Forestry Commission England

Woodland Management Plan

Woodland Property Name	**Stanmer Park**	
Case Reference	40206	
Plan Period dd/mm/yyyy (ten years)	**Approval Date: 02/08/2018**	**To: 2028**
Five Year Review Date	**2023**	

Revision No.	Date	Status (draft/final)	Reason for Revision
1	15/12/16	Draft	Cityparks comments
2	11/01/17	Draft	Cityparks comments
3	19/06/2017	Draft	Cityparks comments
4	02/12/2017	Draft	Cityparks comments
5	21/02/18	Draft	Consultee responses
The landowner agrees this plan as a statement of intent for the woodland			☒

Forestry Commission England

UKFS Management Planning Criteria

Approval of this plan will be considered against the following UKFS criteria, prior to submission review your plan against the criteria using the check list below.

No.	UKFS Management Plan Criteria	Approval Criteria	Applicant Check
1	Forest management plans should state the objectives of management and set out how the appropriate balance between economic, environmental and social objectives will be achieved.	Have objectives of management been stated? Consideration given to economic, environmental and social factors (Section 2.2)	☒
2	Forest management plans should address the forest context and the forest potential and demonstrate how the relevant interests and issues have been considered and addressed.	Does the management strategy (section 6) take into account the forest context and any special features identified within the woodland survey (section 4)	☒
3	In designated areas, for example national parks, particular account should be taken of landscape and other sensitivities in the design of forests and forest infrastructure.	Have appropriate designations been identified (section 4.2) if so are these reflected through the work proposals in the management strategy (Section 6)	☒
4	At the time of felling and restocking, the design of existing forests should be re-assessed and any necessary changes made so that they meet UKFS Requirements.	Felling and restocking are consistent with UKFS forest design principles (Section 5 of the UKFS)	☒
5	Consultation on forest management plans and proposals should be carried out according to forestry authority procedures and, where required, the Environmental Impact Assessment Regulations.	Has consultation happened in line with current FC guidance and recorded as appropriate in section 7	☒
6	Forests should be designed to achieve a diverse structure of habitat, species and ages of trees, appropriate to the scale and context.	Do the felling and restocking proposals create or improve structural diversity (refer to the plan of operations)	☒
7	Forests characterised by a lack of diversity due to extensive areas of even-aged trees should be progressively restructured to achieve a range of age classes.	Do the felling and restocking proposals create or improve age class diversity (refer to the plan of operations)	☒
8	Management of the forest should conform to the plan, and the plan should be updated to ensure it is current and relevant.	Has a five year review period been stated below and achievements recorded in section 3	☒
9	New forests and woodlands should be located and designed to maintain or enhance the visual, cultural and ecological value and character of the landscape.	When new planting is being proposed under this plan is consistent with UKFS and FC guidance on woodland creation	☒

Forestry Commission England

1. Property Details

Woodland Property Name:		**Stanmer Park**	
Name	Brighton and Hove City Council Parks Projects Hollingdean Depot Brighton BN1 7GA	Owner ☒	Tenant ☐
Email	Fiona.LeGarsmeur@brighton-hove.gov.uk	Contact Number	01273 294737
Agent Name (if applicable)		Julian Miller, Miller Land Management Grooms Cottage, Whitfield Hill, Dover, Kent CT 16 3BJ	
Email	jools@millerlandmanagement.co.uk	Contact Number	01304 447867
County	East Sussex	Local Authority	Brighton and Hove City Council Lewes District Council
Grid Reference	TQ343086	Single Business Identifier	108267900
Management Plan Area (Hectares)		158.9ha	
Have you included a Plan of Operations with this management plan?		Yes ☒	No ☐
List the maps associated with this management plan		Map 1 : Location map Map 2 : Sub-compartments map Map 3: ASNW map Map 4: Archaeological features map Map 5 : Public access Map Map 6: Landscape designations Map Map 7 : Biodiversity designations Map Map 8: Veteran trees / badger setts map Map 9: Hazards and constraints map Maps 10a-e: Harvesting proposals Maps 11a-e: Other operations	
Do you intend to use the information within the management plan and associated plan of operations to apply for the following		Felling Licence ☒ Thinning Licence ☒ Woodland Regeneration Grant ☒	
Tick to declare management control and agreement to public availability of the plan			☒

2. Vision and Objectives

To develop your long term vision, you need to express as clearly as possible the overall direction of management for the woodland(s) and how you envisage it will be in the future. This covers the duration of the plan and beyond.

2.1 Vision

Describe your long term vision for the woodland(s).

The vision is to maintain a balanced woodland ecosystem, within the designated historic park, which is capable of the sustainable delivery of a wide range of public benefits in perpetuity, ensures that the nature conservation, landscape and historic environment are protected and enhanced across the park and maintains and enhances quality public access to provide a peaceful and pleasant setting for quiet informal recreational activities as befitting a public park.

To achieve this, the woodland at Stanmer Park will be brought back into active economic management with the aim of sustainable production of timber and wood fuel through the application of sound silvicultural principles.

2.2 Management Objectives

State the objectives of management demonstrating how sustainable forest management is to be achieved

No.	Objectives (include environmental, economic and social considerations)
1	***Maintain the historic landscape value of the woodland:*** - by conserving existing woodland boundaries - by adoption of low impact silvicultural systems and use of small felling coupes to reduce negative landscape impacts. - by regular thinning to maintain individual tree stability - by retention of veteran trees where there is no conflict with health and safety considerations - by managing public access impacts on historic features within the woodland - by surveying for historic environment features prior to operations - by avoiding damage to identified features during harvesting, extraction and other woodland operations
2	***Sustainable timber and woodfuel production:*** - Manage high forest plantations under continuous cover principles, with regular thinning to provide wood fuel and timber for sale. - Re-establish a coppice regime with a 25-year cycle in a proportion of the stands. - Improve management access where necessary to facilitate harvesting and other management operations. - Ensure adequate restocking levels are achieved by natural regeneration, layering and / or replanting - by controlling squirrels, deer and other threats to the economic value of the woodland.
3	***Maintain and enhance the biodiversity value of the native woodland especially ancient woodland:*** - by re-introducing a traditional coppice regime over parts of the woodland (as above); - by retaining a proportion of mixed broadleaved stands as minimal intervention areas for wildlife; - by identifying, protecting and retaining veteran trees where present ; - by identifying and protecting the habitat of rare and endangered species; - by monitoring and controlling deer numbers to prevent negative impacts on ground flora; - by maintaining fences to prevent stock trespass; - by monitoring and controlling invasive shrub species (e.g. laurel); - by annual cutting of paths, rides and tracks to maintain areas of permanent open

No.	Objectives (include environmental, economic and social considerations)
	ground habitat - by retention of standing and fallen deadwood as important habitat provided there is no conflict with H&S requirements. - by monitoring and where necessary controlling adverse impacts of recreational use on sensitive habitats and species within the woodland (eg by restricting or imposing conditions on public access to parts of the woodland).
5	***Maintain and enhance public access provision within the woodland:*** - By maintaining the path network in safe and useable condition - By maintaining tree safety, especially in areas of heavy public use - By controlling anti-social behaviour and unauthorised access. - By providing designated areas for mountain bike use to prevent conflict with other users. - By improving interpretation and education facilities within the woodland - By encouraging public engagement in management activities.

3. Plan Review - Achievements

Use this section to identify achievements made against previous plan objectives. This section should be completed at the 5 year review and could be informed through monitoring activities undertaken.

Objectives	Achievement
n/a	Not applicable this is the first CS plan for the woodland

4. Woodland Survey

This section is about collecting information relating to your woodland and its location, including any statutory constraints i.e. designations.

