

Appendix 8.1

Highland Estate Impact Assessment Schedule

Contents

1	Introduction	1
1.1	Potential and Overall Impacts on Agriculture, Sporting and Forestry Interests	1
1.2	Business Viability Impacts on Agriculture, Sporting and Forestry Interests for Phoines Estate	9

Tables

Table.1	Potential and Overall Impacts on Agriculture, Sporting and Forestry Interests	1
---------	---	---

1 Introduction

1.1 Potential and Overall Impacts on Agriculture, Sporting and Forestry Interests

1.1.1 This appendix supports **Chapter 8** and provides an assessment of potential and overall impacts on agriculture, sporting and forestry interests in **Table 1** below.

1.1.2 Additionally, a viability assessment for Phoinies Estate has also been conducted, as discussed under **section 1.2** of this appendix.

Table.1 Potential and Overall Impacts on Agriculture, Sporting and Forestry Interests

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
South Drumochter Estate		20000 to 20700	Mixed rough grazings and heather hill margin forming secondary grouse habitat. Beauly Denny Powerline (BDL) access track. Land Capability for Agriculture (LCA) Grade 6:2. Deer habitat and movement areas - no stalking. Farmed on a Secure Agricultural Tenancy and "in hand" estate sheep flock, managed as "tick mops".	<u>Temporary</u> Disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Minor loss to rough grazings. Minor loss to grouse habitat. Estate access improvement.	A: Low; S: Medium; FT: Low	<u>Temporary</u> A: Low S: Medium FT: Low <u>Permanent</u> A: Low; S: Low; FT: Low	<u>Temporary</u> A: Negligible/ Slight; S: Moderate FT: Negligible/ Slight <u>Permanent</u> A: Negligible/ Slight; S: Slight; FT: Negligible/ Slight	<u>Temporary</u> A: Slight S: Moderate FT: Slight <u>Permanent</u> A: Slight S: Slight FT: Slight	<u>Temporary</u> Slight/Moderate Adverse Estate and Farm Tenancy remain viable <u>Permanent</u> Slight Adverse Estate and Farm Tenancy remain viable
	21250 to 21600	Existing Dalwhinnie junction and associated amenity ground, river embankment and grazings, including heather and rough grasses. LCA Grade 6:2. Deer habitat and movement areas - no stalking.	<u>Temporary</u> Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss of rough grazings. Direct access off A889, but land severed from main estate to the east of A9.	A: Low	<u>Temporary</u> A: High <u>Permanent</u> A: High	<u>Temporary</u> A: Moderate <u>Permanent</u> A: Moderate			

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
		20700 to 22100	Mixed rough grazings and heather hill margin forming secondary grouse habitat. LCA Grade 6:2. Deer habitat and movement areas - no stalking. Farmed on a Secure Agricultural Tenancy and "in hand" estate sheep flock, managed as "tick mops". Existing sheep creep access under A9 at north end of section to South Drumochter Estate land to the west of A9.	<u>Temporary</u> Disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements in particular to existing sheep creep access <u>Permanent</u> Existing shelter belts not assessed within this section. Minor loss to rough grazings. Minor loss to grouse habitat. Proposed estate access improvement and new sheep pens to mitigate the removal of the existing sheep creep and maintain sheep movement provision.	A: Low; S: Medium; FT: Low	<u>Temporary</u> A: Low S: Medium FT: Low <u>Permanent</u> A: Low; S: Low; FT: Low	<u>Temporary</u> A: Negligible/ Slight; S: Moderate FT: Negligible/ Slight <u>Permanent</u> A: Negligible/ Slight; S: Slight; FT: Negligible/ Slight		
	21600 to 21900		Mixed open semi-natural scrub with rough grazings in places. LCA Grade 6:2. Deer habitat and movement areas - no stalking.	<u>Temporary</u> Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss of rough grazings. Loss of access and land severed.	A: Low	<u>Temporary</u> A: High <u>Permanent</u> A: High	<u>Temporary</u> A: Moderate <u>Permanent</u> A: Moderate		
	21900 to 22100		Mixed rough grazings with areas of wetland in places. LCA Grade 6:2. Deer habitat and movement areas - no stalking. Sheep creep connection to the main estate land on east of A9 and sheep access from the main estate to existing A889 public road.	<u>Temporary</u> Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss of rough grazings. Loss of access and land severed.	A: Low	<u>Temporary</u> A: High <u>Permanent</u> A: High	<u>Temporary</u> A: Moderate <u>Permanent</u> A: Moderate		

