Proposed Large Scale Residential Development at Rathgowan, Mullingar, Co. Westmeath Applicant: Marina Quarter Ltd.

Volume II

Main Statement

CHAPTER 10

Landscape & Visual Impact





August 2023

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10 Landscape and Visual Impact Assessment

10.1 Introduction

PECENED. This section of the EIAR appraises the existing landscape of the site at Rathgowan, Mullingar, Co. Westmeath and the greater context within which it lies. It will then assess the likely landscape and visual impacts arising from the proposed development on these lands. The assessment will also take into account the cumulative impact from nearby recent development and unbuilt permitted development. It will also describe the proposed landscape mitigation measures and the resulting residual landscape and visual impacts.

10.1.1 Author Information and Competency

JBA Consulting Engineers and Scientists Ltd has been commissioned to conduct a Landscape and Visual Impact Assessment (LVIA) of the site and environs. The chapter has been prepared by Christos Papachristou (Chartered Senior Landscape Architect), Conor O'Neill (Project Environmental Scientist), and Jemima Kivikoski (Assistant Environmental Scientist).

Christos is a Chartered Member of the Landscape Institute (CMLI) in the UK. Christos has carried out LVIAs and been involved in the preparation of numerous EIARs. Conor holds an MSc in Environmental Science and an Adv. Dip. in Planning and Environmental Law from the King's Inns, and has prepared LVIAs as part of wider EIARs for several housing developments. Jemima holds a BSc in Chemistry and a Pg. Dip. in Environmental Science, and has assisted in preparing LVIAs for a number of developments.

10.1.2 Reference to Guidelines Relevant to Discipline

The landscape assessment undertaken is made with regard to the sensitivity of the landscape and its ability to undergo change. The methodology is based on national and local policy guidelines and best practice methodology as outlined in the references below:

- Guidelines on Landscape and Visual Assessment (2002); Irish Landscape Institute (ILI)
- Guidelines for Landscape and Visual Impact Assessment (GLVIA), third edition (2013), Landscape Institute (UK)
- Guidelines on Information to be Contained in Environmental Impact Assessment Reports (2022); Environmental Protection Agency (EPA)
- Environmental Impact Assessment of Projects: Guidelines on the Preparation of the Environmental Impact Assessment Report (EIAR) (2017); European Commission (EC)
- Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment (2013); EC
- Guidelines on Landscape and Landscape Assessment (2000); Department of the Environment, Community and Local Government (DOE)
- National Landscape Strategy 2015-2025; DOE
- National Biodiversity Action Plan (2017-2021)
- Westmeath County Development Plan 2021-2027 (County DP); Westmeath County Council



- Mullingar Local Area Plan 2014-2020 (MLAP); Westmeath County Council
- LCA and LVIA of Specified Infrastructure Projects Overarching Technical Document (Dec 2020); Transport Infrastructure Ireland (TII)
- Visual Representation of Development Proposals, Landscape Institute (UK, 2019), sechnical guidance notes for photomontages
- Amenity Trees and Woodland: A Guide to their Management in Ireland (2010); Tree Courcell, of Ireland

In addition to the above documents, Ordnance Survey and National Monuments Service historical maps were used to help identify past land uses, landscape components and historic landscape evolution. In a modern context, aerial images from 1995 to the present also informed landscape changes.

10.1.3 Methodology

The landscape and visual amenity assessment examines the potential effects of the proposed development on views of receptors within the Zone of Theoretical Visibility including residential properties and nearby open spaces, in terms of visual intrusion and visual obstruction. It also examines the impact on landscape character areas from the permanent physical changes to the site brought about by the development.

The Landscape and Visual Impact Assessment in the EIAR and takes into consideration aerial photography, emerging design drawings, relevant various publications and reports, together with visits to the site and environs of the proposed development. The Assessment is carried out in accordance with:

- Environmental Protection Agency (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports;
- Guidelines for Landscape and Visual Impact Assessment (GLVIA) as published by the Landscape Institute (UK) and the Institute of Environmental Management and Assessment (3rd Edition, 2013); and
- Landscape Character Assessment (LCA) of Westmeath County, Chapter 13 of the Westmeath County Development Plan 2021-2027.

Verified photomontages in accordance with the GLVIA guidance are included to facilitate the assessment of visual impacts. The mitigation measures for the protected structures have been agreed following liaison with the Conservation Officer.

10.1.3.1 Landscape Impact Assessment Criteria

When assessing the potential impacts on the landscape resulting from a proposed project, the following criteria are considered:

- Landscape character sensitivity;
- Magnitude of likely impacts; and
- Significance of landscape effects.



10.1.3.2 Sensitivity of the Landscape

The sensitivity of the landscape to change is the degree to which a particular Landscape Character Area (LCA) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics.

Landscape Sensitivity, often referred to as 'value', is classified using the following criteria which have been derived from a combination of industry guidelines from the Landscape Institute for Landscape and Visual Impact Assessment and professional judgement.

- Very high Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are very high value landscapes, protected at an international level e.g., World Heritage Site, where the principal management objectives are likely to be protection of the existing character;
- High Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national level e.g., National Park, where the principal management objectives are likely to be protection of the existing character;
- Medium Areas where the landscape character exhibits a medium capacity for change in the form of development. Examples of which are medium value landscapes, protected at a Local or Regional level e.g., Open space areas mentioned within a County Development Plan, where the principal management objectives are likely to be protection of the existing character;
- Low Areas where the landscape character exhibits a high capacity for change and has very few or no designated landscapes or open space areas; and
- Negligible Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

10.1.3.3 Magnitude of Likely Landscape Impacts

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed project. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the boundary of the proposed project that may have an effect on the landscape character of the area.

- Very high Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.
- High Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.



- Medium Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to changes in landscape character, and quality.
- Low Changes affecting small areas of landscape character and quality, together with the loss
 of some less characteristic landscape elements or the addition of new features or elements.
- Negligible Changes affecting small or very restricted areas of landscape character. This may
 include the limited loss of some elements or the addition of some new features or elements
 that are characteristic of the existing landscape or are hardly perceivable.
- Neutral Changes that do not involve the loss of any landscape characteristics or elements and will not result in noticeable changes to the prevailing landscape character; and
- Positive Changes that restore a degraded landscape or reinforce characteristic landscape elements.

10.1.3.4 Significance of Landscaped Effects

The significance of the landscape impact will be the combination of the sensitivity of the landscape against the magnitude of the change. It is summarised in Table 10.1 below.

Table 10.1 Significance of	l andscape and Visua	l effects based on	Magnitude and Sen	sitivitv
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	SENSITIVITY						
MAGNITUDE	Very high	High	Medium	Low	Negligible		
Very high Profound Very significant standard		Significant	Moderate	Slight			
High	Very significant Significant		Moderate	Slight	Slight		
Medium	Significant Moderate		Slight	Slight	Imperceptible		
Low	Low Moderate Slight		Slight	Imperceptible	Imperceptible		
Negligible	Slight	Slight	Imperceptible	Imperceptible	Imperceptible		
Neutral	Imperceptible	Imperceptible	Imperceptible	Imperceptible	Imperceptible		
Positive	Positive	Positive	Positive	Positive	Imperceptible		

10.1.3.5 Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric (or humancentric) basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape.

