out the policies and objectives under which other District plans are prepared and monitored.

In preparing the Brief and Objectives for this Forest Design Plan (FDP), issues were grouped under these Key Themes and assessed for their importance. Those relevant are set out in Table 1 below.

Table 1. Relevant issues under the SFS Key Themes

SFS Key Theme	Issues assessed as relevant by staff team for Westfield FDP
Climate change	Carbon sequestration targets Habitat Networks on new acquisitions Species selection in accordance with climate change projections
Timber	Conifer production
Access & health	Informal access routes Joint access rights Protect public rights of way
Environmental quality	Unscheduled monuments (archaeological remains) Watercourses West Lothian AGLV
Biodiversity	Priority Habitat Types – Intermediate and Lowland Raised Bog Native Woodland expansion Deer Management Adjacent designated sites (Black Loch Moss SAC/SSSI, Easter Snipe Wood SINC)

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## 1.1 Brief and Objectives

Following the analysis above, Table 2 sets out the Brief and Objectives agreed for developing the management proposals for Westfield.

**Table 2. Initial Brief and Objectives for developing management proposals**

<b>Brief</b>	<b>Objectives</b>
Maximise plantable ground and productivity of tree species	<ul style="list-style-type: none"><li>• Plant site suited species for timber production where site conditions allow</li><li>• Include productive conifers where appropriate in the landscape</li><li>• Suitable pest management to ensure success of planting and regeneration</li></ul>
Preserve important landscape and historic features	<ul style="list-style-type: none"><li>• Preserve the most important views within the site and enhance where possible</li><li>• Protect known historic features</li></ul>
Increase biodiversity value	<ul style="list-style-type: none"><li>• Develop options for expansion of native woodland</li><li>• Improve quality of bog, and minimise impact of planting</li></ul>