

Limerick WWTP Upgrade and Regional Bioresource Centre

ElAR Chapter 15 - Landscape and Visual

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Formerly JB Barry Partners who became part of Egis in 2023

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Glossary and Defined Terms

Acronym	Description
AA	Appropriate Assessment
AASR	Appropriate Assessment Screening Report
ACP	An Coimisiún Pleanála
AD	Anaerobic Digestion
AGS	Aerobic Granular Sludge
AER	Annual Environmental Report
BOD	Biochemical Oxygen Demand
BC	Bioresource Centre
C	Carbon
CAFÉ	Clean Air for Europe Directive
CHP	Combined Heat and Power
DIN	Dissolved Inorganic Nitrogen
DSM	Digital Surface Model
DTM	Digital Terrain Model
ECJ	European Court of Justice
EIAR	Environmental Impact Assessment Report
ELV	Emission Limit Value
EPA	Environmental Protection Agency
ESB	Electrical Supply Board
EU	European Union
FOG	Fats Oils and Grease
FST	Final Settling Tank
GHG	Greenhouse Gas
GLVIA3	Guidelines for Landscape and Visual Impact Assessment 3 rd edition
HGV	Heavy Goods Vehicle
LCA	Landscape Character Area
LDP	Limerick Development Plan 2022–2028
LVIA	Landscape and Visual Impact Assessment
MLPS	Main Lift Pumping Station
MCA	Multi-Criteria Analysis
MRP	Molybdate Reactive Phosphate
IDA	Industrial Development Agency
IFAS	Integrated Fixed-Film Activated Sludge
N	Nitrogen
NDP	National Development Plan
NHA	National Heritage Area
NIS	Natura Impact Statement
NPF	National Planning Framework
NSO	National Strategic Outcomes
NSS	National Spatial Strategy
NWSMP	National Wastewater Sludge Management Plan
P	Phosphorous

PE	Population Equivalent - The amount of wastewater received at a treatment plant (and its design capacity) is measured in units known as population equivalent (or PE). The wastewater received from all sources, e.g. industrial, tourism, commercial, residential, etc., is converted into these units, with one unit of PE representing the wastewater treatment load typically generated by a single person.
PFF	Pass Forward Flow
PFT	Picket Fence Thickener
pNHA	Proposed National Heritage Area
PS (C/ree PS)	Pumping Station (Corcanree Pump Station)
QI	Qualifying Interest
RAS	Return Activated Sludge
RBC	Regional Bioresource Centre
RSES	Regional Spatial and Economic Strategy
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SBR	Sequencing Batch Reactor
SHC	Sludge Hub Centre
SIA	Stable Isotope Analysis
SID	Strategic Infrastructure Development
Sludge	Solid by-products of wastewater
SPA	Special Protection Area
SS	Suspended Solids
TDS	Total Dry Solids
THP	Thermal Hydrolysis Process
UCA	Urban Character Area
UWWTD	Urban Wastewater Treatment Directive
UWWTR	Urban Wastewater Treatment Regulations
WFD	Water Framework Directive
WWDA	Wastewater Discharge Authorisation
WWDL	Waste Water Discharge Licence
WWTP	Wastewater Treatment Plant
WSPS	Water Services Policy Statement
ZoVI	Zone of Visual Influence
ZTV	Zone of Theoretical Visibility

Departments and Stakeholders

Acronym (where applicable)	Departments & Stakeholders
ACP	An Coimisiún Pleanála
DPER	Department of Public Expenditure and Reform
CACNaT	Department of Climate Action, Communication Networks and Transport
DCCA	Department of Communications, Climate Action and Environment – Changed in 2020
DCHG	Department of Culture, Heritage and the Gaeltacht – Changed in 2020
DoF	Department of Finance
DHPLG	Department of Housing, Planning and Local Government – Changed in 2020
HLGaH	Department of Housing, Local Government and Heritage
EPA	Environmental Protection Agency
GSI	Geological Survey Ireland
GWS	Group Water Schemes
IFI	Inland Fisheries Ireland
ILI	Irish Landscape Institute
IR	Irish Rail (Iarnród Éireann)
UÉ	Uisce Éireann
LCCC	Limerick City & County Council
LA	Local Authority
LI	Landscape Institute
NMS	National Monuments Service
NPWS	National Parks & Wildlife Service
NRA	National Roads Authority
NTA	National Transport Authority
OPW	Office of Public Works
OSi	Ordnance Survey Ireland
SRA	Southern Regional Assembly
TII	Transport Infrastructure Ireland
TUS	Technological University of the Shannon

15 LANDSCAPE AND VISUAL

15.1 Introduction

JBA Consulting Ireland Ltd. has been commissioned by Egis Engineering Ireland Ltd. to undertake a Landscape and Visual Impact Assessment (LVIA) in relation to the upgrade of the Limerick Wastewater Treatment Plant (WWTP) (hereafter referred to as Limerick WWTP) and Corcanree Pump Station (PS) in Co. Limerick. Both proposals constitute the Proposed Development. This chapter of the EIAR will address the likely landscape and visual impacts associated with the Construction and Operational Phase of the Proposed Development.

15.1.1 Outline Project Description

The Proposed Development will cater for future population growth and industrial development in the area, in line with population projections for Limerick as set out in the National Planning Framework (NPF) Implementation Roadmap and the Southern Region Regional Economic Spatial Strategy (RSES). It will provide 20% Headroom allowance, in line with Uisce Éireann guidelines for large urban settlements. It will also ensure the WWTP continues to comply with requirements of the EPA Wastewater Discharge License (WWDL), Urban Wastewater Treatment Regulations (UWWTR) and other relevant Uisce Éireann Guidelines.