4.1 Description

Brief description of the woodland property	***Location:*** Stanmer Park lies on the north-east outskirts of Brighton and approximately 6 km west of Lewes, East Sussex. The estate is owned by Brighton and Hove City Council and extends to about 485 hectares of which nearly 159 hectares is woodland. The main access point to the estate is at NGR TQ343086. ***Setting:*** The woodland on the estate is an important component of the eighteenth century designed landscape of the Park. The main woodland blocks occupy chalk downland ridges surrounding the gently rounded dry valley which contains Stanmer House and village, with smaller blocks scattered through the surrounding parkland to the south and agricultural land to the north. ***Topography:*** The main valley is aligned roughly north-west to south-east, on the dip slope of the South Downs. Slopes are generally moderate with some stepper areas. Elevation ranges from about 50m ASL by the main entrance on the south-eastern boundary, to 190m along the northern edge. ***Soils and geology:*** Soils are mainly shallow, free-draining lime-rich chalky loams, with rather heavier, slightly acid clayey loams in the southern parts of Great Wood. The underlying geology is Cretaceous Upper Chalk of the Newhaven Chalk and Seaford Chalk Formation, overlain in a few places with Quaternary Clay-with-Flints. ***History of management:*** Old estate and Ordnance Survey maps indicate that the original layout of the woodland blocks has survived largely intact since it was laid out in the 18th century by the Pelham family. Stanmer is therefore an important example of an eighteenth century designed landscape and is listed in the Register of Historic Parks and Gardens. It remained in private ownership until requisitioned during the second World War as an army training ground – parts of the woodland were damaged by artillery fire and use for tank training during this period. In 1947 the estate was acquired by the Brighton Corporation (now Brighton and Hove City Council) for public use.

The 1950s and 1960s saw an active woodland management programme of selective felling, thinning and respacing as well as the creation of the Forest Garden in Great Wood.

During the 1980s the A27 dual carriageway was constructed which resulted in some loss of woodland and the separation of Coldean Woods from the rest of the estate.

The estate was very heavily impacted by the 1987 storm which resulted in windthrow of mature trees over approximately two-thirds of the area. Replanting with mixed broadleaves was undertaken but in many areas this has been overtaken by natural regeneration of sycamore and ash.

More recently management activity has been constrained by budgetary considerations and a lack of resources. Work has been restricted to tree safety operations, monitoring and control of elm disease, and some small-scale coppicing and thinning works.

As there has been little management in recent years, most stands would benefit from some intervention, particularly the post-storm plantings. There is scope to expand and upgrade the access infrastructure to allow better access for timber extraction especially to the northern part of the property if resources are available.

A Conservation Management Plan has recently been produced for the whole estate and the woodland plan builds on the recommendations included in that document (see Appendix 12).

Woodland composition:

Parts of the woodland are designated as ancient semi-natural woodland (ASNW – 89.1ha) and parts as Planted Ancient Woodland Sites (PAWS – 37.5ha) on the Ancient Woodland Inventory, although the latter figure appears to be incorrect as it includes much woodland which is predominantly native broadleaved in character. This should therefore be considered as ASNW rather than PAWS. In fact old estate maps appear to indicate that there was actually little woodland cover present prior to the lay-out of the 18th century landscape plantings. The majority of the woodland consists of broadleaved mixtures with beech, ash and sycamore the dominant species. There is a minor component of conifer planting, including larch, spruce and red cedar. The eastern part of Great Wood was planted as an arboretum / "Forest Garden" with a broad range of conifer and broadleaved species in the 1950s. Elms are an important feature of the woodland with the Brighton area one of the few places in the UK where mature elms have survived.

There is a fairly diverse age class structure, with some remnants of the original planting (1780 – 1820) remaining, including a number of important veteran trees. Notable further phases of replanting occurred in the 1920s and 1950s. The dramatic impact of the 1987 storms is still evident in most compartments.

A sub-compartment schedule is provided in Appendix 1 – this includes an illustration of the current species composition and age class distribution. Also included is a calculation of the estimated sustainable yield from the woodland, which has been assessed as approximately 650 cubic metres per annum, or 6500

	cubic metres over the 10 years of this plan. ***Historic environment features:*** There are three scheduled ancient monuments within the woodland, as outlined below, and the estate as a whole contains a large number of historic environment features, indicating occupation of the site since prehistoric times. There are a large number of listed buildings on the estate and two of these are within the woodland – the Frankland Monument at NGR TQ3362509177, and the Water Catcher at NGR TQ3335009780. ***Public access:*** Provision of opportunities for public recreation is an important function of the estate as a whole. Because of its peri-urban location and proximity to the University campus there is significant recreational pressure on the resource, including the woodland areas. A comprehensive access management plan is currently under preparation covering the whole estate including the woodland. There are several public rights of way (public footpaths and bridleways) through the woodland and a number of permissive routes which largely follow the original ride network. There is de facto unrestricted public access on foot, as all the woodland is designated Access Land. There are a number of small public car parks along the main access road to the village and on the western edge of the property. The woods are heavily used by walkers and mountain bikers, which has resulted in some friction between user groups.

4.2 Information

Use this section to identify features that are both present in your woodland(s) and where required, on land adjacent to your woodland. It may be useful to identify known features on an accompanying map.

Feature		Within Woodland(s)		Cpts	Map No	Notes
Biodiversity – European Protected Species						
Bat	Species (if known)	Yes ☒	No ☐	(all)		See below
Dormouse		Yes ☒	No ☐	(??)		See below
Great Crested Newt		Yes ☐	No ☒	(??)		No records within site but see below
Otter		Yes ☐	No ☒			No records
Sand Lizard		Yes ☐	No ☒			No records
Smooth Snake		Yes ☐	No ☒			No records
Natterjack Toad		Yes ☐	No ☒			No records

Notes

Bats are assumed to be present throughout the woodland. There are records of six bat species: Serotine (*Eptesicus serotinus*), Brown long-eared bat (*Plecotus auritus*), Common pipistrelle (*Pipistrellus pipistrellus*), Daubentons bat (*Myotis daubentonii*), Noctule (*Nyctalus noctula*) and Soprano pipistrelle (*Pipistrellus pygmaeus*) in the vicinity of the woods. There are roost sites in various buildings in Stanmer village but no known roosts within the woodland. Older trees in particular will have strong potential to provide suitable niches for roosts for some species.

Dormice are potentially present within the woodland and areas of hazel coppice could perhaps provide good habitat for this species. Monitoring for dormouse was carried out in the woods between 2011 and 2015 with 50 nest boxes installed but only 4 juveniles were recorded, in a single box in 2013. The dormouse habitat quality of much of the woodland is not high because of the absence of understorey with desirable species such as honeysuckle and bramble. There is also considerable disturbance due to the high levels of recreational use by dog walkers.

There are records of great crested newts (GCN) approximately 1km south east of the estate but no records within it. There are only a few ponds within or close to the woodland blocks. These do not appear to provide optimal newt habitat owing to levels of disturbance and are so far apart as to make GCN travel between them difficult. Therefore it is considered unlikely that great crested newts are present within the woodland.

Provided that the relevant EPS guidelines are adhered to (see Appendix 2), the risk of adverse impact on these species is low. The operations proposed will generally be low intensity and without the use of heavy machinery. All work sites will be assessed for the presence of EPS prior to harvesting and other operations.