Visual receptors most susceptible to changes in views and visual amenity are:

- Very high Residents in properties within protected landscapes and travellers on a Scenic route where awareness of views is likely to be heightened.
- High Residents in properties with predominantly open views from windows, garden or curtilage. People, whether residents or visitors, who are engaged in outdoor recreation including use of public rights of way, whose attention or interest is likely to be focused on the



landscape and on particular views, and those on a scenic route where the view is not specifically in the direction of the proposed development.

- Medium Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience, and communities where views contribute to the landscape setting enjoyed by residents in the area.
- Low People engaged in outdoor sport or active recreation on a local scale, which does not involve or depend upon appreciation of views of the landscape; and people at their place of work whose attention may be focused on their work or activity, not their surroundings and where the setting is not important to the quality of working life, and people travelling in vehicles where their view is limited to a few minutes at any viewpoint; and
- Negligible Changes affecting restricted viewpoints.

10.1.3.6 Magnitude of Visual Impact

The magnitude of a visual effect is determined on the basis of several factors: the relative numbers of viewers, the distance from the viewpoint, the visual dominance of the proposed development within a view and its effect on visual amenity, as follows:

- Very high The proposal intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene.
- High The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene.
- Medium The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it may generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. Alternatively, it may represent a balance of higher and lower order estimates in relation to visual presence and visual amenity.
- Low The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene; and
- Negligible The proposal would be barely discernible within the available vista and/or it would not detract from, and may even enhance, the visual amenity of the scene.
- Magnitude can also be described as:
- Neutral Changes that are not discernible within the available vista and have no bearing the visual amenity of the scene; and
- Positive Changes that enhance the available vista by reducing visual clutter or restoring degraded features.

10.1.3.7 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix as used earlier in respect of landscape impacts, see Table 10.1.



10.1.3.8 Impact Classification Terminology



Each impact is described in terms of its quality, significance, extent, duration & frequency and type where possible.

IMPACT CHARACTERISTICS	TERM	DESCRIPTION
Quality of Effects	Positive	A change that improves the quality of the environment.
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation within the margin of forecasting error.
	Negative/ Adverse	A change that reduces the quality of the environment.
Significance of	Imperceptible	An effect capable of measurement, but without significant consequences.
Effects	Not significant	An effect which causes noticeable changes in the character of the environment, but without significant consequences.
	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
	Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
	Very significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
	Profound	An effect which obliterates sensitive characteristics.
Extent and Context of Effects	Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions.
Probability of Effects	Likely	The effects that can reasonably be expected to occur because of the planned project, if all mitigation measures are properly implemented.
	Unlikely	The effects that can reasonably be expected not to occur because of the planned project, if all mitigation measures are properly implemented.

Table 10.2 Impact Classification Terminology taken from EPA (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports



IMPACT CHARACTERISTICS	TERM	DESCRIPTION Effects lasting from seconds to minutes. Effects lasting less than a day. Effects lasting less than a year.
Duration and Frequency of	Momentary	Effects lasting from seconds to minutes.
Effects	Brief	Effects lasting less than a day.
	Temporary	Effects lasting less than a 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.
	Reversible	Effects that can be undone, for example through remediation or restoration
	Frequency	Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
		·
Types of Effects	Indirect/ Secondary)	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.
	Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	'Do-Nothing'	The environment as it would be in the future should the subject project not be carried out.
	`Worst case'	The effects arising from a project in the case where mitigation measures substantially fail.
	`Worst case' Indeterminable	
		substantially fail. When the full consequences of a change in the environment cannot be
	Indeterminable	substantially fail. When the full consequences of a change in the environment cannot be described. When the character, distinctiveness, diversity or reproductive capacity of an

10.1.3.9 Cumulative Impact Assessment

The cumulative effect of a set of developments is the combined effect of all the developments taken together.

Cumulative effects on visual amenity consist of combined visibility and sequential effects.

Combined visibility occurs where the observer is able to see two or more developments from one viewpoint.



- Combined visibility may either be in combination (where several developments are within the observer's arc of vision at the same time) or in succession (where the observer has to turn to see the developments).
- Sequential effects occur when the observer has to move to another viewpoint to see different developments. For example, this could be when travelling along roads or path the occurrence of sequential effects may range from frequently sequential (the features appear regularly and with short time lapses between, depending on speed of travel and distance between the viewpoints) to occasionally sequential (long time lapses between appearances, because the observer is moving very slowly and / or there are large distances between the viewpoints).

Cumulative landscape effects affect the physical fabric or character of the landscape, or any special values attached to the landscape.

- Cumulative effects on the physical fabric of the landscape arise when two or more developments affect landscape components such as woodland, dykes or hedgerows. Although this may not significantly affect the landscape character, the cumulative effect on these components may be significant – for example, where the last remnants of former shelterbelts are completely removed by two or more developments.
- Cumulative effects on landscape character arise from two or more developments. Housing developments introduce new features into the landscape. In this way, they can so change the landscape character that they can create a different landscape character type. That change need not be negative; some derelict or industrialised landscapes may be enhanced as a result of such a change in landscape character. The cumulative effects on landscape character may include other changes, for example trends or pressures for change over long time periods, which should form part of any consideration of a particular project.

The area in which the proposals site is located contains other housing developments and therefore there is potential for cumulative effects on landscape and visual amenity.

10.1.4 Definition of the study area

In order to define the study area of the assessment the primary consideration is the Zone of Theoretical Visibility. This is the area from which it is expected that the proposed development will be visible based on a bare earth scenario. A bare earth scenario does not take into consideration elements that screen views like existing built environment and vegetation. A proportionate approach is taken based on the sensitivity of the landscape, the extents and nature of the proposal.

For developments of similar nature, an area covering 3km radius around the proposals is generally accepted as a proportionate approach.

10.1.5 Difficulties Encountered in Compiling Information

The Famine cemetery located northeast of the site at the southwestern edge of an industrial park was not accessible. Sherwood Park residential estate lies to the southeast of the cemetery and shares similar views. This estate was used to assess views instead of the cemetery. No views to the proposed development are expected.



A high point north of the N4 could not be accessed as it is located within private forestry lands. Fishing ponds which are part of Lough Drin to the south were accessible. The expected impact would be 1. D. 1. R. 1. 08/1013 imperceptible.

10.2 Description of Existing Environment

10.2.1 Receiving Environment – Site Context

The proposed development is located at the northwest fringe of Mullingar town just within the town boundary. It lies outside the town centre, but has established links back to the historic core. On a broader scale, the site falls under the Landscape Character type "Central Hills and Lakes (Zone 4)" (County DP). The surrounding terrain (within 1km) would be considered gently undulating, with only modest changes in elevation. Gentle terrain typically limits degree of visibility. Taller hills arise north and west of the site approaching the rural environs around the lakes. Lough Owel lies approximately 3 km northwest and Lough Ennell lies approximately 4 km southwest of the site.