The initial upgrade works will cater for the +10-year growth projections, increasing to 285,000 PE including a future industrial committed load of 27,500 PE. There will be provision made in the civil infrastructural development of the plant (tank sizing and pipework) for the +25-year growth projections of 325,000 PE. However, a planning review will be required before any uplift above 285,000 PE can be instated.

Relevant drawings that should be read in conjunction with this report are included in Volume 3 of this EIAR.

15.2 Methodology

15.2.1 Relevant Legislation, Policy and Guidelines

The landscape assessment undertaken is made with regard to the sensitivity of the landscape and its ability to undergo change. The generally accepted guidelines as the best practice methodology that is followed in this assessment is:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA), third edition (2013), Landscape Institute (UK) as amended in August 2024 (LITGN-2024-01)

Additional guidelines that have been considered on national and local policy guidelines and best practice methodology, as outlined in the references below:

- 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 (2023-2030)
- Limerick Development Plan 2022-2028; Limerick County Council
- Southern Regional Assembly, Regional Spatial and Economic Strategy 2020 - 2032
- 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); Technical guidance notes for photomontages

- Amenity Trees and Woodland: A Guide to their Management in Ireland (2010); Tree Council 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

15.2.1.1 Limerick Development Plan 2022-2028

The Limerick Development Plan 2022-2028 (LDP) aims to see Limerick become a "green City region", with a focus on the River Shannon Estuary. The LDP includes a Landscape Character Assessment which identifies Landscape Character Areas for the wider county as well as Urban Character Areas (UCA) within Limerick City. Both developments are located within sites designated as UCAs.

The Proposed Development at the Limerick WWTP site is located in UCA 04, Southern Environs. The specific objectives for UCA 04 are:

- Infill and brown field development patterns to be favoured.
- Building Height Strategy to inform design of higher buildings and to direct high buildings to the areas in the City Centre that have been identified as having potential for increased building height, subject to a comprehensive case by case assessment at the planning application stage.
- Special Control Area in Mungret College Area to be retained, together with protected views.
- The Framework for Mungret to guide development in this location.
- Existing green spaces to be retained.

Corcanree PS is situated in UCA 01, City. The specific objectives for UCA 01 include:

- Create a pedestrian friendly river focused City Centre environment.
- Development to take into account the existing Architectural Conservation Areas and protected structures as set out under Volume 3.
- Infill and brown field development patterns to be favoured.
- Regard to be had to the Limerick 2030 Economic and Spatial Plan.
- New buildings within the City Centre should respond closely to the fundamental character and general scale of existing buildings and streetscape.

15.2.2 Appraisal Method for the Assessment of Impacts

The assessment is based on the recommendations in the Guidelines for Landscape and Visual Impact Assessment (GLVIA)¹ as published by the Landscape Institute (UK) and the Institute of Environmental Management and Assessment (3rd Edition, 2013, as amended in 2024). The assessment also considers the landscape character assessment within the Limerick Development Plan 2022-2028.

The LVIA was carried out in August 2025 and was undertaken through a combination of desk studies and field surveys by an environmental scientist and a chartered landscape architect.

The site-work stage involved the verification of nearby views from the initial desk-based study and observations of the site and surrounding area for the purposes of the impact assessment. Field notes are recorded in relation to the likes of topography, land use, unique landscape features and overall landscape character.

Photomontages were produced using images taken on-site. The photomontages produced are verified and have been produced in order to accurately illustrate the Proposed Development in the Operational Phase. The assessment of impacts was based on the on-site observations of the surveyors and considered the verified photomontages. Photography was collected during a site visit on the 30th of October 2025.

¹ Landscape Institute and Institute of Environmental Management & Assessment, 2013 Guidelines for Landscape and Visual Impact Assessment 3rd Edition. Routledge

15.2.2.1 Landscape Impact Assessment Criteria

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

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

15.2.2.2 Sensitivity of the Landscape

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

Landscape Sensitivity is determined by combining the value of the receptor and its susceptibility to the type of change arising from the development. Landscape Sensitivity 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.

15.2.2.3 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 Development. 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 Development 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.

15.2.2.4 Significance of Landscape 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 15-1 below.

TABLE 15-1: SIGNIFICANCE OF LANDSCAPE AND VISUAL EFFECTS BASED ON MAGNITUDE AND SENSITIVITY

Significance of Landscape and Visual Impacts based on Magnitude and Sensitivity					
	SENSITIVITY				
MAGNITUDE	Very high	High	Medium	Low	Negligible
Very high	Profound	Very significant	Significant	Moderate	Slight
High	Very significant	Significant	Moderate	Slight	Slight
Medium	Significant	Moderate	Slight	Slight	Imperceptible
Low	Moderate	Slight	Slight	Imperceptible	Imperceptible
Negligible	Slight	Slight	Imperceptible	Imperceptible	Imperceptible
Neutral	Imperceptible	Imperceptible	Imperceptible	Imperceptible	Imperceptible
Positive	Positive	Positive	Positive	Positive	Imperceptible

15.2.3 Visual Impact Assessment Criteria

15.2.3.1 Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric (or human-centric) 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 focussed 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 focussed 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 view point; and
- **Negligible** - Changes affecting restricted viewpoints.

Using information collected from the initial desktop investigation using aerial imagery and verified on site during the site visit, receptors were identified and grouped into various clusters: residential, community, commercial, open space and town centre. The individual receptor units (e.g. an individual dwelling) were then grouped with neighbouring receptors of the same category to make clusters (housing estates, industrial estates, etc.). The receptor groups were organised into three categories: combined receptors associated with both Limerick WWTP and Corcanree PS, receptors specific to Limerick WWTP, and receptors specific to Corcanree PS. See Figure 15-22 to Figure 15-24 for a plan of the receptor groups.

