

Landscape and Visual Impact Assessment
for a proposed residential development at
Bluebell, Naas, Co. Kildare

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LANDSCAPE & VISUAL IMPACT ASSESSMENT

1.1 Introduction

Mitchell + Associates was engaged by the applicant, Ardstone Homes, in October 2018 to prepare a Landscape and Visual Impact Assessment (LVIA) for a proposed residential development at Bluebell, Naas, Co. Kildare. This LVIA summarises the impact of the proposed development on the landscape character and visual amenity of the current site and on the contiguous area and the site environs. It considers these in the context of the site, lying on the southern fringes of Naas. It describes the landscape character of the subject site and its hinterland, together with the visibility of the site from significant viewpoints in the locality. It includes an outline of the methodology utilised to assess the impacts and descriptions of the receiving environment (baseline) and of the potential impacts of the development. Mitigation measures introduced to ameliorate or offset impacts are considered and the resultant predicted (residual) impacts are outlined. This report should be read with reference to the photomontages, which are contained in a separate A3 report prepared by 3D Design Bureau.



Figure 1.1 Site location and context

1.2 Methodology

1.2.1 Introduction

The assessment was carried out between October and November 2018. It takes account of the existing landscape's capacity to accommodate the proposed development and assesses the impacts upon existing settlements and the public spaces associated with them. This Landscape and Visual Impact Assessment (LVIA) includes consideration of two main aspects:

- Landscape Character Impact – the assessment of effects on the character of the landscape arising from the insertion of the proposed development into the existing landscape context. The 'landscape' aspect of assessment is relatively subjective and can be described broadly as the human, social and cultural experience of one's surroundings. These combined impacts will elicit responses whose significance will be partially dependent on how people perceive a particular landscape and how much the changes will matter in relation to other senses as experienced and valued by those concerned. Despite the extremely large part played by our visual experience in forming our views on landscape, one's perception and indeed memory also play an important part if the changes brought about in landscape character are to be fully understood. It is clear therefore that different people doing different things will experience the surrounding landscape in different ways. Such sensitivities and variations in response, including where and when they are likely to occur, are taken into consideration in the assessment.
- Visual Impact – the assessment of effects of the proposed development on the visual environment and visual amenity as evidenced by the comparison of baseline (existing) images and photomontages illustrating the proposed development in context. This second aspect is somewhat less subjective in that direct 'before and after' comparisons can be made. Visual impact occurs by means of visual intrusion and/or visual obstruction and the distance between subject and viewpoint has a bearing on the scale of such impact.

It is appropriate that aspects of architectural context and design approach are addressed when assessing impact of proposed development on the landscape. In this regard, aspects of the architectural design rationale and the specific architectural responses to the site and context, are referred to within this report.

The standard evaluation methodology used in the preparation of the Landscape and Visual Impact Assessment (LVIA) for Environmental Impact Assessment Reports (EIAR) is utilised. The evaluation methodology is therefore based on the following:

- 'Guidelines on the information to be contained in Environmental Impact Statements' - Environmental Protection Agency (EPA) 2002.
- 'Advice Notes on Current Practice in the preparation of Environmental Impact Statements' - Environmental Protection Agency (EPA), September 2003.
- 'Guidelines for Landscape and Visual Impact Assessment', prepared by the Landscape Institute and the Institute of Environmental Assessment, published by Routledge, 3rd Edition 2013.
- Reference is also made to the DRAFT 'Revised guidelines on the information to be contained in Environmental Impact Statements' - Environmental Protection Agency (EPA), September 2015
- The DRAFT 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' - Environmental Protection Agency (EPA), August 2017.

This Landscape and Visual Impact Assessment involved:

- Visiting the area in November 2018 and preparing a photographic record of the main landscape features;
- Undertaking a desk study of the subject site and its immediate environs in relation to its local and broader significance using the information gathered from site visits, studying aerial photography, historic and Ordnance Survey mapping;

- Establishing and describing the receiving environment in terms of the existing landscape, its visual amenity and its significance;
- Assessing the nature, scale and quality of the proposed development through examination of the design team's drawings, illustrations and descriptions of the proposed scheme;
- Assessing potential viewpoints, choosing and agreeing those which could be considered most important and most representative in terms of visual impact; and
- Assessing the landscape and visual impacts of the proposed development through consideration and interpretation of the prepared photomontages.

1.2.2 Photomontage Methodology

The primary method adopted for Visual Impact Assessment relies largely on a comparative visual technique whereby accurate photomontages incorporating the proposed development are compared to the existing corresponding baseline photograph so that an assessment of impact can be made. These 'before' and 'after' images are prepared for a number of selected viewpoints. The methodology for the preparation of photomontages, including site photography, 3D computer modelling and rendering of views, is outlined in more detail in Appendix 1.1.