The site is accessed along its northern boundary from the R394, which serves as the spine between the Permitted Phase 3 site and proposed Phase 1/2 site. The R394 is a new relief road, providing peripheral access to the N4 and R390 to Athlone. Consequently, the site is strongly associated with the R394. A wayleave at the southwest corner links the site to the R393 (Longford Road). The R393 continues toward the town centre as the Ashe Road, serving as one of several gateways to the town and providing an immediate urban connection. The Rathgowan Roundabout is the node linking these regional roads.

North and west of the site lie agricultural environs. The lands to the northwest are zoned Agricultural, while the large area to the northeast of the site and south of Brookfield Estate is zoned Open Space. Further to the south, across the R493, the lands are zoned Parkland. With these designations, it can be anticipated that nearby lands will retain some degree of openness and potential recreational activity.

Beyond these two open areas mentioned above, both north and west of the site, residential development in the form of housing estates flanks the R394 northeast and southwest of the site. This has gradually evolved the local character from rural into suburban.

The 2014-20 Mullingar Local Area Plan contains three maps that are valuable when creating a landscape character baseline. These include the Open Space Map (map 04), Greenway Map (map 05) and the Natural Heritage Map (map 08). The site is not designated within any of these maps or contain protected trees or watercourses.

On a larger scale, per the 2021-27 Westmeath County Development Plan, the site is not in the High Amenity Area and the nearest Protected Views (no. 19, 21, 22) are oriented away from the site. An existing Cycle/Walking Route is identified (relief road), but most recreational amenity follows the Grand Canal route.

There are a number of Protected Structures (RPS) within Mullingar Town, but only two have potential intervisibility. Columb Barracks (RPS 019-021 to 036) is a cluster of 15 no. protected structures 200m



southeast of the site. However, the high perimeter walls prevent views to the site from within the complex. Views from outside the walls should be considered. The second structure is *Barrack View House* (RPS 019-020) 30m south of the site.

One period home on the National Inventory of Architectural Heritage (NIAH) list is near the site. *Rathgowan House* (NIAH 153310001) sits 225m northwest of the site boundary. The house is no longer extant, but has yet to be removed from the NIAH database. It should be noted that *Barrack View House* listed in the RPS above has been de-listed from the NIAH database (formerly NIAH 15310002). A cluster of buildings at the St. Mary's Hospital complex (both RPS and NIAH) sits 600m to the northeast.

The nearest Archaeological Feature (protected under the National Monuments Act) is a Standing Stone (WM01464) 240m to the southeast, located in the carpark of the Tesco. A Ringfort (WM019-046) lies 580m west of the site surrounded by agricultural pastures within the Sarsanstown townland.

Prior to the establishment of the Relief Road (R394) the site would have been viewed as backland agricultural parcels only seen in the distance from the Ashe Road. The construction of the R394 has created a large public road frontage. To date, this has been undeveloped and forms the largest undeveloped residential parcel along the R394.

Adjacent to the site, the R394 offers an established broad footpath and road level cycle lane, evident in use by both modes of transport during site visits.



Figure 10.1 Site Context. The site context shows the location of Lough Owel and Lough Ennell in relation to the site. Terrain is generally flat with the landscape becoming more rugged to the north and around the lakes.



10.2.2 Receiving Environment - Site

The site is located on gently rising terrain at the fringe of town centre suburban residential development. The field sizes and parcelling have remained the same since the 6-inch Ordnance Survey maps in the mid 1800's. The R394 was constructed generally along the old field boundary also the townland boundary) Four different types of boundaries characterise the site.

Northeast and southeast Boundary – Treelines separate the site from Ashefield Estate which hugs the boundary from the northeast around to the south east. A recent development block of apartments (Ref: 19/6121) sits at the southern corner of the site.

North Boundary - The R394 forms the northern boundary, beyond which lies lands zoned as *Open Space* in the Westmeath CDP. Directly to the northwest lies lands upon which construction of Phase 3 of the scheme is currently underway. The site boundary is defined by a sod/stone ditch topped by a mature hedgerow. Most of the trees are Ash, supplemented with Hawthorn and Blackthorn. This hedgerow forms an identifiable boundary to the *Open Space* and is a strong visual buffer for views from the east.

South Boundary – The R393 (Ashe Road) runs directly adjacent to the southern boundary. Accessed from the R393 is an ESB substation which links with the overhead electrical cable poles present within the site.

West Boundary – The western boundary forms a corner which forms a fork between the R394 and R393 at the Rathgowan Roundabout. There are sub shrubs and tall grasses within the site but no hedgerows or treeline. The view from the roundabout is clear.

Internal Tree Line – Within the site, a row of substantial Ash trees (no. 4557-4563) visually reduces the scale of the site and is regularly visible from many of the view receptors. In the Tree Survey report, all trees are graded as "B2" quality, the highest grading on site. As Ash trees, they are late to come into leaf and early to go out of leaf.

It is worthwhile noting that the Tree Survey report did not grade any trees on site as category "A". The highest grading is "B2". 75% of the trees on site have been categorised as "B2", with no trees in such a poor state of health to be categorised as "U" trees (Unsuitable for retention).

Native wildflowers, in particular Ranunculus, appear as part of the natural seed bank.

10.2.3 Zone of Theoretical Visibility

A Zone of Theoretical Visibility (ZTV) was produced for the assessment. The ZTV gives an indication of the surrounding landscape with potential visibility of the proposed development site. For this site, the ZTV maps the area with potential visibility within a 3 km radius from the centre of the site. The ZTV was based on a viewer height of 1.6 m and building heights of 10 - 13 m. The ZTV is based on a digital terrain model (DTM) and represents a bare ground scenario i.e., with no trees, hedgerow or built features present that would provide screening.





Figure 10.2 Zone of Theoretical Visibility. The ZTV is based on Digital Elevation Models (DEMs). The Digital Terrain Model (DTM) represents a bare ground scenario i.e., with no trees, hedgerows or built features that would provide screening. A viewer eye height of 1.6 m and building heights (viewpoints) of 10 - 13 m were used.

10.3 Characteristics of the Project

Glenveagh Homes Ltd. is seeking planning permission to develop 1& 2 phases of housing, where permission has been granted for phase 3 on adjacent lands on the opposite side of the R394. For the overall project description refer Chapter 2. Interventions and proposals specific to the landscape character and potential impact on visibility are described below.

Modifications to Existing Conditions

The existing hedges and treeline forming the northeastern, eastern and southeastern boundary are to be entirely retained within the development plan with additional planting scheduled. This would result in a slight modification of the existing environment for several nearby receptors. The removal of the internal treeline and hedgerow is noteworthy as these are effective screening elements for receptors to the west.

All overhead ESB wires are to be relocated underground except for one large tower in between the ESB substation and the new block of apartments at the southern corner of the site. These cables and poles are unsightly and their relocation will prove to be an improvement in environmental conditions for receptors to the south.