Feature		Within Woodland(s)		Cpts	Map No	Notes
Biodiversity – Priority Species						
Schedule 1 Birds	Species	Yes ☒	No ☐	(all)		See below
Mammals (Red Squirrel, Water Vole, Pine Marten etc.)		Yes ☐	No ☒			No records
Reptiles (grass snake, adder, common lizard etc.)		Yes ☒	No ☐	10		See below
Plants		Yes ☒	No ☐	2,10		See below
Fungi/Lichens		Yes ☐	No ☒			No records
Invertebrates (butterflies, moths, beetles etc.)		Yes ☒	No ☐	5,6, 13, 22		See below
Amphibians (pool frog, common toad)		Yes ☐	No ☒			No records
Other (please Specify):		Yes ☒	No ☐	1, 7, 8, 10, 11, 19, 20, 23, 24, 27, 32, 41	8	Badger setts see below

Notes

Biodiversity data was provided by Sussex Biodiversity Records Centre (see Appendix 3).

There are records of a number of Schedule 1 bird species - Red kite (*Milvus milvus*), Barn owl (*Tyto alba*), Black redstart (*Phoenicurus ochruros*) and Firecrest (*Regulus ignicapilla*) within the Park. NERC Section 41 species recorded include Corn bunting (*Emberiza calandra*), Wood warbler (*Phylloscopus sibilatrix*), Grey partridge (*Perdix perdix*) and Lesser spotted woodpecker (*Dendrocops minor*). Not all of these are woodland specialist species but are likely to make use of the woodland, woodland edges and adjacent open ground. Owls are also known to nest in Compartment 5 (Great Wood).

There are records of slow worm (*Anguis fragilis*), common lizard (*Zootoca vivipara*) and grass snake (*Natrix natrix*) within the Park but most of these are outside the woodland area.

A number of BAP invertebrate species are recorded within the woodland including the moths Ghost Moth (*Hepialus humuli*), Pretty Chalk Carpet (*Melanthia procellata*), Knot Grass (*Acronicta rumicis*) Garden Tiger (*Arctia caja*) and Cinnabar (*Tyria jacobea*) and butterflies Dingy skipper (*Erynnis tages*), White-letter Hairstreak (*Satyrium w-album*), Brown Hairstreak (*Thecla betulae*) and Wall (*Lasiommata megera*). Many of these species will benefit from the proposed coppice and ride management which will create a shifting pattern of more open habitats within the woodland. White-letter hairstreak is dependent on elm, so measures to conserve elm will also benefit this species.

Important plant species within the woodland include White helleborine (*Cephalanthera damasonium*) present in Great Wood (compartment 2) and slender bedstraw (*Galium pumilum)* present in the northern woodland (compartment 11). There are historic records of fly orchid *(Ophrys insectifera*) in Great Wood but it is thought that this population may have been lost due to extraction damage following the 1987 storms. Management will seek to ensure that habitat for these species is protected and that the impact of any disturbance is minimised during forest operations. There will be active grassland management to maintain suitable conditions for the population of white helleborine in Great Wood arboretum.

There are active badger setts in a number of the woodland compartments – see Map 8. Badgers and their setts are protected under the Protection of Badgers Act 1992. Disturbance to setts during forest operations will be minimised in line with the best practice guidance given in FC publication FPG9 "Forest Operations and Badger Setts" (see Appendix 7)

Feature	Within Woodland(s)		Cpts	Adjacent to Woodland(s)		Map No
Biodiversity- Designations						
Site of Special Scientific Interest	Yes ☐	No ☒		Yes ☐	No ☒	
Special Area of Conservation	Yes ☐	No ☒		Yes ☐	No ☒	
Tree Protection Order	Yes ☐	No ☒		Yes ☐	No ☒	
Special Protection Area	Yes ☐	No ☒		Yes ☐	No ☒	
Ramsar Site	Yes ☐	No ☒		Yes ☐	No ☒	
National Nature Reserve	Yes ☐	No ☒		Yes ☐	No ☒	
Local Nature Reserve	Yes ☒	No ☐	See below	Yes ☒	No ☐	7
Other (please Specify): Local Wildlife Site Biosphere Reserve Local Geological Site	Yes ☒	No ☐	See below	Yes ☒	No ☐	7

Notes

The southern part of the site is designated as Stanmer Park Local Nature Reserve. This includes woodland Compartments 1-8, 17, 20, 21, 24, 25, 28-30, 32-36.
The north-east corner of Chalk Ridge (woodland compartment 18) lies within Tenant Lain and Moons Gate Woods Local Wildlife Site.
Part of the estate is a Local Geological Site because it includes the largest concentration of Sarsen stones in the eastern part of the South Downs. This includes woodland compartments 1-6, 20, 28-30 and 36.
The boundaries of these designated areas are currently under review but Map 6 shows the current (2018) bioundaries.
The site is also wholly within the Brighton and Lewes Downs Biosphere Reserve.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Landscape:					
National Landscape Area : **125 South Downs**					
National Park	Yes ☒	No ☐	(all except Cpt 38)	6	See below
Area of Outstanding Natural Beauty	Yes ☐	No ☒			
Other (please Specify): Conservation Area	Yes ☒	No ☐	1-5, 17, 20, 28-30, 35, 36	6	See below

Notes:

The whole estate (apart from Varley Park (Cpt 38) lies within the South Downs National Park. Management of the Stanmer woodlands will align with the National Park forestry and woodland policies as outlined in their management plan (see extract in Appendix 4).

The southern part of the estate lies within Stanmer Conservation Area. This includes much of Great Wood (Cpts 1-5), Richmond Hill (Cpt 20), Grubbings (Cpt 17), and a number of the smaller clumps within the parkland area (Cpts 28-30, 35, 36). The Conservation Area Appraisal identifies important views from the ridge between Cpts 17 and 20; appropriate management of the woodland will ensure that these views are maintained and that negative landscape impacts are minimised.

Feature	Within Woodland(s)		Cpts	Map No	Notes
People:					
CROW Access	Yes ☒	No ☐	all	5	See below
Public Rights of Way (any)	Yes ☒	No ☐	1-8. 10-12, 15, 16, 19, 22, 24, 32	5	See below
Other Access Provision	Yes ☒	No ☐	all	5	See below
Public Involvement	Yes ☒	No ☐			
Visitor Information	Yes ☒	No ☐	6f, 21a	5	See below
Public Recreation Facilities	Yes ☒	No ☐	all	5	See below
Provision of Learning Opportunities	Yes ☐	No ☒			
Anti-social Behaviour	Yes ☒	No ☐			
Other (please Specify):	Yes ☐	No ☒			

Notes:

Because of its location close to the outskirts of Brighton, provision of recreational opportunities is a key function of the woodland, with an estimated 500,000 visits per annum. The whole estate including all woodland blocks is classified as Open Access land.

Brighton and Hove City Council and the South Downs National Park have both produced a number of leaflets promoting walks within the woodland and wider estate. There are several public footpaths and bridleways along with a well-used network of permissive path routes which pass through most of the woodland blocks, including a perimeter route around the estate. Additionally, heavily-used unofficial mountain bike routes and informal paths have developed through many of the blocks. There is the potential for conflict between these different user groups and also the potential for damage to sensitive habitats as a result of intensive recreational use. Management of the permissive path network will be an ongoing cost – both control of encroaching vegetation and repairs to path surfacing.

There are two car parks within the woodland, in Great Wood (sub-compartment 6f) and Upper Lodge Wood (sub-compartment 21a) and numerous other small car parks elsewhere on the estate. There are several information boards located in the car parks and elsewhere on the walking routes.

Because the estate is open to the public parts of the woodland are vulnerable to fly tipping, unauthorised vehicular access and vandalism. More isolated blocks have been used as campsites by homeless people. There is also heavy use of the woodland by mountain bikers including construction of ramps.