15.2.3.2 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.

15.2.3.3 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 15-1.

15.2.4 Impact Classification Terminology

Table 15-2 presents the Impact Classification Terminology as published in the EPA guidance document². Standard definitions are provided in this glossary, which permit the evaluation and classification of the quality, significance, duration and type of impacts associated with a Proposed Development on the receiving environment.

Each impact is described in terms of its quality, significance, extent, duration & frequency and type, where possible. The significance criteria as set out in the Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA (2022) have been used for the purpose of this assessment.

² Environmental Protection Agency (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports

TABLE 15-2: IMPACT CLASSIFICATION TERMINOLOGY

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 Effects	Imperceptible	An effect capable of measurement, but without significant consequences.
	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.
Duration and Frequency of Effects	Momentary	Effects lasting from seconds to minutes.
	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.
	Indeterminable	When the full consequences of a change in the environment cannot be described.
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost.
	Residual	The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
	Synergistic	Where the resultant effect is of greater significance than the sum of its constituents.

15.2.5 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 industrial units are within the observer's arc of vision at the same time) or in succession (where the observer has to turn to see the industrial units; and
- 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 paths. 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; and
- Cumulative effects on landscape character arise from two or more developments. Industrial units 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 proposal's site is located contains other industrial developments and therefore there is potential for cumulative effects on landscape and visual amenity.

This cumulative assessment focuses on any impacts arising from the development of the proposals in combination with the presence of other existing wastewater treatment infrastructure in the area. Although other wastewater treatment infrastructure is present within the wider area, these are either sufficiently small in scale and/or at sufficient distance that significant cumulative effects are not expected.

In addition to existing wastewater treatment infrastructure, the area also hosts the Castlemungret Cement Factory, a large facility with several tall elements. In some places, both the structures at Castlemungret and the Proposed Developments will be visible.

15.3 Baseline Environment

15.3.1 Timing of Surveys

The initial survey and fieldwork were carried out in February 2022, when deciduous vegetation was not in leaf. The levels of screening by vegetation were therefore low. A follow up site visit was carried out in October 2025. Where deemed relevant, consideration of seasonal changes in vegetation has been given within the assessment.

15.3.2 Site Photography

Photography was carried out during the site visit from locations where the Proposed Development was expected to be visible representing groups of visual receptors. Thirteen panorama photographs were taken from locations around the Proposed Development. The locations of these viewpoints are shown in Figure 15-1,

and the viewpoints shown in Figure 15-2 to Figure 15-14. Viewpoints were not selected on the N18 road due to the inability to safely collect photography and the low sensitivity of vehicles/drivers as receptors; N18 is not a scenic route. To adequately assess the impacts to the views of users of the N18, the assessors drove by the Limerick WWTP using the N18.

