APPENDIX G5: METHODOLOGY

1.0 Introduction

This methodology is based on experience and the Landscape Institute/Institute of Environmental Management and Assessment (LI/IEMA) 'Guidelines for Landscape and Visual Impact Assessment', Third Edition, 2013 (GLVIA3). The assessment of landscape and visual effects aims to be as objective as possible, however, as the GLVIA3 explains:

> *'Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction... much of the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development or land use change may have on visual amenity, or about the significance of change in the character of the landscape and whether it is positive or negative.'*
>
> (page 21, paragraph 2.23)

2.0 Zone of Theoretical Visibility and Study Area

Specialist computer software was used to process digital landform data in order to identify the theoretical extent of the area from which the proposed residential development is likely to be visible, the Zone of Theoretical Visibility (ZTV). Six spot locations (target points) were used to simulate the general spread of the development footprint, which were then given maximum ridge heights Above Ordnance Datum (AOD) for the proposed residential properties, local centre and primary school, as shown on the Building Heights Parameter Plan.

The ZTV shows the 'worst' case scenario in that it only takes account of landform and significant settlement footprints and vegetation blocks as visual barriers. Local barriers such as hedgerows, for example, have not been incorporated.

The ZTV: On Completion, that is without the screening benefit of any new planting, is shown on *Figure 7.6*, with the theoretical visibility of the new housing shown by the blue ray colouration.

The theoretical visibility of the proposals was further assessed and verified on-site.

3.0 Assessment Process

3.1 Data Trawl and Site Visit

After establishment of the initial study area and ZTV, a data trawl was undertaken to collect baseline information, including topography, landscape planning policy designations,

published sources of landscape character and other relevant information. The published sources, or copyright details of baseline data, are acknowledged on relevant drawings.

Following the data trawl, a series of site visits have been undertaken between August 2014 and December 2017 in respect of both this planning application and previous planning application by two Chartered Member of the Landscape Institute, to:

- review and verify the computer-generated ZTV;
- identify representative viewpoints;
- assess the local landscape character of the site and its surroundings;
- to assess the potential landscape and visual effects of the proposals; and
- develop appropriate landscape mitigation measures.

Further site work was undertaken in 2016 as part of the Sandleford Park Heritage and Landscape Assessment of the Proposed Country Park Report (see *Appendix G9*), which has also been reviewed and updated in respect of this planning application.

3.2 Selection of Viewpoints

The selection of publicly available viewpoints was made to:

- include a representative range of visual receptors;
- determine how effects may vary with geographic location and distance;
- identify how the southern part of the site contributes to the visible setting of Sandleford Priory; and
- include additional viewpoints requested by WBC, including the view from the first floor of St. Gabriel's School, views from northern section of A339, and sequential views from the public footpath crossing the site.

No private viewpoints have been assessed. However, where appropriate, typical viewpoints, from publicly accessible locations, were selected adjacent to properties to provide an indication of the likely visual effects on these private visual receptors, and this is noted in the Visual Effects Table, at *Appendix G6*. Visual effects are summarised in the main ES Chapter.

The following terminology has been used to describe the approximate distance between the viewer and the proposals:

- local: under 0.5km
- medium distant: 0.5 - 2km
- distant: over 2km

The type of view has been described as glimpsed (ie. in passing), filtered, oblique, framed, or open.

The number of viewers has been described in terms of few, moderate, or many.

3.3 Photography

Photographs were taken in RAW format using a Nikon D90 Digital SLR camera with Nikon 35mm DX (fixed focal length) lens.

The time, date, altitude and grid coordinates for each frame were recorded from the dedicated Nikon GPS accessory.

Photographs were resampled to Jpeg files and stitched into photograph panoramas. Site photographs are contained in *Appendix G3*.

3.4 Verified Photomontages

The photomontages produced by SLR Consulting adhere to the guidelines set out by the Landscape Institute in ***'Photography and Photomontage in Landscape and Visual Impact Assessment, Advice Note 01/11'***. The final photomontage is sized so that the image will give an accurate representation when held at a certain distance from the eye. This distance is provided on the framed sheet of each photomontage.

3.4.1 Measured Photograph

The location of the viewpoints is recorded using either a hand-held GPS or roving GPS equipment. The location is recorded in OS coordinates so that the viewpoints can be reproduced in CAD relative to the subject of the photomontage which is also located using OS coordinates ***(Advice Note 01/11, para. 4.3)***.