1.2.3 Selection of Views

In recognition of the sensitivities of this location and to enable a full and detailed assessment of the proposal, a total of 11 photomontages was prepared. The views were chosen to accurately represent the likely visual impact from a variety of directions around the site.



Figure 1.2 Selected viewpoints

In accordance with the guidelines, views from the public domain were given priority, particularly those from main thoroughfares and public places. The Guidelines also require that the proposed development is considered in context and that photomontages illustrate the proposed development with sufficient context for proper assessment. The views submitted are considered to be the most important and representative, having regard to the requirement to examine the likely significant impacts.

The initial photomontages prepared are also used to assess the preliminary design and to inform the design team of any advisable amendments – this is an iterative process and offers an opportunity for the design team to adjust the design or for the location of viewpoints to be adjusted to be sure of illustrating maximum impact. A location map of the selected viewpoints is also included with the photomontages in the separate A3 document.

1.2.4 Methodology for Rating of Impacts

An assessment is made in respect of the significance, scale or magnitude of predicted impacts which is set against an assessment of the quality/sensitivity of the impact. For each view, the scale/magnitude of impact is related to the simple quantum of change within the field of view and to the nature and sensitivity of such change in respect of the respective receptors, in the context of the existing (receiving) environment. Therefore, whilst the significance or scale of impact may range from 'imperceptible' to 'profound' and these may in part be related to distance and proximity, it should be remembered that the nature of the change and the sensitivities of the viewers also play a part in this aspect of assessment for each view.

The quality of impact can be assessed as 'positive' or 'negative' depending on whether the change is considered to improve or reduce the quality of the landscape character or visual environment. The quality of impact may also be assessed as 'neutral' if the quality of the environment is unchanged. The assessment of quality in particular, needs to consider and weigh-up a range of issues and potentially conflicting standpoints. The nature of the proposed change, its context, appropriateness, quality of design and the sensitivities of the viewers are all important considerations for this aspect of assessment.

This latter issue of sensitivity can however create emotive responses which often have little or no regard for the appropriateness and/or design of the proposal and the assessment needs to be considered in that context. For example, in this case of a residential development proposed for agricultural lands, the interests or concerns (sensitivities) of say, a farmer in the area may differ greatly to those of an existing local resident or potential house-buyer. The reconciliation of such sensitivities could be considered unlikely, in which case, issues of appropriateness and design quality become more influential in the assessment. The quantum, scale and proximity of proposed development are important aspects to be considered in terms of the carrying capacity of any sensitive landscape. The scheme design of the whole development (buildings, roads, planting etc) and the subtleties of detail design in such circumstances are important in mitigating potentially negative impacts and ultimately, in determining appropriateness.

The duration of impact is a third aspect of assessment to be considered and may range from temporary to permanent. In this case, the proposed housing is likely to be long term, however the effectiveness of existing and proposed planting in assimilating the scheme into the existing landscape context or in totally screening it will presumably develop and mature over time. The temporary/short term impacts during the construction of the proposed development are also considered.

The significance criteria used for landscape and visual assessment are based on those given in the EPA 'Guidelines on the information to be contained in Environmental Impact Statements', 2002, (Section 5 Glossary of Impacts) and the DRAFT 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' - Environmental Protection Agency (EPA), August 2017 (Section 3, pp 50-52). These are outlined in Appendix 1.2.

1.3. Description of Receiving Environment

1.3.1 Site Location and Landscape Context

The site for proposed development occupies lands on the southern fringe of Naas, south of the new ring road. It is essentially a greenfield site of approximately 4ha located some 200 metres west of the R448 Kilcullen Road. The site is currently agricultural land which is essentially one existing field, lying adjacent to the western and southern edges of the Broadfield View housing estate which is predominantly a mix of single and two-storey detached and semi-detached houses with front and rear garden spaces and a well-established street tree structure which is relatively mature. The rear gardens of the existing residential properties along the site boundary, are lined by fairly mature, continuous hedgerows with mature specimen trees. To the west and south of the subject site the agricultural land is contiguous, without any defining boundary, though an existing mature hedgerow with mature trees crosses the southern part of the site from east to west. Development of the subject site for housing represents an extension of the existing residential development along the southern fringes of the town.

The topography of the site is gradually sloping at an approximate 1 in 40 fall to the north-west corner from a local high point in the south-east corner. Despite the locally elevated south-eastern corner of the site, visibility of the site from public roads around it, is limited by intervening hedgerows and existing buildings.

1.3.2 Planning Context

The planning context for proposed development in this area is set by the current Kildare County Development Plan (2017-2023). In addition, the Naas Town Development Plan 2011 - 2017 has designated the site; 'C7 - New Residential' – refer to Figure 1.3 below. The purpose of this zoning is to provide new residential development and other services incidental to residential development. Whilst housing is the primary use under such zoning, recreation, education, crèche/playschool, community buildings and sheltered housing may also be permitted. Limited shopping facilities may also be considered in order to serve the local needs of the residents.