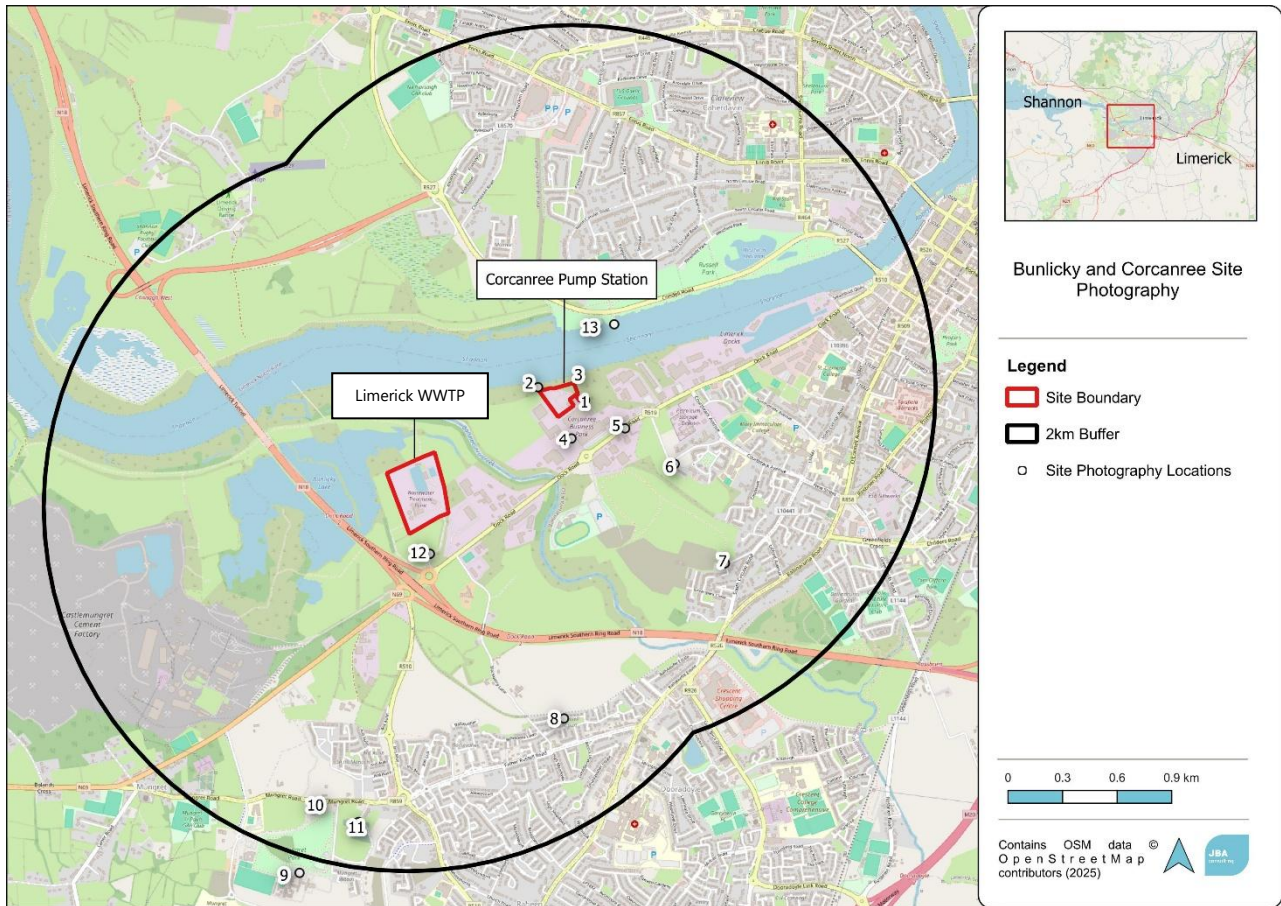


FIGURE 15-1 SITE PHOTOGRAPHY LOCATIONS



FIGURE 15-2: VIEW 1, FROM CAR PARK LOOKING NORTHEAST TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-3: VIEW 2, FROM SPILLANE'S TOWER, LOOKING SOUTHEAST INTO THE EXISTING CORCANREE PS



FIGURE 15-4: VIEW 3, FROM OPEN SPACE ALONG THE SOUTH BANK OF THE RIVER SHANNON ESTUARY, LOOKING SOUTHWEST INTO THE EXISTING CORCANREE PS AND TOWARDS THE PROPOSED DEVELOPMENT



FIGURE 15-5: VIEW 4, CORCANREE BUSINESS PARK, LOOKING NORTH TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-6: VIEW 5, FROM DOCK ROAD, LOOKING NORTHWEST TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-7: VIEW 6, FROM ALANDALE HOUSING DEVELOPMENT, LOOKING NORTHWEST TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-8: VIEW 7, LOOKING OVER THE OLD GREENPARK RACECOURSE AND NORTHWEST TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-9: VIEW 8, FROM RUSSELL COURT, LOOKING NORTH TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-10: VIEW 9, FROM MUNGRET COLLEGE, LOOKING NORTHWEST TOWARDS THE PROPOSED DEVELOPMENTS AT LIMERICK WWTP AND CORCANREE PS



FIGURE 15-11: VIEW 10, FROM MUNGRET MONASTERY, LOOKING NORTH TOWARDS THE PROPOSED DEVELOPMENT AT LIMERICK WWTP



FIGURE 15-12: VIEW 11, FROM MUNGRET MONASTERY, LOOKING NORTHEAST TOWARDS THE PROPOSED DEVELOPMENT AT CORCANREE PS



FIGURE 15-13: VIEW 12, FROM LIMERICK WWTP ACCESS ROAD OFF THE DOCK ROAD, LOOKING NORTH TOWARDS THE PROPOSED DEVELOPMENT



FIGURE 15-14: VIEW 13, FROM BARRINGTON'S PIER ON THE NORTH BANK OF THE RIVER SHANNON ESTUARY, LOOKING SOUTHWEST TOWARDS THE PROPOSED DEVELOPMENTS AT CORCANREE PS AND LIMERICK WWTP

15.3.2.1 Receptors

Using information collected from the site visit and desktop study, receptors were identified and grouped into various clusters: residential, community, commercial, open space and town centre. The surrounding area is a mix of various receptors, with the closest receptors being predominantly commercial and a greater variety as the distance from the sites increases. Commercial receptors are directly adjacent to both sites. Residential is predominantly located in the northeast and south of both sites and are separated from the sites either by urban clutter, vegetation or the River Shannon Estuary. Equally, the Community receptors are located

approximately 1.5km away from the nearest site boundary. Open Space is focused towards the settlement of Limerick and near residential receptors.

The expected magnitude of change is discussed in section 15.6.4, sensitivity of the receptors is weighted against the expected magnitude of change.

15.4 Landscape Character

15.4.1 Immediate Site Surroundings

Limerick WWTP

The site is located at the existing Limerick WWTP, on land south of the Shannon Estuary, west of Limerick City. The site is approximately rectangular and 8.9 ha in size. The site is surrounded by mature hedgerows which largely filter the WWTP from the surrounding areas, allowing only glimpses through gaps in the vegetation.

The site is adjacent to green fields in all directions, with most of the surrounding area rural in nature. To the west is the N18 road, which enters into the Limerick Tunnel to the northwest. Beyond this is the Castlemungret Cement Factory, with several very tall industrial elements which are visible from multiple locations in the area. To the east is an industrial area along Dock Road. The River Shannon Estuary and the low land around it is to the north.

Corcanree PS

The site is located at the existing Corcanree PS, within Corcanree Business Park on the south bank of the River Shannon Estuary. The site is approximately triangular and 1.8 ha in size. The site is surrounded by mature hedgerows which largely filter the PS from the surrounding areas, allowing only glimpse views through gaps in the vegetation.

To the south is Corcanree Business Park, and other industrial sites are along Dock Road. The Shannon Estuary and the low land around it is to the north. Green fields are to the east and west.

15.4.2 Wider Character

The wider landscape is both rural and suburban, being on the outskirts of Limerick City, near to the industrial areas of Dock Road, the Limerick Docks, and Castlemungret, but with large green areas of both public open space and agricultural fields, with the River Shannon being an important aspect. The topography is generally flat, though it rises gently to the south. Residential areas are present but are not in the immediate vicinity of either site.

The north bank of the Upper Shannon Estuary is more residential than the south in this area, with most of the built-up area on that side of the river in use for housing, with small commercial areas spaced intermittently.

