
5 - Historical and Cultural – Landscape Assessment



- 5.1 Introduction
- 5.2 Historical development of the landscape
- 5.3 Baseline assessment: landscape context and character
- 5.4 Landscape resources and sensitivities
- 5.5 Visual resources and sensitivity
- 5.6 The design concept for Heartwood Forest
- 5.7 Assessment of impacts
- 5.8 Mitigation of negative landscape or visual effects
- 5.9 Conclusions

Appendices – Volume 3,

5. Historical and cultural – landscape assessment

Through local consultation and the EIA scoping meeting, a number of key issues regarding the landscape and visual impact were raised. This section will assess the following impacts,

- Visual impact of planting in relation to local landscape character
- Visual impact of planting on people who view the area, including Sandridge and southern edge of Wheathampstead villages
- Maintenance of key views looking out, from inside the site

Visual impact from adjacent properties (see also chapter 7)

The Woodland Trust contracted Dr Simon Bell, chartered forester and chartered landscape architect to carry out the landscape and visual assessment for the forest proposals. Impacts on adjacent properties have been assessed with neighbours who have raised comments through the consultation period, and mitigation measures have been agreed as detailed in chapter 7.

5.1. Introduction

5.1.1 This report presents an assessment of the anticipated visual impact of proposals to plant approximately 354ha of mixed broadleaved woodland on land at Sandridge, Hertfordshire, to be known as Heartwood Forest.

5.1.2 The potential visual impact of the proposals must be assessed as part of the overall Environmental Impact Assessment (EIA) undertaken under the Environmental Impact Assessment (Forestry) Regulations (1999). This report should be read as part of the main EIA, which itself contains a summarised version.

5.1.3 Planting of forestry can be of concern to many people regardless of the purpose behind the planting, which may be generally environmentally and socially benign, as a change to a familiar and valued landscape despite the fact that it often occurs over a relatively long period of time and is not likely to mature for several decades. In this case, the objective of the project is the planting of a substantial area of significant scale in a landscape where woodlands of such a size are rare. The landscape is also visually prominent and views to and from the area proposed for planting are numerous and extensive. However, in preparing the plans for this, care has been taken to ensure that the highest possible standards of design have been applied and that the visual impact has been tested from all significant viewpoints.

5.1.4 The design of the new woodland proposals follows the requirements laid out in the Forestry Commission's "Lowland Landscape Design Guidelines" and seeks to respect the landscape character assessment for the area. It also takes into account the historical aspects of the landscape. The design is, however, to some extent conceptual and does

not include all the detail, especially of internal spaces and edges. Nevertheless, the impact on the landscape at the larger scale can be tested satisfactorily.

5.1.5 The area concerned is visible from roads passing along the edges of and through the property where edges will become the most dominant elements, as well as from other roads affording longer-distance views and from numerous settlements and residential properties. Several rights of way also provide viewing opportunities. Many of these viewpoints are elevated, enabling views across, or overlooking part or all of the site.

5.1.6 The methodology of the landscape and visual impact assessment is partly derived from the Forestry Commission Guidance, partly from the "Guidelines for Landscape and Visual Impact Assessment 2nd Edition" (Landscape Institute and Institute of Environmental Management and Assessment, 2002) and from a methodology developed for the RSPB by Dr Simon Bell and used in assessments for that organisation (mainly the removal of forest from heathland) (RSPB 2008). The main aspects considered in this Landscape and Visual Impact Assessment are as follows:

- An assessment of the baseline conditions of the landscape, its historical development and current situation.
- The assessment of impacts on landscape resources, which in this case is primarily the character of this part of Hertfordshire, but also includes local designations. This analysis includes a consideration of the landscape history as well as the main characteristics of the landscape.
- An assessment of impacts on visual resources, based on the sensitivity of a selection of viewpoints from where people will be able to see the changes to the landscape. This uses visualisations to demonstrate the expected appearance and to assess the impact of the changes to the landscape.
- The quality and appropriateness of the design for the site and how well it fulfils the requirements of the Lowland Landscape Design Guidelines. The design has not been completed in every detail (such as ride layout or detailed edge planting), but is developed in terms of its general pattern and the shape and scale of the wooded and open areas. Mitigation requirements will also be noted

5.2. Historical development of the landscape

5.2.1 The landscape of the Heartwood Forest area has a long history of settlement dating back to earliest prehistoric times. There were significant developments in Roman times, leaving a heritage of roads still used and forming a number of boundaries to the project area. Sandridge has a mediaeval core and there are still some old houses dating back to those times. Some of the farms originated as mediaeval manors. There are also some ancient woods on the site. In the wider landscape there are some larger wooded elements, many being ancient woodlands, mainly on the higher areas.

5.2.2 The historical landscape can be constructed from maps going back to the 18th century. These are presented in Maps 2-5 in Volume 3 Appendix 1. The Tithe maps presented and discussed in the report on archaeology for the same area (Heritage Network,

2009) show that the landscape of the study area had a pattern of large-scale irregularly shaped enclosed fields up to the mid-late 18th/early 19th centuries. These fields were to some extent subdivided some time between the mid 1700s and the mid 1800s (the maps of Dury and Andrews' 1766, compared with the first edition OS map of 1869, Map 3). The 1766 map shows the area consisting of larger common fields, used for strip cultivation. The characteristic dog's leg boundaries on some of the fields suggest that these were enclosed in the 16th or 17th centuries, when a certain amount of hedge establishment took place in such areas, although the Historic Landscape Assessment may dispute this. The 1st Edition OS map of 1869 (Map 3) shows the newer, smaller-scale enclosure pattern. There were some changes shown between the 1st and 2nd Edition OS maps (2nd Edition of 1898, Map 4) which showed that the majority of the long narrow spinneys recorded on the Tithe maps (see archaeology report for these) had disappeared while some woods had survived and a few new ones had appeared. Many of the smaller fields across the study area had been amalgamated into larger units, probably to allow for the use of larger steam ploughs. However, a number of the longer field boundaries, such as that running south-east from Pudler's Wood to the main road, had survived from 1843. The period up to 1951 (Map 5) showed almost no change to the field pattern, with the exception of some new woodlands developing. The enlargement of the fields to the pattern of today is characteristic of the 1970s onwards, when larger machinery was introduced and larger fields became more efficient.

5.2.3 The Hertfordshire Historic Landscape Assessment (HLA) identifies the current landscape in terms of different time depths. Map 6 shows the units that have been identified from this. According to the historic environment record and interrogation of the layers beneath the map the whole area was one of irregular ancient fields enclosed in the mediaeval period between 1100 and 1600 (i.e. not open common fields), ancient woodland, and historic parks. This type of field pattern was associated with dispersed settlement of small hamlets, often with names ending in "End" or "Green", such as in Ayers End or Coleman Green. This is suggested as being classic for Hertfordshire, and while there has been some change in the area concerned, it has not been extensive. There has been some alteration at various dates, particularly some loss of boundaries. The commons have also been there for a very long time. The area of Heartwood lies on several units – "irregular ancient fields", which are presumed to be more or less intact in terms of boundaries, although one section in the area proposed for planting has clearly lost all such old boundaries, "later piecemeal enclosures" and "fields with some 20th century boundary loss". This picture is borne out by the series of maps showing how some boundaries have been removed in the 19th and 20th centuries.