This high level of public use will need to be carefully managed and closures of parts of the network will be necessary for safety reasons during harvesting and other operations. It will be important to ensure that users are kept informed of the reasons for these closures. Explanation/ interpretation of the proposed management of the woodland should be provided and appropriate consultation undertaken. Provision of permanent interpretation boards providing information about the woodland, routes within it, and its management should be considered. Improvements could be made to way-marking and signage.

The boundaries of compartments 1-7, 10, 19, 21, 22, 29 and 32 are adjacent to public roads. Proximity to roads may impose additional operational costs when carrying out harvesting and other operations on these sites (e.g. requirement for traffic control)

Consideration will be given to ways in which different user groups can be accommodated whilst avoiding potential conflicts (i.e. mountain bikers and dog walkers). These issues will be addressed via the Local Access Forum and / or Council consultation with user groups and development of an Access Management plan.

A defensible tree management strategy will be implemented following agreed principles – this will involve a regular inspection of trees with frequency and level of inspection related to risk to people and property.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Historic Environment:					
Scheduled Monuments	Yes ☒	No ☐	6,7,32	4	See below
Unscheduled Monuments	Yes ☒	No ☐	2, 4-7, 16, 31, 32	4	See below
Scheduled Landscapes	Yes ☐	No ☒			
Registered Parks and Gardens	Yes ☒	No ☐	(all except 19)	4	See below
Boundaries and Veteran Trees	Yes ☒	No ☐	2, 4-8, 10-19, 27, 31, 32, 37, 38, 40	8	See below
Other (please Specify): Archaeologically Sensitive Areas Listed Buildings	Yes ☒	No ☐	 6.7.9.11, 31,32 2,32	4	See below

Notes:

All of the woodland with the exception of Moons Plantation (Cpt 19) lie within Stanmer Park Grade II Registered Historic Park /Garden. A copy of the listing entry is provided as Appendix 6a. Maintenance of the historic landscape appearance of the woodlands in the wider landscape of the park is a key priority of the proposed woodland management and so there is unlikely to be any conflict with this designation.

There are three scheduled ancient monuments within the woodland:
1014456 Bowl Barrow in Great Wood (NGR TQ3285 0944 – sub-compartment 6f)
1020385 Cross Dyke in Great Wood (NGR TQ3319 0924 – sub-compartment 6c)
1020384 Prehistoric Linear Boundary and Bronze Age Bowl Barrow in Pudding Bag Wood (NGR TQ3257 0955 – sub-compartment 7b).

A further SAM, Medieval settlement at Stanmer (1418222 - NGR TQ3357 0976) adjoins Watercache (Compartment 32)

These features will be managed in close liaison with Historic England and protected from damage during woodland operations. A copy of the listing entries for these features is provided as Appendix 6b.

There are a number of other historic environment features located within or adjacent to the woodland blocks, including Iron Age, Bronze Age, Roman, and medieval remains: these are shown on Map 4 and a summary listing is provided as Appendix 6c. There are also a number of old boundary walls around the external perimeters of the woodland – some of these are in good condition but others less so.

The Frankland Monument in sub-compartment 2a (Great Wood arboretum) is a listed building, as is the Watercatcher in sub-compartment 32b.

Several zones within the woodland have been identified as Archaeologically Sensitive Areas – these include buffer zones around the SAMs in Great Wood, Pudding Bag Wood and Watercache along with Rocky Clump (Compartment 31) and parts of Piddingworth Plantation (Cpt 9), and Highpark Wood (Compartments 11 & 12). These are shown on Map 4.

The woodlands include a number of trees of considerable age and stature, some dating back to the original landscape plantings or even earlier. Many of these qualify as "veteran trees" and have high landscape and nature conservation value. These have been mapped and their locations are shown on Map 8.

These features will be managed with care and in accordance with the UKFS "Forests and Historic Environment" guidelines to ensure that they are conserved for their archaeological and historic landscape values.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Water:					
Watercourses	Yes ☐	No ☒			
Lakes	Yes ☐	No ☒			
Ponds	Yes ☒	No ☐	9, 17	7	See below
Other (please Specify):	Yes ☐	No ☐			
Notes:	As the estate is located on porous chalk, watercourses are not a significant feature of the property. There are a number of man-made dewponds including Lot's Pond in Grubbings Wood (Compartment 17) and a smaller pond just north of Piddingworth Plantation (Cpt 9). These provide some additional landscape diversity, although Lot's Pond is concrete based and frequently disturbed by bathing dogs and so is likely to offer limited useful wildlife habitat.				

4.3 Habitat Types

This section is to consider the habitat types within your woodland(s) that might impact/inform your management decisions.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Woodland Habitat Types					
Ancient Semi-Natural Woodland	Yes ☒	No ☐	1, 5-8, 10-12, 15-17, 19, 20, 22, 35	3	See below
Planted Ancient Woodland Site (PAWS)	Yes ☒	No ☐	1-6, 11, 16	3	See below
Semi-natural features in PAWS	Yes ☒	No ☐			
Lowland beech and yew woodland	Yes ☒	No ☐			
Lowland mixed deciduous woodland	Yes ☒	No ☐			
Upland mixed ash woods	Yes ☐	No ☒			
Upland Oakwood	Yes ☐	No ☒			
Wet woodland	Yes ☐	No ☒			
Wood-pasture and parkland	Yes ☐	No ☒			Adjacent to woodland
Other (please Specify):	Yes ☐	No ☒			

Notes:

A large proportion of the woodland appears on the Ancient Woodland Inventory as either Ancient semi-natural woodland (ASNW) or Planted Ancient Woodland Site (PAWS). Much of the area that has been classified as PAWS is more accurately described as ASNW as it contains mainly native broadleaved species, albeit with a component of non-natives.

Old estate maps appear to indicate that woodland cover on the estate was rather sparse prior to the 18th century landscape planting undertaken by the Pelhams. However most of the compartments have certainly been under woodland cover for at least the last 200 years.

The native woodland is best classified as a mixture of lowland beech and yew woodland on the shallower soils, (NVC W12), with lowland mixed deciduous woodland (NVC W8) on deeper base rich soils, grading to NVC W
10 on more acid clayey soils.

The areas identified as planted ancient woodland (PAWS) are diverse in terms of species and structure. As noted above some (for example compartments 1 and 4) contain predominantly native species and are better considered as ASNW or "restored PAWS". Others, although of plantation origin, do not contain a preponderance of conifer species except in small areas. Their mixed character provides additional species diversity and landscape benefits and does not have a significant negative impact on biodiversity. There is no urgent need to restore these areas to native cover, although this could be achieved gradually over a long timescale. The Arboretum (Cpt 2) is also included in the area designated as PAWS.

In all ASNW and PAWS areas there is a presumption against clear-felling, continuous cover systems will be adopted, and the objective will be to at least maintain (and preferably enhance) their ecological condition.

Feature	Within Woodland(s)		Cpts	Map No	Notes
Non Woodland Habitat Types					
Lowland calcareous grassland	Yes ☐	No ☒			Adjacent habitat but not within woodland
Lowland dry acid grassland	Yes ☐	No ☒			
Lowland heath land	Yes ☐	No ☒			
Lowland meadows	Yes ☐	No ☒			
Lowland raised bog	Yes ☐	No ☒			
Rush pasture	Yes ☐	No ☒			
Reed bed	Yes ☐	No ☒			
Wood pasture	Yes ☐	No ☒			Adjacent habitat but not within woodland
Unimproved grassland	Yes ☐	No ☒			
Wetland habitats	Yes ☐	No ☒			
Other (please Specify):	Yes ☐	No ☒			

4.4 Structure

This section should provide a snapshot of the current structure of your woodland as a whole. A full inventory for your woodland(s) can be included in the separate Plan of Operations spreadsheet.