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
North Drumochter Estate	20000 to 21250		Mixed rough grazings with areas of wetland/ haugh and heather in places. Not part of any grouse beat or management for grouse. LCA Grade 6:2. Deer habitat and movement areas - no stalking. Estate sheep loading/ off loading area at north end, accessed off existing A889.	<u>Temporary</u> Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss of rough grazings.	A: Low	<u>Temporary</u> A: Low <u>Permanent</u> A: Low	<u>Temporary</u> A: Negligible/ Slight <u>Permanent</u> A: Negligible/ Slight	<u>Temporary</u> A: Slight <u>Permanent</u> A: Slight	<u>Temporary</u> Slight Adverse Estate remains viable <u>Permanent</u> Slight Adverse Estate remains viable
Phoines Estate		22100 to 23750	Mainly heather hill margin and part of the Leacain Grouse Beat – Drive 1 (driven from south to north). Important grouse drive. Producing 18-22 brace per day (average of 3.5 days shot per annum). LCA Grade 6:2 with seasonal sheep grazing and “in hand” estate sheep flock, managed as “tick mops”. Sheep creep access under existing A9 and at existing A9 aqueduct bridge. Deer habitat and movement areas - no stalking.	<u>Temporary</u> Disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Restricted sheep movement but temporary access to be provided. Disruption to access arrangements <u>Permanent</u> Significant loss to grouse habitat and shooting over Leacain Drive 1. Minor loss to rough grazings. Replacement sheep access by way of new sheep creep; additional sheep access at Allt Coire Bhathaich bridge ledge; and access at new aqueduct bridge.	A: Low; S: High;	<u>Temporary</u> A: Low S: High <u>Permanent</u> A: Low; S: High	<u>Temporary</u> A: Negligible/ Slight; S: Substantial <u>Permanent</u> A: Negligible/ Slight; S: Substantial	<u>Temporary</u> A: Moderate S: Moderate <u>Permanent</u> A: Slight S: Moderate F: Slight	<u>Temporary</u> Moderate Adverse See viability assessment in Section 1.2 below <u>Permanent</u> Moderate Adverse See viability assessment in Section 1.2 below

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
	22100 to 24400		<p>Mixed rough grazings with river margin and areas of heather.</p> <p>Utilised as additional habitat area to the Leacain Grouse Beat – Drive 1 (grouse driven from west to east over A9 to south end of Drive 1).</p> <p>Useful addition to grouse drive.</p> <p>Producing 18-22 brace per day (average of 3.5 days shot per annum).</p> <p>LCA Grade 6:2 with seasonal sheep grazing and “in hand” estate sheep flock, managed as “tick mops”.</p> <p>Sheep creep access under existing A9 and at existing A9 aqueduct bridge.</p> <p>Deer habitat and movement areas - no stalking.</p>	<p><u>Temporary</u></p> <p>Significant disturbance to grouse likely during nesting and shooting seasons</p> <p>Loss to rough grazings</p> <p>Disruption to access arrangements, but temporary access to be provided.</p> <p><u>Permanent</u></p> <p>Significant loss to grouse habitat and shooting over Leacain Drive 1.</p> <p>Significant loss to rough grazings.</p> <p>Equivalent sheep access provision</p>	<p>A: Low; S: High;</p>	<p><u>Temporary</u></p> <p>A: Medium S: High</p> <p><u>Permanent</u></p> <p>A: Medium; S: High</p>	<p><u>Temporary</u></p> <p>A: Slight/ Moderate; S: Substantial</p> <p><u>Permanent</u></p> <p>A: Slight/ Moderate; S: Substantial</p>		
		23750 to 24050	<p>Mixed rough grazings with small areas of heather in places between existing A9 and aqueduct forming secondary grouse habitat.</p> <p>LCA Grade 6:2.</p> <p>Deer habitat and movement areas - no stalking.</p> <p>Seasonal sheep grazing and “in hand” estate sheep flock, managed as “tick mops”.</p>	<p><u>Temporary</u></p> <p>Minor disturbance to grouse likely during nesting and shooting seasons</p> <p>Loss to rough grazings</p> <p>Disruption to access arrangements</p> <p><u>Permanent</u></p> <p>Minor loss to grouse habitat.</p> <p>Loss to rough grazings.</p>	<p>A: Low; S: Medium;</p>	<p><u>Temporary</u></p> <p>A: Low S: Medium</p> <p><u>Permanent</u></p> <p>A: Low; S: Medium</p>	<p><u>Temporary</u></p> <p>A: Negligible/ Slight; S: Moderate</p> <p><u>Permanent</u></p> <p>A: Negligible/ Slight; S: Moderate</p>		