10.3.1 Proposed Development

The proposed development aims to provide an integrated residential scheme consisting of various house types. No structures appear taller than 3-storeys. The structures are set within a landscape that has a strong emphasis on high quality amenity spaces and a north-south biodiversity link along the R394 and east west along the boundaries. There is significant change to the R394 road frontage and more than 240 semi-mature trees are proposed for planting. The proposed landscape works are illustrated in the Appendix drawing no. LA-104 "Proposed Landscape Masterplan".

Computer Generated Images (CGI's) have been produced for the project, illustrating the internal landscape design and housing style and density.

Internally there are 3 no. large active amenity areas, one includes a children's play area and teen area. Several attenuation buffers underlie green spaces and wild areas two of which flank the entrance from the northern roundabout along the R394. Overall, open space amenity constitutes a higher than average percentage and is considered within statutory parameters.

Tree planting serves to enhance the urban realm and provide commuting links to the various habitats. The aim is to improve visual screening while enhancing biodiversity. The majority of the proposed planting is deciduous at an approximate ratio of 4:1 deciduous to evergreen. There are pockets with clusters of entirely native species and urbanised zones where all of the trees are non-native, for performance in urban conditions. To balance, half of the trees and shrubs will be native. With the embargo on the movement and planting of Ash trees due to *Ash Dieback* disease (Hymenoscyphus fraxineus), none are specified. It is noted that some of the non-native species could, in time, be replaced by Ash if the embargo is lifted. Table 10.3 outlines some of the proposed tree species.

Tree Planting Species – General Site	
Acer pseudoplatanus (Sycamore Maple) 8.5%	Prunus species (Wild and Bird Cherry) 15.2%
Amelanchier x grandiflora (Robin Hill) 7%	Quercus species (Oak) 15%
Betula species (Birch) 21%	Sorbus aucuparia (Rowan) 11.8%
Crataegus species (Hawthorn) 8.5%	Syringa vulgaris (Common Lilac) 6%
Pinus sylvestris (Scots Pine) 3.4%	Other species 4.2%

Table 10.3 Tree Species Overview



10.4 Predicted Impacts

10.4.1 Predicted Impact Assessment

RECEIVED. As described in the methodology, the impacts to the landscape and visual amenity will be assessed based on the sensitivity of the receptor and magnitude of change. This assessment as part of apEIA will be focusing on potential significant and profoundly significant impacts and secondarily on impact of lower significance.

Receptor groups were identified during the initial desktop investigation using aerial imagery and verified on site during the site visit. Receptors were grouped in terms of function, i.e., residential buildings, community buildings, etc., and location. See Figure 10.3 for the 'Visual Receptor Plan' which shows the identified receptor groups. These receptor groups are discussed below with an assessment of the effects on their visual amenity.



Figure 10.3 Visual Receptor Plan. Receptors fall within an approximate 1 km radius from the site

7 no. photomontages have been produced showing the expected visual impact of the proposed development from selected points around the site. In photomontages where the proposed development is not clearly discernible, an additional image is included where a white line represents the outline of the extent of proposed buildings. This provides a sense of the degree of screening. The compendium of photomontages is presented in Appendix 10.1 of this EIAR.



With regards *Impact Duration*, impact was considered permanent if a receptor had a distinct alteration to the horizon line or if views of a structure would continue to remain visible. During assessment, the landscape was also considered in the context of permanency. For example, retained mature trees were considered permanent, with management and evolution. New woodland tree planting at the eastern end of the site would in itself become a permanent screening feature due to size and consity. Street tree planting was considered to have filtering contribution, but as a single tree layer was hot a permanent screening element. In this appraisal, *Type of Impact* was considered positive only if the proposals contribute to the character of the locality *and* would not be detrimental to the rural association. A negative *Type of Impact* might occur if for example, the proposals diminished the experience of the R394, diluted the character or perception of Mullingar town or had detrimental impact on large volumes of quality existing trees.

10.4.2 Receptor Descriptions

Table 10.4 Visual Impact Summary Table

Receptor No.	Title of receptor	Distance from site	Sensitivity	Magnitude of change	Predicted impa	ct and duration Operation
R1	8 houses in Ashefield Estate	0 m	High	Medium	Temporary, moderate, negative	Permanent, moderate, negative
R2	Houses along R393 south of the site	10m	High	Medium	Temporary, moderate, negative	Permanent, slight, positive
R3	Ashefield estate and Abbeylands	0 – 250m	High	Low	Temporary, slight, negative	Permanent, slight, negative
R4	Abbeylands, St. Brigids Terrance, Green Road, O'Growney Drive, Cathedral View, and Fair Green estates	400 – 600m	High	Neutral	Temporary, slight, negative	Permanent, imperceptible, negative
R5	Raithin Estate	100 – 275m	High	Low	Temporary, slight, negative	Permanent, slight, negative
R6	Houses along R393 west of the site	50 – 170m	High	Low	Temporary, slight, negative	Permanent, slight, negative
R7	Farran, Grange Meadows, Grange Heights, Grange Lawns, Grange Village, Grange Crescent, Lakeland Drive, Ardleigh Vale, Ardleigh Park, Oaklawns and Woodlands estates	250 – 1050m	High	Negligible – Neutral	Temporary, slight, negative	Permanent, imperceptible, negative



Receptor No.	Title of receptor	Distance from site	Sensitivity	Magnitude of change	Predicted impa	ct and duration
R8	Rathgowan Wood, Ardilaun Heights and Ardilaun Green estates south along the R394	300 – 1050m	High	Low – Negligible	Temporary, slight, negative	Permanent, slight, negative
R9	Residences northwest along R393	480 – 1110m	High	Neutral	Temporary, imperceptible, negative	Permanent, imperceptible, negative
R10	Brookfield Estate	300 – 775m	High	Low – Negligible	Temporary, slight, negative	Permanent, slight, negative
R11	College Hill and College Vale estates	780 – 1250m	High	Negligible – Neutral	Temporary, slight, negative	Permanent, imperceptible, negative
R12	Residences northeast along L1801 and Irishtown Road.	810 – 1250m	High	Low	Temporary, slight, negative	Permanent, slight, negative
Co1	Gaelscoil an Mhuillinn	75m	Low	Low	Temporary, imperceptible, negative	Permanent, imperceptible, negative
Co2	Columb Barracks	180m	High	Low	Temporary, slight, negative	Permanent, slight, negative
Co3	Mullingar Educate Together, Mullingar Presbyterian Church, Grange United Football Pitch and Mullingar Harriers	250 – 600m	Low	Negligible	Temporary, imperceptible, negative	Permanent, imperceptible, negative
Co4	St. Marys and Midland Regional Hospital Mullingar	580m	Low	Negligible	Temporary, imperceptible, negative	Permanent, imperceptible, negative
Co5	Saint Finian's College	700m	Low	Negligible	Temporary, imperceptible, negative	Permanent, imperceptible, negative
C1	Tesco	220m	Low	Negligible	Temporary, imperceptible, negative	Permanent, imperceptible, negative
C2	Small commercial cluster including a Spar and butcher	500m	Low	Negligible	Temporary, imperceptible, negative	Permanent, imperceptible, negative



Receptor No.	Title of receptor	Distance from site	Sensitivity	Magnitude of change		oct and duration
OS1	Zoned open space	30m	Low	Low	Temporary, imperceptible, negative	Permanent, imperceptible, negative
OS2	Rathgowan park	210m	Low	Low	Temporary, imperceptible, negative	Permanent, imperceptible, negative

R1 (8 no. houses along the northeast boundary with direct views) – Distance from nearest site boundary = 0m

These houses are oriented along the northeastern boundary of the site such that views of the site from back, upper storey windows are direct in a southwestern direction. A treeline and hedgerow exist along the northeastern boundary which provide partial screening; however, the trees are deciduous and therefore the screening is seasonal. Several electrical pylons within the site are also clearly visible. Northeastern views from front windows are of surrounding residences in Ashefield Estate.

