

# Dunachton Estate

## Long Term Forest Plan

SRDP RP Case number 3886297

February 2013

## Index

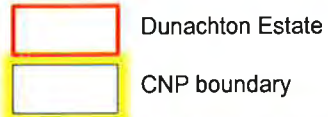
Location map .....	page 1
Property ownership details.....	3
Existing grant schemes .....	4
Stakeholder engagement .....	5
Long-term vision and management objectives / site and species description.....	6 - 7
Compartment details.....	8 - 9
Compartments map .....	10
Species map.....	11
Analysis and management proposals .....	12 - 13
View from Lynachlaggan .....	14
Photo viewpoint location .....	15
Felling phases.....	16
Successor species.....	17
Compartments map.....	18
Production Forecast .....	19
Tolerabce table.....	20

Appendix

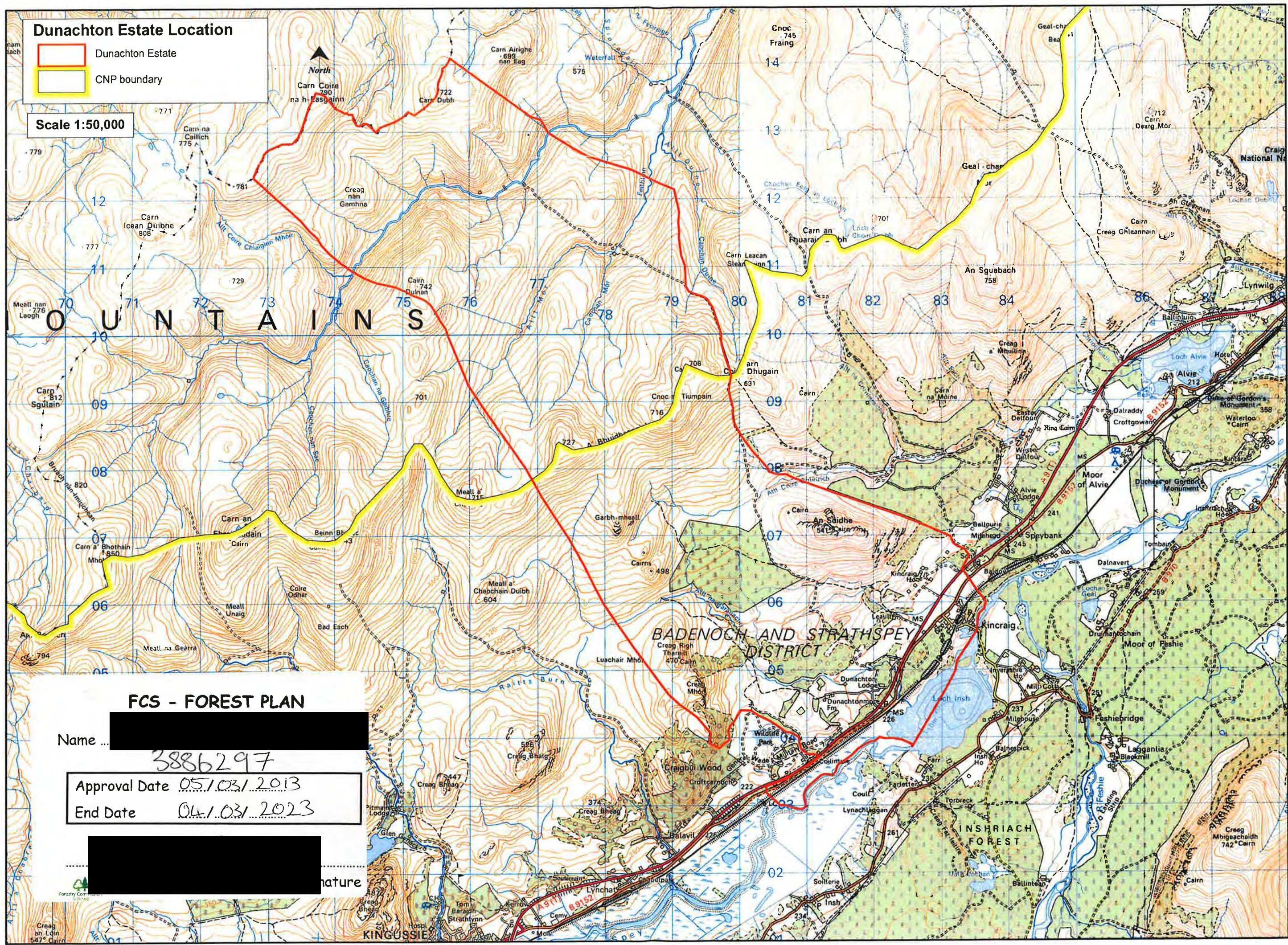
Scoping report



# Dunachton Estate Location



Scale 1:50,000



## FCS - FOREST PLAN

Name ...

[Redacted Name]

3886297

Approval Date 05/03/2013

End Date 04/03/2023

Signature

[Redacted Signature]



## Property

### Ownership

Dunachton Estate is a private estate owned by [REDACTED] the Estate is managed in conjunction with Fyvie Estate from the Estate office in Turriff. The managing agent for agriculture and general estate management is:

Smiths Gore  
The Estate Office  
Scone Palace  
Perth  
PH2 6PD

Forestry management is by:

Badenoch Land Management  
Alvie Estate Office  
Kincraig  
Kingussie  
Ph21 1NE

Payee

[REDACTED]  
Fyvie Estate Office  
Fyvie  
Turriff  
AB53 8JS

### Property details

Dunachton Estate extends to 4360 hectares, it is located to the west of Kincraig village at an altitude of 226 - 742 metres. The estate is a mixed estate with the traditional sporting, forestry and farming interests, some 84 hectares of land in the south of the estate has been leased to the Royal Zoological Society of Scotland where the Highland Wildlife Park is now located. The southern half of the estate is within the Cairngorms National Park.

The total woodland area is 450 ha which comprises:

Conifer	180ha	40%
Broadleaf	270ha	60%

The wooded areas of Dunachton Estate are all in the southern part of the estate, located between Loch Insh and the lower slopes of the Monahliaths at an elevation of 225 - 430 metres. Aspect is generally southern, soils are thin and acidic with areas of deep peat accumulations in hollows. Until the mid 1960's woodland cover would have been restricted to upland oak-birch woodland with some exocitic species established around the house and policies. In the period between 1967 - 1973 a number of shelter belts and commercial conifer plantations were established. Areas were fenced, ploughed and planted with mixed conifers including a large percentage of Lodgepole pine of various provenances.

**Existing grant schemes and felling licences**

<b>Location</b>	<b>FC ref no. and date</b>	<b>Description</b>
Compartment 15	030900343 19/05/2004	New planting
Compt 12 and 13	030001400 6/08/1996	regeneration
CPT 17	030900559 15/07/2005	regeneration
Cpt 20	4097739	New planting/regeneration

## **Stakeholder engagement**

Kincraig Community Council mentioned the appreciation of the community for the access provision that has been provided over the years but expressed concern at proposals to re-introduce cattle, after a long period of exclusion for woodland regeneration, into a woodland to the west of the village which is extremely popular with dog walkers. This issue has now been resolved as the estate now graze the area with sheep rather than cattle.

SNH are generally supportive of restructuring and planting proposals, would welcome the restoration and Riparian management of the PAWS site identified. They also mentioned the likelihood of red squirrels in the woodlands and advised that red squirrel dreys are protected.

SEPA advised that new or upgraded watercourse crossings may require a license and also advised of the risk of diffuse pollution from run-off from roads during forestry operations. They also advised that buffer strips of minimum two metres should be left between new planting and watercourses.

Neither Balavil Estate nor Alvie & Dalraddy Estates had any specific comments or concerns.

## Long Term Vision and Management Objectives

The management objectives for Dunachton woodlands is to maximise the financial return from the standing crop in the commercial plantations. Create a more variable stand structure by the staged removal of windthrown stands and the creation of open spaces in areas where the peat depth is excessive for successful tree establishment. To remove all the lodgepole pine in the longer term and replace with Sitka Spruce as the primary conifer species with Scots pine and larch as secondary species. Areas of upland birchwood will be retained in the long term for visual amenity, wildlife habitat and biodiversity and livestock shelter. Livestock exclusion areas will be established in rotation to allow for regeneration from the existing trees and field and ground layer vegetation.

To manage the woodlands around the village of Kincaig with a minimum intervention regime such that the balance between wildlife habitat and public amenity is maintained.