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
		24050 to 26050	Mixed rough grazings with small areas of heather in places between existing A9 and aqueduct forming secondary grouse habitat. LCA Grades 6:2 and 6:3. Deer habitat and movement areas - no stalking. Seasonal sheep grazing and "in hand" estate sheep flock, managed as "tick mops". Sheep access under A9 at Cuaich underpass.	<p><u>Temporary</u> Minor disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements</p> <p><u>Permanent</u> Minor loss to grouse habitat. Loss to rough grazings. Improved vehicle access at Cuaich junction. Enhanced public access and disturbance from layby at ch. 24,400</p>	A: Low; S: Medium;	<p><u>Temporary</u> A: Low S: Medium</p> <p><u>Permanent</u> A: Low; S: Medium</p>	<p><u>Temporary</u> A: Negligible/ Slight; S: Moderate</p> <p><u>Permanent</u> A: Negligible/ Slight; S: Moderate</p>		
	24400 to 25300		Mixed rough grazings with small areas of heather in places forming secondary grouse habitat. LCA Grades 6:2 and 6:3. Deer habitat and movement areas - no stalking. Seasonal sheep grazing and "in hand" estate sheep flock, managed as "tick mops".	<p><u>Temporary</u> Minor disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements</p> <p><u>Permanent</u> Minor loss to grouse habitat. Loss to rough grazings.</p>	A: Low; S: Low;	<p><u>Temporary</u> A: Low S:Low</p> <p><u>Permanent</u> A: Low; S: Low</p>	<p><u>Temporary</u> A: Negligible/ Slight; S: Negligible/ Slight</p> <p><u>Permanent</u> A: Negligible/ Slight; S: Negligible/ Slight</p>		

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
	25300 to 25600		Mixed rough grazings forming secondary grouse habitat. LCA Grade 6:3. Deer habitat and movement areas - no stalking. Woodland plantation comprising mid to late rotation conifers suffering from windblow damage. Seasonal sheep grazing and "in hand" estate sheep flock, managed as "tick mops".	<u>Temporary</u> Minor disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss to rough grazings. Loss of conifer trees and re-planting. Improved access from Cuaich junction	A: Low; S: Low; F: Low	<u>Temporary</u> A: Low; S:Low; <u>Permanent</u> A: Low; S: Low; F: High	<u>Temporary</u> A: Negligible/ Slight; S: Negligible/ Slight <u>Permanent</u> A: Negligible/ Slight; S: Negligible/ Slight F: Moderate		
	25600 to 26050		Mixed rough grazings and "inby" sheep holding parks associated with adjacent sheep handling pens. LCA Grade 6:3. Deer habitat and movement areas - no stalking. Access to adjacent houses and buildings at Cuaich. Sheep access under A9 at Cuaich underpass.	<u>Temporary</u> Disturbance to sheep movements possible Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss to rough grazings. Improved access from Cuaich junction	A: Low;	<u>Temporary</u> A: Low; <u>Permanent</u> A: Low;	<u>Temporary</u> A: Negligible/ Slight; <u>Permanent</u> A: Negligible/ Slight;		