Adjacent land is zoned; 'B - Existing / Infill Residential' and '1 – Agricultural'.

To the south-east of the site, adjacent to the southern edge of the Broadfield View housing estate, a separate existing planning permission for road access (Planning reference 15848), links the site to the R448 Kilcullen Road. Beyond this and across the R448 Kilcullen Road, the Piper's Hill residential development (approx. 400 units) is currently under construction and nearing completion.

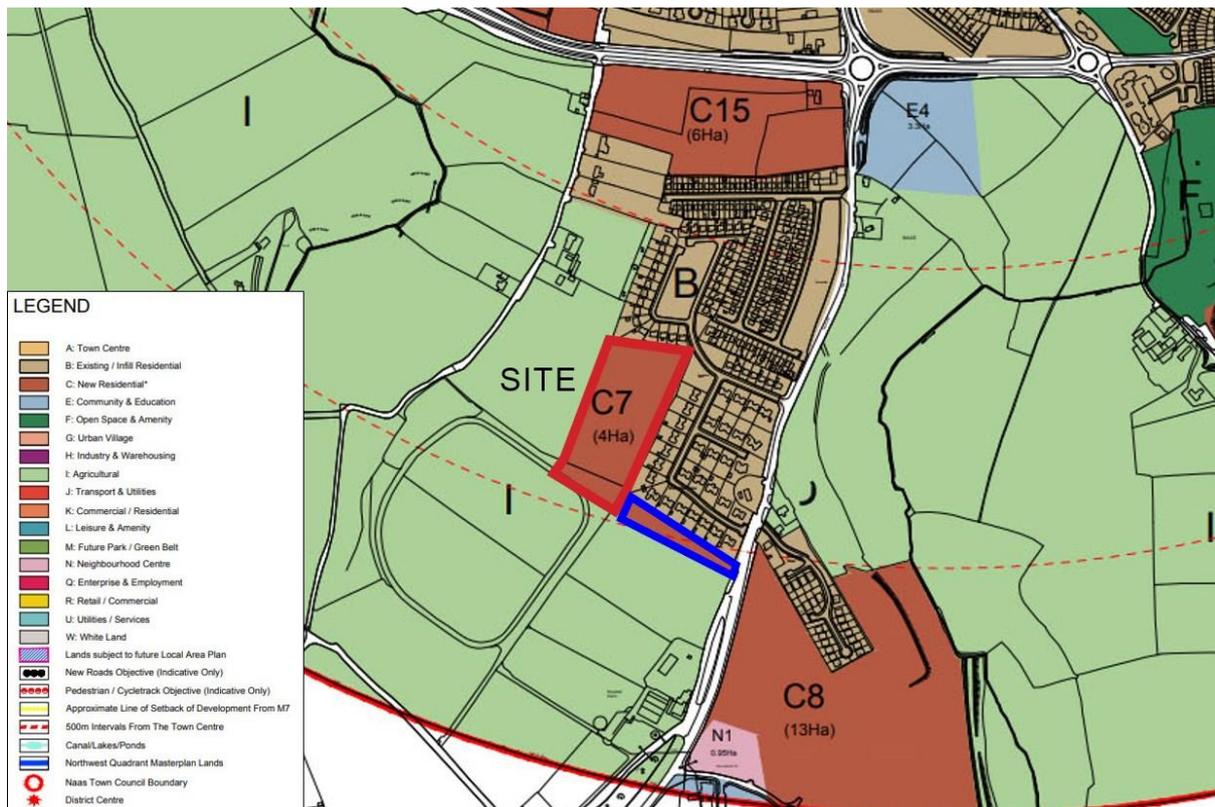


Figure 1.3 Land-use zoning, showing the site zoned for new housing (C7)

The Planning Report and Statement of Consistency, prepared by Declan Brassil & Co. Ltd and submitted with the application provides additional information regarding the Planning Context of the site. The Planning Report and Statement of Consistency document states that the proposed development will contribute to achieving the critical mass to support the significant investment in infrastructure and services for Naas and the wider area. In addition, the proposed development provides for the consolidation of an existing urban area proximate to the emerging neighbourhood district at Pipers Hill to the southeast and public transport services along Kilcullen Road.

Accordingly, it is considered that the proposed residential development is consistent with the Core Strategy and Settlement Strategy of the current Kildare County Development Plan, the zoning objective for the lands in the Naas Town Development Plan, and associated residential development policies and objectives contained therein.