5.2.4 It is clear that the landscape of the area has been predominantly open for hundreds of years. According to the HLA Hertfordshire was rather open by late Bronze Age times and during the post-Roman and early Saxon periods it became more wooded, so that by the time of the Domesday Book it was one of the most wooded counties in southern England. Thus the woodland has been cleared to create the present landscape of arable fields once more in mediaeval times. However, while the changes caused by woodland will result in an increase in enclosure and a reduction in openness, compared with the changes brought about by development, this can be considered to be a benign alteration.

All landscapes evolve and change over time but it is human activities and built development that cause the greatest changes. The historic landscape assessment types noted in 2.3, i.e. those which will be directly affected by the proposed tree planting, will be regarded as key landscape resources for the assessment of landscape impact (see Sections 4 and 7).

5.3. Baseline assessment: landscape context and character

5.3.1 The area proposed Heartwood Forest lies just to the north of the village of Sandridge, not far from St Albans and also quite close to Wheathamstead in the north as well as Harpenden. Despite the closeness of several large settlements, railways and roads, it remains a very rural area. It is part of a larger expanse of mixed agricultural landscape typical of this part of Hertfordshire consisting of fields, some small woods and dispersed houses or farmsteads. It is all greenbelt.

5.3.2 The landscape is rolling, the site lying over a ridge between two dry valleys, with a fairly flat top to the ridge and in places, steeper slopes. Parts of the site are also flatter, lower lying fields. The landscape is divided by hedges with some hedgerow trees, though not a very dense pattern of these. The agriculture is arable cropping on the clay-with-flints soil overlying chalk. Patches of mixed broadleaved woodland, containing old coppice of hornbeam as well as ash, beech, oak and other species are also a feature, some of these being larger than others but generally averaging 5-10 ha in area. What is interesting about these woods, however, is that the landscape appears to be more wooded than it is as a result of the coalescence of these woods and individual hedgerow trees in some of the views. This is likely to have an effect on the capacity of the landscape to absorb new woodland without unduly changing its character.

5.3.3 Viewpoints from elevated positions are common and offer many distant views only partly screened in places by tree cover or hedges, etc. Roadside trees and some tall hedges also screen some parts of the site from some roads, but these are not likely to have much effect on the overall visibility of the proposed woodland.

5.3.4 Map 1 and the aerial photograph (Fig. 1) show the areas proposed for planting, though they do not show precisely how much is planned for tree cover within the boundary at this stage.

5.3.5 **Landscape character** is well described for the area. It is available at three different scales and from three different sources:

5.3.5.1 *The Countryside Character Assessment* contains the Chilterns as a single unit within which the area lies. However, this is an outlying part of the Chiltern Hills area, forming more or less the south-eastern boundary of the area and therefore the lowest portion of the land which rises gradually to the north-west where the escarpment dominates and where the plateau is highest and most dominating. In many ways the

section where the site is located is less distinguishable from the nearby areas. The Countryside Character report notes the field patterns, small woodland areas and the old villages as key features which are also noted in the other assessments.

5.3.5.2 The recently produced draft *East of England Regional Landscape Character Assessment* does not distinguish landscapes on the basis of the Countryside Character units. The area proposed for planting is categorised as either Wooded Plateau Farmlands or Wooded Chalk Valleys. This is a coarse-grained assessment but it accurately describes the character of the area – the main ridge or plateau of the site and nearby areas does contain wooded elements as noted above, while the valleys either side are dry and of chalk origin (chalk is exposed due to ploughing in places). The summary points for these LCA types are as follows:

Wooded Plateau Farmlands

- Located in Bedfordshire, north Hertfordshire and through much of north-east Essex and west Suffolk
- Gently undulating landscape often forming raised broad plateaus or narrow ridges dissected by river valleys
- Heavy soils comprising glacial boulder clay (till) - over chalk
- west giving rise to heavy brown soils and become more heavy clay in the north and east
- Arable land use defined by an irregular field pattern, often large scale
- Well-wooded landscape, particularly in Hertfordshire - copses of ancient woodland particularly associated with villages and parkland/estates and plantation woodlands
- More open in north and east
- Settled character comprising scattered farmsteads and hamlets (often linear) and historic nucleated villages
- Strong mediaeval landscape with roads and lanes rarely being straight, and ancient commons
- Major airports including Stansted and Luton

Wooded Chalk Valleys

- Common landscape type within south Bedfordshire and north-west Hertfordshire
- Comprises steep-sided, sometimes narrow valleys that extend into surrounding plateau areas
- Valleys sides may undulate - the tributaries often forming shallow gentle combes with distinctive 'downland' character
- Mixed soils including fine silty/loamy soils and calcareous soils
- Many of the valleys are winterbournes while others are associated with a permanent water channel
- Mixed land use comprising arable (often on upper slopes) and pasture on steeper slopes and on the valley floor
- Varied enclosure pattern defined by mature hedgerows which are often species rich

- Fragmented pattern of ancient woods scattered throughout area particularly on steepest slopes
- Some woods are linear in form but make a significant visual contribution giving rise to a well-wooded, intimate character
- Occasional parkland landscapes
- Settled character with dispersed pattern of villages/hamlets and larger settlements
- Valleys often form transport corridors (road and rail), and sunken lanes are a feature

5.3.5.3 *The Hertfordshire Landscape Character Assessment* of 2001 is by far the most comprehensive and detailed assessment which covers the proposal area and its surroundings. There are three LCA types which are relevant for this assessment: 102 (Ayers End Valleys and Ridges), 103 (Nomansland Common) and 32 (Simonshyde Ridge). The proposed area for planting lies on parts of 102 and 32, while it is adjacent to 103. The character of 101, Childwick Plateau which is next to 102 may also be affected.

The following extracts from each relevant type are useful for establishing the baseline of the character and the implications of the new woodland proposals. Map 7 shows the extent of these LCA types and the proportion of the proposed woodland to fall within them.

Area 102 Ayers End Valleys and Ridges

Landscape Character

A network of dry, interconnecting valleys with a sense of rural seclusion despite the close proximity of settlements on the higher ground to the rear of the smaller plateau areas on the fringes of this area. The visual containment is aided by the prominent small- and medium-sized woods located on the upper reaches of the valley sides. Narrow lanes and equestrian activities create a relatively relaxed feel. The plateau areas are more open, with large arable fields and intermittent clipped hedgerows. On the fringes of the adjacent urban settlements there is a greater emphasis on recreational activities, including playing fields, equestrian activity, golf and community woodland.

Key characteristics

- Open dry valleys overlooked by smaller areas of plateau on the fringes
- Quiet area with few visual detractors except the A1081 and main line railway to the west
- Small woods on the upper slopes emphasize the valleys
- Area served by narrow, winding roads lined by dense mixed hedgerows
- Mixed arable, pasture and recreational land uses
- Number of equestrian establishments associated with small country houses, including The Grove and Sandridgebury
- Locally prominent built edges to adjacent settlements
- Isolated properties or small clusters of dwellings, generally with strong vernacular architecture

Land cover and land use

The primary land use is arable cropping. However there is also a good proportion of equestrian pasture, including sites at Sandridgebury and Pipers Lane. Around the perimeter of the area and adjacent to the settlements of Harpenden and St. Albans there is a range of leisure-related land uses, including extensive new playing fields for the St Albans School and Old Albanians on the A1081, the pay and play golf course at Long Acre Farm and the Jersey Farm Woodland Park north of St. Albans. There is a small orchard at Cheapside Farm

Vegetation and wildlife

The area contains a number of small- to medium-sized discrete woods, some of which are ancient, e.g. Thames Wood, Langley Wood, Pudler's Wood, Clappers Wood and Eight Acre Wood. The main species mix is oak/hornbeam with variable amounts of elm. There are also a number of later plantations, e.g. Pismire Spring, where species include cherry, ash and larch. The main hedgerow species are hawthorn/blackthorn and elm with smaller amounts of hazel, holly and field maple. Hedgerow trees are mainly oak, holly and ash. Sunken lanes and tall overgrown hedges are common on the steeper slopes, e.g. Pipers Lane. Mud Lane is a notable green lane with interesting ground flora including bluebell. On the arable plateau areas the hedges are tightly clipped and the landscape more open, however there has been tree planting around Cheapside Farm.