Establish management prescriptions in line with UKWAS, the UK Forestry Standard the objectives of the Cairngorms National Park woodland Framework.

To continue to manage the woodlands in a sustainable manner whilst remaining adaptable in order to meet any future changes in priorities.

## Site and Species Description

Woodland cover on the Estate comprises around 270 hectares of native broadleaf woodland and 180 hectares of conifer plantation and conifer shelterbelts. At the higher elevations the broadleaf woodland is primarily upland birchwood with a juniper under-storey, at lower elevations the woodlands have a significant oak and aspen component. A large proportion of these woods are designated as Semi Natural Ancient Woodland. In the recent past significant areas of these woodlands have had livestock excluded to allow for regeneration, it is proposed in the longer term to open up these areas and enclose other areas in order that a broad range of age classes throughout the woods will eventually be achieved. The woodland areas in and around Kincaig are managed primarily for amenity and recreation.

Between 1968 and 1973 a planting programme was instigated which saw the establishment of a 160 hectare commercial mixed conifer plantation on the high ground, the under-planting of a 17 hectare area of the birch woodland adjacent to Dunachton burn to create another mixed conifer plantation on the lower ground, and the establishment of a number of smaller shelter belts on the in-by ground. (see concept map)

A large proportion of the planted species (especially on the higher ground) was lodgepole pine of poor provenance which proved to be prone to windthrow and in 1997 some re-structuring of the plantation was started with the removal of some of the worst windthrown crop. Other windblown areas were left to act as shelter for a restock crop which has since been established, but a large proportion of the restructured areas were left unplanted to become open areas within the woodland for habitat diversity and deer control.

Future management proposals will include thinning of species which could ultimately produce a saw-log crop and selected felling coupes of the remaining windthrown and poorer lodgepole pine.(see concept map for indicative areas)

Some years back timber merchants were invited to quote for the felling of the plantation that was established within the birch woodland (compartments 1, 2, and 3) with the intention of returning the woodland to birch. The cost of the operation at the time proved prohibitive, this option could be reconsidered if market conditions improve.

Some of the shelterbelts are now approaching maturity, it is proposed to fell and restock these as necessary to ensure continuity of shelter to meet the needs of the long-term management of the estate.

The exact timing of felling will depend on market conditions but it is anticipated that shelterbelt (a) would be felled within the first five years of the plan.

A new planting area of some 14 hectares was planted in 2010 under the SRDP Rural Priorities Scheme adjacent to the hill road, it is a combination of native broadleaves and native pine planting and a proportion of stocking by natural regeneration, It is likely that any future new planting will be along similar lines.

#### **Survey data**

Digital Aerial Photographs (2005) held at Alvie Estate office.

Some of the woodland areas within Kincaig village are included within the boundary of the Insh Marshes SSSI

The oak woodland at Speybank is covered by a tree preservation order



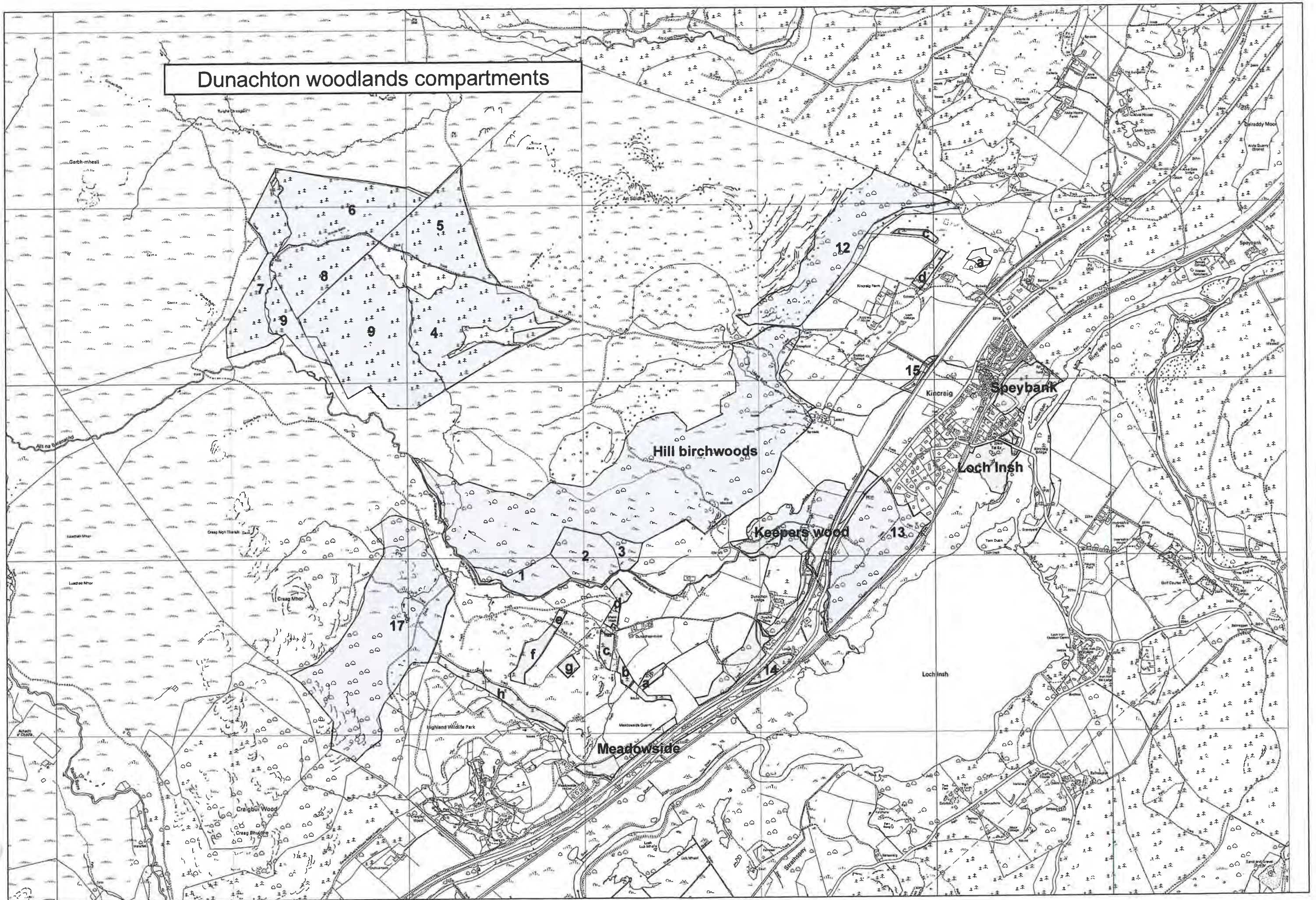
Compartment details

Cpt no.	area (Ha)	Planting year	Species	Comments	yield class
				Cpts 1,2&3 are a contiguous block	
1	6.09	1968	SS,SP,DF,HL	Difficult access (across a burn)	10
2	8.57	1968	DF, HL		10
3	2.48	1968	HL		10
				Cpts 4-10 are a contiguous block	
4	36.09	1973	SP, EL, LP, SS	includes 8.9 ha open ground	8
5	19.23	1970	SP, LP, HL		8
6	25	1970	LP		8
7	14.88	1971	LP, HL, SP		8
8a	9.4	2006	SS		14
8b	4.91	1971	SP		8
9	6.1	1971	SP, HL, LP		8
10	42.53	1972	SP, LP, HL, SS	includes 3.3ha open ground	8
				Cpts 11 (shelterbelts)	
11a	1.8	1967	SP, SS, NF, EL		16
11b	0.8	1967	SP, NF, LP		8
11c	1.33	1967	HL, EL, NF, LP		8
11d	1.74	1967	EL, JL, NS, SYC		12
11e	0.45	1967	NF, SS		16
11f	2.89	1967	SP, SS, LP		16
11g	0.86	1967	SP, SYC		8
11h	4.53	1967	SP, SS, LP		8
				Pheasant coverts	
a	0.92	1993	SP, MBL		8
c	0.8	1993	SP, MBL		8
d	1.2	1993	SP, MBL		8
14	1.51	1996	SP, EL		8
16	1.12	2004	NBL		<8
				Natural regeneration areas	
12	32.24	1996	NBL	Dates are livestock exclusion dates	<8
13	23.2	1996	NBL		<8
17	55.83	2005	NBL		<8
				Grazed woodlands	
meadowside	3.6	1960	NBL		<8
A9 roadside	5.7	1960	NBL		<8

Policies and Keepers wood	18.27	1960	NBL	includes mixed conifers round lodge	<8
Speybank	6.25	1960	NBL		<8
Loch Insh	5.44	1960	NBL		<8
hill birchwood	111.07	1960	NBL		<8



Dunachton woodlands compartments





## Analysis and management proposals.

The woodlands on Dunachton Estate have for the most part a south-eastern aspect. The landscape is large and dominated by An Suidhe to the north and Craig Mhor and Craig Buidhe to the south. The roadside Native woodlands and some hill birchwoods can be seen from some parts of the A9 road/rail corridor, the conifer plantations and most of the shelterbelts are hidden by the topography. More can be seen of the woodlands from the unclassified road that goes from Kincaig to Insh (see photograph).