Furthermore, the Planning Report and Statement of Consistency notes that the proposed development is consistent with the following Section 28 Ministerial Guidelines:

- 'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas' (including the associated 'Urban Design Manual') (2009)
- 'Sustainable Urban Housing: Design Standards for New Apartments' (March, 2018)
- 'Urban Development and Building Heights – Guidelines for Planning Authorities', a Consultation Draft (August 2018) published by the Department of Housing, Planning and Local Government.
- Design Manual for Urban Roads and Streets
- 'Childcare Facilities – Guidelines for Planning Authorities' (2001)

- 'The Planning System and Flood Risk Management' – Guidelines for Planning Authorities (November, 2009) (including the associated technical appendices)
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2009)

1.4. Characteristics of the Proposed Development

1.4.1 Introduction

A comprehensive description of the design for the proposed residential development is contained in the Architect's Design Statement. Please refer also to the design layout drawings and sections included with the application.

The proposed development at Kilcullen Road is a residential development consisting of a variety of maisonettes, detached, semi-detached and terraced houses (primarily 2-storey) ranging from 1 to 4 bedrooms. The development also includes a low-rise apartment block (4-storey) with a range of 1 and 2 bedroom unit sizes. The scheme has been designed to integrate with any future development of agricultural lands to the west and south, which would be subject to future residential zoning. Open space amenity areas, including residential play spaces are located at the core of the proposed development, with the adjacent homes providing passive surveillance. Roads, footpaths and parking for vehicles and bicycles is provided throughout the scheme with car spaces allocated adjacent to each home. Hard and soft landscape works are integrated into the scheme design and the retention of existing hedgerows along the northern and eastern boundaries, including many of the existing mature specimens, is a notable feature of the scheme.

In summary the proposed development comprises:

- 93 housing units (as detached, semi-detached, terraced and dormer units);
- 28 apartments and;
- 4 maisonettes

1.4.2 Context and Design Characteristics

The designed scheme seeks to harmonise and integrate the development within the existing landscape. The design rationale and details employed seek to mitigate any negative effects on the landscape character and visual amenity of the area by:

- incorporating the development to integrate with the existing adjacent housing and finishing the new buildings primarily in earth tones and natural materials
- retaining existing vegetation where possible and introducing appropriate planting to further screen and absorb the buildings over time
- including public open spaces within the design which link with and relate appropriately to existing adjacent open spaces.

1.5 Potential Impacts of the Proposed Development

A development such as this proposal has the potential to impact significantly upon the landscape and visual aspects of the existing environment in a number of ways, at both construction and operational stages. Effects can be short or long term; temporary or permanent. The purpose of this section of the report is to describe the potential effects of such proposed development; upon the visual and landscape aspects of the immediate area, and further afield, where relevant.

1.5.1 Construction Phase

Potential visual impacts during the construction phase are related to temporary works, site activity, and vehicular movement within and around the subject site. Vehicular movement may increase in the immediate area, and temporary vertical elements such as scaffolding, site fencing, gates, plant and machinery etc., will be required and put in place. All construction impacts will be temporary, and may include the following:

- Site preparation works and operations (incl tree protection measures)
- Site excavations and earthworks
- Site infrastructure and vehicular access
- Construction traffic, dust and other emissions
- Temporary fencing/hoardings
- Temporary site lighting
- Temporary site buildings (including office accommodation)
- Scaffolding

1.5.2 Operational Phase

The proposed development will consist of the insertion of new residential buildings, road infrastructure and associated ancillary elements onto the subject site and will replace the existing agricultural field currently covering the site. It should be noted that despite the proximity of the proposed development to existing residential development to its north and east, the location and effectiveness of existing field boundary hedgerows and tree screens if retained, will assist in restricting and screening existing views into the site from without. The potential impact of the proposed development however, could be negative, particularly if the existing boundary vegetation is damaged or degraded. Many aspects of the proposed scheme design are included specifically to respond to such issues and any associated concerns. The design approach and specific mitigation measures employed to address such sensitive contextual issues and to respect and enhance the local rural environs are outlined in Section 1.6, Mitigation, below.

1.5.3 The 'Do Nothing' Approach

If the proposed development were not to proceed, the site would presumably (in terms of its landscape impact), remain in its present form for a period. In such circumstances the current agricultural uses would also presumably continue. All existing boundary hedgerows would continue to grow and mature, subject to their maintenance and management by the adjoining occupiers.