Field pattern

Field patterns derive mainly from the pre-18th century irregular enclosure. There was some later parliamentary enclosure, but the significant impact has been the creation of large prairie fields in the later part of the 20th century, particularly to the south of the area. To the north of Nomansland Common are a few former unenclosed common arable fields. Field sizes are medium to the north while to the south-west and south-east they are larger and more regular in shape. Locally there are some reasonably intact portions of hedgerow networks, e.g. at Cross Farm immediately south of Harpenden. Smaller paddocks have been created by sub-dividing larger fields with temporary fencing to serve local equestrian activity, e.g. along Pipers Lane and Sandridgebury.

Visual and sensory perception

The area is generally both visually contained and coherent. Despite the close proximity of a number of towns the distant and enclosing views are largely formed and framed by vegetation or landform. This is a peaceful area with few detractors, particularly in the central core. The harmonious blend of dwellings using traditional materials adds to the appeal of the area. The central ridge between Cheapside Farm and Hillend Farm is more exposed. The most significant noise source is from the main line railway.

The recommended management strategy for the area is "improve and conserve".

Area 32 Simonshyde Ridge

Landscape character

An undulating north/south ridge with dominant arable land cover. To the north and east both extensive ancient and discrete plantation woodlands create a contained and coherent landscape. To the west and south the landscape is much more open with extensive and distant views to and from the area. There is a quiet and detached feel. The sparse farmsteads, narrow twisting lanes with hedgebanks and the wooded enclosure of Coleman Green add to the relaxed character.

Key characteristics

- extensive woodland areas on eastern slopes
- small settlements and individual properties well-assimilated into the landscape
- large arable fields with relic hedgerows
- narrow lanes (some sunken) with hedgebanks
- distant views to south-east, west and north

Land cover and land use

The primary land use is arable farming on both the slopes and the narrow plateau. Woodland is the major secondary land use to the eastern and northern slopes. Small areas of pasture for cattle and horses remain in association with farmsteads, e.g. Fairfold's Farm and Symondshyde Farm. Poor hedges have often been replaced by fencing, which gives a temporary feel.

Vegetation and wildlife

Extensive woods include Symondshyde, Furze Field, Chalk Dell and Titnol's Woods, many of them ancient with a natural acidic oak/hornbeam/birch mix. Sessile oak is also a feature of the woods, planted by the Gascoigne-Cecil Estate. Ash and oak form wood banks to the edges. Coppice is a feature to the north-west of the area. At Symondshyde, areas of botanically-rich remnant heath survive in the rides. Plantations have also been added to either connect with the ancient woods or as discrete areas, e.g. David's Dingle. There is a large proportion of softwoods (both larch and pine) throughout and these are actively managed. The fine mature lime avenue from Brocket Hall terminates at Benstead's Wood. At Coleman Green there are areas of heathy grassland, but much of the area has reverted to semi-natural woodland. The hedges are variable, being locally prominent on hedgebanks with the underlying gravels often visible in some of the lanes. In contrast there has been extensive hedge removal in the fields, and those that do exist are relic and in a state of decline. Hedgerow species are mixed and include hornbeam, field maple, holly, elm and some bracken to the small plateau area. Hedgerow trees include oak, ash and holly.

Field pattern

The historic field pattern varies. To the north and east the mainly pre-18th century organic enclosure pattern is largely intact, although hedgerow loss makes the area seem more open. Field units are generally irregular in shape and medium to large in size. There has been some limited enlargement to prairie fields. To the south and east there is an historic pattern of parliamentary enclosure, which has subsequently been extensively

altered by both 20th century enclosure and a loss of former boundaries from post-1950 enlargements.

Visual and sensory perception

This moderately elevated area is visible from the surrounding landscape with the woods forming a key feature from the east. The more open farmland to the south is particularly visible from the edge of St Albans. Within the area the views are framed and generally contained by hedgerows, woodland and the undulating landform. From the south of the area near Nashe's Farm there are distant views across the Vale of St Albans and as far as the Shenley Ridge.

The recommended management strategy is "improve and conserve".

Area 103: Nomansland Common

Landscape character

A small but distinctive area located in a dry valley and surrounded by farmland. Due to locally poor soils the area has historically been cleared and used as a common. Today this is a popular location for informal recreation, notably dog walkers. There are similarities with Harpenden Common, but the area exhibits a more remote feel, largely detached from urbanising influences.

Key characteristics

- Narrow low-lying valley feature with open aspects
- Acid gravel soils with chalk and clay exposures
- Important for historic and contemporary recreational uses
- Acidic grassland and heathland communities
- Regenerating scrub oak and hawthorn woodland over areas of former clay and chalk extraction
- Clusters of small hamlets on fringes of the common

Land cover and land use

In ancient times the area would have been wooded, however at some point it was cleared for grazing, which continued until the 1930s. Due to the light quality of the acidic soils the area largely escaped cultivation, apart from during WWII when part of South Common was ploughed for crops. Today the common comprises a mix of rough grassland and scrub woodland. Although there are still grazing rights on the common, the land use today is mainly for informal recreation, including dog walking and model aircraft flying. Wheathampstead Cricket Clubhouse and pitch is located to the north, adjacent to the B651.

Vegetation and wildlife

In the absence of grazing, a considerable proportion of the acidic grassland to the north has reverted to hawthorn scrub and secondary oak/birch woodland. Hornbeam, ash, aspen, cherry and sycamore are minor species in the woodland mix. The grassland communities are a key component of the landscape and are dominated by creeping bent

and red fescue. Locally rare flora species include petty whin, heather, dwarf gorse and thatch moss. On the road verges there tends to be a more rank vegetation. The northern grasslands tend to be more acidic while those to the south are neutral. There are no hedges within the core of the area, however on the perimeter there is an hawthorn/hornbeam/elm mix. The common supports a range of uncommon invertebrates, including mottled grasshoppers, solitary bees and wasps, beetles and spiders. Lizards have also been recorded.

Field pattern

The area is unified by its historical origin as an unenclosed open-margined common. Some leisure uses have locally disrupted this pattern e.g. the Cricket Club.

Visual and sensory perception

This small character area is visually unified. The scale is small to medium in the open areas of the common but much more confined within the regenerating scrub woodland. The common is generally concealed from views outside the area and therefore provides an unexpected and pleasant contrast when passing through from the adjacent landscapes. Away from the B651 this is a peaceful, low-key area.

The recommended management strategy for the area is “conserve and strengthen”.

5.3.6 The landscape character descriptions make note of the role played by woodland and of the potential for additional woodland, although such an extensive proposal as that for Heartwood Forest was probably never envisaged by the consultants who prepared the assessment. It is frequently the case that management objectives for LCA types are to conserve the character that they currently have – they are essentially conservative in nature. However, landscapes do evolve and change, some quite dramatically, yet it is also possible to enable this change to occur while respecting landscape character. The three landscape types from the Hertfordshire LCA will be regarded as key landscape resources for the purpose of the landscape impact assessment (see Sections 4 and 7).