The camera used will be a standard SLR digital camera with a 50mm equivalent lens ***(Advice Note 01/11, Section 4)***. This has been shown to most closely represent that of the human eye. A 360 degree panoramic image in portrait is then recorded with an overlap of no less than 20% in each photograph. A level tripod is used as it is essential that the panoramic image is as flat as possible to reduce any error in the 3D phase of the photomontage creation process. A panoramic image in portrait is then recorded with an overlap of no less than 20% ***(Advice Note 01/11, para. 3.4)***.

Other points in the view may be recorded using the GPS to further aid in the alignment of the photomontage. This can include buildings, trees, lamp posts, kerb lines, etc.

3.4.2 Photomontage Creation

A 3D model of the proposed development is built from Architects'/Clients' plans and elevations or an existing 3D model from the Architect/Client is used. This is aligned to OS coordinates along with the camera viewpoint positions.

The information from the viewpoint photographs is entered into the 3D software and the survey information is used to orientate the camera in the correct direction. Lighting conditions are matched as closely as possible and the view is then rendered. Once the final output from the 3D software is generated, it is then overlaid onto the original background photograph. Any foreground elements that may obscure the proposed development are then layered back over the top of the rendered image in order to give a true representation of the impact of the development.

The final image is then framed on a drawing sheet along with the existing photograph for direct comparison. The drawing sheet would usually display information on the viewpoint's location, orientation and the distance from the eye that the image should be held in order to give an accurate representation ***(Advice Note 01/11, para. 5.2)***.

3.5 Landscape Character Assessment

The landscape character of the site and study area has been assessed with reference to published guidance. The findings of the desk study and site assessment are recorded in the Landscape Effects Table, at *Appendix G6*, and are also summarised in the main ES Chapter.

3.6 Approach

The assessment process has comprised:

- analysis of the baseline situation;
- identification of the nature of receptors (sensitivity);
- identification of the nature and magnitude of potential effects likely to result from the proposed development; and
- reporting of significant landscape and visual effects.

3.7 Timescales

This assessment considers visual effects for the following time periods:

- <u>During Construction and On Completion:</u> in winter, without the benefit of effective planting mitigation; and
- <u>15 Years After Completion:</u> in winter, with the benefit of any effective planting mitigation.

The reporting of landscape effects is for all time periods.

In all cases, the assessment of effects makes comparison with the baseline condition of the site.

4.0 Sensitivity of Receptors

4.1 General Definitions

4.1.1 Value

Landscapes and views may be valued at community, local, national level or above, dependant on their rarity, popularity or location within a protected area such as an Area of Outstanding Natural Beauty. The criteria for assessing the baseline value of landscapes and views is described below.

4.1.2 Susceptibility to Change

The ability of a given landscape or view (visual receptor) to accommodate the specific nature of the proposed development and/or change in land use without undue harm or adverse consequences is referred to as 'susceptibility to change'. This susceptibility is assessed against the baseline value of the landscape or view.

4.1.3 Overall Sensitivity

The assessment of overall receptor sensitivity combines judgements on the susceptibility of the receptor to the proposed development and the value attributed to that receptor.

4.2 Landscape Value

Landscapes, including their character and features, may be valued at community, local, national level or above. Existing landscape designations have been taken as the starting point for the assessment of value, as shown on *Table 1* below. However, the value of designated areas may locally vary across their geographic extent depending on their intactness, or proximity to detracting forms of development, for example.

Table 1 sets out the relative importance and value of generic landscape designations and descriptions, identifying those designations applicable to the study area in the third column:

Table 1: Landscape Designations

Typical Designation	Description	Actual Designation for this Site	Importance (Value)
World Heritage Site	Unique sites, features or areas of international importance with settings of very high quality.	None.	International (High)
National Park Area of Outstanding Natural Beauty Setting of Grade I and II Listed Building, or Scheduled Monument	Sites, features or areas of national importance with settings of high quality.	North Wessex Downs AONB lies beyond the ZTV to the south-west of the site. Sandleford Priory (Gabriel's School) is listed Grade I, and associated historic parkland is registered Grade II. Sandleford Place and Warren Lodge Presbytery are listed - Grade II. Historic features are further described in *ES Chapter 9: Cultural Heritage*.	National (High)
Special Landscape Area Long distance footpath	Sites, features or areas of regional importance with intact character.	None.	Regional (High/Medium)
Conservation Area	Sites, features or areas of district importance.	Newbury Conservation Area lies 0.6km north of the site, but is separated from it by existing development.	District (Medium/Low)