1.6 Mitigation (remedial/reductive measures)

1.6.1 Construction Phase

The building site including a site compound with site offices, site security fencing, scaffolding and temporary works will be visible during the construction phase. This is generally viewed as a temporary and unavoidable feature of construction in any setting. Other mitigation measures proposed during this delivery stage of the development, revolve primarily around the implementation of appropriate site management procedures during the construction works – such as the control of lighting, storage of materials, placement of compounds, control of vehicular access, and effective dust and dirt control measures, etc. Such mitigation is set out in the Preliminary Construction Management Plan prepared by DBFL Consulting Engineers. This is a working document which will be continually reviewed and amended to ensure effective mitigation throughout the construction period. The Preliminary Construction Management Plan specifically references the following construction phase mitigation measures as relevant to the assessment of Landscape and Visual impact:

- Site hoarding will be erected to restrict views of the construction activity e.g. standard 2.4m high construction hoarding
- Establishment of tree protection measures as required (no-dig construction zones, tree protection fencing and existing hedgerow retention). Any trees which are not to be taken down shall remain undisturbed and undamaged
- Tree protection fences if required are to be constructed in accordance with BS 5837:2012 "Trees in Relation to Design, Demolition and Construction - Recommendations"
- A 'Construction Exclusion Zone' notice shall be placed on tree protection fencing at regular intervals
- Tree Protection Zones are not to be used for car parking, storage of plant, equipment or materials
- A post construction re-assessment of any retained trees shall be carried out.

1.6.2 Operational Phase

The proposed scheme is designed to integrate well within its existing context. This will be accomplished through:

- establishing an integrated and respectful relationship between the existing housing and the proposed development, incorporating aspects of prevalent built forms, scale, texturing, colour and materials;
- the insertion, positioning and modelling of the built elements, in order to assist in the visual reduction of the apparent mass of buildings – in particular, the siting of the higher 4-storey apartment block within the lower part of the site;
- appropriate architectural detailing to assist in the respectful integration of the external building facades – including the modulation of openings and fenestration in a manner that reflects current local proportions and rhythms.
- rationalisation of all services elements and any other potential visual clutter and its incorporation internally within building envelopes (as far as practically possible).
- use of appropriate and harmonising colour, tones and materials.

- the provision, maintenance and management of a sensitively considered soft landscape design for the development, which assists in the integration and screening of the buildings within the existing landscape.

1.7 Predicted Landscape Character Impact of the Proposed Development

The proposed development will impact on the landscape to varying degrees in terms of its perceived nature and scale. These impacts are tempered and conditioned by sensitivities associated with the receptor. The duration of such impacts is however determined by the design life of the proposed development as tempered by the mitigating effect of the maturing designed landscape proposed as an integral part of the development. In this case the development has a design life of up to 60 years. Impacts on landscape character are therefore deemed to be of long term duration in this instance.

In assessing the landscape character impacts specifically, there are three main inter-related aspects to be addressed in considering the development proposals, namely:

- The perceived character of the existing edge-of-town, agricultural landscape – how it is impacted by the proposal;
- Impacts of the proposed development on social and cultural amenity and;
- The proposed views of the development, relative to the existing site (outlined in 1.8) and the associated impact on visual amenity.

1.7.1 Construction Phase

Initially the erection of site fencing will be completed, site access points established and site accommodation units placed. Early in the construction period, topsoil stripping and excavations for building foundations will commence. Removal and/or storage of excavated materials from site and the delivery of construction materials will generate increased traffic within, to and from the site.

As construction progresses over the construction period, visual impacts will vary, with the on-going business of construction - delivery and storage of materials, the erection of the buildings, etc. Mitigation measures have been proposed as per section 1.6 'Mitigation (remedial/reductive measures)' to minimise the impact of the construction works on the site environs.

People living in the existing housing estate to the north and east of the site will be impacted negatively to a slight extent by the construction of the proposed development. For the more sensitive of these receptors (occupiers of existing houses backing onto the subject site boundary) the visual impact of the proposed development during construction will vary from moderate and neutral to moderate and negative, depending on the stage of construction, and the intensity of site activity. The construction impacts will be of short-term duration.

1.7.2 Operational Phase

Impact on the perceived character of the area

Whilst the term 'landscape character' is generally held to involve more than simply appearances, there is little doubt that a place's visual qualities contribute most to its character. Generally speaking this is particularly so for say, visitors or tourists, whose experience is often fleeting - however, the incidence of visitors or tourists is likely to be low to very low. In the context of the proposed development, impacts will generally be felt by people who live nearby, who may no longer enjoy a prospect of green fields behind them, rather a view (albeit filtered by the retained hedgerows) of a housing scheme similar in many respects to that in which they live.

One might surmise that the current landscape character of this area is perceived largely by local people as essentially agricultural land located at the edge of a substantial and expanding town. However, the actual visual penetration into the site from the main public access routes is rather limited due largely to the presence of existing intervening groups of trees and hedgerows – this has the effect of limiting impact to those residing more closely to the site.

It is clear that the insertion of any proposed development into this existing open expanse will alter the landscape context of the area to an extent, however for this particular site, existing views-in are really quite limited and this will limit associated impacts. The site is 200 metres distant from the Kilcullen Road and is served by a linking entrance road between them - so there is also no immediate relationship between the proposed development and the nearest busy road.