5.4. Landscape resources and sensitivity

5.4.1 As well as the HLA and LCA types described above there are several other landscape resources affected by the proposal that can be identified as potentially belonging to several categories;

Designated landscapes: the area is outside the Chilterns AONB which has a high sensitivity as a national designation. There are some local designations such as a Landscape Conservation Area which encompasses parts of the western portion of the site. This designation is for the open character and this is likely to be affected by extensive woodland planting. It is sensitive to such changes. The St Albans District Plan from 1994 (under review) has a policy (Policy 104) which concerns development in this

Landscape Conservation Area but this does not affect woodland planting. However, Policy 103 concerning woodlands has a goal of increasing woodland in the district.

Designed landscapes: there are two areas not far from the site – (Brocket Park and Gorehambury). However, while sensitive to changes that might affect key views out from them, they are unlikely to be affected owing to topography and intervening elements.

Greenbelt: the proposal lies wholly in an area designated as greenbelt. However, woodland planting would tend to serve as reinforcement rather than weakening of the greenbelt. Policy 105 of the St Albans District Plan aims to improve the greenbelt.

Conservation areas: the village of Sandridge is partly designated a conservation area. This core may be affected by the views to and from major elements such as the church tower, although not directly affected. Nevertheless, the area is sensitive to landscape change.

Map 8 shows the location and extent of these designations. Table 5-1 summarises the sensitivity of each category of landscape resource.

LANDSCAPE RESOURCE	DISTANCE FROM THE SITE	LEVEL OF IMPORTANCE	LEVEL OF SENSITIVITY
Landscape character areas:			
Ayers End Valleys and Ridges	Site is in the area	N/A	High
Simonshyde Ridge	Site is in the area	N/A	High
Nomansland Common	Site is outside the area but visible from it	N/A	High
Historic landscape units:			
Irregular ancient fields	All the listed HLA types fall within the site	N/A	High
Later piecemeal enclosures		N/A	Medium
Fields with some 20 th century boundary loss		N/A	Low
Designations:			
Landscape conservation area	Site is within the designated area	Local	Medium
Greenbelt	Site is within the designated area	Local	Medium
Conservation area	Site is outside but close to area	Local	Low
Designed landscapes	Site is outside the area and not visible from it	N/A	Not sensitive

Table 5 - 1. Summary of landscape sensitivities

5.4.2 The criteria for the sensitivity levels are drawn from the guidance. The main weighting applies to the degree of historical intactness and time depth of the HLA units and to the level of designation (national, regional, local, etc). The HLA sensitivity is deemed to be highest for the pattern of enclosures that has survived the longest and gives the greatest time depth, the lowest to the one most affected by recent 20th century changes.

5.4.3 The conclusion is that while the landscape resources likely to be affected by the proposal are limited in number and extent, they nevertheless have a sensitivity to change which ranges from high to low depending on the category of resource and its level of importance.

5.5. Visual resources and sensitivity

5.5.1 The landscape was scoped to establish who can see the project area and from where. The degree to which people are sensitive to and concerned about landscape change depends on several factors, as advised in the Guidelines for Landscape and Visual Impact Assessment:

- The visibility of the landscape
- The number of people who see the landscape
- The nature of the viewing experience

5.5.2 Landscape visibility

5.5.2.1 The visibility of the landscape depends on the topography, the presence of elements that block or screen views and the amount of the landscape accessible to potential viewers. The Heartwood Forest site lies partly on an elevated ridge and partly on lower land. Most of the area is surrounded by other high ground offering clear and unobstructed views across all or some of the site. From the east there are many viewpoints looking at the site which is highly visible, being only slightly screened from a few places by woodlands. The north has fewer viewpoints and is slightly farther away. The south also has several viewpoints although woodland and topography have some effect on visibility. The west has several viewpoints from where the west facing slopes are highly visible. In addition there are several continuous views obtained along the various roads, albeit with some high hedges screening parts from view.

5.5.2.2 There are also some viewpoints from within the site along the paths currently used by walkers and others. These provide attractive views out of the site and their obstruction is an issue to be considered.

5.5.2.3 The conclusion is that the Heartwood Forest site is highly visible from a large number of locations. These are both short- and middle-distance views, where large sections of the site are prominent, views along roads, where parts of the site are screened and some internal views which may be screened by tree planting.

5.5.3 Numbers of viewers

5.5.3.1 There is no hard data available on the number of viewers seeing the Heartwood Forest site. However, it can be inferred that because the area is densely populated and there are many busy roads, houses in villages and in the countryside generally, and places used for recreation, such as the Hertfordshire Way, there are large numbers of people who see the area. With increased public access after the tree planting takes place, many more will see the area in future, especially from within the site.

5.5.3.2 The conclusion is that there are large numbers of people who see the landscape, although more from some viewpoints than others.

5.5.4 The nature of the viewing experience

5.4.4.1 This part of Hertfordshire is not a major tourism area. However, many people live there and enjoy the views of countryside and the opportunities for walking, cycling or horse riding. This means that people experience the landscape all year round and enjoy its changing moods. This is also likely to mean that people are used to seeing the landscape as it is and are not likely to react favourably to dramatic changes taking place. While few people probably visit the area specifically to enjoy the scenery, most of the residents will gain some benefit from the quality of the landscape as they go about their daily lives or pursue recreation at weekends. While some people will drive the lanes regularly on their daily business, others will use them to reach recreation areas including the Nomansland Common and the Heartwood Forest site itself.

5.5.4.2 The conclusion is that most people living in the area experience the landscape throughout their daily lives and that is an integral part of their relationship with the place, although some viewpoints are seen differently from others.

5.5.6 Following scoping of the area (it was walked around to explore the places from where it would be visible from publicly accessible locations), 24 external and five internal viewpoints were identified and selected as presenting the most representative views of the area. These are from residential areas, public roads, isolated houses, public rights of way and recreational sites such as Nomansland Common. This is not completely exhaustive but it represents a very comprehensive coverage of the area. Each was photographed, its location recorded on a map and with GPS and panoramas prepared with short descriptions of the main features of the view (viewpoint locations are presented on Map 9 and the baseline photographs are presented in Appendix 2).

5.5.7 Each photograph has been assessed as to how it meets the criteria for visual sensitivity as noted above and this has been used to estimate the overall degree of visual sensitivity of the area. Table 5-2 presents the assessment of each viewpoint. The ratings in the boxes are for each dimension of visual sensitivity, summarised to give an overall score (L= Low, M = Medium, H = High).