Photomontage V3 in the attached Photomontage Booklet shows the expected view from this receptor group.

Sensitivity Receptors would be residents at home and therefore sensitivity is High.

Magnitude The tallest part of the proposed development is located in the eastern corner of the site adjacent to these houses. The retained treeline in combination with new tree planting will provide partial screening to the built aspect of the development, however, majority of tree species are deciduous and this screening will be reduced in the winter. The visual change for these receptors is moderate as the development will change an open space into a built area. However, the change is in keeping with the surrounding environment which is generally urban with rural elements to the north and west and open space to the north. The overall magnitude of change is *Medium*.

Effect During construction the impact will be **Temporary, Moderate, Negative**. Once operational the impact will range from **Permanent, Slight, Negative** for residences with existing vegetation screening their views to **Permanent, Moderate, Negative** for those without screening vegetation. In the winter all impacts to views are expected to be **Permanent, Moderate, Negative**.

R2 (12 no. residences along R393 to the south of the site) – Distance from nearest site boundary = 10m

One standalone farmhouse at the southeastern corner of Rathgowan Roundabout and 3 no. houses in Raithin Estate have north facing views directly into the site. Other residences in Rathin Estate have indirect east-west views into western and eastern areas of the site. No treeline is present along this



boundary and views are of the substation, boundary shrubs, internal treeline and electrical pylons. Parts of the R394 can also be seen from across the site. Direct views into the site for pouses in Rathin Estate are occupied by the electrical substation located along the R393. Houses in Rathin are oriented around a small green space likely used as a kickabout area for residents.

Photomontage V5 in the attached Photomontage Booklet shows the expected view from this receptor group.

Sensitivity Receptors would be residents at home and therefore sensitivity is *High*.

Magnitude Electrical cables are to be relocated underground and the proposed screen planting to the existing substation will offer an improvement to the visual character of the site. Tree pits at the western corner will improve visual character for the farmhouse and houses with indirect east-west facing views. Views across the site to the R394 will be blocked by the development which may bring a minor sense of confinement. The overall magnitude of change is *Low*.

Effect During construction the impact will be **Temporary, Moderate, Negative**. Once operational the impact will be **Permanent**, **Slight, Positive**.

R3 (large group of residences of Ashefield Estate and Abbeylands Estate located northeast, east and southeast) – Distance from nearest site boundary = 0 - 250 m

Houses in this receptor group are oriented relative to the development such that their views are either angled, indirect or screened by other dwellings. They are a combination of detached and semidetached two-storey houses. A hedgerow and treeline along the southeastern boundary provides a natural screening element for houses located closest to the development in this receptor. While views are facing in a northeast – southwest direction for majority of houses, they are located to the east and share no border with the site. The views are entirely occupied by other houses in the estate. Similarly, views from northeastern houses in Ashefield are screened by R1. There may be some filtered views through gaps. Most views of the site will be of boundary treelines and overhead electrical cables.

Photomontage V4 in the attached Photomontage Booklet shows the expected view from this receptor group.

Sensitivity Receptors would be residents at home and therefore sensitivity is High.

Magnitude The development would introduce a built element for houses with angled or partially filtered views that may be too far away or screened to benefit from the existing or proposed treelines, however, this would be a small change is in line with the surrounding environment which is a transition from suburban to rural. The retained treelines and new tree planting will reduce the magnitude of this change for houses closer to the development. The overall magnitude of change is *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**



R4 (Collection of housing estates to the northeast, east and southeast which includes: Abbeylands, St. Brigids Terrance, Green Road, O'Growney Drive, Cathedral View, and Fair Green estates) – Distance from nearest site boundary = 400 – 600 m

Houses in these estates share similar degrees of screening from houses in R3, and receptors C1 and Co2. Houses along St. Brigids Terrace and Longford Road northeast and east of the site respectively have will have views towards the development from back upper storey windows. These views will be heavily screened by R3, C1 and Co2. Houses with a north-south orientation have no views towards the site. Views from side windows may be present but will be heavily screened, angled or obscured by other receptors and vegetation present along residential streets within the estates.

The surrounding environment for this receptor is chiefly suburban with houses along St. Brigids Terrance and Longford Road could be characterised as more urban being closer to shops and community amenities.

The lefthand side of Ashe Road is fully developed up to this point (where the landscape transitions to Barrack View House). The presence of the substation and numerous ESB pylons and overhead wires do not full evoke the sense of rural environs. However, looking towards the site there is a layering of mature trees, evoking a distant rural hinterland.

Sensitivity Receptors would be residents at home and therefore sensitivity is High.

Magnitude The site cannot be viewed clearly from these receptors, however, once constructed, the tallest elements of the development may be visible along the horizon for some residences with partially screened view. For other houses the development would introduce virtually no change in the surrounding environment. The overall magnitude of change will therefore *Negligible*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Imperceptible, Negative.**

R5 (*Remaining houses of Rathin Estate, south-southwest of the site*) – Distance from nearest site boundary = 100 - 275 m

This receptor group includes detached, semi-detached and terraced two storey houses. Most of the houses have a northeast-southwest orientation towards the site. Houses to the east border with Co1, Co2 and R7. To the southwest approximately 32 residences are oriented along a cul-de-sac perpendicular to the R394. To the west lies a large area zoned as parkland and to the south lie disused fields, open space and playing pitches. The area is generally less congested with buildings, however, houses at the east of the receptor group are encompassed by built features and other residences. A small field associated with the farmhouse in R2 is bordered by houses in Raithin along its southern and eastern perimeter. Internal hedgerows and trees are present around old farm buildings. This is separated from the houses by a thick treeline running along the eastern boundary. The pasture and treeline are rural features for houses situated at a transition between urban and rural landscapes.

Sensitivity Receptors would be residents at home and therefore sensitivity is *High*.