The existing site with limited access into it, offers nothing in the way of an amenity resource for the local populace. The proposed development will not greatly alter that but will provide open space amenities for the residents. The scheme design makes allowance for possible future linkage into and through the scheme as appropriate, for both vehicles and pedestrians, and includes for the potential future provision of a direct pedestrian connection at the site's north-east corner into the Broadfield View housing estate.

1.8 Predicted Visual Impact of the Proposed Development

1.8.1 Introduction

The assessment of visual impact is determined through the comparison of 'before' and 'after' photomontages – it is therefore, perhaps, a little less subjective than an assessment of landscape character. It too is inevitably influenced to some extent by the standpoint of the viewer (the receptor). The assessment of visual impacts created by the proposed development includes a consideration of the visual impacts on the visual environment likely to be impacted. A total of 11 photomontages have been prepared that illustrate the visual impact of the proposed development on the surrounding landscape. They are included in a separate A3 report submitted with the planning application for the proposed development. In this photomontage report the existing view from each viewpoint is shown together with the proposed development as seen from the same viewpoint. The red line that appears on some of the proposed photomontages indicates the location of the new development in the background, which in

such cases is largely screened from view by distance, the intervening built environment, topography or vegetation.

Because the design life of the proposed development is up to 60 years, the duration of predicted visual impacts is assessed as long term, as is the case for predicted landscape character impacts (refer to section 1.7.2).

The assessment of visual impacts through the use of comparative photomontages serves to identify impacts upon the visual environment. The photomontages are important in illustrating the impact of the proposed scheme from the more sensitive viewpoints. In this instance, they also serve to support and illustrate an aspect of the landscape character impact assessment.

It is important to remember that whilst photomontages are a useful tool in illustrating comparative visual impact, they are recognised as having their limitations and potential dangers. The guidelines for their use in assessment clearly advocate their use in the context of a site visit to the viewpoint locations and point out that photomontages alone should not be expected to capture or reflect the complexity underlying the visual experience (refer to the GLVIA, 3rd Edition and the Landscape Institute's Advice Note 01/11).

1.8.2 Assessment of views

Photomontages were prepared for 11 views from a range of viewpoints. For each view, the significance/magnitude and quality/sensitivity of the impact are assessed and summarised as follows:

View 1 – Existing View

This is a view from the R448 Kilcullen Road looking north-westwards. The southern corner of the Broadfield View housing estate sits behind the hedgerow in the centre of view and the subject site lies beyond that.

View 1 – Proposed View

The proposed development is barely visible in the view and can just be seen at the far end of the entrance road from the Kilcullen Road up to the site. The entrance road is previously approved and therefore doesn't strictly form part of the current application for the proposed development but is illustrated for reference purposes only.

The visual impact from this viewpoint is **imperceptible**.

View 2 – Existing View

This view is taken from a more distant viewpoint at a location further south along the Kilcullen Road, looking north-westwards. The site is marked by a number of existing mature trees along its southern boundary in the distance and existing residential property within the Broadfield View estate can just be glimpsed along the horizon (centre of view).

View 2 – Proposed View

The proposed development can be discerned in this view (left of centre) where the roof of proposed housing units can be seen on the horizon where a small group of existing trees have been removed. The proposed tree planting along the entrance road creates a green reinforcing effect to the existing hedgerow lines.

The visual impact from this viewpoint is **slight and neutral**.

View 3 – Existing View

This view is taken from the Broadfield View estate looking west. The existing street trees are well established, fairly densely planted and contribute significantly to the pervading verdant character. The site lies behind the hedgerow in the background.

View 3 – Proposed View

A small part of the proposed building development is visible beyond the existing hedgerow. What can be seen of it relates well to the existing housing in terms of scale, style and finish. The potential footpath links and the resultant gap in the hedge are also included in the view and illustrate the potential maximum impact from this viewpoint. The existing foreground planting continues to dominate in the view.

The visual impact from this viewpoint is **slight and neutral**.

View 4 – Existing View

This is a view from the Rathasker Road looking north-east towards the site. The existing character of the area is agricultural with fields edged by hedgerows and mature specimen trees.

View 4 – Proposed View

The proposed development is outlined by the red line to assist in identifying its profile. Though the very top of some of the proposed houses may be seen, the development is distant and is effectively fully screened by the intervening landform.

Visual impact from this viewpoint is **imperceptible**.

View 5 – Existing View

This is a view from the Rathasker Road looking eastwards towards the site. The view is afforded by a gap in the field hedge, which is otherwise largely continuous along the road, preventing views generally towards the east. The site is perched at the top of the rise and can be discerned by the tops of the mature trees and the pylon.