Number	Location	Description	Visibility	Number of viewers	Nature of the experience	Overall sensitivity
1	TL17209 10963 JUNCTION OF B651 AND COLEMAN GREEN LANE	This view is the point at which the road enters the site. The landscape is partly hidden by hedges and the horizon is low. The view is seen by everyone driving along this busy route travelling northwards on leaving Sandridge. It represents a major threshold to the proposed forest.	M	H	M	M
2	TL17422 11204 PART WAY ALONG COLEMAN GREEN LANE	This view is seen by traffic travelling northwards along Colemans Green Lane. This is a fairly quiet road leading to dispersed houses. The road passes through the proposed forest, which will be on either side until the junction with Hammonds Lane. The large trees in the hedges are part of the character while the hedges themselves already provide some screening.	M	M	M	M
3	TL17341 10757 FROM THE BACKS OF HOUSES ON THE NORTHERN EDGE OF SANDRIDGE LOOKING NORTH-NORTH-EAST	This view is one that will be obtained by residents in the houses backing onto the fields to the north of Sandridge. The proposed forest site starts a field away, leaving an open area between it and the houses. At present the view is simple and open but without many features.	M	H	H	H
4	TL17433 10673 FROM THE HERTFORDSHIRE WAY AS IT LEAVES SANDRIDGE, LOOKING NORTH- EAST	This view is partly that gained by walkers using the Hertfordshire Way long-distance footpath and partly by residents of the houses on the northern boundary of Sandridge. The terrain is fairly flat and open with the views contained by hedges or by the woodland in the distance.	M	H	H	H
5	TL17732 10550 FAIRSHOT COURT	This view is from in front of Fairshot Court and is also similar to the view obtained by teachers and pupils at the nearby primary school. The view is quite heavily screened by hedges with large trees. The proposed forest will start one field over.	L	M	H	M
6	TL17962 10840 WOOD LOOKING WEST ALONG THE HERTFORDSHIRE WAY	This view is looking south-west from the edge of the wood, as experienced by walkers. The proposed forest will occupy the field on the other side of the hedge, making a section of the walk pass through woodland on both sides.	L	M	H	M
7	TL18313 11257 THE JUNCTION OF THE HERTFORDSHIRE WAY AND HAMMONDS LANE LOOKING WEST	This view looks towards the corner of the proposed woodland, which will be behind the hedge beyond the finger post. It is the view seen by drivers passing along Hammonds Lane towards Sandridge as well as by walkers along the lane as they turn onto the bridleway. The hedges provide significant screening of the view into the site. Woodland already features in the view.	L	M	M	M

Number	Location	Description	Visibility	Number of viewers	Nature of the experience	Overall sensitivity
8	TL18622 11343 VIEW DOWN HAMMONDS LANE AND FROM HAMMONDS FARM LOOKING WEST.	This view as seen by residents at the farm and by travellers along Hammonds Lane takes in a considerable area of the proposal although the hedges and hedgerow trees coalesce in the view to screen the middle distance and to reduce the apparent openness of the view. There is also woodland existing in the view which will act as anchors for the new forest in the landscape.	M	M	H	M
9	TL18756 11201 FROM PUBLIC FOOTPATH BETWEEN HAMMONDS LAND AND FAIRFOLDS FARM, LOOKING WEST	This view is from a higher elevation looking across the middle ground to the far ridge, most of which will form part of the proposed forest, as seen by walkers using the footpath. Woodland is already a feature of the ridge while trees in the hedges provide a "bosky" feeling to the scene.	H	L	H	H
10	TL18835 11653 TOWER HILL LANE	This view is obtained by residents in houses along Tower Hill Lane, although not necessarily as open as this, looking down from higher land, west-south-west. The hedges and hedgerow trees provide considerable screening of the view to the ridge, which is part of the south-western section of the proposed forest	L	M	H	M
11	TL18982 12238 COLEMAN GREEN LANE NEAR THE JUNCTION WITH TOWER HILL LANE	This view, looking south-west, is seen by travellers on the quiet Coleman Green Lane. The proposed forest will start one field over and the ridge on the skyline is also part of the area, although likely to be screened from this view as the trees grow.	M	M	M	M
12	TL19285 12295 THE HERTFORDSHIRE WAY BETWEEN COLEMAN GREEN AND TITNOL'S WOOD	This view is seen by walkers following the Hertfordshire Way, looking west. The elevation is higher, looking over the landscape, although the woodland on the right of the view screens a good part of the ridge.	M	M	H	M
13	TL 17939 11642 THE JUNCTION OF DROVERS LANE AND COLEMAN GREEN LANE	This view is seen by travellers along Coleman Green Lane. The field ahead, beyond the finger post is part of the proposal. The large hedgerow trees are an important part of the foreground landscape.	L	M	M	M
14	TL 1762613252 IN FRONT OF HOUSES AND NEAR A SCHOOL ON THE EDGE OF WHEATHAMPSTEAD	This view is the one residents and users of a right of way have, looking south down and over Nomansland Common to the ridge beyond, which is part of the proposal. The landscape is already wooded and the foreground contains an area of small trees, although it will be some time before these develop into woodland.	M	H	H	H

Number	Location	Description	Visibility	Number of viewers	Nature of the experience	Overall sensitivity
15	TL17426 12284 NOMANSLAND COMMON	This view is from the common looking south-west towards the edge beyond which lies the site of the proposed forest, which may add depth and weight to the skyline.	M	H	H	H
16	TL15622 12255 JUNCTION OF AYERS END LANE AND BULL LANE	Looking south-east, this represents the view of some residents and people travelling along the lane, although the view is taken from a field entrance as the hedges in the area are effective at blocking views. The site starts at the hedge at the bottom of the foreground field, encompassing the ridge including the wooded areas on the slopes.	M	M	H	H
17	TL15229 11728 ALONG A RIGHT OF WAY SOUTH-EAST OF AYERS END LANE	This view is obtained by walkers following this bridleway which eventually passes right through the site of the proposed forest. It has a good view of the landform of the ridge and dry valley together with the patches of woodland on the site, which starts at the bottom of the slope.	H	M	H	H
18	TL14909 11917 THE POINT AT WHICH AYERS END LANE CROSSES THE RAILWAY	This is the view obtained by travellers along the road, looking south-south-east down a field which will remain open to the ridge beyond which is part of the proposed forest. The view is only seen fleetingly because of the angle and the effect of the hedges along most of the lane.	L	H	M	M
19	TL15442 10736 THE RAILWAY BRIDGE AT CHEAPSIDE FARM	This view is seen by users of the Hertfordshire Way as they cross eastwards over the main railway line. The field behind the trees to the left of the bridge is part of the area proposed for planting, which will fill in the space behind the existing trees lining the edge of the railway.	M	M	H	M
20	TL15748 10078 BRIDGE COTTAGE ON SANDRIDGEBURY LANE	This is the view from the cottage and the lane as it emerges from the railway tunnel, looking over fields towards the area to be planted under the proposal (two fields away). The woodland on the horizon is on the site.	L	M	M	M
21	TL16897 10576 THE ROAD TO SANDRIDGEBURY FROM SANDRIDGE, NEAR POUND FARM	This view 'This view will be seen by those who live on the western edge of Sandridge and travelling up the road en route to Sandridgebury. The site starts at the field corner in the middle distance.	H	H	H	H
22	TL19902 10118 HOUSING AT THE SOUTHERN END OF SANDRIDGE	This is representative of the view which most residents will have of the ridge forming the central section of the site of the proposed forest which includes the woodland on the summit. Houses will screen parts of the site from each residence.	H	H	H	H