Magnitude Views for houses in Raithin are screened by houses further north in R2 or the hedgerows and trees present in the adjacent field. The tops of some electrical pylons may be visible from upper storey windows, however, views to the site are largely obstructed. Some views may be partially screened by trees within the adjacent field. Once constructed, views of the development from houses flanked by more rural features could experience a greater change than houses located closer to suburban elements. The overall magnitude of change is *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

R6 (9 no. houses Along the R393 west of the Rathgown Roundabout, west of the site) – Distance from nearest site boundary = 50 - 170 m

5 no. houses lie at the southwestern boundary of the site for Phase 3 of the development. 4 no. houses are located on the opposite side of the R393. All houses are detached bungalows. Hedges are present around some houses. South of these houses lies a large area of zoned parkland which can be characterised as a tree and shrub studded marshy grassland. The R394 forms a barrier between the development site and this receptor group. Bungalows are fitting within rural settings as their low-lying form can be easily obscured by hedgerows.

Rathgowan House (Reg. 15310001) is a delisted NIAH structure located north of this receptor group. It is shrouded by a small, wooded area that extends in a narrow corridor to the R393.

Photomontage V7 in the attached Photomontage Booklet shows the expected view from this receptor group.

Sensitivity Receptors would be residents in their home and therefore sensitivity is High.

Magnitude These houses have no views directly oriented towards the development site. As the houses are bungalows, views are confined to the average eye level. Views from front and back gardens may be clearer, however, hedges and trees around garden boundaries will partially or fully screen these views. The tallest elements of the development will be visible through angled or partially screened views; however, proposed treelines will provide natural elements to the horizon in conjunction with built elements.

For residents, spacious countryside will be populated with suburban features diminishing the openness of the landscape. This may negate a sense of separation and afford a sense of connection to Mullingar town. The overall magnitude of visual change will be *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

R7 (Estates to the south and southwest of the development including: Farran, Grange Meadows, Grange Heights, Grange Lawns, Grange Village, Grange Crescent, Lakeland Drive, Ardleigh Vale,



Ardleigh Park, Oaklawns and Woodlands estates) – Distance from nearest site boundary = 250 – 1050 m

This receptor group covers a large area of suburban residences located on the western outskirts of Mullingar town. They are detached and semi-detached two storey dwellings. The houses are oriented in varying directions around curving residential roads and cul-de-sacs. The site with larger green spaces The R393 (Longford Road) is also a busy Regional Road, but has a slightly different character as a point of arrival from Longford and surrounding villages. A key investigation is understanding when the proposed development might be visible when approaching from the south.

Sensitivity Receptors would be residents in their home and therefore sensitivity is *High*.

Magnitude The visual landscape is suburban, with majority of views of the site fully screened by houses or Co3. Any views present will be angled and partially screened. The overall magnitude of change is therefore *Negligible – Neutral*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Imperceptible.**

R8 (*Estates along the R394 southwest of the site including: Rathgowan Wood, Ardilaun Heights and Ardilaun Green estates*) – Distance from nearest site boundary = 300 – 1050 m

These estates are located along the west side of the R394 as it curves south towards Grange South Roundabout. Dwellings are semi-detached and terraced two storey buildings. Rathgowan Wood is closest to the site, while Ardilaun Green is the furthest. Rathgowan Park is adjacent to the east of Rathgowan Wood. These are also several small green areas throughout this receptor group.

Sensitivity Receptors would be residents at home and therefore sensitivity is High.

Magnitude Houses are oriented in multiple directions. Those facing east-west in Rathgowan Wood will have the clearest views although these will be angled and partially filtered by R2 and vegetation present in Rathgowan Park. Moving south along R394 houses are oriented in an east-west direction and overlook R7. Houses located off the R394 are arranged in different directions along cul-de-sacs and curved residential roads. Views from these houses will have a higher degree of screening from houses located along the R394. The tallest points of the development may be visible through angled and obscured views through gaps between houses. The overall magnitude of change will range from *Low – Negligible*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

R9 (*Residences northwest along R393*) – Distance from nearest site boundary = 480 – 1110 m

The 15 no. residences are located northwest of R6 westbound along the R393. The majority of dwellings are bungalows with several dormers as well. These houses lie beyond the boundary of



Mullingar town and sit within a rural environment. Hedgerow partitioned fields and pastures lie to the north and south. Vegetation is abundant between houses, affording a greater sense of privacy.

Sensitivity Receptors would be residents at home and therefore sensitivity is *High*.

Magnitude Majority of views to the site will be limited to the average eye level as many of the nouses are bungalows. Orientation of houses is in a northeast-southwest direction with direct views from front or back windows unlikely. Hedges and trees between houses screen eastern views from side windows. Woodland associated with Rathgowan House also provides a screening element such that the development will be hardly visible from any angle. Therefore, the overall magnitude of change will be *Neutral*.

Effect During construction and operation the impact will be Temporary, Imperceptible, Negative and Permanent, Imperceptible, Negative respectively.

R10 (Brookfield Estate and no.20 houses along Irishtown Road, north of the development site) – Distance from nearest site boundary = 300 - 775 m

Dwellings are a mixture of detached single and two-storey buildings with front and rear gardens with three central green spaces within the estate. Houses along Irishtown Road (L1773) are bungalows or dormers. Directly southwest of Brookfield is a large area zoned as open space. This estate sits on the northwestern boundary of what is considered Mullingar town. With open fields and pastures to the west and suburban landscape and hospitals to the east. The parkland directly to the south west of the estate is a naturalised pasture and provides an important amenity to the residents.

Sensitivity Receptors would be residents at home and therefore sensitivity is High.

Magnitude Houses sharing the border with the parkland have views towards the development site. From rear, second storey windows the development would be visible through angled and partially screened views. Views from houses within the estate will have visibility increasing screened by other houses. The retention of treelines along the north and northeast site boundary will aid in the onsite screening of the development. Further southwest of the open space the construction of phase 3 is currently ongoing. The proposed development is fitting with the expanding suburban setting and the overall magnitude of change will be *Low – Negligible*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

R11 (*College Hill and College Vale estates and 11 no. houses along Irishtown Road, north of the development site*) – Distance from nearest site boundary = 780 – 1250 m

Houses along Irishtown Road are bungalows with front and rear gardens separated by hedges. They are oriented in a slight northwest-southeast direction Houses in College Hill and College Vale estates are semi-detached and two-storey with front and rear gardens. This receptor also forms the boundary of what is considered Mullingar town. To the north, west and south the landscape is rural. St. Finian



College is situated directly to the east and Brookfield estate lies to the southeast. A Met Eireann weather station is located just off the Irishtown Road to the south. Irishtown road is fined with a thick hedgerow that occupies frontal views from the 11 bungalows. The surrounding fields afford a greater sense of openness.

Sensitivity Receptors would be residents at home and therefore sensitivity is *High*.

Magnitude Views of the development site will be clearest from the 11 houses along Irishtown road. However, visibility is restricted to the average eye level and screened by the thick hedgerow. Views will be increasingly screened as one moves away from Irishtown Road into the College Hill and College Vales estates. The overall magnitude of change will be Negligible – *Neutral*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Imperceptible, Negative.**

R12 (*32 no. rural houses along L1801 and L1773 (Irishtown Road, northeast of the site*) – Distance from nearest site boundary = 810 – 1250 m

These houses are located outside of the limit of Mullingar town on a gentle slope descending towards the site. They are detached bungalows and two-storey houses with front and rear gardens and thick partitioning hedges. These residences sit within a rural landscape. Housing is located along roads rather than in housing estates to the north and west, R9 lies to the south across open fields. The environment to the southeast is open fields partitioned by hedgerows and trees. Terrain rises gently to the north and northwest. Mullingar substation is located along the northwest side of the L1801 and is hidden by thick and tall hedges around it's boundary.