View 5 – Proposed View

A part of the development can be seen in the distance through the gap in the hedge. The upper storey of the apartment block in being set back and lighter toned, doesn't immediately register, reducing the building's apparent scale and height. The traditional pitched roof-form and white render finish of the 2-storey houses represent typical, almost traditional, edge of town development. This is nevertheless a sought-out and glimpsed view through the gap in the hedge and as such is untypical of the views along the Rathasker Road.

The visual impact from this viewpoint is **moderate and negative**.

View 6 – Existing View

This view is from the South Ring Road around Naas town, looking south-east towards the site which is quite distant. The existing context is one of new housing development close to the road which is also lined either side by roadside screen planting.

View 6 – Proposed View

The roofline of parts of the proposed development is just visible in the distance, in the centre of view. It occupies a very small part of the field of view. The existing maturing roadside planting in the middle distance will totally screen it from view in several years.

The visual impact from this viewpoint is **slight and neutral**.

View 7 – Existing View

This view is taken from a more distant viewpoint along the Kilcullen Road (south of View 2), looking northwards. It is a broad road with mature trees and planting which limit lateral views across the countryside.

View 7 – Proposed View

The profile of the proposed development is indicated by the red line and will not be visible from this viewpoint.

The visual impact from this location will be **imperceptible**.

View 8 – Existing View

This view is taken from the larger open green space within the existing housing estate at Broadfield View. Views into the site are somewhat screened by the existing houses and the mature trees behind and in front of them. The existing context is clearly residential with primarily 2-storey dwellings fringing the open grass area.

View 8 – Proposed View

The proposed development is visible in the gaps between the existing foreground houses, rather than above them. The height, scale, form and finish of the proposed development is appropriate in this context

The visual impact from this location will be **slight and neutral**.

View 9 – Existing View

This is a further view from the Rathasker Road, west of the site, looking east. The narrow road, is lined either side with unbroken hedgerows, limiting views beyond the road itself.

View 9 – Proposed View

The profile of the proposed development is indicated by the red line and cannot be seen through the existing hedgerow.

The visual impact from this location will be **imperceptible**.

View 10 – Existing View

This is a distant view taken from the R445 near Jigginstown Green, looking south-east towards the site. The context is edge-of town housing development beyond grass paddock and occasional mature trees.

View 10 – Proposed View

The proposed development is outlined by the red line. It will not be visible from this viewpoint.

The visual impact from this location will be **imperceptible**.

View 11 – Existing View

This view is looking from the roundabout at the Newhall Retail Park, close to the M7 and the Newbridge Road, looking south-east towards the site. The retail park in the middle distance is relatively low rise with a fringe of screen planting in front of it.

View 11 – Proposed View

The proposed development away in the distance is outlined by the red line. It is entirely screened by intervening elements and will not be visible from this viewpoint.

The visual impact from this location will be **imperceptible**.

In summary, the visual impacts of the proposed development are markedly reduced primarily because of the limitation placed on building heights in the designed scheme coupled with the screening effect of other built developments in the vicinity and the existing hedgerows edging the site and beyond. The topography in and around the site also offers no high vantage points. The site is not particularly visible from outside so all of the selected views do not offer full clear views into the site – views in are often glimpsed through gaps in hedges etc. The proposed development seeks to retain most of the existing hedgerows and mature trees fringing the site – this also greatly assists in the successful integration of the proposed residential units into the landscape. The existing hedgerows and proposed scheme planting are effective in screening the proposed housing units.

For all of the views except View 5, the visual impact is either imperceptible or is assessed as slight and neutral. View 5 (assessed as moderate and negative) is a glimpsed view through a gap in an existing hedgerow along a narrow and very lightly used road – as such it is neither typical nor representative of the views generally available around the site.

1.9 Monitoring

The retention of most of the existing hedgerows and the existing trees coupled with the effective use of new planting to screen and integrate the built elements of the proposal into the existing landscape are important aspects of the proposed scheme design. The success of the proposed scheme is dependent on both operations being properly executed. Effective tree and hedgerow protection measures must be established in advance of construction work commencing and an approved system of monitoring the on-going health and vigour of both existing and proposed planting will be necessary. The timely planting and the maintenance and management required to successfully establish new planting with the projected rates of growth and general performance required, needs a significant and effective input from professionals with the necessary expertise to ensure it is effectively delivered. The monitoring of the planting performance and suitably appropriate responses to ensure same will be essential to the success of the development as proposed.

1.10. Cumulative Impacts

1.10.1 Introduction

Current guidelines suggest that a determination should be made as to whether cumulative effects are likely to occur – these are outlined in the current GLVIA guidelines (3rd edition) as '*additional effects caused by the proposed development when considered in conjunction with other proposed developments of the same or different types*'. It has become accepted practice that such a determination generally needs to be made as to whether any likely pending or permitted development of a similar nature will have any bearing on the assessment of the proposed development and this is subject to the assessor's judgement in the matter.