Land on the south bank around the two sites is mostly agricultural or open space, with industrial uses along Dock Road, and residential areas further south in Dooradoyle.

15.5 Visual Amenity

15.5.1 Summary of Visual Amenity

Both sites are located on level, low ground close to the banks of the Shannon Estuary and are surrounded by tall trees and hedgerows. The existing vegetation means that the majority of both developments are visible via glimpse views only. The taller elements of both sites, i.e., the tops of storage tanks, are visible from a limited number of areas in the surrounding 2km.

The wider landscape is relatively flat, but with frequent vegetation. Overall, the impression is of a landscape with medium distance views, with limited long-distance views due to existing vegetation. The River Shannon Estuary is a dominating part of the local landscape.

Zone of Theoretical Visibility (ZTV) plans were produced for the assessment for both sites. In the absence of vegetation or buildings, visibility is good in the immediate vicinity of both sites. Visibility reduces with increasing distance.

15.5.2 Zone of Theoretical Visibility and Zone of Visual Influence

The ZTVs for Limerick and Corcanree (Figure 15-15 and Figure 15-16 respectively) give an indication of the surrounding landscape with potential visibility of the Proposed Development sites. Figure 15-17 shows the overlap between the two ZTVs, where both sites are visible.

For both sites, the ZTV illustrates the area with potential visibility within a 2km radius from the centre of the site, using a viewer eye height of 1.6m. The ZTV for the Limerick WWTP is based on a structure height of 4m and the ZTV for the Corcanree PS is based on a height of 3m. 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.

When existing vegetation and built environment in the area are taken into consideration, that visibility on the ground is constrained to a greater extent than is implied with the ZTV. This is shown with the use of digital surface models (DSM) instead of DTM. The result is the Zone of Visual Interest (ZoVI). The ZoVI shows that visibility of the Proposed Development is limited to glimpse filtered views through vegetation, and indirect views from certain taller buildings.

For Limerick WWTP, the ZoVI is constrained largely to the immediate area surrounding the site, with some higher points in the surrounding area also having visibility.

Corcanree PS's ZoVI is similar to the Limerick WWTP's, with greater extents over the River Shannon.