Table 1: Landscape Designations			
Typical Designation	**Description**	**Actual Designation for this Site**	**Importance (Value)**
Non-designated landscape Public footpath or bridleway	General countryside area, or community space or public right of way valued at the local level.	Woodland blocks within the site are either recorded as ancient woodland, or contain ancient woodland indicator species, as described in *ES Chapter 6: Ecology*. A public footpath crosses the site between A339 Newtown Road and Warren Road.	Local (Medium/Low)

Whilst the assessment of value is partly based on the importance of landscape-related planning designations, other criteria used to assess landscape value of the site in more detail, including that of undesignated landscapes, are set out in *Table 2* below:

Table 2: Criteria for Assessing the Value of Non-designated Landscapes	
Attribute	**Criteria**
Landscape Quality	Intactness of the landscape/condition of individual elements.
Scenic Quality	General appeal of the landscape to the senses.
Rarity	Rarity of landscape character areas, types or features.
Representativeness	Particular characteristic/feature/element considered a particularly important example.
Cultural Interest	The presence of wildlife or cultural heritage interest which contributes positively to the landscape.
Recreation Value	Evidence that the landscape experience forms an important part of recreational activity, eg. as established in guidebooks.
Wildness/Tranquillity	Evidence that a landscape is valued for its wildness/tranquillity.
Associations	Relevant associations with notable figures, such as writers or artists, or events in history that contribute to landscape value.

An assessment of overall value has been made for each landscape receptor, and has been categorised in terms of high, medium and low value. For example, an intact landscape in good condition, where scenic quality, tranquillity, and or cultural heritage features make a particular contribution to the landscape, or where there are important cultural or historical associations, is likely to be of high value. Conversely, a degraded landscape in poor condition, containing a number of detracting features, with no particular scenic qualities or cultural interest is likely to be of low value.

4.3 Susceptibility of Landscape Receptors to Change

GLVIA3 states that the susceptibility of a landscape receptor (whether it is the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) depends on its ability to accommodate the proposed development without due consequences for the maintenance of the baseline situation and/or achievement of landscape planning policies or strategies.

Judgements on landscape susceptibility need to take into account the extent to which the attributes of the receiving landscape will be able to accommodate new development without demonstrable harm, adverse change, or loss of features to come to a balanced view. The following criteria have been used to determine landscape susceptibility:

- landform;
- sense of openness or enclosure;
- field pattern and scale;
- landcover;
- relationship of a given landscape area to any existing settlements or developments; and
- scenic or special qualities.

Not all criteria will be equally applicable or important within a given landscape, and where this is the case this is explained within the assessment. Landscape receptor susceptibility has been categorised into three main categories, as shown in *Table 3* below:

Table 3: Landscape Receptor Susceptibility to Change	
Susceptibility	**Criteria**
High	Little ability to accommodate the proposed development without undue harm.
Medium	Some ability to accommodate the proposed development without undue harm.
Low	Substantial ability to accommodate the proposed development without undue harm.

4.4 Overall Landscape Sensitivity

The overall sensitivity of landscape receptors has been assessed and described as *low, medium or high*, with reference to the following factors:

- whether the landscape is protected by planning designation;
- whether the area is important to the setting of a protected landscape or heritage feature;
- the scale of the landscape in terms of its landform and vegetation and settlement patterns;
- the degree of enclosure and screening within the local landscape, or conversely its openness and wider visibility;
- scenic and perceived qualities of the landscape; and
- whether the character of the landscape is influenced by any existing development or built elements, or particular types of prominent land use.

4.5 Value of Views

Visual receptors are people and the views they experience at particular places, and they may comprise users of public rights of way or other outdoor recreational facilities, vehicle travellers, or people who may be visiting, living or working within the study area.

The value attached to views has regard to a number of factors, including:

- recognition through planning designations, supplementary planning documents, management plans for protected landscapes, or association with heritage assets;
- recorded in published documents such as guidebooks, or on Ordnance Survey maps as a viewing area, or acknowledged in literature or art, for example; and
- the popularity of the viewpoint.