Woodland Type	Percentage of Mgt Plan Area	Age Structure	Notes (i.e. understory or natural regeneration present)
Coppice	11%	Even-aged	Mainly mixed broadleaved coppice with some pure sweet chestnut and pure sycamore stands. Many stands are an intimate mixture of planted and coppice regrowth following the 1987 storms. Standards are present in most blocks but often sparsely scattered.
Native Broadleaved high forest	72 %	Uneven-aged	Mainly beech, ash and sycamore, often in mixture, and usually with a range of age classes present. Oak also present in Great Wood
Woodland Open space	6%	n/a	Includes tracks, paths, wayleave clearance.
Intimate mixture	9%	Even-aged	Parts of Great Wood (Cpts 4 & 5) Millbank Wood (Cpt 16) and Grubbings (Cpt 17) contain mixed broadleaves in mixture with Norway spruce, larch and western red cedar
Conifer	2%	Even-aged	Only small stands of pure conifer are present, in compartments 5 and 16.

5. Woodland Protection

Woodlands in England face a range of threats; this section allows you to consider the potential threats that could be facing your woodland(s). Using the simple Risk Assessment process below woodland owners and managers can consider any potential threats to their woodland(s) and whether there is a need to take action to protect their woodlands.

5.1 Risk Matrix

The matrix below provides a system for scoring risk. The matrix also indicates the advised level of action to take to help manage the threat.

Impact	High	Plan for Action	Action	Action
	Medium	Monitor	Plan for Action	Action
	Low	Monitor	Monitor	Plan for Action
		Low	Medium	High
		Likelihood of Presence		

5.2 Plant Health

Threat	Elm disease
Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	Following the impacts of elm disease in the 1970s, the Brighton area now has the only substantial collection of elms in the UK and this was awarded national collection status in the 1990s. Elms are a minor but important component of the woodland at Stanmer, and there are a number of mature specimens present. There is an ongoing elm disease monitoring programme already in place and control of elm disease will continue within the woodland and wider estate. All mature elms will be retained and protected from damage and disturbance during forest operations. Where present, healthy younger elms will be favoured during thinning operations within the woodland (i.e. other species will be removed in preference). Younger trees will also be protected and retained as potential future standards in areas which are coppiced.

Threat	Chalara Fraxinea (Ash die-back)
Likelihood of presence	High
Impact	High
Response (inc protection measures)	Ash makes up a significant proportion of the woodland, accounting for about 25% by area, generally as a component of mixed woodland. There is evidence of Chalara infection in ash on many parts of the estate and the assumption is that infection will continue to spread, so that the woodland is likely to be heavily impacted in the short to medium term. There is uncertainty as to the level of resistance of UK ash to Chalara but it seems likely that there will be significant mortality as a result of the disease. Normally, as a native species in predominantly ASNW woodland, ash would be favoured over sycamore when thinning mixed stands of the two species, with the aim of increasing the proportion of ash in the canopy. But this approach requires some modification in light of the threat posed by Chalara. Ash which is badly affected by Chalara should be removed during thinning but healthy trees should be retained as they could potentially be resistant to the disease. This implies that many of the ash / sycamore mixed stands will continue to contain a significant proportion of sycamore, but if possible it should not be allowed to become too dominant. In stands to be coppiced, a proportion of healthy ash stems (up to 20% canopy cover) will be retained to provide potential seed source for ash regeneration and to provide future standard trees. Where there is significant mortality of ash it may be necessary to consider planting alternative native species as replacements (e.g. pedunculate oak, wild cherry, wild service, hornbeam, field maple, small-leaved lime, perhaps sweet chestnut on more acidic soils) in order to maintain woodland cover and restrict the dominance of sycamore. Funding may be available via Countryside Stewardship to support this replanting work. However, natural regeneration would be preferable and planting will only be undertaken if there does not appear to be sufficient natural regeneration of desirable replacement species in the gaps left by ash. Chalara will also have implications for tree safety management, particularly if larger ash trees are weakened or killed by the disease. Frequency of inspections may need to be increased and the costs of remedial works are likely to rise as Chalara spreads. All contractors will be required to observe biosecurity measures to restrict the import and export of Chalara from the site, e.g. ensuring no leaf material is brought on site from elsewhere, in line with best practice. This strategy will be subject to review as further information on the disease becomes available – up to date information is provided on the Forestry Commission website : http://www.forestry.gov.uk/ashdieback

Threat	Phytophthora diseases
Likelihood of presence	Low
Impact	Low
Response (inc protection measures)	*Phytophthora spp* are a group of pathogens which can infect a wide range of tree species including beech, sweet chestnut and oak but larch is particularly susceptible to *Phytophthora ramorum* and can also act as a sporulating host to multiply infection. The disease has spread eastwards from south-west England and Wales and cases have now been reported throughout the UK. Larch is a very minor component of the woodland (about 1% by area) but is nevertheless potentially at risk from the disease. This was probably originally planted as a "nurse" species for oak and beech. Rhododendron is also known to be a host for the pathogens and there is a small quantity of rhododendron present in Great Wood. Trees will be monitored for signs of the disease, and if infection is suspected the Forestry Commission should be contacted. If infection is confirmed a Statutory Plant Health Notice will be issued requiring felling of the infected trees. Progressive removal of the larch component will be undertaken during thinning programmes particularly in situations where it is out-competing the native species in mixed plantings. Consideration will also be given to removal of the rhododendron present (see "invasive species" below)

Threat	Diseases of sweet chestnut
Likelihood of presence	Low
Impact	Low
Response (inc protection measures)	Sweet chestnut is a minor component of the woodland, mainly in Great Wood so the impact of chestnut blight (*Cryphonectria parasitica*) would be very localised. There are no recorded infections in the vicinity of the woods and outbreaks which have occurred in the UK appear thus far to have been controlled. Further information is available at: http://www.forestry.gov.uk/chestnutblight An outbreak of Oriental chestnut gall wasp (*Dryocosmus kuriphilus*) has recently occurred in Kent and it is likely that it may be present undetected elsewhere. As above, the small amount of sweet chestnut present means that impacts would be low. The galls produced have adverse impacts on stem straightness and therefore quality and suitability for fencing material. Further information is available at : http://www.forestry.gov.uk/gallwasp Routine inspections will be undertaken and the FC notified if any disease symptoms are found. Sanitation felling is likely to be required if any outbreak is detected.

5.3 Deer

Likelihood of presence	Medium
Impact	Low
Response (inc protection measures)	Fallow deer are known to be present in the vicinity of Stanmer, and other species may also be in the area. Deer will have negative impacts on tree regeneration and on native woodland ground flora through browsing and grazing if present in sufficient numbers, but there is currently no evidence of any deer damage within the woodlands. This may be due to high levels of disturbance caused by recreational use, and in particular heavy use by dog walkers. Monitoring for evidence of deer presence and damage will be undertaken throughout the woods. It is recommended that assessment is carried out using the Deer Initiative template (see guidance in Appendix 8), which will allow quantification of deer impacts. Additional measures such as use of tree guards or deer fencing of regenerating areas may be necessary if deer numbers increase to levels where significant damage is occurring. However these measures are not considered to be necessary at present.