The shelterbelts are quite prominent in the landscape but the plantation blocks are for the most part concealed by the foreground landscape and vegetation.

The hill plantation which comprises some 152 hectares is located on a relatively flat section of the hill ground, the ground rises from south-east to north-west only 70 metres in 1550 metres.

The underlying geology is pelitic gneiss and schist and soils are humus iron podzols, peaty podzols and peat. When originally established, the deeper peat areas (which comprises the majority of the area) were planted with south coast lodgepole pine. Much of this has since succumbed to windblow and has left large areas which are an un-penetrable tangle. When these areas have been clearfelled in may well be the case that large areas may be deemed unsuitable for re-stocking due to peat depth. Ground preparation prior to re-stocking will be by mounding with re-stock species primarily sitka spruce. Experience at compartment 8 which was re-stocked in 2006 has shown that quite a large native broadleaf component will come in by natural regeneration once grazing pressure is eliminated.

Protection will be by fencing, such fences will be marked with wooden droppers due to the presence of black grouse in the area. Any deer gaining access to the re-stock areas will be either driven out or shot by the owner [REDACTED] or his keeper [REDACTED].

The southern and eastern perimeters of the hill plantation (Scots pine and Larch) will be thinned but are to be retained as a standing crop for the duration of the plan period. The thinning of the southern and eastern edges of compartments 4 and 5 will have variable density thinning areas of at least 200 square metres in extent to try to soften the edges of the plantation blocks in the wider landscape. When compartment 4 is restocked, the broadleaf component of at least 10% of the total area will be concentrated at the eastern corner to soften the plantation edges.

Further opportunities at landscape enhancement will be explored in subsequent Forest Plans.

The shelterbelts associated with the in-bye agricultural land will be felled and re-stocked in rotation in order that some shelter is always maintained. Re-stock species will be Norway or Sitka spruce in the wetter areas with Scots pine and larch on the drier knolls, planting will be direct planting, no ground preparation is deemed necessary. Protection will be by stock and rabbit-proof fencing.

All harvesting operations will be undertaken outwith the breeding season for European Protected species.

## Restocking

All areas clearfelled under this Forest Plan will be restocked within 3-5 years after the Clearfelling operation. Restocking densities will comply with SRDP restocking densities or whatever grant scheme exists at that time.

Any areas which have been identified for restocking through natural regeneration will be assessed after 5 years and if regeneration is insufficient, planting will be carried out by year 10 to avoid areas of deforestation and planted to stocking densities which will comply with SRDP restocking densities or whatever grant scheme exists at that time. The planted species will be the same as intended through regeneration.



## Haulage

Highland Council TEC services will be contacted in advance of any harvesting operations to agree on roading issues

## Archaeology

There are no known archaeological sites within the woodlands but if any are discovered they will be protected and the Regional Archaeologist will be advised of the location.

## Public access

Although there are occasional walkers on the high ground, they are usually passing through to the tops rather than exploring the plantations. It is the woodlands in and around Kinncraig that are most frequently used by locals and visitors to the area for dog walking and informal recreation. Compartment 13 had domestic livestock removed for a number of years to allow natural regeneration, once the regeneration had been achieved it was proposed to re-introduce cattle to the area. Responding to potential safety fears expressed by the local community in relation to cattle and dog walkers, the estate revised their proposals and now use the area for rough grazing and shelter for sheep.

## Designated areas

Some of the woodlands in the south of the Estate are within or adjacent to the river Spey and Insh marshes SSSI/SAC/SPA. Although it is thought unlikely likely that these sites will be affected by the forestry proposals in this Forest Plan liaison with SNH will be maintained.

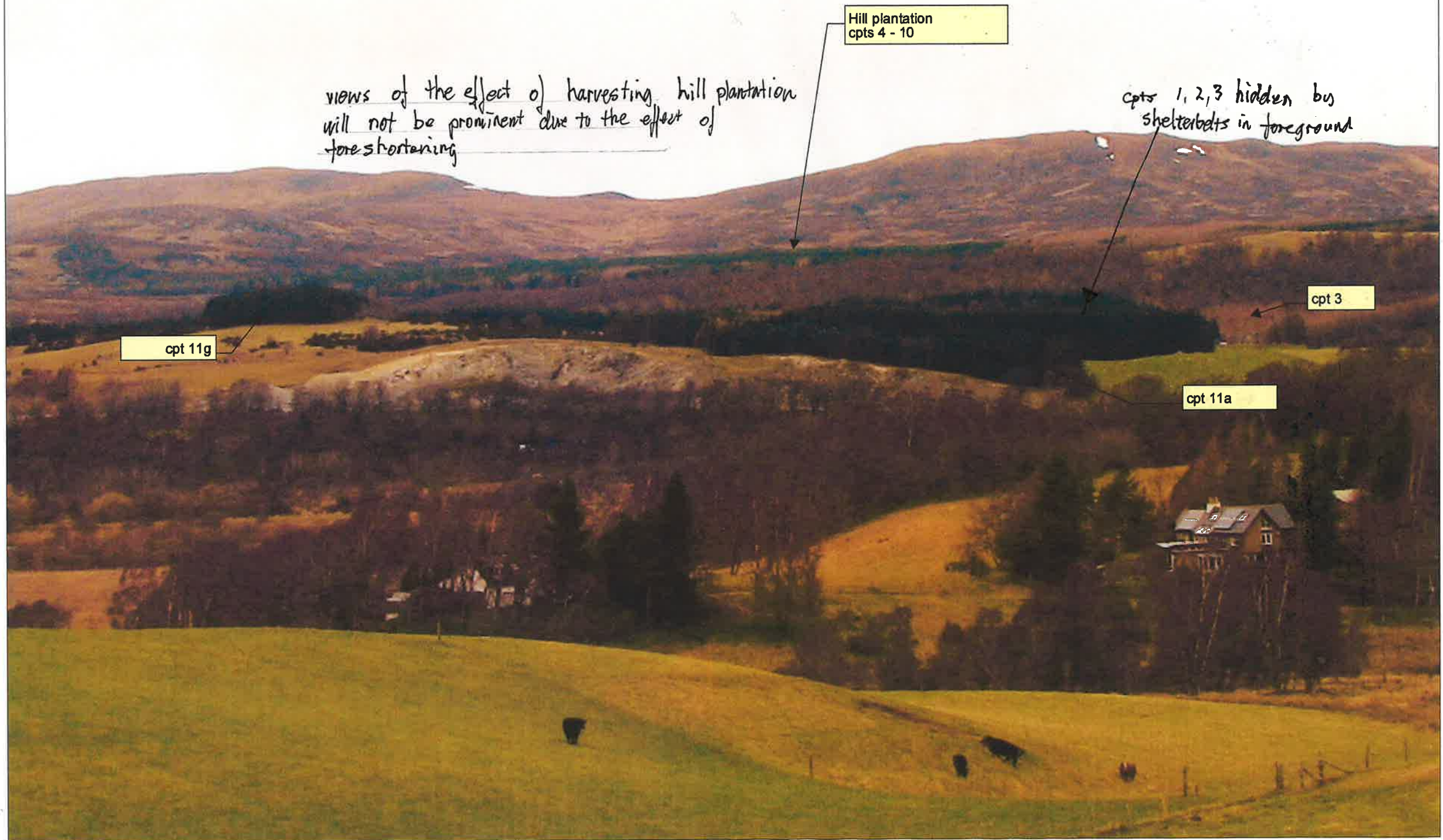
E

e

0

1

# view from lynchlaggan



views of the effect of harvesting hill plantation will not be prominent due to the effect of foreshortening