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
		26050 to 29700	<p>Mainly heather hill margin and part of the Etteridge Grouse Beat – Drives 4 & 5 (driven from south to north) and Drive 1 (driven from north to south). Important grouse drives.</p> <p>Producing: up to 45 brace per day – Drive 4; up to 50 brace per day – Drive 5; Drive 1 currently not shot, but returning to production in 2017 season (average of 3.5 days shot per annum).</p> <p>LCA Grades 6:2 and 6:3 with seasonal sheep grazing and “in hand” estate sheep flock, managed as “tick mops”.</p> <p>Open scrub at north end.</p> <p>Two sheep creep accesses under existing A9.</p> <p>Ledge access under A9 at Allt Garbh.</p> <p>Deer habitat and movement areas - no stalking.</p>	<p><u>Temporary</u> Disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements</p> <p><u>Permanent</u> Minor loss to grouse habitat and shooting. Minor loss to rough grazings. Improved access to grouse drives at Allt Garbh.</p>	<p>A: Low; S: High;</p>	<p><u>Temporary</u> A: Low S: High</p> <p><u>Permanent</u> A: Low; S: Medium</p>	<p><u>Temporary</u> A: Negligible/ Slight; S: Substantial</p> <p><u>Permanent</u> A: Negligible/ Slight; S: Moderate/ Substantial</p>		
	26050 to 29200		<p>Mixed rough grazings with small areas of heather in places forming secondary grouse habitat.</p> <p>LCA Grade 6:2.</p> <p>Deer habitat and movement areas - no stalking.</p> <p>Seasonal sheep grazing and “in hand” estate sheep flock, managed as “tick mops”.</p>	<p><u>Temporary</u> Minor disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements</p> <p><u>Permanent</u> Minor loss to grouse habitat. Loss to rough grazings. Improved access off new access point at Allt Garbh.</p>	<p>A: Low; S: Low;</p>	<p><u>Temporary</u> A: Low S:Low</p> <p><u>Permanent</u> A: Low; S: Low</p>	<p><u>Temporary</u> A: Negligible/ Slight; S: Negligible/ Slight</p> <p><u>Permanent</u> A: Negligible/ Slight; S: Negligible/ Slight</p>		

Estate	Chainage (area to west of existing A9)	Chainage (area to east of existing A9)	Baseline Land Use	Description of Potential Impact	Sensitivity	Magnitude	Overall Significance	Overall Impacts on Each Estate	In combination Impact
					A= Agricultural; F = Forestry; S = Sporting; FT = Farm Tenancy				
	29200 to 31050+		Mixed rough grazings with wetland, heather, river margin and open scrub areas. LCA Grades 6:2 and 6:3. Very small area of LCA Grade 5.1 Current vehicle and stock access from Crubenmore road. Deer habitat and movement areas - no stalking. Seasonal sheep grazing and "in hand" estate sheep flock, managed as "tick mops".	<u>Temporary</u> Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Loss to rough grazings. Improved access from new access at Allt Garbh.	A: Low; S: Low;	<u>Temporary</u> A: Low S:Low <u>Permanent</u> A: Low; S: Low	<u>Temporary</u> A: Negligible/ Slight; S: Negligible/ Slight <u>Permanent</u> A: Negligible/ Slight; S: Negligible/ Slight		
		29700 to 31050+	Mixed heather hill margin/ rough grazings, part of the Etteridge Grouse Beat – Drive 1 (driven from north to south). Grouse Drive 1 currently not shot, but returning to production in 2017 season (average of 3.5 days shot per annum). Woodland comprising open scrub and more dense conifers at the north end. LCA Grade 6:3 with seasonal sheep grazing and "in hand" as "tick mops". Deer habitat and movement areas - no stalking.	<u>Temporary</u> Disturbance to grouse likely during nesting and shooting seasons Loss to rough grazings Disruption to access arrangements <u>Permanent</u> Minor loss to grouse habitat and shooting. Loss to rough grazings. Minor loss of trees.	A: Low; S: Medium; F: Low	<u>Temporary</u> A: Low; S:Low; <u>Permanent</u> A: Low; S: Low; F: Low	<u>Temporary</u> A: Negligible/ Slight; S: Slight <u>Permanent</u> A: Negligible/ Slight; S: Slight F: Negligible/ Slight		
Ben Alder Estate	22200 to 22550		Commercial woodland recently felled and re-planted with broadleaf/conifer mix.	<u>Permanent</u> Loss of trees. <u>Likely loss of/requirement to re-pay woodland planting grant (SRDP).</u>	F: Low	<u>Permanent</u> F:Medium	<u>Permanent</u> F: Slight	<u>Permanent</u> F: Slight	<u>Permanent</u> Slight Adverse Estate remains viable