5.4 Grey Squirrels

Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	Grey squirrels are present throughout the woodland. They can have negative impacts on tree survival and timber quality by stripping bark from the main stem and branches of trees, mainly between April and the end of July. Recent research has also indicated that squirrels may have negative impacts on woodland bird populations by predation, competition for food and nest sites. Damage can also have impacts on tree safety by weakening stems and limbs and allowing ingress of fungal pathogens. Past squirrel damage is apparent on older beech and sycamore as well as younger trees within the woodland. Trees between 10 and 40 years old are most vulnerable, especially sycamore, beech, oak, and sweet chestnut. Much of the post-storm planting is therefore at a vulnerable age, and thinning is likely to increase the growth rate of the remaining trees making them more prone to attack. Control of the grey squirrel population is therefore desirable – this would normally be done by live trapping supplemented by shooting. The high levels of public use of the woodland may make trapping problematic, as there is the potential for interference with traps. Checking traps will also require commitment of resources as it would be a legal requirement that traps are checked at least daily during the trapping season. In addition it is understood that there is considerable public opposition to squirrel control within the Council area. This is likely to be based on a lack of awareness of the grey squirrels' status as a non-native pest and of the damage that they can cause to woodland ecosystems, and may perhaps be overcome by a programme of education and information. If these issues cannot be overcome it may be necessary to accept ongoing damage to the woodland by grey squirrels which may mean that the future capacity to produce quality timber is reduced. Grey squirrel control is likely to be a requirement if funding for woodland management is sought under the Countryside Stewardship scheme.

5.5 Livestock and Other Mammals

Threat	Rabbits
Likelihood of presence	High
Impact	Low
Response (inc protection measures)	Rabbits are present in most of the woodland blocks. They are a potential threat to the woodland as they can cause browsing damage to newly-planted or naturally regenerating trees. At present, rabbit populations do not appear to be high enough at to causing any negative impacts. However, rabbit population levels will tend to fluctuate and monitoring of coppice regrowth will be undertaken to ensure rabbit damage is not preventing regeneration. Any new planting will be protected using spiral rabbit guards to ensure successful establishment – for smaller scale planting this will be more economic than rabbit fencing.

Threat	Livestock
Likelihood of presence	Low
Impact	Low
Response (inc protection measures)	Stock trespass may have negative impacts on the biodiversity of the woodland, such as browsing damage to trees and ground flora, soil compaction, poaching and nutrient enrichment. Stock exclusion from the woodland is therefore considered desirable. The majority of the larger woodland blocks are already stock-fenced and the fencing appears to be in good condition. However monitoring will be necessary to make sure that boundaries adjacent to grazing land are kept in stockproof condition. A rolling programme of renewal and repair will be agreed in liaison with tenants and neighbours. Some of the smaller woodland strips are currently unfenced and are clearly being used for sheltering livestock. In the longer term it will be beneficial to stock fence these strips to allow regeneration of the woodland. However in the shorter term this may not be possible where they are included within farm tenancies.

5.6 Water & Soil

Threat	Diffuse pollution
Likelihood of presence	Low
Impact	Medium
Response (inc protection measures)	There is potential for diffuse pollution from some of the proposed management activities – e.g. herbicide application; construction of infrastructure; timber extraction. These activities could lead to pollution / sedimentation of watercourses via runoff although the risk is low because there are few watercourses or waterbodies in the vicinity of the wood. Use of pesticides will be minimised as far as possible and will only be required to control rhododendron and laurel (and possibly sycamore) or for weed control around any enrichment planting or restocking. Any such work will be carried out by fully trained operators. Harvesting operations will generally be of low intensity and low ground impact equipment will be used where possible. Some of the smaller blocks can only be accessed by crossing adjacent fields, and liaison with farming tenants will be required where this is the case. Where all-weather tracks are not present, timber extraction will as far as possible be confined to the drier months where there is less risk of rutting, compaction and subsequent run-off. In the longer term, if resources are available, upgrade of the track network will improve all-weather access. Operational Site Assessments will be carried out prior to all operations. Generally the risk of diffuse pollution will be low provided the relevant best practice guidelines and UKFS Forests and Water guidelines are adhered to.

5.7 Environmental

Threat	Invasive species – Sycamore
Likelihood of presence	High
Impact	High
Response (inc protection measures)	Sycamore forms a significant component of the woodland at Stanmer (over 30% by area). It is considered a non-native species, can be invasive and is therefore generally not deemed to be a desirable component of native woodland. It is apparent that sycamore has been present in the woodlands for a considerable time and probably became well-established following felling during the Second World War. It has clearly made further advances following the 1987 storm and has regenerated profusely to become a major component of many post-storm plantings. The approach to sycamore will be a pragmatic one - to accept it as a component of the woodland (even in ASNW areas) but to attempt to ensure that it does not become any more dominant than is already the case. It is clearly suited to site conditions, a satisfactory species for woodfuel and with appropriate management can produce valuable timber. The other main species present at Stanmer – ash and beech – are both under threat – ash from Chalara and beech from drought as a result of climate change. Therefore the complete removal of sycamore, even if it were a practical proposition, might not be prudent if woodland cover is to be maintained. Where practical, consideration will be given to increasing species diversity during the restocking phase – this will entail planting of native broadleaved species in groups accompanied by localised control of sycamore regeneration (including herbicidal treatment of stumps to prevent regrowth).

Threat	Pollution
Likelihood of presence	Low
Impact	High
Response (inc protection measures)	As stated above there is potential for diffuse pollution as a result of some of the proposed woodland operations. It is also possible that there may be some impacts from smoke where burning is carried out as part of coppicing operations. The necessary exemptions will be obtained from the Environment Agency and liaison with neighbours will be undertaken to advise them of proposed operations and minimise conflicts. Operational Site Assessments will be carried out prior to all operations and where contractors are engaged the requirement to adhere to best practice guidelines to minimise pollution risks will be written into contract documentation.

Threat	Fire
Likelihood of presence	Low
Impact	Medium
Response (inc protection measures)	Because of the broadleaved nature of the woodland, the threat of fire is generally low despite high levels of public access. Occasionally illegal camping occurs within the woods and there is a risk of fire damage to individual trees from unattended camp-fires or from deliberate arson. This will be dealt with by ongoing monitoring / wardening of the site and public education. Where brash burning is undertaken as part of coppicing operations it will be a requirement that all fires are closely supervised and fully extinguished prior to leaving the site. The fire service will be provided with details of site management contacts and will be notified in advance of burning operations in order to prevent false alarms. Where contractors are used they will be provided with Emergency Response cards detailing the grid reference of the worksite and its closest access point, in order that the fire brigade can be quickly directed to any fire.

Threat	Invasive species – Rhododendron / laurel / Wingnut
Likelihood of presence	High
Impact	Low
Response (inc protection measures)	Small amounts of rhododendron *(Rhododendron ponticum*) and cherry laurel (*Prunus laurocerasus*) are present along ride edges in compartment 5 in Great Wood, presumably originally planted as ground cover. There does not appear to have been significant spread from the original planting locations into the wider woodland environment. There is also a small clump of (Wingnut) present on the ride edge in compartment 4. This non-native species can spread aggressively through suckering which can have negative impacts on the native woodland ecology. It may be able to take advantage of increased light levels following thinning to spread, although at present it does not appear to have spread very far. However, there is a requirement under the UK Forest Standard to control exotic invasive shrub species in native broadleaved woodland so these species will be controlled by cutting and chipping or burning. Cut stumps will be treated with glyphosate herbicide to prevent regrowth. Monitoring will be undertaken to assess success of treatment and need for further control.