Hill plantation  
cpts 4 - 10

cpts 1, 2, 3 hidden by shelterbelts in foreground

cpt 11g

cpt 3

cpt 11a



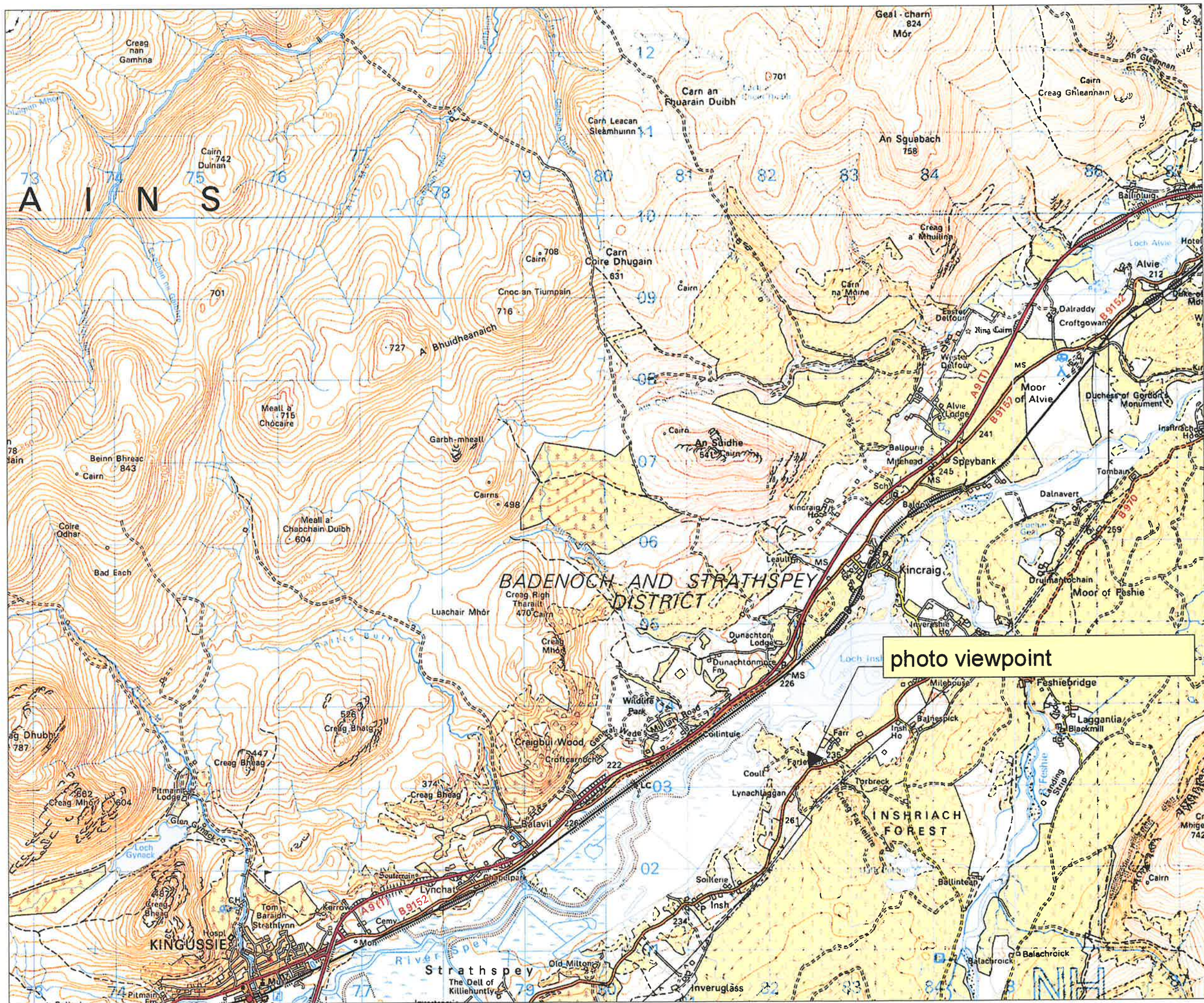


photo viewpoint



Dunachton woodlands compartments

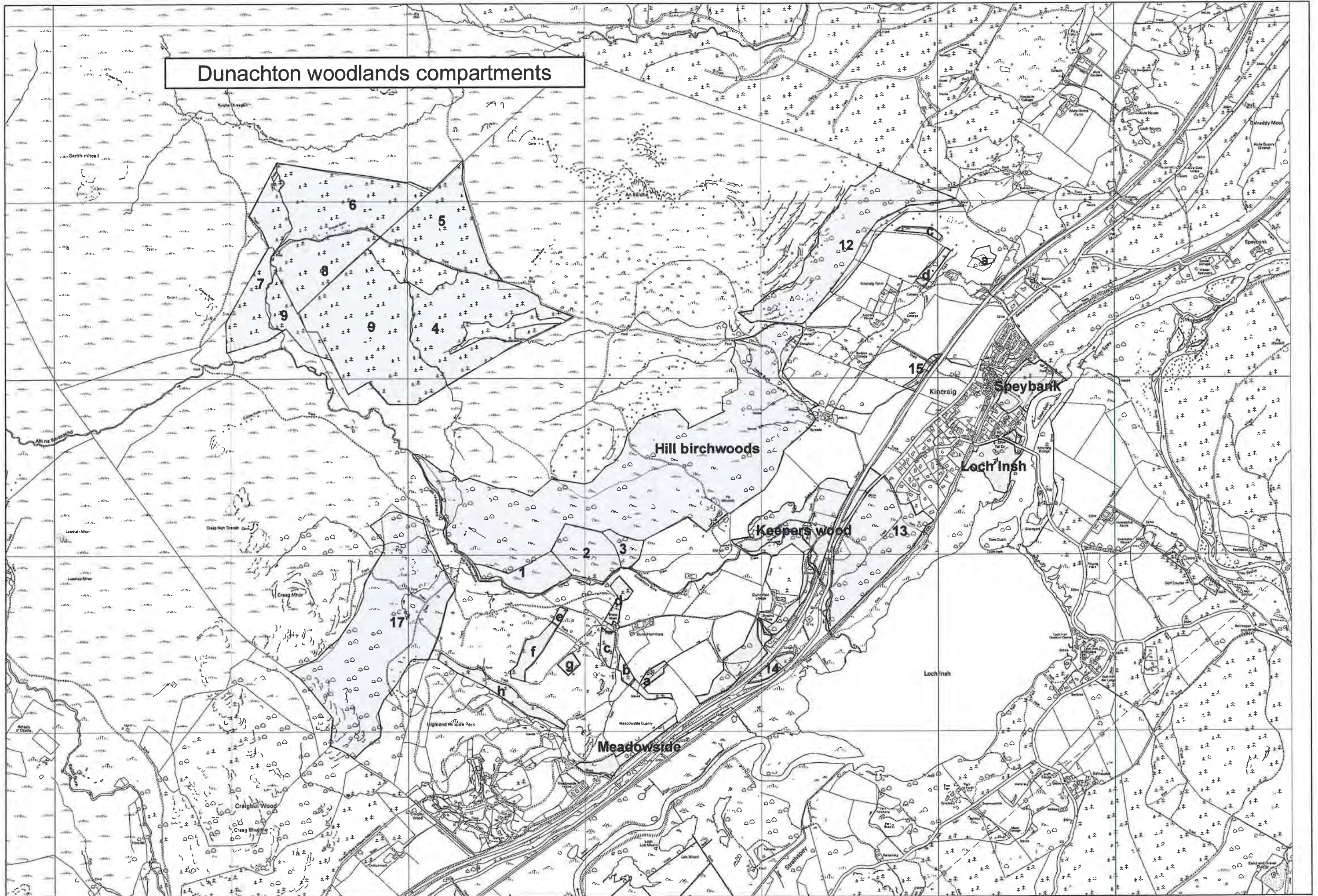




Table 4 Production Forecast Data (To be completed for areas of 100 hectares and over)