Sensitivity Receptors would be residents at home and therefore sensitivity is *High*.

Magnitude The development site sits at a lower elevation from these houses. Tallest elements of the development may be seen from rear windows or gardens for houses situated along the southeast side of L1801. Visibility will be screened by hedgerows present throughout the open fields. The development will integrate well with the suburban character of the outskirts of Mullingar town. It is unlikely to significantly impact the visual characteristics of the views from these houses due to distance and screening elements. The overall magnitude of change will be *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

Co1 (*Gaelscoil an Mhuillinn, southeast of the site*) – Distance from nearest site boundary = 75 m

Gaelscoil an Mhuillinn is a small Irish speaking primary school located along R393 oriented in a northeast-southwest direction. There are trees to the front and rear and a large green play area to the east. The school sits to the east of R2, northeast of R5, south of R3 and northwest of Co2. It is located in a suburban area strongly characterised by built elements.



Sensitivity Receptors would be students and staff and therefore sensitivity would be *Low*.

Magnitude Views of the development would be angled and screened by trees located around the school and along the southeastern border of the development site. Visibility would be limited. The overall magnitude of change would be *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Imperceptible, Negative**.

Co2 (Columb Barracks southeast of the site) – Distance from nearest site boundary = 180 m

The barracks house a cluster of 15 no. protected structures (RPS 019-021 to 036). Located along the R393, the barracks has a rich history that dates back as far as 1641. Its use as a military facility ceased in 2012. It is a feature of the Mullingar Heritage Trail. Future development of this site by the LDA is likely however, will not commence before the completion of the proposed development. The site is well connected through public transport with Mullingar train station located 500 m southeast.

Sensitivity Receptors will be site visitors and tourists therefore sensitivity is *High*.

Magnitude The barracks are surround by high walls that obscure any views from within the compound. Visibility from within upper storeys of the compound buildings may be clearer, though views would be angled and partially screened by R2, R3, and R5. The overall magnitude of change will be *Low*.

Effect During construction the impact will be **Temporary, Slight, Negative**. Once operational the impact will be **Permanent, Slight, Negative.**

Co3 (*Mullingar Educate Together, Mullingar Presbyterian Church, Mullingar Harriers and Grange United Football Pitch, southwest of the development site*) – Distance from nearest site boundary = 250 – 600 m

Mullingar Educate Together is a three storey L-shaped building accessed from the roundabout south of Rathgowan roundabout along the R394. East Along Grange Crescent is Mullingar Harriers, Mullingar Presbyterian Church and Grange United football pitch. The receptor group is surrounded by residential estates in R5 and R7, and separated from R8 by the R394.

Sensitivity Receptors would be staff and students at the school, attendees of the church and players and spectators on the sports grounds. Receptor sensitivity is therefore *Low*.

Magnitude The proposed development is at a slightly higher elevation than this receptor group and visibility will be obscured by R2 and R5. There may be angled or screened views through gaps particularly from the open spaces of the pitches. The overall magnitude of change is *Negligible*.

Effect During construction and operation the impact will be Temporary, Imperceptible, Negative and Permanent, Imperceptible, Negative respectively.



Co4 (*St. Mary's Hospital and Midland Regional Hospital Mullingar, northeast of the site*) – Distance from nearest site boundary = 580 m

These hospitals are located along Longford Road R1773 separated by R394 as Castlepollard Road. The hospitals are situated at the fringe of Mullingar town with a mixed landscape to the northeast and R4 and R10 to the southwest. Co5 is northwest of the hospitals. The Midlands Regional Hospital Buildings are of mixed height with the highest structures reaching 4 storeys. St. Marys hospital is comprised of old converted stone buildings reaching 3 storeys. Both hospitals are oriented in a northwest-southeast direction. The hospitals lie at the same elevation as the development site.

Sensitivity Receptors would be staff and patients, therefore sensitivity is Low.

Magnitude Visibility of the development will be minimal due to the orientation of the hospital buildings. Ground level views will be obscured by R3 and R10 and hedges located along the R394. The overall magnitude of change will be *Low to Negligible*.

Effect During construction and operation the impact will be **Temporary**, **Imperceptible**, **Negative** and **Permanent**, **Imperceptible**, **Negative** respectively.

Co5 (St. Finian's College, north of the site) – Distance from nearest site boundary = 700 m

St. Finian's is a national, mixed, Catholic secondary school at the boundary of Mullingar town. The school is at the edge of Mullingar town confines where the landscape to the north and northwest is dominated by pastures and fields partition by hedgerows. An industrial estate which has been scoped out of this assessment is located to the northeast of the site while to the south lies Brookfield estate. The surrounding environment reflects the transitionary position of the school between suburban and rural areas.

Sensitivity Receptors would be students and staff and therefore sensitivity is Low.

Magnitude The school sits upon an undulating terrain unlikely to influence the visibility of the site from the school. Most views will be angled, and partially or fully screened by Brookfield estate. The magnitude of change will be *Negligible*.

Effect During construction and operation the impact will be Temporary, Imperceptible, Negative and Permanent, Imperceptible, Negative respectively.

C1 (*Tesco within shopping centre, southeast of the development site*) – Distance from nearest site boundary = 220 m

A small shopping centre housing a large Tesco and several other businesses is located southeast of the site. There is a large car park to the north of the shopping centre. The carpark is bordered by trees on all sides and the shopping centre is surrounded by residences from R3 and R4. Columb Barracks (Co2) lies across the R393 to the southwest. The centre is a single storey building at sits at the same elevation as the development site.



Sensitivity Receptors would be staff and consumers, therefore sensitivity is Low

Magnitude Visibility of the development is obscured by houses and trees in R3. The magnitude of change will be *Negligible*.

Effect During construction and operation the impact will be **Temporary**, **Imperceptible**, **Negative** and **Permanent**, **Imperceptible**, **Negative** respectively.

C2 (*Small commercial cluster including a Spar and butcher*) – Distance from nearest site boundary = 500 m

These businesses are adjacent to R7 and Co3 along the R394. There are small grassy verges and trees located along the R394 near the roundabout to the northeast of the businesses. The establishments are situated in a predominantly residential environment.

Sensitivity Receptors would be staff and customers and therefore sensitivity is *Low*.

Magnitude The development may be visible from the small carpark attached to the premises. Views would be angled and partially or fully screened by vegetation, Mullingar Educate Together, R5 and R2. The magnitude of change will be *Negligible*.

Effect During construction and operation the impact will be Temporary, Imperceptible, Negative and Permanent, Imperceptible, Negative respectively.

OS1 (Zoned open space north of the site) – Distance from nearest site boundary = 30 m

This space has been zoned as open space in the Mullingar Local Area Plan 2014 – 2020. The site is a naturalised pasture with marshy characteristics, and shrubs lining the perimeter. There are no park structures or man-made elements such as pathways. Photomontage V2 in the associated Photomontage Booklet shows the proposed view from the eastern boundary of this open space.