Threat	Wind
Likelihood of presence	Low
Impact	High
Response (inc protection measures)	A windier climate is likely to result in more frequent storm damage and windblow. Generally the site can be considered fairly sheltered or moderately exposed, with DAMS scores of between 9 and 16. However, the damage from the 1987 Storm has had a lasting impact on the woodland and it is accepted that extreme weather events may become more frequent and more severe in the future due to climate change. The most exposed blocks are those at higher elevation in the north and east, which are exposed to the prevailing south-westerlies. Soils on the site are generally well-drained but often shallow, so tree stability is an issue. Individual tree stability will be promoted by ensuring that regular light thinning is carried out. Many of the stands have not been thinned for some time so implementation of a sensitive thinning programme will be a priority.

Threat	Anti-social behaviour
Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	Because the estate is open to the public, parts of the woodland are vulnerable to fly-tipping, unauthorised vehicular access and vandalism. Occasionally illegal camping occurs within the woods. There is a risk of fire damage to trees from unattended camp-fires or from arson as well as accumulation of rubbish. It is not possible to restrict access to the site but use of vehicle barriers should prevent unauthorised vehicular access. Other issues such as littering will be dealt with by ongoing monitoring / wardening of the site and public education.

Threat	High levels of recreational use
Likelihood of presence	High
Impact	High
Response (inc protection measures)	As already indicated, the woodland is heavily used by both walkers and mountain bikers. This can result in negative impacts on the ecology of the site. Such negative impacts include compaction, erosion and trampling of ground flora by the creation of additional paths, cycle routes and bike jumps / ramps; disturbance to badgers and other nocturnal fauna by night riding; and pollution and disease risks from dog faeces. These impacts will be carefully monitored and where necessary mitigated by restricting access to parts of the site which are being damaged by recreational activity. This action will be augmented by public information and education to explain the environmental importance of the woodland and how the recreational activity is causing damage, and will be enforced by wardening activity.

Threat	Drought
Likelihood of presence	Medium
Impact	Medium
Response (inc protection measures)	The impacts of climate change are uncertain but it is widely accepted that increased temperatures and reduced levels of summer rainfall are likely to have impacts on the survival and growth of beech woodland, due to drought stress. As mentioned below under "Lack of species diversity", building resilience to the impacts of climate change is desirable, but may be difficult to achieve at low cost. Where natural regeneration of beech occurs it will be accepted, but planting of alternative species will also be considered.

5.8 Climate Change Resilience

Threat	Uniform structure
Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	As a result of the significant storm damage suffered in the 1987 storm, and subsequent restocking, a large proportion of the woodland is of very similar age and rather uniform in structure. Overall structural diversity will be improved by applying different silvicultural techniques to different parts of the woodland. Some of the younger stands will be selectively thinned whilst others (generally within the woodland matrix and thus less visually prominent) will be managed by coppicing. Coppice coupes will be relatively small in size and coppicing will be spread over the whole of the plan period, resulting in stands of different ages rather than a uniform age class structure. Within maturing stands further structural diversity will be provided by management under continuous cover principles. Small coupe or group felling combined with long-term retention of selected trees will gradually result in development of an un-even age structure within individual stands.

Threat	Lack of tree species diversity
Likelihood of presence	High
Impact	Medium
Response (inc protection measures)	Although a fairly broad range of species are present in the woods, as illustrated in Appendix 1, the species composition is currently dominated by three species – sycamore, ash and beech, which together account for 75% of the woodland by area. Therefore there is scope to increase species diversity when replanting / restocking, particularly as ash and beech face threats as already outlined above and sycamore is not necessarily desirable in ancient woodland. Opportunities will be taken to diversify the species composition of the woodland during the restocking phase, in order to increase the resilience of the woodland to current and future threats posed by climate change and pests and diseases. This may be difficult to achieve at low cost, as unless natural regeneration of a broader range of desirable species can be encouraged, there will be a requirement for some enrichment planting coupled with sycamore control in order to manipulate stand composition.

6. Management Strategy

This section requires a statement of intent, setting out how you intend to achieve your management objectives and manage important features identified within the previous sections of the plan. A detailed work programme by sub-compartment can be added to the Plan of Operations.

Management Obj/Feature	Management Intention
Timber / fuelwood production	**Sustainable timber and woodfuel production:** - Manage high forest compartments under continuous cover principles, with regular selective thinning to provide wood fuel and timber for sale. The target will be to thin all high forest areas (other than areas identified as "non-intervention") within this 10 year plan period – a total of approximately 108 ha. Thinning intensity will be varied depending on current stocking levels and degree of exposure. - Re-establish a coppice regime with a 25-year cycle in approximately 25 ha of P1990 mixed broadleaved stands. Small coupes of maximum 0.5ha will be cut, aiming to cut a total of 2.5ha / annum, to enhance structural diversity. Target areas for coppicing will be those where the majority of the stems are already of coppice origin and where adverse landscape impact will be minimal. - Management access will be improved where necessary to facilitate harvesting and other operations. Initially this will include creation of timber stacking areas. In the longer term, there is scope for development of a wider surfaced track network to allow all-weather access to more remote parts of the wood. - Ensure adequate restocking levels are achieved by natural regeneration, layering and / or replanting. Monitor coppice regrowth and impacts of Chalara, and gap up / replant if required. -Monitor and where necessary control threats to tree establishment and timber quality including deer, rabbit and squirrel damage.

Maintain biodiversity	**Maintain and enhance the biodiversity value of the woodland especially ancient woodland:** - Re-introduction of a traditional coppice regime over part of the woodland (as outlined above) will diversify age class structure and provide a shifting pattern of open ground, thus enhancing habitat diversity; -Thinning of the majority of the woodland will maintain individual tree stability, reduce over-shading of native ground flora, and may provide opportunities to manipulate species composition in favour of native species. - A proportion of mixed broadleaved stands (approx. 9ha, just under 6%) will be retained as undisturbed "minimal intervention" areas for wildlife; - Veteran trees will be identified, protected and retained where there is no conflict with health and safety considerations - halo thinning around identified veterans will be undertaken as part of the thinning operations. Additional trees will also be identified for retention to provide future generations of veteran trees. - Deer numbers will be monitored and where necessary controlled, to prevent negative impacts on ground flora and woodland integrity; - Fences and other boundaries adjoining grazing land will be maintained in stockproof condition to prevent stock trespass, in liaison with neighbouring landowners and tenants; - Invasive non-native tree and shrub species will be controlled where necessary to prevent adverse impacts on native species and ground flora. - Rides, including the permissive path network and public rights of way within the woodland will be managed by annual mowing to maintain areas of permanent open ground. Where appropriate rides will be widened by coppicing edge trees to provide a drier track surface and scalloped edges created to provide a warmer microclimate for invertebrates. -The population of white helleborine (*Cephalanthera damasonium*) present in Great Wood will be monitored and conserved. This will achieved by maintaining small glades around known populations of the orchid by annual mowing at the end of summer / early autumn. This will maintain appropriate conditions for reproduction. - Ground flora (including populations of bluebells and early purple orchid present in Great Wood) will be monitored and conserved and protected from damage and disturbance by recreational activities.

	-Standing and fallen deadwood will be retained in situ as important invertebrate habitat provided there is no conflict with health and safety considerations.
Protect Historic environment	**Protect historic environment and vernacular features within the woodland:** - The Historic Landscape value of the woodland will be conserved by retaining the existing woodland boundaries and maintaining the external appearance of the woodland as an important backdrop to the parkland and Stanmer House. - Scheduled Ancient Monuments and woodland adjacent to them will be managed in consultation with Historic England to ensure that there is no negative impact on their historic value. This may include removal of tree cover from around these features. - Where appropriate consideration will be given to providing additional interpretation of historic features (e.g. information boards). - Operational sites will be surveyed prior to operations for historic environment features. Features will be marked on operational maps and contract documents, to avoid damage to identified features during harvesting, extraction and other woodland operations.