Key views towards and from Sandleford Priory have also been considered.

The criteria used to assess the value of views are summarised in *Table 4* below:

Table 4: Value Attached to Views	
Value	**Criteria**
High	Views from landscapes/viewpoints of national importance, or highly popular visitor attractions where the view forms an important part of the experience, or with important cultural associations.
Medium	Views from landscapes/viewpoints of regional/district importance or moderately popular visitor attractions where the view forms part of the experience, or with local cultural associations.
Low	Views from landscapes/viewpoints with no designations, not particularly popular as a viewpoint and with minimal or no cultural associations.

4.5.1 Susceptibility of Visual Receptors to Change

The susceptibility of different types of people to changes in views is mainly a function of:

- the occupation or activity of the viewer at a given location; and
- the extent to which a person's attention or interest may therefore be focussed on a view and the visual amenity experienced at a given view.

The criteria used to assess the susceptibility of a visual receptor are summarised in *Table 5* below:

Table 5: Visual Receptor Susceptibility to Change	
Susceptibility	**Type of Receptor**
High	People with a proprietary or particular interest in a view, or with a prolonged viewing opportunity: - Residents; - People engaged in outdoor recreation, including users of long distance recreational routes and well-used public rights of way, whose attention is likely to be focussed on the landscape, and on particular views, and their environment; - Visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience; - Communities where views contribute to the landscape setting enjoyed by residents; and - Travellers along scenic routes.
Medium	People with a moderate interest in the view and their surroundings: - Travellers by road, rail or other mode of transport routes along scenic routes, where the appreciation of the view contributes to the enjoyment and quality of the journey; and - People engaged in outdoor recreation, where their appreciation of their surroundings and particular views is incidental to their enjoyment, including public rights of way that to not exhibit heavy usage or have notable visual detractors within views.

Table 5: Visual Receptor Susceptibility to Change	
Susceptibility	**Type of Receptor**
Low	People with a momentary, or little, interest in the view and their surroundings as their focus is on other activities: - People engaged in, and focused on, in outdoor sport or recreational activities; - People at their place of work, where the setting is not important to the quality of working life; and - Travellers, where the view is fleeting and incidental to the journey.

GLVIA3 qualifies the above examples as follows:

> *'This division is not black and white and in reality there will be a gradation in susceptibility to change. Each project needs to consider the nature of the groups of people who will be affected and the extent to which their attention is likely to be focussed on views and visual amenity.'* (page 114, paragraph 6.35)

4.6 Overall Sensitivity of Visual Receptors

The overall sensitivity of visual receptors (assessment viewpoints) has been assessed and described as *low, medium or high* with reference to the following factors:

- value and rarity of the view;
- composition of the view;
- location, context and importance of a viewpoint;
- the expectations and activity of the viewer; and
- the number of people (observers) affected.

5.0 Effect Criteria

The determination of the magnitude of landscape and visual effects combines an assessment of the size or scale of effects, together with an assessment of the geographical extent over which those effects are likely to be experienced, including consideration of their duration, and potential reversibility.

5.1 Size and Scale of Effects

The size and/or scale of effects relates to the extent of change in a given landscape, such as the loss or addition of features or change in land use, and the scale of the change in the composition of a given view.

5.2 Nature of Effects

The nature of effects may be positive or negative (beneficial or adverse), and direct or indirect. Direct effects are those which result directly from a development itself, whereas indirect or secondary effects may arise as a consequential change resulting from

development, for example, changes to downstream vegetation as a result of alterations to a drainage regime.

5.3 Geographical Extent of Effects

The geographical extent of effects relates to:

- the area over which direct landscape effects are likely to be experienced (ie. this could be at the site level, the immediate setting of the site, or landscape character type or area);
- the area over which indirect landscape effects are likely to be experienced (ie. where there is intervisibility between two different areas); and
- the area over which visual effects are likely to be visible.

5.4 Duration

The following terminology is used to describe the duration of the proposals:

- short-term: under 1 year
- medium-term: 1-15 years
- long-term: over 15 years

Effects may be temporary, permanent or reversible over time. For example:

- *temporary* - visual effects arising from construction activities may be limited solely to the construction period;
- *permanent* - where construction necessitates some clearance of existing vegetation, or irreversible change in land use; or
- *reversible* - restoration of a quarry following mineral extraction.