Sensitivity Receptors would be residents of surrounding residential receptor groups. Sensitivity is Low.

Magnitude The development will be visible from the space, however, the proposed street tree planting within the proposed development design will provide some screening from street views although the degree of screening will be seasonal. While the space is a green amenity for local residents, it has no significant features or characteristics that set it apart from the surrounding pastures. The extent to which residents avail of the amenity is likely to be low. The magnitude of change will be *Low*.

Effect During construction and operation the impact will be Temporary, Imperceptible, Negative and Permanent, Imperceptible, Negative respectively.

OS2 (Rathgowan park southwest of the site) – Distance from nearest site boundary = 210 m



This is a small open space adjacent to Rathgowan Park estate which can be directly accessed by resident of the estate through a walkway which links with the parks internal winding footpath.

Sensitivity Receptors would be residents of surrounding residential receptor groups. Sensitivity is Low.

Magnitude The development will be visible from most of the park with possible screening from R2 and R5 at the southern corner. Proposed tree pts at the western corner will provide some screening of the taller elements. The level of screening may vary depending on the season. The magnitude of change will be *Low*.

Effect During construction and operation the impact will be **Temporary**, **Imperceptible**, **Negative** and **Permanent**, **Imperceptible**, **Negative** respectively.

10.4.3 Do Nothing Scenario

The site, which is currently under agricultural use as pastureland, would likely remain under agriculture and resemble its' current condition under the *Do Nothing Scenario*. There are no hazardous trees on site that require removal. Most other elements would evolve naturally (growth, death, regeneration). Due to grazing, natural regeneration is minimal. Without intervention, there is little evidence that new planting would arise, so it can be anticipated that the site would devolve in terms of biodiversity.

10.4.4 Temporary Impact

As witnessed on housing sites across the country, construction of the development would add temporary machinery to the landscape and cause high levels of soil disturbance. With vegetation removed internally, the construction scene will be visible and likely include views of temporary security fencing or hoarding. This is a *Negative* visual and landscape character impact, but it is a *Temporary* one. Implementation of short-term mitigation measures include tree protection measures and the phasing of vegetation removal and replanting. This will help mitigate negative impact on the local community.

10.4.5 Operational Impact

The highest *Permanent* landscape impact is the loss of agricultural land. As low-moderate quality agricultural lands that are increasingly being surrounded by development, loss of land here is perceived as better than loss of other peripheral agricultural land. Secondary *Irreversible* landscape impacts consist of partial vegetation removal along the R394 and within the site, plus an increase in impermeable surfaces and modification of natural drainage patterns. In terms of landscape character, the concept of the Rathgowan roundabout as a gateway node to the town centre is underscored. The R394 would approach it's full density zoning and clearly demarcate adjacent amenity lands for public use. This is viewed as an improvement, resulting in a *Slight, Positive* impact.

The highest operational visual impacts will be experienced by visual receptors closest to the site, particularly those in R1 which have south-facing views over the site. These impacts will be *Slight* to *Moderate Negative*, as described above. Other receptors will generally experience *Slight* to *Imperceptible Negative* visual impacts, due to increased screening and distance from the site.



10.4.6 Cumulative Impact

Cumulative Impact is the incremental impact created by the proposed development in the context of surrounding land uses, recent changes and considered future development. In this chapter, cumulative impact assesses the visual alterations in the landscape and the potential modification to the rural and suburban setting as a result of all recent and proposed development, regardless of who carried or will carry out the actions. In assessing future works, only reasonable, foreseeable actions are considered.

In a larger context, this side of town has experienced significant growth for Mullingar. The R394 provides the infrastructure which appears to allow this growth to function.

The proposed and permitted sites currently function as agricultural spaces. The change to residential housing will have significant landscape character impacts. These developments will solidify the town centre fringe, adding activity to Ashe Road with pedestrians and cyclists. They will also aid in defining the zoned Open Space without reducing the peripheral hedgerows. Biodiversity will be altered on site. But, with the retention of trees and provision of positive landscape road frontage, many of the alterations will be neutralised.

This development is likely to expedite the need for opening up the zoned *Open Space* and *Parkland* areas to the public. This will reside with the local authority, but will be a benefit to the larger community.

10.5 Proposed Mitigation Measures

10.5.1 Mitigation Measures at Design Stage

During the design and construction stages of the project, consideration should be given on how to avoid any adverse impacts on views from the visual receptors and impact on greater landscape character. As with any development, some degree of impact is inevitable and, wherever possible, measures should be identified to mitigate the adverse nature of these impacts. In this instance where there is a public presence and potential for impact on community character, the proposed mitigation prioritises minimising negative impacts at this interface.

- Provide a green link between the adjacent zoned *Open Space* and *Parkland* parcels, north and south of the site. This link shall be min. 10m in width and consist of mixed native species.
- Retain category "B2" trees within the northeast hedgerow, as a visual filter to the Open Space lands.
- Retain the Ash trees to the centre of the site that are in excess of 15m height, as a visual backdrop to numerous views.
- Retain the trees along the western boundary adjacent to the Rathgowan House laneway, as they also impact character on adjacent lands.
- Provide a solid buffer to the existing residences at the south end of the site.



To minimise visual impact, roofing material to any structures to be nonveflective with a dark KILLED. PAL colour tone.

10.5.2 Mitigation Measures at Construction Stage

- Trees to be retained should be fenced off at the commencement of construction the specified Root Protection Area (RPA) to avoid inadvertent felling or use of the ground under canopies for construction purposes.
- The attenuation zone adjacent to the R394 should be constructed early in the development and planted 6 months prior to its use as stormwater attenuation, to ensure soil settlement and vegetation establishment.
- Salvaged topsoil should not be stored more than 6 months if kept in piles more than 1m high. Rotate stockpiling to fit this time period, to ensure healthy aerated soil for use in the completed development.

10.6 Residual Impacts

The increased roadside animation and improved landscape character is likely to enhance the identity of the Ashe Road as a town centre gateway road.

The planting of the attenuation zone with native trees and damp meadow wildflowers, along with improved stormwater management, will provide long-term improvement to local habitat and result in a greater diversity of flora and fauna. This is assessed even in the context of development, as the long-term use of lands for grazing imposes its own habitat limitations and environmental impacts.

The proposals provide a visual relationship to adjacent amenity lands and improve the experience for R394 road users.

10.7 Significant Interactions

Recommendations were given to the Landscape Architect with regards the R394 landscape buffer and coordination of trees for retention and removal.

Other chapters cross-referenced in this assessment include the following:

- Chapter 2 Site Location and Project Description for coordination of proposed elements of the development
- Chapter 6 Hydrology for referencing of proposed attenuation and SuDS measures
- Chapter 12 Biodiversity for referencing of existing site and contextual ecology
- Chapter 13 Cultural Heritage and Archaeology cross referencing on the status and sensitivity of nearby historic structures