Maintain public access	**Maintain and enhance public access provision within the woodland** - The path network including permissive paths and public rights of way will be maintained in a safe and useable condition by repairing, stoning and drainage works as necessary. - Tree safety will be maintained by ensuring that an annual risk-based audit is carried out and that any identified remedial works are carried out promptly. - Use of the woodland walks for quiet informal public recreation will be promoted and public engagement in hands-on management of the woods encouraged (for example through conservation volunteering) - Anti-social behaviour will be controlled by wardening activities and prevention of unauthorised access. - Where resources allow and demand is proven, improving interpretation facilities within the woodland, e.g. through provision of additional leaflets and information boards. - The Council is committed to engaging with all parties interested in the management of the woodland, and to ensuring that information on, and interpretation of all woodland management activities is provided. - Consultation will be undertaken to investigate the possibility of designating specific areas for mountain bike use, in order to prevent conflict between different user groups.

7. Stakeholder Engagement

There can be a requirement on both the FC and the owner to undertake consultation/engagement. Please refer to Operations Note 35 for further information. Use this section to identify people or organisations with an interest in your woodland and also to record any engagement that you have undertaken, relative to activities identified within the plan.

(Please see Appendix 9 attached)

8. Monitoring

Indicators of progress/success should be defined for each management objective and then checked at regular intervals. Other management activities could also be considered within this monitoring section. The data collected will help to evaluate progress.

Management Objective/Activities	Indicator of Progress/Success	Method of Assessment	Frequency of Assessment	Responsibility	Assessment Results
Timber / fuelwood production	Area coppiced - as per plan	Walk-over assessment	Annual	Owner / agent	Work programme – harvesting schedules
Timber / fuelwood production	Harvesting yield / volume	Timber / log sales records	Annual	Owner / agent	Work programme - harvesting
Timber / fuelwood production	Restocking – adequate stocking density	Sample plots	Annual	Owner / agent	Work programme – gapping up / replanting
Timber / fuelwood production	Restocking – species diversity maintained	Walk-over assessment	Annual	Owner / agent	Work programme - gapping up
Timber / fuelwood production	Management access – maintained in good order	Walk-over assessment	Annual	Owner / agent	Work programme - track repair / surfacing
Timber / fuelwood production	Rabbit damage -absent	Walk-over assessment	Annual	Owner / agent	Work programme – protection / fencing
Timber/ fuelwood production	Deer damage - absent	Habitat Impact assessment	Annual	Owner / agent	Work programme- following seasons deer cull
Timber / fuelwood production	Squirrel damage - absent	Trapping records	Annual	Owner / agent	Work programme – squirrel control
Maintain biodiversity	Stockproofing – maintained	Boundary survey	Annual	Owner / agent	Work programme – fence repairs / renewal
Maintain biodiversity	Invasive species – effectively controlled	Walk-over assessment	Annual	Owner / agent	Work programme – invasive species control
Maintain biodiversity	Tree diseases- impacts minimised	Walk-over assessment	Annual	Owner / agent	Work programme – harvesting / tree safety works
Maintain biodiversity	White helleborine – population increased	Quadrats at known locations	Annual	Owner / agent	Work programme – glade management/ thinning

Management Objective/Activities	Indicator of Progress/Success	Method of Assessment	Frequency of Assessment	Responsibility	Assessment Results
Maintain biodiversity	Veteran trees – protected from competition	Fixed point photography	Annual	Owner / agent	Work programme – thinning / tree safety work
Maintain biodiversity	Open ground - rides maintained	Walk-over assessment	Annual	Owner / agent	Work programme – ride and glade mowing
Historic environment	Historic features – protected from damage	Fixed point photography	Annual	Owner / agent	Work programme - harvesting
Public access	Tree safety – maintained	Tree safety audit	Annual	Owner / agent	Work programme – tree safety works
Public access	Path network - safe and useable / furniture maintained	Walk-over assessment	Annual	Owner / agent	Work programme – path management
Public access	Illegal / anti-social activity - controlled	Wardening incident reports	Annual	Owner / agent	Work programme – wardening
Public access	Public engagement - promoted	Volunteer day records	Annual	Owner / agent	Work programme – wardening
Public access	Interpretation facilities - information provided	Wardening records	Annual	Owner / agent	Work programme - wardening
Public access	Impacts on conservation / historic value	Fixed point photography	Annual	Owner / agent	Work programme – wardening / protection / fencing

List of Maps and Appendices

Maps:	
1	Location map
2	Sub-compartments map
3	Ancient woodland
4	Historic Environment features
5	Public access
6	Landscape designations
7	Biodiversity designations
8	Veteran trees / badger setts
9	Hazards and constraints
10a-e	Harvesting operations maps
11a-e	Other operations maps
Appendices:	
1	Sub-compartment schedule / data
2a-c	European Protected Species guidance – bats / dormouse/ Great crested newts
3	Biodiversity – species records
4	South Downs National Park – Forestry Policy
5	Stanmer Conservation Area Appraisal
6a	Stanmer Park Historic Park / Garden listing information
6b	Scheduled Ancient Monuments listings
6c	Listing of other Historic Environment features
7	Forestry Commission guidance – Badgers and forestry
8	Deer Impact Assessment information
9a	Stakeholder list
9b	Public consultation summary report
10	Work programme
11a-c	Arboretum trees data and maps
12	Stanmer Park Conservation Plan

Forestry Commission England

FC Approval – FC Office Use Only

UKFS Management Plan Criteria	Approval Criteria	Yes	No	Notes
Forest management plans should state the objectives of management, and set out how the appropriate balance between economic, environmental and social objectives will be achieved.	Have objectives of management been stated? Consideration given to economic, environmental and social factors (Section 2.2)	☑	☐	
Forest management plans should address the forest context and the forest potential, and demonstrate how the relevant interests and issues have been considered and addressed.	Does the management strategy (section 6) take into account the forest context and any special features identified within the woodland survey (section 4)	✓ ☐	☐	
In designated areas, for example national parks, particular account should be taken of landscape and other sensitivities in the design of forests and forest infrastructure.	Have appropriate designations been identified (section 4.2) if so are these reflected through the work proposals in the management strategy (Section 6)	☑	☐	
At the time of felling and restocking, the design of existing forests should be re-assessed and any necessary changes made so that they meet UKFS Requirements.	Felling and restocking are consistent with UKFS forest design principles (Section 5 of the UKFS)	☑	☐	
Consultation on forest management plans and proposals should be carried out according to forestry authority procedures and, where required, the Environmental Impact Assessment Regulations.	Has consultation happened in line with current FC guidance and recorded as appropriate in section 7	☑	☐	
Forests should be designed to achieve a diverse structure of habitat, species and ages of trees, appropriate to the scale and context.	Do the felling and restocking proposals create or improve structural diversity (refer to the plan of operations)	✓ ☐	☐	
Forests characterised by a lack of diversity due to extensive areas of even-aged trees should be progressively restructured to achieve a range of age classes.	Do the felling and restocking proposals create or improve age class diversity (refer to the plan of operations)	☑	☐	
Management of the forest should conform to the plan, and the plan should be updated to ensure it is current and relevant.	Has a five year review period been stated below and achievements recorded in section 3	✓ ☐	☐	
New forests and woodlands should be located and designed to maintain or enhance the visual, cultural and ecological value and character of the landscape.	When new planting is being proposed under this plan is consistent with UKFS and FC guidance on woodland creation	☑	☐	

Approving Officer Name	Julian Williams	Plan approved	21/3/2018