6.0 Landscape Effects Magnitude

The size and/or scale of change in the landscape takes into consideration the following factors:

- the extent/proportion of landscape elements lost or added;
- the contribution of that element to landscape character and the degree to which aesthetic/perceptual aspects are altered; and
- whether the effect is likely to change the key characteristics of the landscape, which are critical to its distinctive character.

The criteria used to assess the size and scale of landscape effects are based upon the amount of change that will occur as a result of the proposals, as described in *Table 6*, below:

Table 6: Landscape Effects: Size/Scale of Change	
Category	**Criteria**
Major adverse landscape effect	The proposals will result in a total change in the key characteristics of landscape character; will introduce elements totally uncharacteristic to the attributes of the receiving landscape or will not fit with its scale; and/or will result in a substantial or total loss, alteration or addition of key elements/ features/characteristics.
Moderate adverse landscape effect	The proposals will result in a partial change in the key characteristics of landscape character; will introduce elements partially uncharacteristic to the attributes of the receiving landscape or will only partially fit with its scale; and/or will result in partial loss, alteration or addition of key elements/features/characteristics.
Slight adverse landscape effect	The proposals will result in a small change in the key characteristics of landscape character; will introduce elements that are not uncharacteristic to the attributes of the receiving landscape; and/or will result in a minor loss, alteration or addition of elements/features/characteristics.
Negligible adverse landscape effect	The proposals will result in a just discernible change to landscape character/ elements/features/characteristics.
No change	The proposals will not cause any change to the landscape character/ elements/features/characteristics.
Negligible landscape benefit	The proposals will result in a just discernible improvement to the landscape character/elements/features/characteristics.
Slight landscape benefit	The proposals will achieve a degree of fit with the landscape character/ elements/features/characteristics and go some way towards improving the condition or character of the landscape.
Moderate landscape benefit	The proposals will achieve a good fit with the landscape character/ elements/features/characteristics, or would noticeably improve the condition or character of the landscape.
Major landscape benefit	The proposals will totally accord with the landscape character/elements/ features/characteristics, or would restore, recreate or permanently benefit the condition or character of the landscape.

7.0 Visual Effects Magnitude

The size and/or scale of change in the view relates to the degree of contrast or integration likely to result from the proposed development and is influenced by the relative time over which a view is experienced and whether it is a full, partial or glimpsed view.

The following criteria are used to assess the size and scale of visual effects, based on the degree of change to the view or composition as a result of the proposals:

Table 7: Visual Effects: Size/Scale of Change	
Category	**Criteria**
Major adverse or beneficial visual effect	The proposals will cause a dominant or complete change or contrast to the view, resulting from the loss or addition of substantial features in the view and will substantially alter the appreciation of the view.
Moderate adverse or beneficial visual effect	The proposals will cause a clearly noticeable change or contrast to the view, which would have some effect on the composition, resulting from the loss or addition of features in the view and will noticeably alter the appreciation of the view.
Slight adverse or beneficial visual effect	The proposals will cause a perceptible change or contrast to the view, but which would not materially affect the composition or the appreciation of the view.

Table 7: Visual Effects: Size/Scale of Change	
Category	**Criteria**
Negligible adverse or beneficial visual effect	The proposals will cause a barely perceptible change or contrast to the view, which would not affect the composition or the appreciation of the view.
No change	The proposals will cause no change to the view.
Neutral	There will be a change to the composition of the view, but the change will be in keeping with the existing elements of the view.

7.1 Night-time Effects

The effect of new light sources associated with the proposed development have been assessed in terms of any existing light sources within the surrounding townscape and landscape, existing skyglow, and dark landscapes, for example. Night-time effects are described in the Visual Effects Table, at *Appendix G6*, and are summarised in the main ES Chapter.

8.0 Significance of Effects

The scale shown in *Table 8*, below, is used as a guide to the relative significance of landscape and visual effects, and takes account of both the overall sensitivity of landscape and visual receptors and the magnitude of effects as follows:

Table 8: Assessment of Landscape or Visual Significance				
Sensitivity of Receptor	**Major Effect**	**Moderate Effect**	**Slight Effect**	**Negligible Effect**
High	Substantial	Substantial	Moderate	Negligible
Medium	Substantial	Moderate	Minor	Negligible
Low	Moderate	Minor	Minor	Negligible