1.2 Business Viability Impacts on Agriculture, Sporting and Forestry Interests for Phoinies Estate

- 1.2.1 As per the assessment methodology within **Chapter 8**, Phoinies Estate has been assessed as likely to experience a moderate or above impact, and as such an assessment of the potential impacts on future viability has been considered below. For clarity, this considers whether the business of the Estate has the potential to adapt its operations as a result of the significant impact.

Estate Summary

- 1.2.2 Phoinies Estate is a 10,120ha (25,000 acre) mixed sporting estate, with its grouse shooting enterprise being the main estate activity. For the avoidance of doubt, we have not had sight at this stage of any accounts or financial information relating to the Estate or its sources of income and have relied solely upon written and verbal information relating to the Estate’s activities only, provided by the Estate and their advisers.
- 1.2.3 The grouse enterprise operates over five individual “beats” (four currently operational; one currently non-operational, but subject to restoration works), producing a total of between 2000 – 3000 brace per annum, shot over 15 – 25 driven days with additional “walked up” days. Driven and “walked up” days are let on a commercial basis, with a number of days retained for the owner.
- 1.2.4 The Estate also operates an “inhand” sheep flock, comprising a total of 2,700 widders (castrated male sheep), managed solely as “tick mops” over the grouse moor areas, in order to reduce tick numbers in those areas and reduce the level of “louping ill” (a disease carried by ticks and fatal to grouse). A seasonal grazing agreement also allows additional sheep on the hill (approximately 1,700 breeding ewes), but which are not owned by the estate. Both the Estate’s sheep and the seasonal grazing agreement sheep are managed by the seasonal grazier.

Agricultural Viability

- 1.2.5 The “hill” area over which sheep graze is estimated by the Estate to be approximately 10,000 acres over Cuaich Hill (which includes the Leacain and Etteridge grouse beats). The total land take from this area by the Proposed Scheme is estimated to be approximately 89.31 hectares (ha) (220.69 acres).

Temporary

- 1.2.6 Our overall impact assessment of the agricultural viability of the Estate on a temporary basis is assessed as Moderate, based on the short term impacts of: loss to rough grazings; restricted sheep movement; disruption to access arrangements. There is no doubt that there will be considerable disruption to the management of the sheep flocks during this period, with movement (from one side of the A9 to the other) and handling being restricted, in particular.
- 1.2.7 This can be mitigated against to some extent by agreement of an appropriate sheep management plan, as sheep movements (offloading from vehicles; gathering for dipping/ clipping/ tick dosing; uploading to vehicles) take place during predictable times of the year and there is no stock on the hill between November and mid-March. For those reasons, we assess the agricultural viability, on a temporary basis, in accordance with the impact assessment criteria to be – **Negligible** Adverse Impact.

Permanent

- 1.2.8 Our overall impact assessment of the agricultural viability of the estate on a permanent basis is assessed as Slight, based on the impacts to: loss of rough grazings; and restricted sheep movement. The overall extent of land take for the scheme is considered to be minimal in terms of the impact on grazings as a whole and the road design has catered for the adequate provision of alternative stock movement via sheep creeps etc. and vehicle off loading/ uploading.
- 1.2.9 For those reasons, we assess the agricultural viability, on a permanent basis, in accordance with the impact assessment criteria to be – **Neutral** Impact.