Rural Development Proposal Number : 3886297

Coupe Data					Stand data						Restructuring areas by successor crop types (hectares)						Optional stand data										
Coupe Reference	Period 1		Period 2		Planned Felling Year	Species	Planting Year	General Yield Class	WHC	Previously Thinned	Net Area (ha)	Sitka Spruce	Other Conifer	Mixed Broadleaves	Native Broadleaves	Caledonian Scots Pine	Natural Regeneration	Other Land	Compartment, Sub compartment / Stand ID	Component / Crop Element	Spacing at Planting	Stems per Hectare	Mean dbh	Basal Area per Hectare	Year of Assessment		
	Fell/Thin Period	Intervention Type	Fell/Thin Period	Intervention Type																							
1	2012-2017	Fell			2012	MC	1968	14	5	n	6.09							6.09									
2	2012-2017	Fell			2012	DF	1968	16	5	n	8.57							8.57									
3	2012-2017	Fell			2012	HL	1968	12	5	n	2.48							2.48									
4			2017-2022	Fell	2017	LP	1973	6	6	n	9.00																
5	2012-2017	Thin			2014	SP	1970	6	5	y	19.20																
7	2012-2017	Fell			2014	LP	1971	6	6	n	7.00	7.00															
9	2012-2017	Fell			2014	LP	1971	6	6	n	2.67	2.67															
10	2012-2017	Fell			2014	LP	1972	6	6	n	42.53	42.53															
11a	2012-2017	Fell			2012	SS	1967	16	5	n	1.14	1.14															
11b	2012-2017	Fell			2012	LP	1967	10	5	n	0.80	0.80															
11c	2012-2017	Fell			2012	LP	1967	10	5	n	1.33	1.33															

Tolerance table

	Adjustment to felling period*	Adjustment to felling coupe boundaries	Timing of Restocking	Changes to species	Changes to road lines	Designed open ground **
<b>FC Approval normally not required</b>	Fell date can be moved within 5 year period. Where separation or other constraints are met	1.0 ha or 10% of coupe area – whichever is less	Up to 2 planting seasons after felling	Change within species group eg evergreen conifers or broadleaves		Location of temporary open ground eg deer glades if still within overall open ground design  Increase by 0.5 ha or 5% of area - whichever is less
<b>Approval by exchange of letters and map</b>		1.0 ha to 5 ha or 10% of coupe area – whichever is less			Additional felling of trees not agreed in plan  Departures of > 60m in either direction from centre line of road	Increase of 0.5 ha to 2 ha or 10% - whichever is less  Any reduction in open ground
<b>Approval by formal plan amendment may be required</b>	<ul style="list-style-type: none"> <li>Felling delayed into second or later 5 year period</li> <li>Advance felling into current or 2nd 5 year period</li> </ul>	> 5 ha or 10% of coupe area	Over 2 planting seasons after felling	Change from specified native species  Change between species group		More than 2 ha or 10%  Any reduction in open ground in sensitive areas  Colonisation of open areas agreed as critical

**Note** - \* Felling sequence must not compromise UKFS advice on adjoining crops. Felling progress and impact will be reviewed against UKFS at mid term review

\*\* Tolerances subject to an overriding maximum of 20% open ground

## Appendix

### Dunachton Estate Long Term Forest Plan

RDC Proposal Number: 3886297  
Business Reference Number: 113334  
Main Location Code: 080/0227  
Forest Plan Area: 440.07 ha  
Scoping Process arrangements:

Following discussions with [REDACTED] it was agreed that because of difficulties experienced on previous occasions trying to find a suitable date when all potential stakeholders could schedule time for a meeting, a scoping statement and concept map should be sent to participants for comment instead of a meeting.

#### Participants:

[REDACTED] (estate owner)  
Dunachton Lodge  
Dunachton Estate  
Kincraig  
Kingussie  
PH21 1LY

[REDACTED] (agent)  
Badenoch Land Management  
Alvie Estate Office  
Kincraig  
Kingussie  
PH21 1NE

[REDACTED]  
Area Officer  
Strathspey and Nairn East Highland  
Scottish Natural Heritage  
Achantoul  
Aviemore  
PH22 1QD

The Highland Council,  
Planning & Development  
Glenurquhart Road,  
Inverness,  
IV1 9DH

The Highland Council,  
Archaeology Unit  
Glenurquhart Road,  
Inverness,  
IV1 9DH

Cairngorms National Park Authority  
14 The Square  
Grantown-on-Spey



[REDACTED]  
Secretary and Treasurer  
Kincaig and vicinity Community Council  
Goldenacre  
Dunachton Road  
Kincaig  
Kingussie  
PH21 1QE

Scottish Environment Protection Agency  
[REDACTED]  
20, Perimeter Road  
Pinefield  
Elgin  
IV30 6AF

Alvie & Dalraddy Estates  
[REDACTED]  
Kincaig  
Kingussie  
PH21 1NE

Balavil Estate  
[REDACTED]  
Balavil  
Kingussie  
PH21 1LU

Responses were received from SNH; Kincaig and Vicinity Community Council; SEPA; Balavil Estate and Alvie & Dalraddy Estates. (Copies appended)

#### Key Issues

Kincaig Community Council mentioned the appreciation of the community for the access provision that has been provided over the years but expressed concern at proposals to re-introduce cattle, after a long period of exclusion for woodland regeneration, into a woodland to the west of the village which is extremely popular with dog walkers.

SNH are generally supportive of restructuring and planting proposals, would welcome the restoration and Riparian management of the PAWS site identified. They also mentioned the likelihood of red squirrels in the woodlands and advised that red squirrel dreys are protected.

SEPA advised that new or upgraded watercourse crossings may require a license and also advised of the risk of diffuse pollution from run-off from roads during forestry operations. They also advised that buffer strips of minimum two metres should be left between new planting and watercourses.

Neither Balavil Estate nor Alvie & Dalraddy Estates had any specific comments or concerns.