Number	Location	Description	Visibility	Number of viewers	Nature of the experience	Overall sensitivity
23	TL17155 09994 BRIDLEWAY IN JERSEY FARM WOODLAND PARK ON EDGE OF ST ALBANS	This view is seen by people using the bridleway and the woodland park, though not from the houses on the edge of St Albans behind. The area proposed for woodland lies on the ridge rising behind the houses in the left half of the picture.	H	M	H	H
24	TL18127 10317 WOODCOCK HILL LODGE	This view is looking across the valley over Sandridge from the higher ground to the south-east, the ridge in the distance being part of the site. This view is seen by residents in some houses as well as travellers coming down the road, for whom it is a focal point.	H	M	H	H
A	TL16335 10823 EDGE OF LANGLEY WOOD	This is a major view looking out from the edge of the site down over fields which are not part of the site, so this will remain open	H	M	H	H
B	TL16182 10873 YOUNG WOODLAND NEAR THE EDGE OF LANGLEY WOOD	This view looks over part of the land to be planted, where the ridge rising on the other side of the valley can be seen.	H	M	H	H
C	TL16323 11872 CORNER OF THE TRACK ABOVE ROUND WOOD	This view looks north over the site towards an area where the landscape appears much more wooded than it is. Nomansland Common lies in the valley bottom.	H	M	H	H
D	TL16618 11604 SUMMIT OF TRACK ALONG EDGE OF LAND FORMING PART OF HILLEND FARM	This view looking east-south-east shows a wide expanse of landscape, including a well-wooded appearance on the far ridge. The land to the left of the track will remain open.	H	M	H	H
E	TL15682 4397 BELOW WELL WOOD	This view looks north-west over the dry valley towards the ridge above Ayers End Lane	H	M	H	H

Table 5 - 2. Visual sensitivity of the viewpoints

5.5.8 The results of this analysis show a range of sensitivities, from medium to high but no low. The reduction from high to medium is mainly because of lower visibility of the site (only limited parts being visible or screening effects of hedges) or the number of potential viewers being lower (fewer residents or fewer drivers or walkers than on other roads) than in other places. However, the overall picture presented by the selection of views is of a highly-visible site seen by many people over long periods of time.

5.5.9 The overall conclusion is that the landscape can be regarded as having an overall high visual sensitivity, which means that high-quality design is needed and that the rate of change of the landscape need to be managed to keep impacts to a minimum.

5.6. The design concept for Heartwood Forest

5.6.1 The design for the forest has been built up from the site boundary, representing the target area to be planted, taking account of various sensitivities, the survey of various factors which act as constraints on the design and the local landscape character. The maps of the survey and of landscape character in Appendix 3 (Maps 10 and 11) illustrate these factors.

5.6.2 It must be noted that this is not a fully-developed comprehensive design at this stage and does not take into account the potential effect of any archaeology on the extent that can be planted, nor any account of detailed design of rides, glades, edges or other features for recreation and access. The design is a broad concept in order to test the landscape and visual impact of the general extent and macro design features.

5.6.3 The survey notes a number of underground and overground services which must be kept open and the scale and extent of these means that they will have a significant effect on the final design. Likewise the roads and paths running through the area, and from which many views may be obtained, are also taken into account.

5.6.4 The local landscape character is determined by the landform and the existing elements such as trees, hedges and woods. The area can be divided into several sections:

- The main ridge and plateau is where a substantial amount of planting is to be located and also where the open land of Hillend farm is to be retained. Owing to the quite flat plateau top, much of this area is very foreshortened so that the amount of impact this has on the landscape and the views is surprisingly small.
- The dry valley is an attractive area, small in scale and enclosed, with woodland elements and interesting topography. It is also part of the landscape conservation area. It should be kept reasonably open and the wooded elements linked by planting on the ridge top, in order to maintain its strong and attractive character.
- The slopes rising from Sandridge have some landform variation and is seen from closer views as well as some more distant, higher-level ones. It is also the area where visitors will tend to congregate, being closest to the access points. The concept is to plant a number of areas with rides and open spaces in-between in order to provide a more diverse character and to allow for views out to be developed. This may take on the character of wood pasture over time, depending on management.
- The flatter, lower areas are seen from higher levels in a few places but are mainly viewed from the roads where they are seen as the woodland edge. Here the edges need to be varied and set back in places with extra diversity which is not developed as yet, although the general shape of the margins has been designed to create this variation in space, especially where a road passes through woodland on both sides.

5.6.5 The concept design is shown in Appendix 3, Map 12 with annotations explaining the essential aspects of it. The viewpoints from which the visual impact will be tested have been used to create a series of computer-aided design (CAD) visualisations. These are quite simple and show the topography, the roads and railway and existing woodlands from the Forestry Commission inventory (so not all woods or treed elements are present). The visualisations show the existing scene with the site area, then the concept design with the trees at 5m, as it develops and shows up in the landscape, then at 20m, when the forest is approaching maturity (in around 70 years' time). These are presented together with the photos so that the degree of match between photo and model can be appreciated.

5.6.6 The views demonstrate that when compared with the map of the extent of the area, which might be thought to imply a massive effect and domination of the landscape as well as a significant change to the character, this is not the case. The effect of the foreshortening of the views, the presence of existing woodland elements, the screening effect of many of these and the nature of the viewpoints, show that the new woodland fits into the landscape remarkably well, not dominating the overall landscape nor changing its character dramatically, except in local areas and in those viewpoints where the woodland edge will create a screen over time. These are limited places and can be further mitigated by good edge design and diversification of the edge planting to make it more attractive than the CAD images currently show. One notable element is the contribution to maintaining the scale, proportion and balance of the landscape of the retained open area at Hillend farm, which is on the ridge top and is big enough in scale to contribute as an element of open space at the correct scale.

5.6.7 The design will develop further and will probably contain more open space to accommodate archaeological protection requirements, recreational routes and habitats, so that the massing effect of the trees will be further reduced in places.

5.7. Assessment of impacts

5.7.1 The impacts on each of the landscape and visual resources are assessed using a set criteria based on the scale and nature of the impact on each resource balanced by the level of sensitivity calculated at the baseline stage.

5.7.2 **Impact on landscape resources.** This depends on the combination of direct and indirect effects that the proposed planting will have on the resource. Since the planting will be within the boundaries of most of the landscape resources, the impacts are likely to be greater. However, impacts can be positive, neutral or negative and how this is interpreted involves professional judgement and, since it is largely qualitative in nature is not entirely susceptible to conclusions solely based on the application of a set of standardised measures. Positive impacts are those where the landscape resource is improved or strengthened, negative impacts where they are changed for the worse and neutral where the changes may have no real effect on quality either way.

5.7.3 The following Table 5-3 presents the assessment of impacts of the proposal on each landscape resource identified in the baseline study.

LANDSCAPE RESOURCE	LEVEL OF SENSITIVITY	NATURE OF THE EFFECT	LEVEL OF SIGNIFICANCE OF IMPACT
Landscape character areas:			
Ayers End Valleys and Ridges	High	The proposal occupies a significant proportion of this character type, but in doing so it mainly covers the open ridge where the views and experience of the landscape are least affected. The characteristic dry valley is to be maintained in an open condition and there is no effect on the winding lanes or vernacular buildings because there are none on the site itself. Thus, despite the large area planted the effect on character is modest and somewhat neutral.	Permanent, moderate neutral
Simonshyde Ridge	High	The proposal affects the westernmost portion of the character area, which is lowest in elevation and marginal in terms of how it reflects the main characteristics of the ridge with its larger wooded elements. While the lanes running through the site will change to become wooded corridors, the extent of views and the lack of access have a marginal effect while the rest of the character type will mainly be affected by the views from it out to the west, where the increase in woodland will tend to reflect the wooded nature of the character type itself and in many ways reinforce the unity of the landscape across both character types.	Permanent, moderate, neutral
Nomansland Common	High	The proposal is right on the edge of this small but sensitive character area. The edge between the two is already delineated by trees and bushes so that the woodland will hardly have a direct effect on any views or the specific common character of the area	Permanent, low, neutral