1.10.2 Cumulative Impacts related to the proposed development

The Local Authority's planning strategy for this area includes for further residential development on other sites nearby and several residential schemes are currently under construction in the south Naas area. Notwithstanding this, for this proposed development, there are no other permitted or pending residential developments in the planning process considered to be of relevance in creating such 'additional effects' or to have a bearing on this assessment. There are therefore no cumulative effects likely to occur.

1.11 References

1. Guidelines on the information to be contained in Environmental Impact Statements prepared by the Environmental Protection Agency (EPA) 2002.
2. Revised guidelines on the information to be contained in Environmental Impact Statements - Environmental Protection Agency (EPA), DRAFT, September 2015.
3. DRAFT 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' - Environmental Protection Agency (EPA), August 2017.
4. Advice Notes on Current Practice in the preparation of Environmental Impact Statements - Environmental Protection Agency (EPA), September 2003.
5. Guidelines for Landscape and Visual Impact Assessment, prepared by the Landscape Institute and the Institute of Environmental Assessment, published by Routledge , 3rd Edition 2013.
6. Photography and Photomontage in Landscape and Visual Impact Assessment - Landscape Institute (UK) Advice Note 01/11.
7. Kildare County Development Plan 2017-2023

Appendix 1.1: Methodology for the production of photomontages

Photography of Site

1. Photographs are taken from locations as advised by client with a professional SLR digital camera. The photographs are taken horizontally with a survey level attached to the camera. The photographic positions are marked (for later surveying), the height of the camera and the focal length of the image recorded.
2. In each photograph, a minimum of 2No visible fixed points are marked for surveying. These are control points for model alignment within the photograph.
3. The photographic positions and the control points are geographically surveyed and these positions are plotted on the site survey drawing as supplied by the Architect.

3D Computer Model, Rendered Views and Photomontage Preparation

4. The buildings are accurately modeled and materials applied according to plans, elevations and finished supplied by the Architect and aligned to the survey drawing with the camera positions.
5. Within the 3d software virtual 3d cameras are positioned according to the survey co-ordinates. The focal length of the photograph is input. Pitch and rotation are adjusted using the survey control points to align the virtual camera to the photograph.
6. The proposed development is output from the 3D software using this camera and the image is then blended with the original photograph to give an accurate image of what the proposed development will look like in its proposed setting. A highly accurate 3D-computer model of the proposed development was created with photo-realistic materials, finishes and colours. Rendered views of the proposed
7. In the event of the development not being visible, the roof line of the development will be outlined in red if requested.
8. A document is produced with the following information:
 - a) Site location map with view locations plotted.
 - b) Photo-montage sheet showing:
 - Existing and proposed conditions
 - View with surveyed control alignment points
 - Reference information including field of view/focal length, range to site/development
 - Date of photograph.
9. All surveying is carried out by a qualified topographical surveyor. Where GPS devices are used they are Survey grade.

Appendix 1.2: Criteria for the Rating of Impacts

(Based on the EPA 'Guidelines on the information to be contained in Environmental Impact Statements' 2002, Section 5 Glossary of Impacts) and the DRAFT 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' - Environmental Protection Agency (EPA), August 2017 (Section 3, pp 50-52). For this LVIA they are further described as follows:

Degree or magnitude of effects (significance)

Imperceptible / Not Significant: The development proposal is either distant or screened by existing landform, vegetation or built environment.

Slight Effects: The development proposal forms only a small element in the overall panorama / field of view, or there is substantial intervening screening by the existing landform, topography and/or vegetation. The view or character of the landscape is noticeably changed but without affecting its sensitivities.

Moderate Effects: An appreciable segment of the existing view is affected by the proposed development or the development creates visual intrusion in the foreground. The view or the character of the landscape is altered but in a manner that is consistent with existing and emerging baseline trends.

Significant Effects: Effects which, by their character, magnitude, duration or intensity alter a sensitive aspect of the landscape/ view.

Very Significant Effects: Effects which, by their character, magnitude, duration or intensity alter most of a sensitive aspect of the landscape/view.

Profound Effects: Effects which obliterate sensitive characteristics of the landscape and/or view.

Quality of effects

The quality of potential visual and landscape effects are assessed according to EPA guidelines as follows:

Positive Effects: Changes which improve the quality of the landscape/view.

Neutral Effects: Changes which do not affect the quality of the landscape/view.

Negative Effects: Changes which adversely affect the character of the landscape or reduce the quality of the visual environment.

Duration of effects

Potential effects arising from a proposed development may also be considered in terms of duration as described in the EPA Guidelines:

Momentary/Brief: Effects lasting less than a day

Temporary: Effects lasting less than one year

Short-term: Effects lasting one to seven years

Medium-term: Effects lasting seven to fifteen years

Long-term: Effects lasting fifteen to sixty years

Permanent: Effects lasting over sixty years