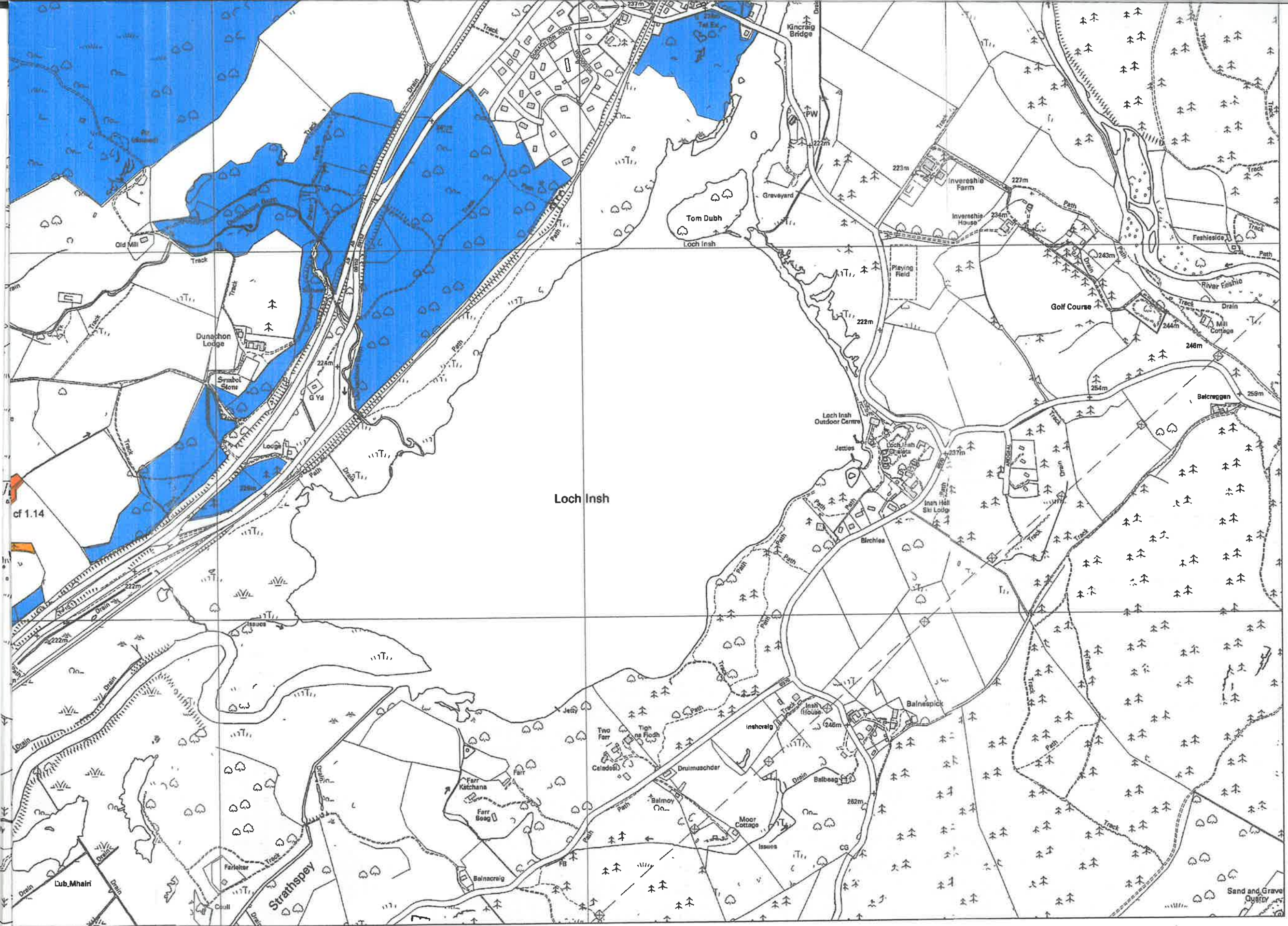
Addressing the Key Issues

Main Issues	Likely Impact	Measure(s) to be taken	Notes
Cattle grazing in woodland popular with dog walkers	Potential danger to dog walkers especially if cows with calves present	Sheep rather than cattle to graze woodland	Not strictly a LTFP issue
Possible disturbance of red squirrels during forestry operations	Dreys could be damaged and young squirrels killed or injured	Location of dreys to be identified prior to forestry operations, where possible harvesting to be undertaken outwith breeding season	FCS Guidance note 33 to be adhered to
Watercourse crossings and the potential for diffuse pollution	Pollution of watercourses	Watercourse crossings to be minimised	Forest and water guidelines and Pollution Prevention Guidance notes to be adhered to
PAWS restoration and riparian management	Improvement in the water environment to the benefit fish and aquatic mammals	Possible removal of non-native conifer species from ancient woodland site	Action to proceed only if economically viable