LANDSCAPE RESOURCE	LEVEL OF SENSITIVITY	NATURE OF THE EFFECT	LEVEL OF SIGNIFICANCE OF IMPACT
Historic landscape units:			
Irregular ancient fields	High	A relatively small section of this HLA type will be affected. However, the map of current boundaries suggests that all the original field boundaries have disappeared, so that the type does not really exist anymore. The forest will cover this type.	Permanent, moderate, neutral
Later piecemeal enclosures	Medium	A major proportion of the site lies in this type but although the field pattern is there as being the same as in the 1 st edition OS map, the actual hedges and trees have been lost over most of the area so that it is increasingly difficult to see the historic pattern. The forest will cover this type but any important features will be retained	Permanent, low, neutral
Fields with some 20th century boundary loss	Low	The majority of the area is under this category and each unit has seen a massive simplification of the field pattern so that there are only the external boundaries left – along roads. Thus, while the forest will fill in the fields the roadside hedges and trees will be retained and managed	Permanent, low, neutral
Designations:			
Landscape conservation area	Medium	The woodland is designed to maintain the open character of the dry valley and by linking the existing woods together it reinforces the character and quality of the landscape	Permanent, moderate positive
Greenbelt	Medium	The woodland will reinforce the character and quality of this part of the greenbelt	Permanent, major positive
Conservation area	Low	The site is separated from the conservation area and while it may affect some views it will have little effect on the character of the conservation area itself	Permanent, low, neutral
Designed landscapes	Not sensitive	No effect	None

Table 5 - 3: Assessment of impacts on landscape resources

5.7.4 The overall picture of the impacts on landscape resources is either positive or neutral in nature and generally moderate in significance. Give that the proposal is for woodland planting, all changes are permanent.

5.7.5 The conclusion is that the impacts of the proposal on landscape resources are such that no mitigation is required.

5.7.6 Impact on visual resources. This impact depends on the sensitivity of the viewpoint, representing the people who see the landscape. The nature of the impact depends on how much of the view is affected and what happens to the view, for example being blocked or enclosed. This section should be read in conjunction with the visualisations presented in Appendix 3. Table 5-4 presents the assessment of impacts of the proposal on each viewpoint identified in the baseline study.

Viewpoint number	Overall sensitivity	Nature of the visual effects	Significance
1	M	The effect of the planting is to produce an enclosed section of road, with variations to the edge (not planted parallel) and to reduce the sense of openness presently in the landscape. This will change the character of the current landscape. However, it will take 70 years to reach this stage.	Permanent, major, neutral
2	M	This view is currently of a lane through open fields with hedges and some old hedgerow trees. It will change to become an enclosed, wooded land with the edges set back in places and coming close in places, letting the light through and creating a different experience than at present. The sense of enclosure will take 70 years to develop fully.	Permanent, major, neutral
3	H	This view shows the new woodland set well back from the houses seen across an open field. The open view currently has some features, but not very many in it. The trees provide an edge which can be further diversified using smaller trees and shrubs but it will inevitably eventually screen the open views and hide the distant parts of the landscape.	Permanent, major, neutral
4	H	This shows how the view along the Hertfordshire Way will alter as the trees grow. The new planting connects with the existing woodland and the triangular shape on the plan converts into a promontory of planting leading towards the viewer. This gives some depth and reduces the wall effect of View 3. Part of the landscape remains open, which balances the effect in this view.	Permanent, major, neutral

Viewpoint number	Overall sensitivity	Nature of the visual effects	Significance
5	M	The view here, if shown in the visualisation as being currently less screened than in reality, shows some of the planting on the main area of the hill, linking with the existing woodland, as well as some of the lower areas. The resulting screening will not be as significant as the visualisation showed due to the present screen.	Permanent, minor, neutral
6	M	No visualisation as the view is entirely contained by trees from within the woodland. An open view becomes an internal woodland view	Permanent, major, neutral
7	M	The triangular field seen down the lane and the junction with the Hertfordshire Way presents a view which is not wholly enclosed and builds on the presence of trees and hedges, also linking with the existing patch of woodland seen on the left. The edges are varied and can be diversified with smaller trees and shrubs as well as by leaving the hedge in places.	Permanent, moderate, neutral
8	M	In this view the foreground landform hides part of the site. However, the ridge is visible and also part of the lower planting area. The effect is less dominating than the map might suggest and the unplanted area of Hillend Farm remains open in the view even when the trees are 20m tall. The rather balanced effect will be helped by the presence of the existing trees and hedges which actually add to the bosky appearance of the scene.	Permanent, moderate, neutral
9	H	This view is quite distant although it includes some of the lower planting just one field away from the viewpoint. However, there is quite a good balance of open to wooded land in the composition and the open area at Hillend Farm, although becoming small in scale as the woodland matures, helps to reduce the dominance of the whole effect.	Permanent, moderate, neutral
10	M	From this view the proposal adds to and connects the already existing wooded elements and does so without dominating the view, although as the trees mature a more solid mass of trees appears to coalesce. The impact will be less due to the screening effect of the foreground trees.	Permanent, moderate, neutral
11	M	The planting as it develops on the ridge does not dominate at all and the space provided by Hillend Farm balances it nicely. As the trees in the area nearer to the viewpoint mature they start to fill in the view and to screen the more distant parts, yet the landscape remains balanced and comparatively open.	Permanent, moderate, neutral

Viewpoint number	Overall sensitivity	Nature of the visual effects	Significance
12	M	As the planting develops the far hill remains proportionately open as a result of the Hillend Farm being unplanted. Eventually the nearer planting grows and affects the view, although existing screening will reduce the impact of this.	Permanent, moderate, neutral
13	M	This view focuses on the close-up scene across the road at the junction, where the forest will fill the view, although in some ways, adding to the presence of the old hedgerow trees already there. This is a kind of threshold to the forest, which also occurs at other places. The view shows the landscape filled with trees but this is a result of the focus of the view at this point.	Permanent, major, neutral
14	H	No visualisation because the model shows the area being screened by the trees at Nomansland Common and the photo only shows glimpses of part of the site above the trees which are more variable in height than the model can show.	Negligible
15	H	The woodland will come to the edge of the common where it will merely connect with the existing trees which already follow the boundary and provide screening and enclosure on the skyline. The trees will not be as uniform in height as shown in the rendering.	Permanent, low, neutral
16	H	In this view the design links together the small relict woods that tend to float in the landscape, giving a better skyline while maintaining the character and quality of the valley. This is also strengthened by adding some smaller elements which help to give a better scale and proportion over time.	Permanent, moderate, positive
17	H	This view shows how the additional woodland planting strengthens the existing elements and also reflects and enhances the landform in the dry valley. The notch in the skyline is filled up and how the small patches help to improve the design unity.	Permanent, moderate, positive
18	M	In this view the woodland planting tends to fill in the space between the existing woodland patch and the railway with its trees along the embankment edge.	Permanent, low, neutral
19	M	The forest planting comes up to the edge of the railway, which is in a cutting and already has a row of trees against it. The bridge view shows the edge and the open space on the right, along which the Hertfordshire Way runs.	Permanent, moderate, neutral
20	M	In this view the new forest will be across two fields and appears as a line of trees on the horizon, building on and strengthening an existing treed horizon, so having little significant effect on the viewers here.	Permanent, low, neutral