Forestry Viability

- 1.2.10 The only woodland/ forestry affected by the Proposed Scheme on Phoinies Estate comprises a small block of conifer plantation located to the south of Cuaich and currently suffering from severe windblow damage (Lechden woods). There is a small area of open trees (mainly natural regeneration Scots pine) affected at the north end of the Proposed Scheme, but this is considered to be of no potential commercial value.
- 1.2.11 Temporary and Permanent Viability –The impacted woodland (Lechden Woods) is already windthrown and in relatively poor condition. We have not carried out any assessment of timber quality, quantity or value, but, as a result of the location, timber growing conditions and windthrow damage, it is our assessment that the increased cost of extracting windthrow timber (as opposed to standing timber), set against the likely low timber value and costs of replanting will result in a neutral value for the woodland and timber. We have therefore assessed woodland viability, on a temporary and permanent basis, in accordance with the impact assessment criteria to be – **Neutral** Impact.

Sporting Viability

- 1.2.12 The Proposed Scheme directly impacts as a result of land take from two of the Phoinies Estate grouse beats (Leacain and Etteridge). Leacain Beat produces between 500-550 brace per annum, shot over five drives, and Etteridge produces between 200-250 brace per annum, shot over four drives (the fifth drive on Etteridge currently not shot). Land take over Leacain Beat is from two drives (drives 1 and 3). Land take over Etteridge Beat is from two active drives also (drives 4 and 5) and part of one inactive drive (drive 1). The land take from the Proposed Scheme, in addition to impacting on grouse beats also impacts on areas considered to be red deer habitat and movement areas, but where no stalking takes place.
- 1.2.13 There is no land take impacting on the “low ground” shooting on the Estate, which is all located at the north end of the estate, outwith Project 8.

Temporary

- 1.2.14 Our overall impact assessment of the sporting viability of the Estate on a temporary basis is assessed as Moderate, based on the short term impacts of: disturbance to grouse likely during nesting and shooting seasons; loss of grouse habitat; loss of ground forming part of grouse drives. There is no doubt that there will be considerable disruption to the grouse population within the land take area and significantly beyond during this period. In addition, there will be direct disturbance to the individual shoot days, mainly due to construction noise and vehicle movements.

- 1.2.15 Grouse drives are a “fixed entity” in that they reflect the optimum location (butt lines) for guns to take advantage of the natural flight of grouse over each drive, observed over many years; the location of some lines of butts may be over 100 years in age. It is therefore not possible to move butt lines to accommodate any temporary changes to the layout and character of an affected drive. Some mitigation may be possible by agreement of a grouse management plan, but halting construction to accommodate shoot days is unlikely and as such there is an expectation that grouse shooting on both affected beats may have to be significantly curtailed during the construction phase. The two beats together provide an approximate total to the Phoinies Estate grouse shot of between 25% - 35%, which is considered to be significant. For those reasons, we assess the sporting (grouse) viability, on a temporary basis, in accordance with the impact assessment criteria to be – **Moderate** Adverse Impact.

Permanent

- 1.2.16 Our overall impact assessment of the sporting viability of the Estate on a permanent basis is assessed as Moderate, based on the impacts to: grouse habitat; loss of ground forming part of grouse drives.
- 1.2.17 The overall extent of land take for the Proposed Scheme is considered to be significant in relation to Leacain Beat – Drive 1 in particular, and we would envisage that a longer term restructuring of the drive will be necessary, to include a removal of butts at the bottom of the existing line and replacement at the top, along with a shortened overall “gathering area” to the drive. The likely outcome from this is expected to be a significant drop in the number of birds shot from this drive.
- 1.2.18 The overall extent of land take for the Proposed Scheme is considered to be minimal in terms of the impact on Leacain Beat – Drive 3 and the three affected Etteridge Beat drives and we would not envisage any need to alter drive layout/ butt lines on a permanent basis; however, long term additional disturbance from the road is likely and a small reduction in grouse shot over these drives would be anticipated.
- 1.2.19 For those reasons, we assess the sporting (grouse) viability, on a permanent basis, in accordance with the impact assessment criteria to be – **Adverse** Impact.