R

B





Loch Insh

cf 1.14



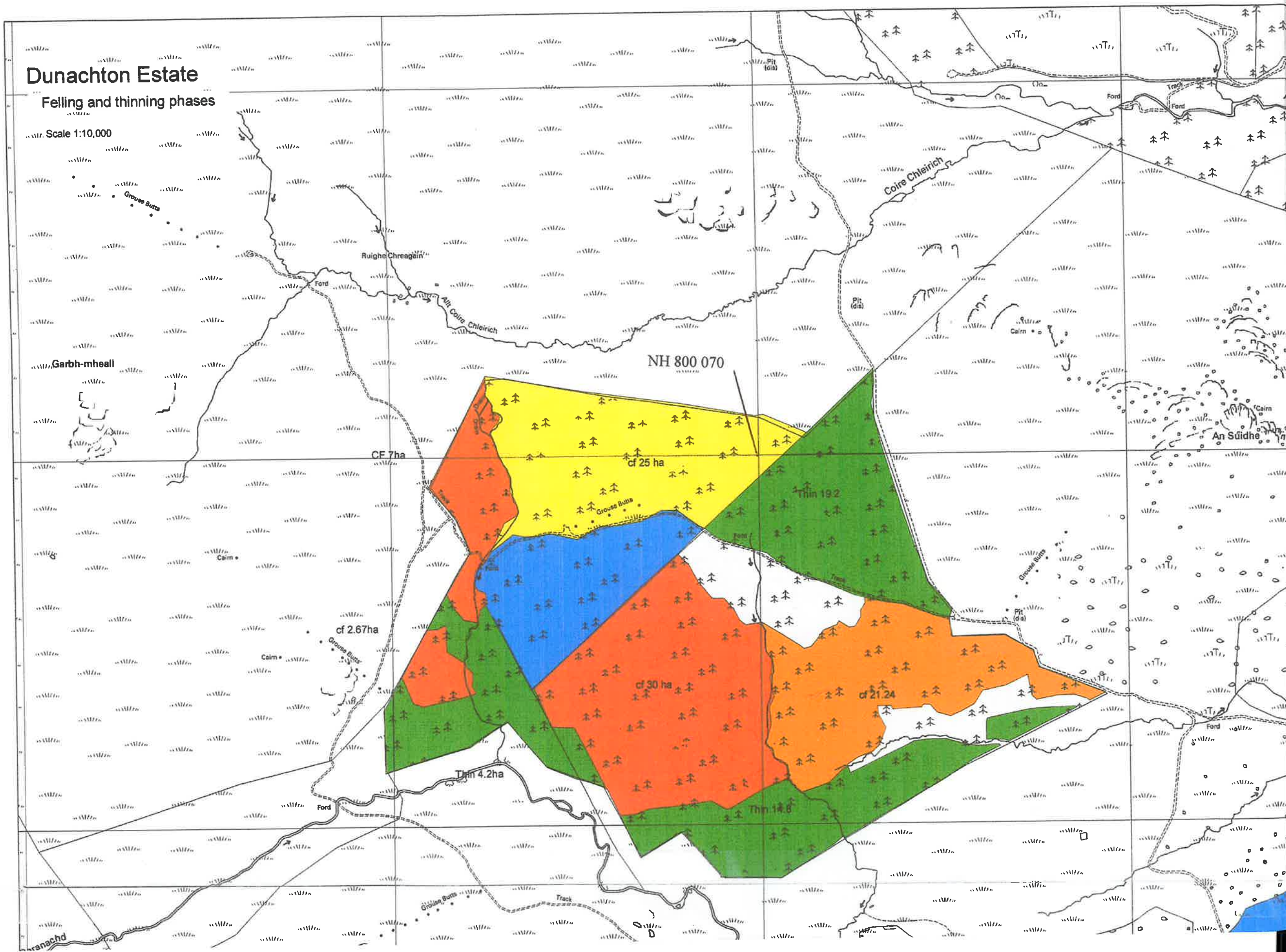
# Dunachton Estate

## Felling and thinning phases

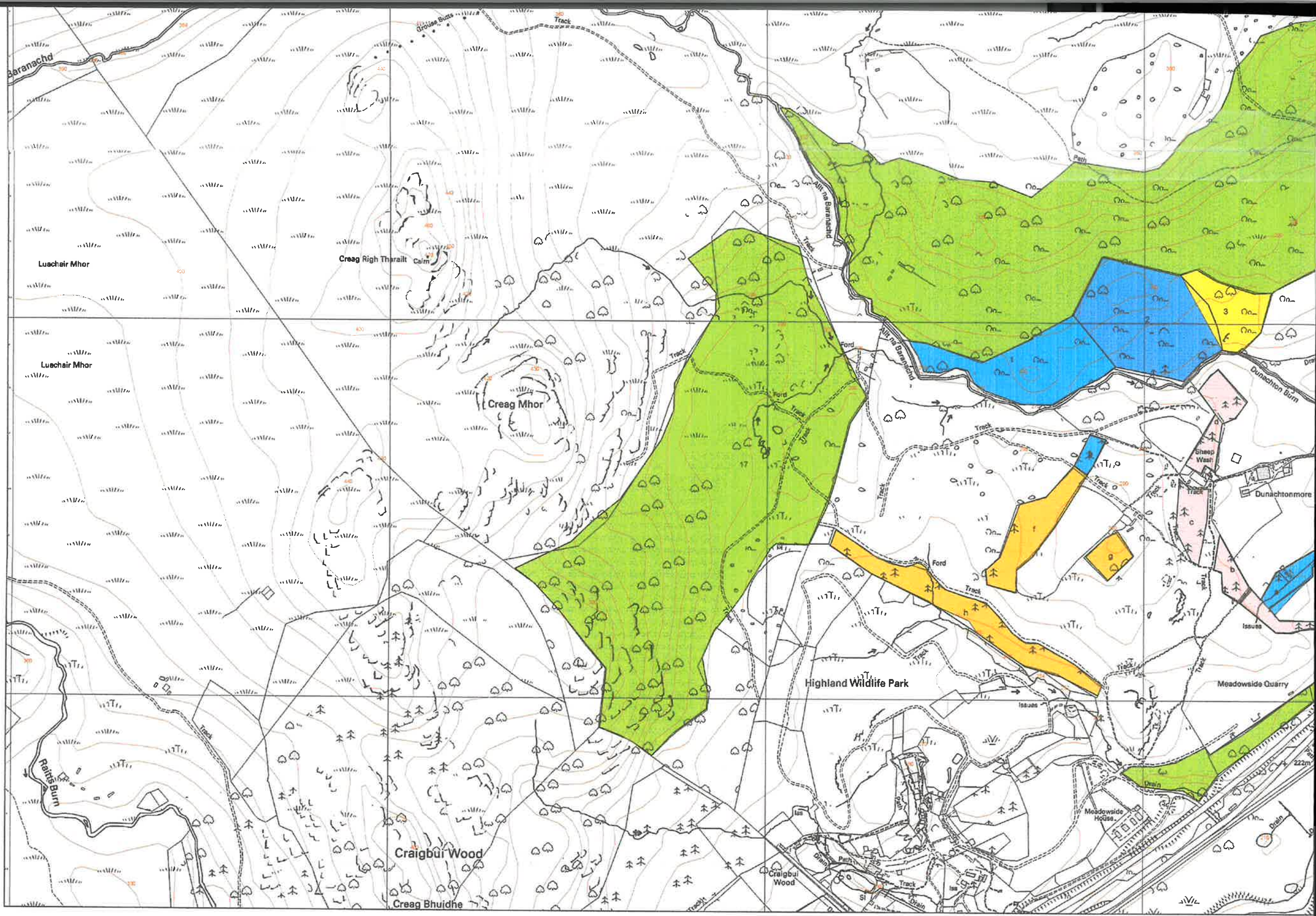
Scale 1:10,000

Garbh-mheall

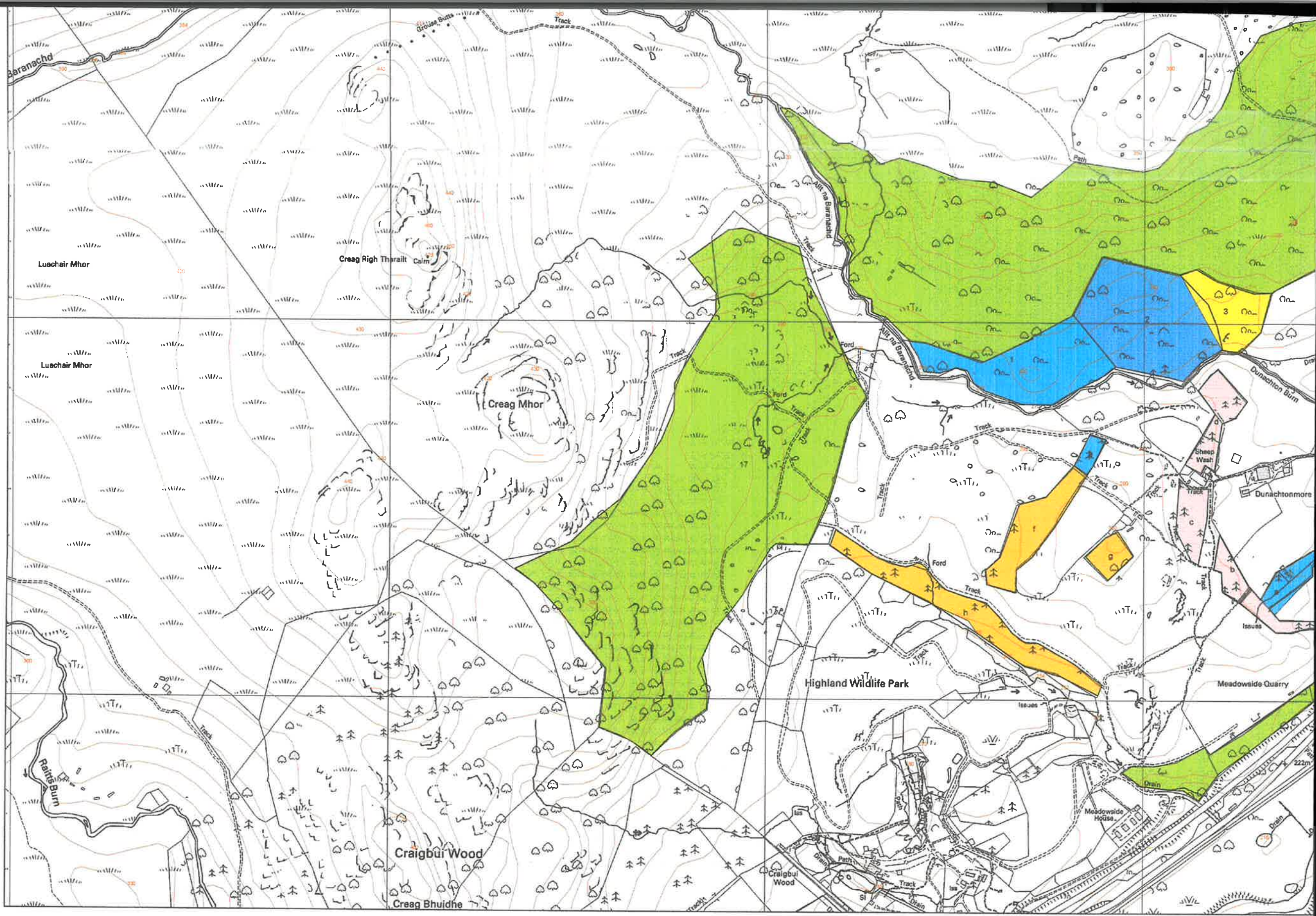
NH 800 070





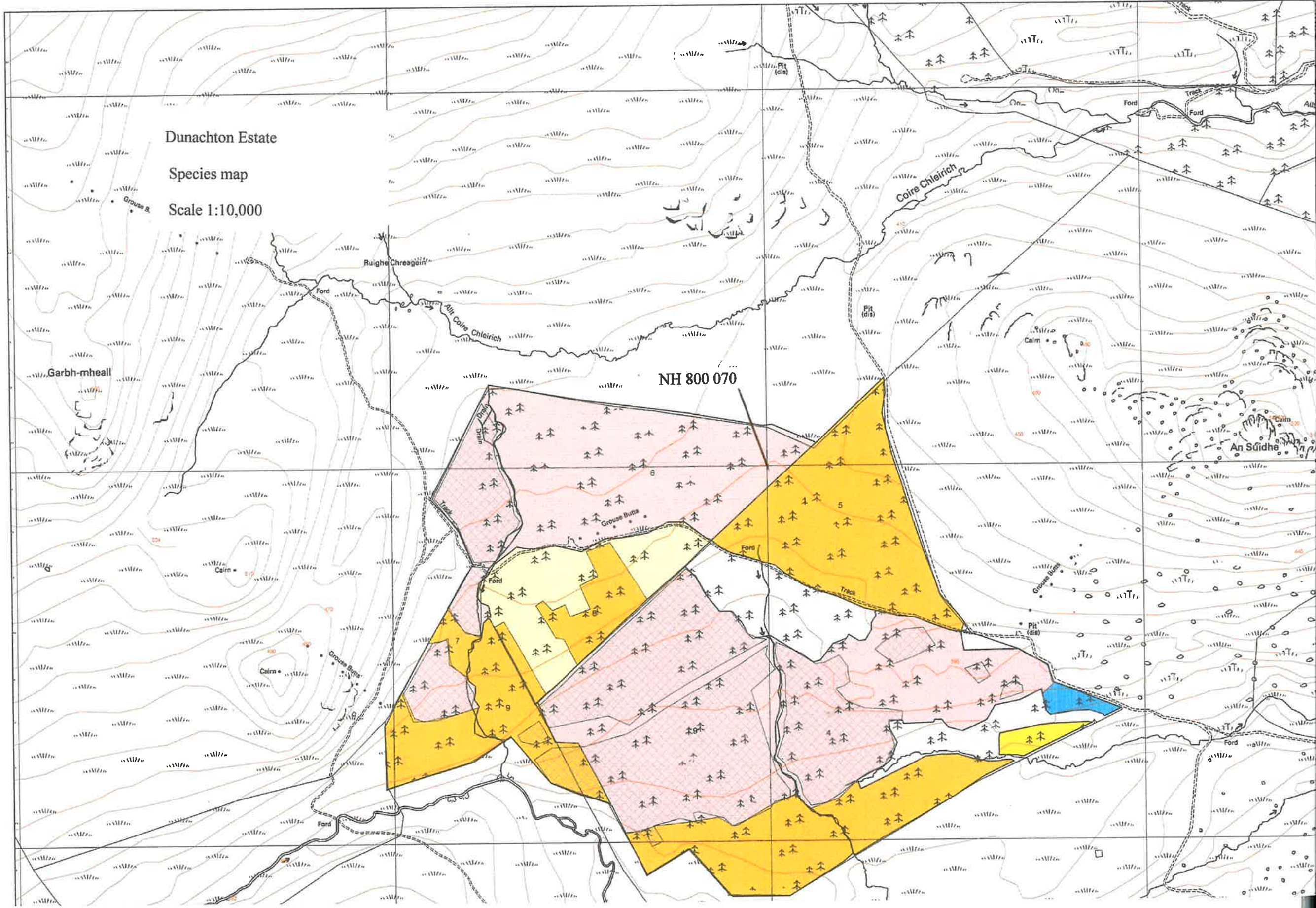




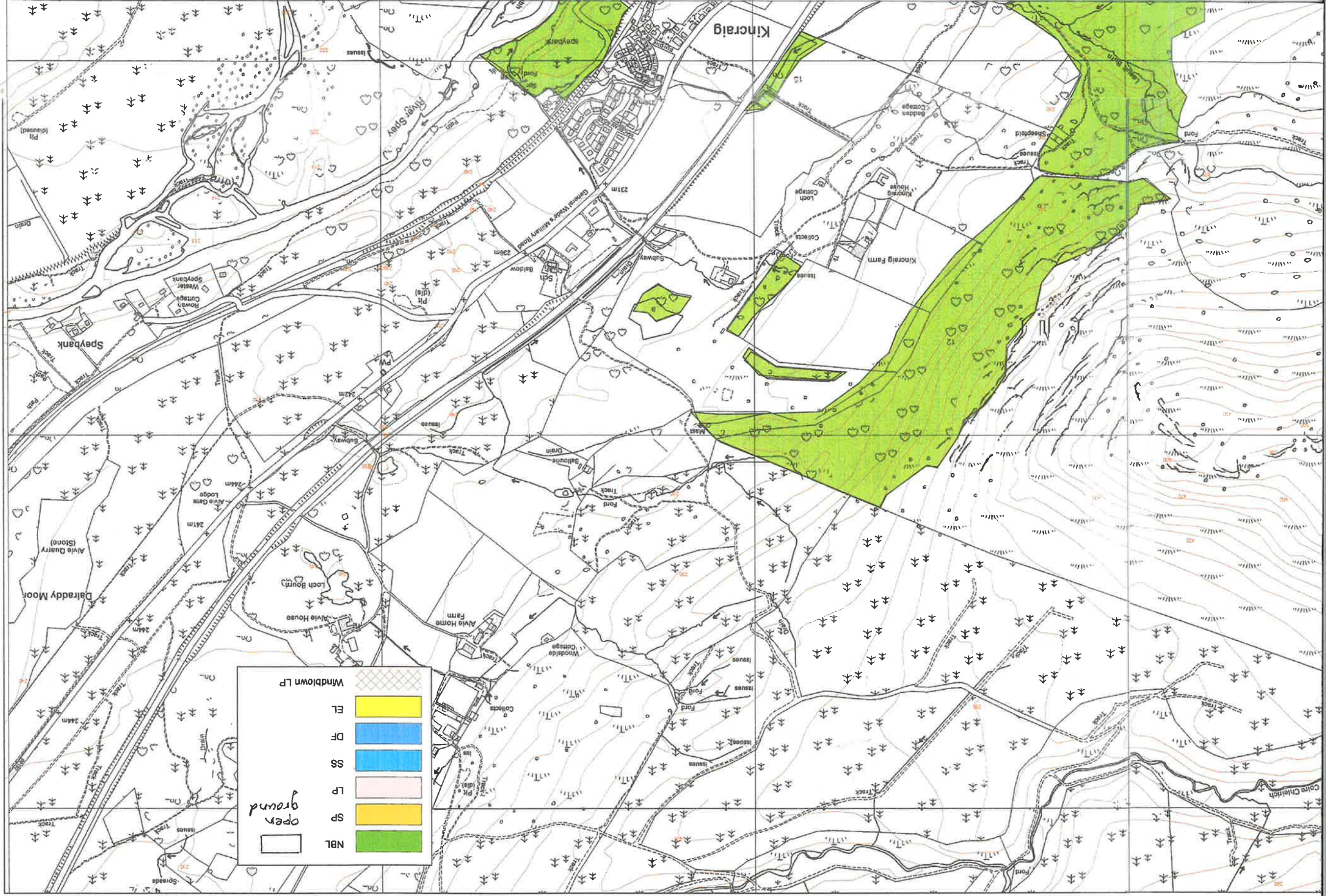