Viewpoint number	Overall sensitivity	Nature of the visual effects	Significance
21	H	The height of the trees at maturity presents a wall across the field, which will be behind the existing trees in most places. It can be made more diverse with low trees and shrubs, not shown here. In fact there are buildings not shown in the view to the right, so the view is not entirely accurate in this area.	Permanent, moderate, neutral
22	H	This view potentially shows a large proportion of the woodland but it is very foreshortened, so that while the ridge becomes continuously wooded the scale of the forest in the landscape is much smaller and in keeping than the total extent of the woodland seen on a map suggests.	Permanent, moderate, neutral
23	H	This open view across the village of Sandridge shows how the whole ridge will be wooded apart from Hillend Farm, although this is nearly invisible, screened by trees once they are mature. However, it does not dominate the scene and there are enough existing wooded elements to anchor it and to provide a sense of unity without disturbing the scale or proportion. The village itself occupies a large part of the scene and will screen parts of the woodland from this view.	Permanent, moderate, neutral
24	H	In this view the elevated position and the open prospect enable the largest extent of the scene to be visible. In the large scale of the landscape and even with the limited wooded elements already in it the extent of the proposed planting is not out of proportion. Hillend Farm remains an open element until the trees in the foreground grow up enough to screen it from view. Until that time it adds diversity and balance to the scene. The skyline itself is already wooded and it can be argued that these elements are weak and out of scale.	Permanent, moderate, neutral
A	H	No visualisation as the view is from the edge outwards	No change
B	H	No visualisation but the view will be blocked unless some special management measures are adopted to maintain some view from there or nearby	Major negative
C	H	No visualisation. The view will be lost among the trees	Major negative
D	H	No visualisation. The view will be lost among the trees	Major negative
E	H	No visualisation. The view will remain open the way it is as there will be no planting in front of it.	No change

Table 5 - 4. Assessment of the visual impact.

5.7.7 The pattern of results of the impact assessment shows that of course the change to the landscape will be permanent and that the significance of the effect depends on the

proximity of the viewpoint to the forest and the effects of any intervening vegetation, trees, hedges etc. The biggest impacts are from over short distances and from houses where the open view will be replaced by the woodland edge, although these are never less than a field away with the exception of Nomansland Farm. The other results tend to be from roads where the open view will change into a tunnel of trees. However, these are mobile views of lower sensitivity, the roads frequently have high hedges at present and the overall experience of the roads includes other stretches where the open character will be retained. Other views tend to portray a wider panorama where the woodland will be seen as only part of it and where the composition tends to be quite well balanced and in some cases arguably improved by the woodland – by linking up the isolated woods and strengthening the skyline effect for example. The internal views are always a problem in woodland planting but require so much land to be left unplanted if the view is to be retained. However, there are ways to design viewpoints and to manage the woodland so as to maintain different types of view but these require detailed work on site. The conceptual nature of the design as presented here does not allow for this at present.

5.7.8 The impact assessment assumes that the nature of the effect, while major or moderate in significance, is generally neutral or, in places, positive. The assumption is based on the fact that the project involves planting native woodland in a landscape already characterised by broadleaved trees and woods and in a way that maximises the design opportunities. Therefore, while there are changes, these can hardly be seen as adverse when compared with developments such as large buildings, wind turbines or motorways. They are mainly neutral in that they add woodland to the landscape but in such a way that the character generally remains the same. Of course some people looking out over a field to a woodland edge instead of the previous open view may find this a negative change while other people may prefer it, in which case it is also safe to say that the change is neutral overall. In the case of woodland planting the changes happen so slowly, and over such a long period, that most people get accustomed to the change. This is in contrast with the more dramatic changes occurring when large objects are being constructed in a comparatively short space of time and which affect people much more. The rates of growth of the woodland have been taken into account in the visualisations in order to help people understand how the landscape will develop and at what rate.

5.7.9 The conclusion is that the impacts of the proposal on visual resources are overwhelmingly moderate in significance, apart from the shorter, more sensitive views from houses or roads and that mitigation is required in limited places, notably the edges seen from houses and roads and the key viewpoints out from the woodland up on the ridge.

5.8. Mitigation of negative landscape or visual effects

5.8.1 The impact assessment presented in Section 7 suggests that there is a limited need for mitigation of either landscape or visual impacts because in the main these are benign, neutral or even positive. However, because the design concept which has been assessed here does not contain all the necessary detail to demonstrate how any localised

impacts which may be perceived as negative or adverse by some residents or travellers this section explains how these will be taken into account in the development of the detailed design.

5.8.2 The Lowland Landscape Design Guidelines spends quite a lot of effort in describing how to deal with design at two scales – that of the forest as a whole in the landscape (dealt with already in the concept design and visible in the visualisations) and internal/detailed design – including edges, road and pathsides, viewpoints, etc. In order to meet the requirements of the guidelines it will be necessary to incorporate this detail into the design further than the concept covers. This includes:

- Edges seen from houses where structural and compositional diversity using low trees and shrubs of different species to reduce the “wall” effect and to provide colour and seasonal diversity as needed.
- Roadsides – over and above the spatial variation shown on the design concept there is also a need to introduce the same sort of diversity as noted for edges.
- Field edges with hedgerows and hedgerow trees – the planted edge will be kept well back in order to allow light for maintaining the viability of the hedges and trees. This will provide a more gradual transition from road or field edge into the forest. The same will apply for the edges of existing wooded elements, especially the older ones.
- Internal spaces such as paths, open spaces for habitat purposes, archaeological areas, viewpoints, etc. The edge design should follow the same general principles as described above, though the scale of the shaping of the edge will differ from that of roads, for example, reflecting the speed with which users will experience linear routes.
- Technical installations such as powerlines or pipelines which need to be kept clear of. The shaping of the edges is shown in the concept design but, as before, the diversity of the edges needs to be increased so as to reduce the corridor effect.

5.9. Conclusions

5.9.1 This report has identified all relevant landscape and visual resources likely to be affected by the proposed planting of Heartwood Forest. By applying the robust and well-established methods of landscape and visual impact assessment a set of conclusions in terms of the landscape and visual impacts on these resources has been established.

5.9.2 The landscape resources, while ranging in sensitivity, are impacted less than might be expected given the scale and size of the forest. This is in part because the more

sensitive parts of the LCA units, for example, are not part of the proposal and where there are examples of more characteristic elements such as the dry valley to the west, this has already been taken into account in the design. Although the landscape will change, the features which define character are not likely to be as affected by further tree planting as compared with other types of development. Furthermore, designated areas such as the landscape conservation area and the greenbelt are very likely to be enhanced and strengthened by the additional tree planting. This is also in line with policies in the current district plan which encourage tree planting and also improvement of the greenbelt.

5.9.3 The visual resources, identified as is normal by a set number of viewpoints selected to be representative of how the public will experience the landscape, are quite extensive and mainly of high sensitivity. It might be expected from the plan of the proposal that the visual effect would be substantial. However, owing to the foreshortened nature of the landscape – primarily the slopes with the plateau above – the visual impact is, for the most part, much lower than this. Nor is this impact adverse. It tends to be neutral – neither presenting specific visual problems nor making dramatic improvements – on the landscape. Only in a few places is there arguably some potential negative impact and this will depend on the views of the people concerned and the effect of time on how people adapt to the slowly developing forest.

5.9.4 The design as presented is not complete – in all details. The assessment focuses more on the broad scale of the proposal and its more macro effects than on the smaller details, which, however, will be important in mitigating some of the potentially more negative aspects as noted in Section 5. 9.

5.9.5 In conclusion, the proposed planting of 354ha of new woodland at Heartwood Forest generally has a permanent, moderate and neutral impact on the identified landscape and visual resources and that, as long as the design is completed to incorporate the detail described in Section 9, it will be an acceptable addition into the local landscape.