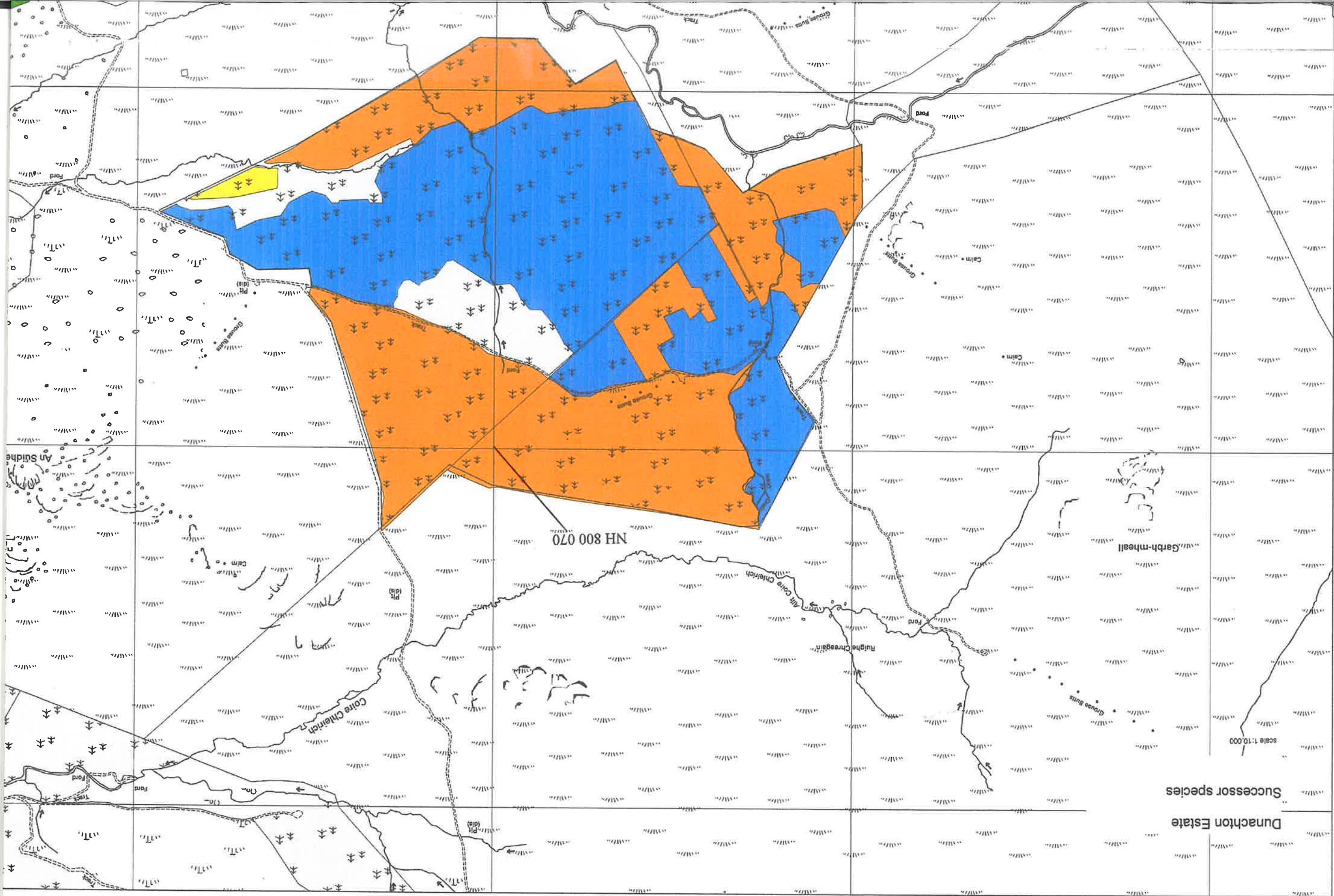
Dunachton Estate  
Species map  
Scale 1:10,000











Dunachton Estate  
Successor species

Scale 1:10,000

NH 800 070

Cote Chierich

Ruighe Chreagan

Garbh-mheall

An Suidhe

Ford

Ford

Ford

Ford

Ford

PT (dia)

PT (dia)

Calm

Grouse Burn

Grouse Burn

Grouse Burn

Track

Grouse Burn

Grouse Burn

Calm

Calm