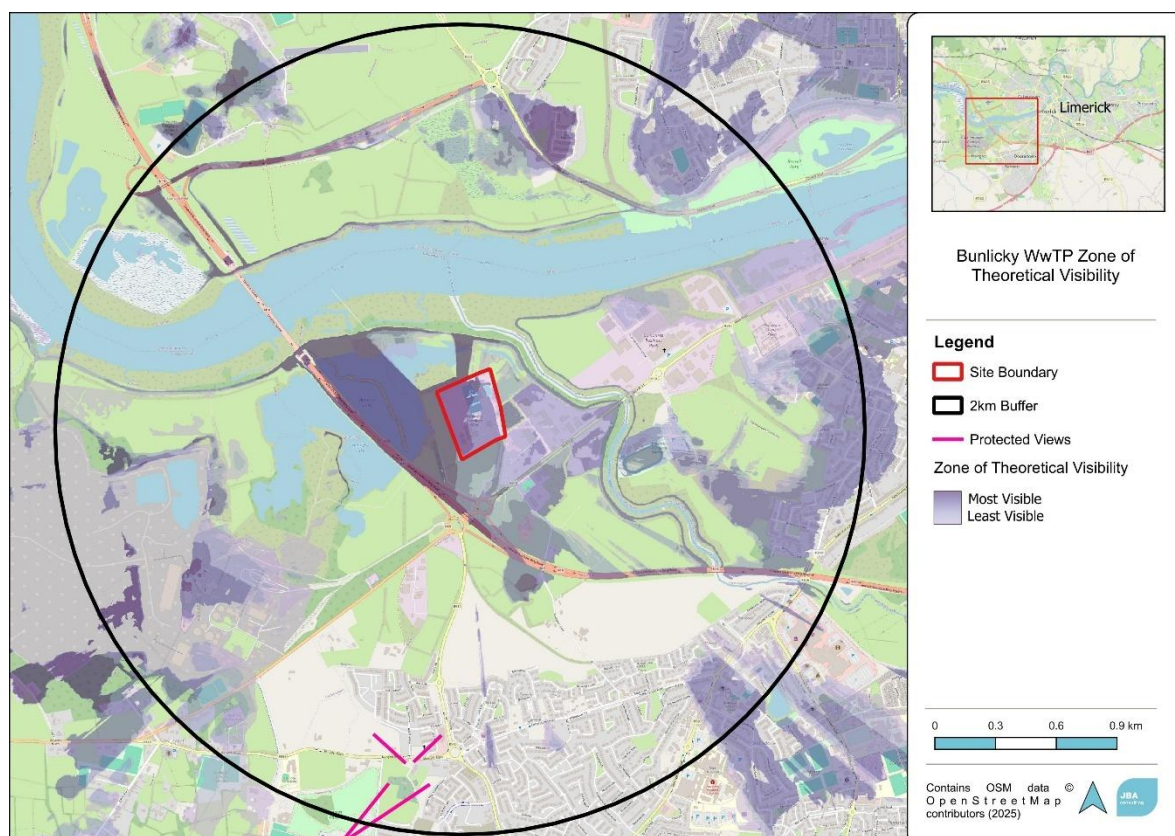


FIGURE 15-15: ZONE OF THEORETICAL VISIBILITY - LIMERICK WWTP

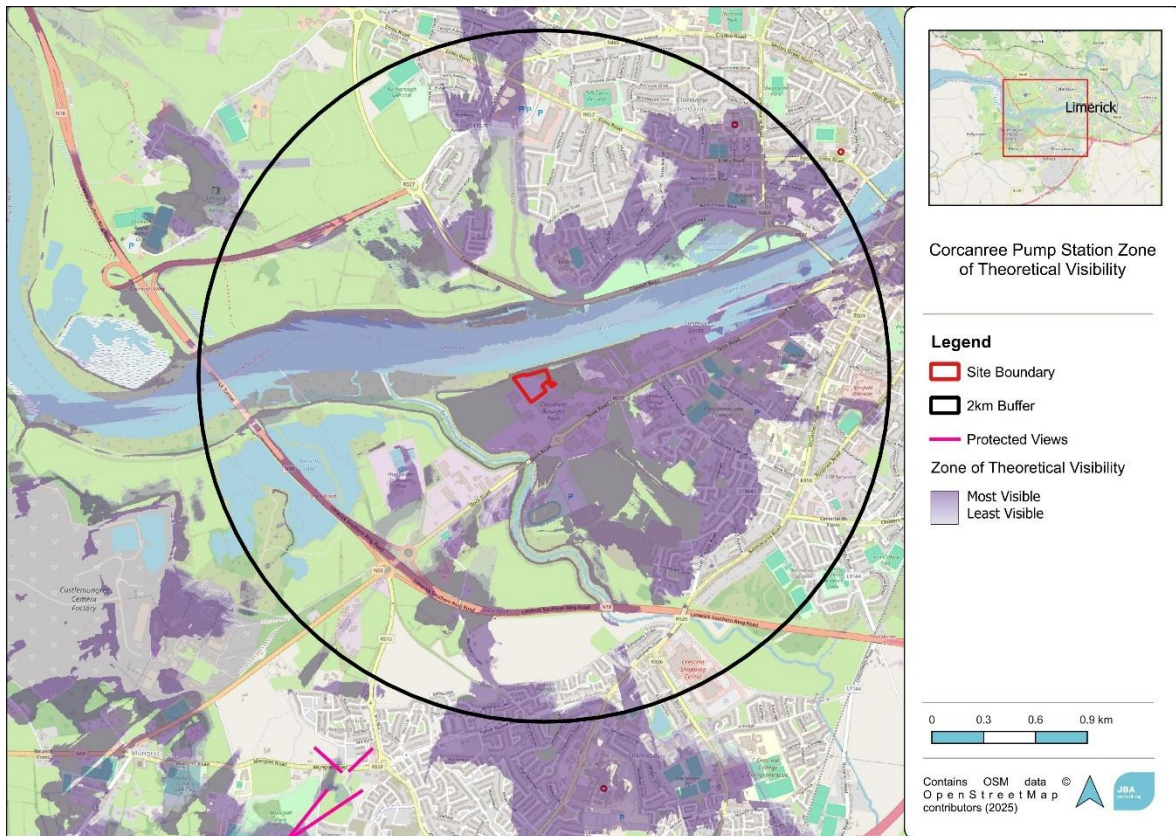


FIGURE 15-16: ZONE OF THEORETICAL VISIBILITY - CORCANREE PS

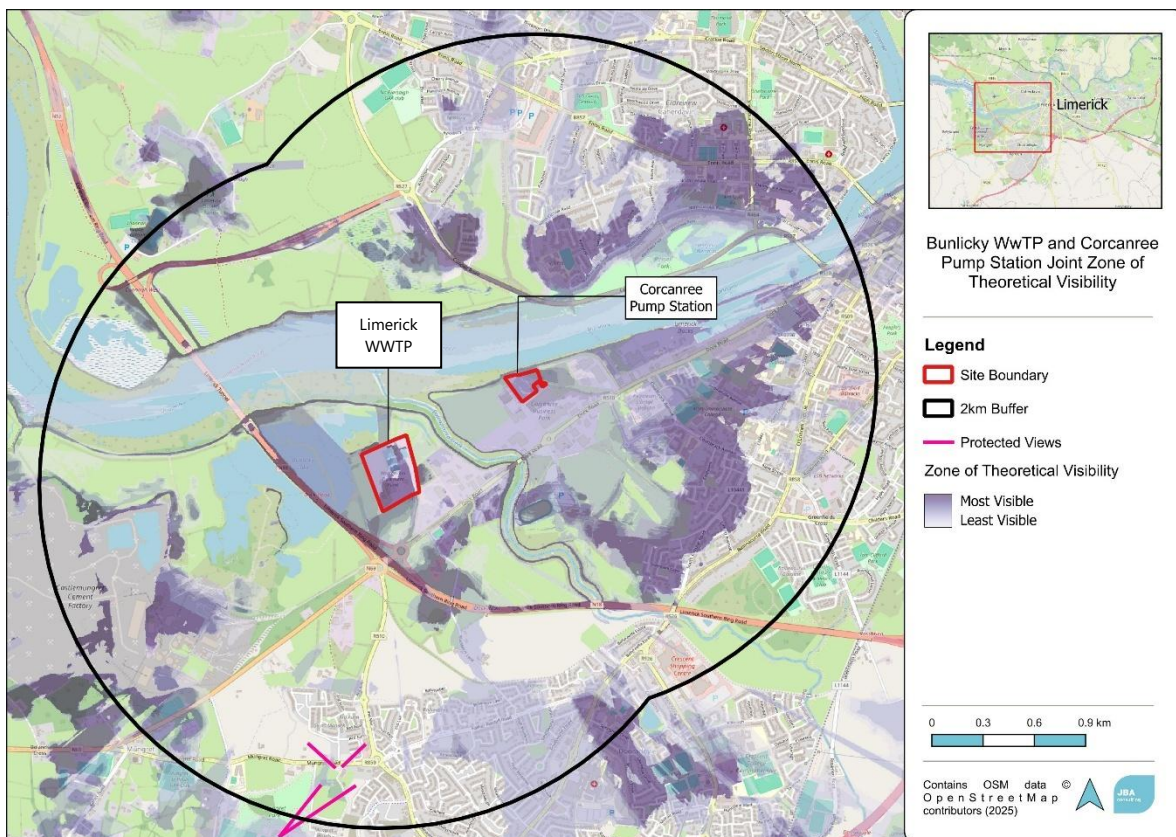


FIGURE 15-17: COMBINED ZONE OF THEORETICAL VISIBILITY FOR BOTH SITES

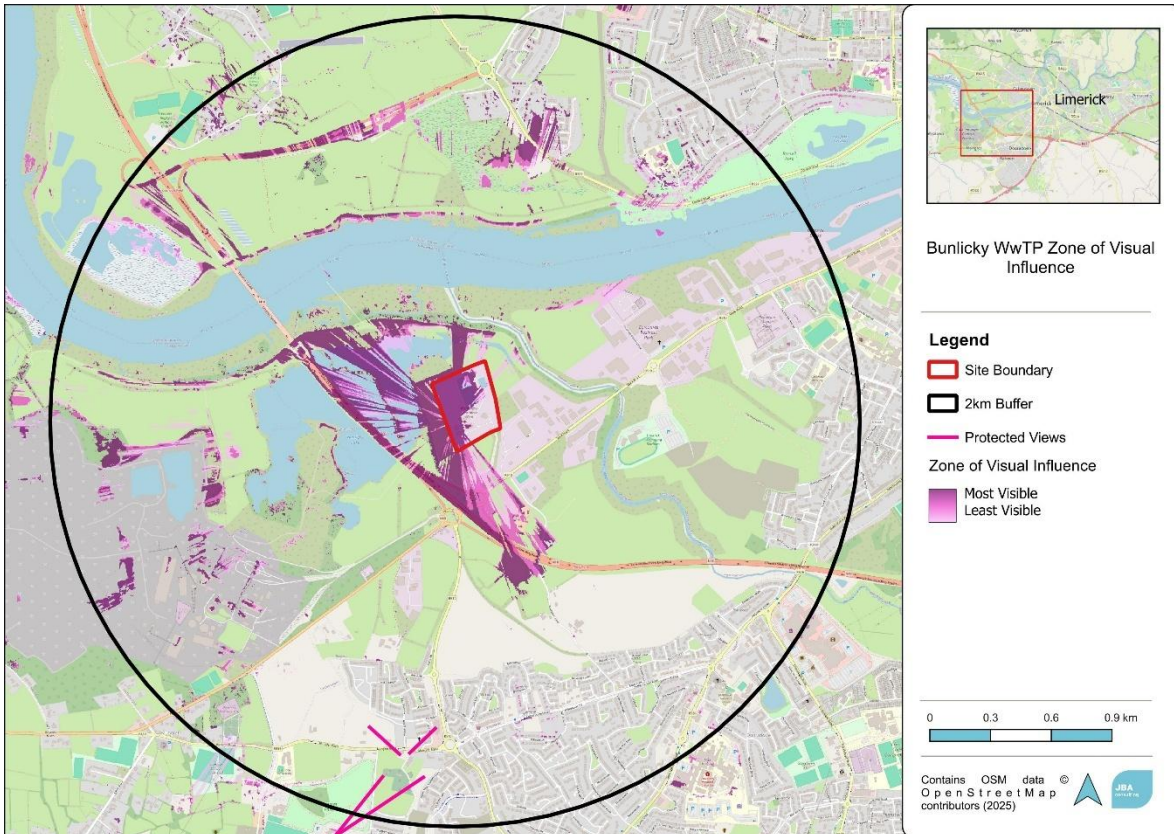


FIGURE 15-18: ZONE OF VISUAL INFLUENCE - LIMERICK WWTP

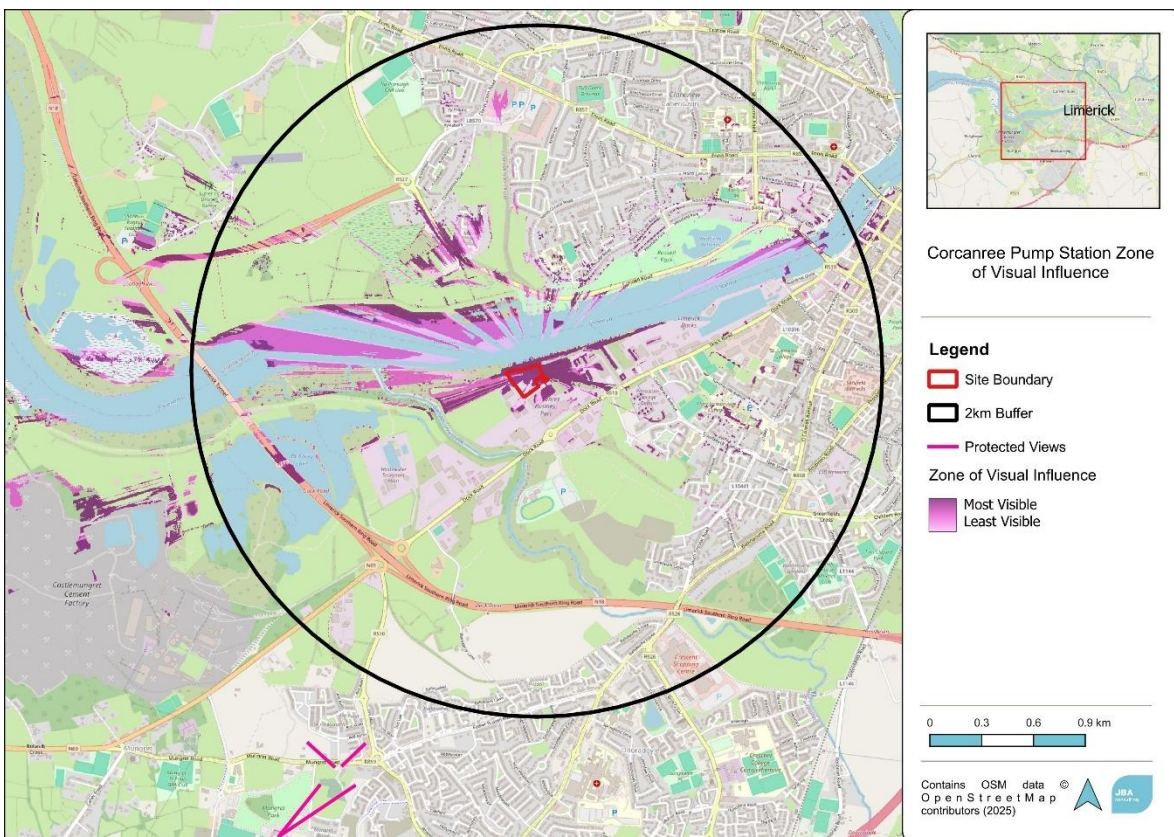


FIGURE 15-19: ZONE OF VISUAL INFLUENCE - CORCANREE PS

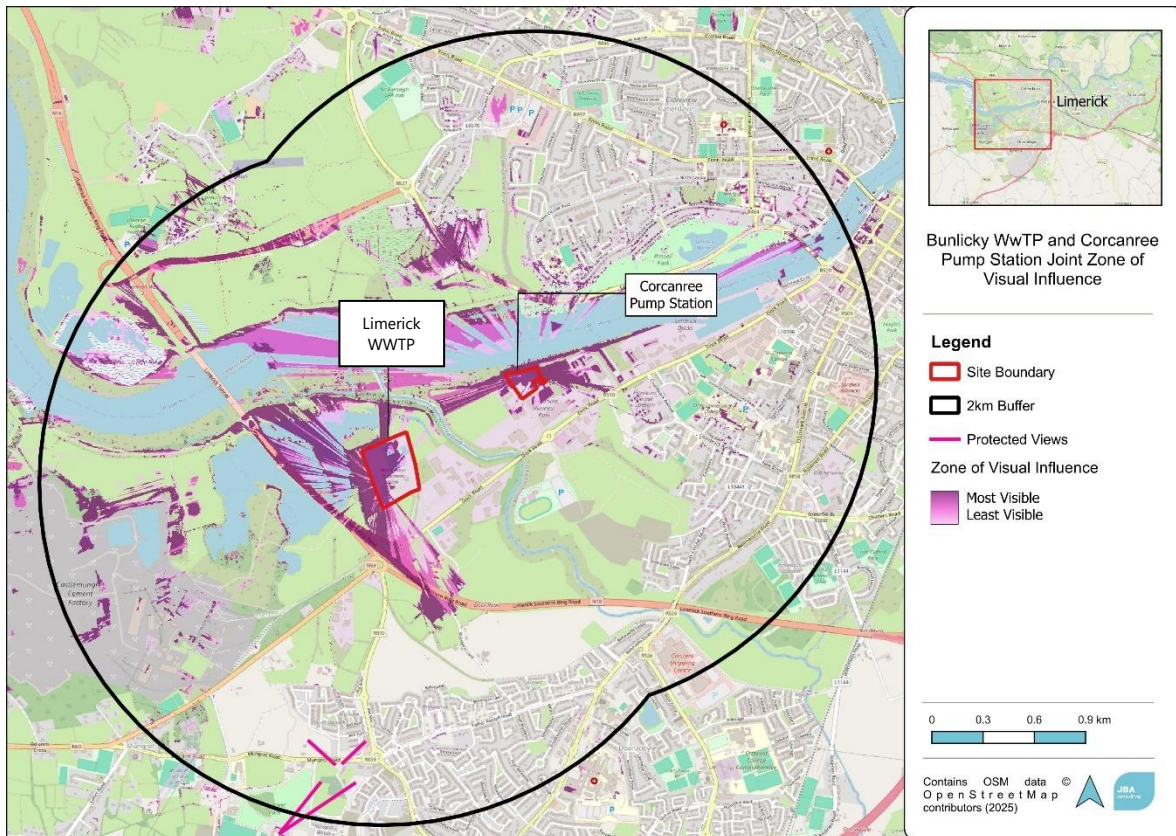


FIGURE 15-20: COMBINED ZONE OF VISUAL INFLUENCE FOR BOTH SITES

15.5.3 Protected Views and Prospects

The Limerick Development Plan 2022-2028 identifies protected views which have important amenity, tourism, economic and cultural value for the County and its people.

Two of these views are within the ZTV for Corcanree PS, and are governed by Objective EH O35, Special Control Areas Mungret. The objective states:

"It is an objective of the Council to protect and maintain the integrity of the Special Control Areas at Mungret Monastic Complex, incorporating all national monuments and protected views including:

- 1) View from Mungret College northeast to the Monastic Complex and;
- 2) Views northwest across the Monastic Complex.

Development within this area will be prohibited with the exception of leisure facilities and moderate extensions to existing dwellings, which will not adversely impact on the character or setting of the complex. The Council will facilitate the provision of interpretative panels and directional signage for Mungret Monastic Complex and park, will be considered in consultation with local community groups."

These views are shown in Figure 15-18.

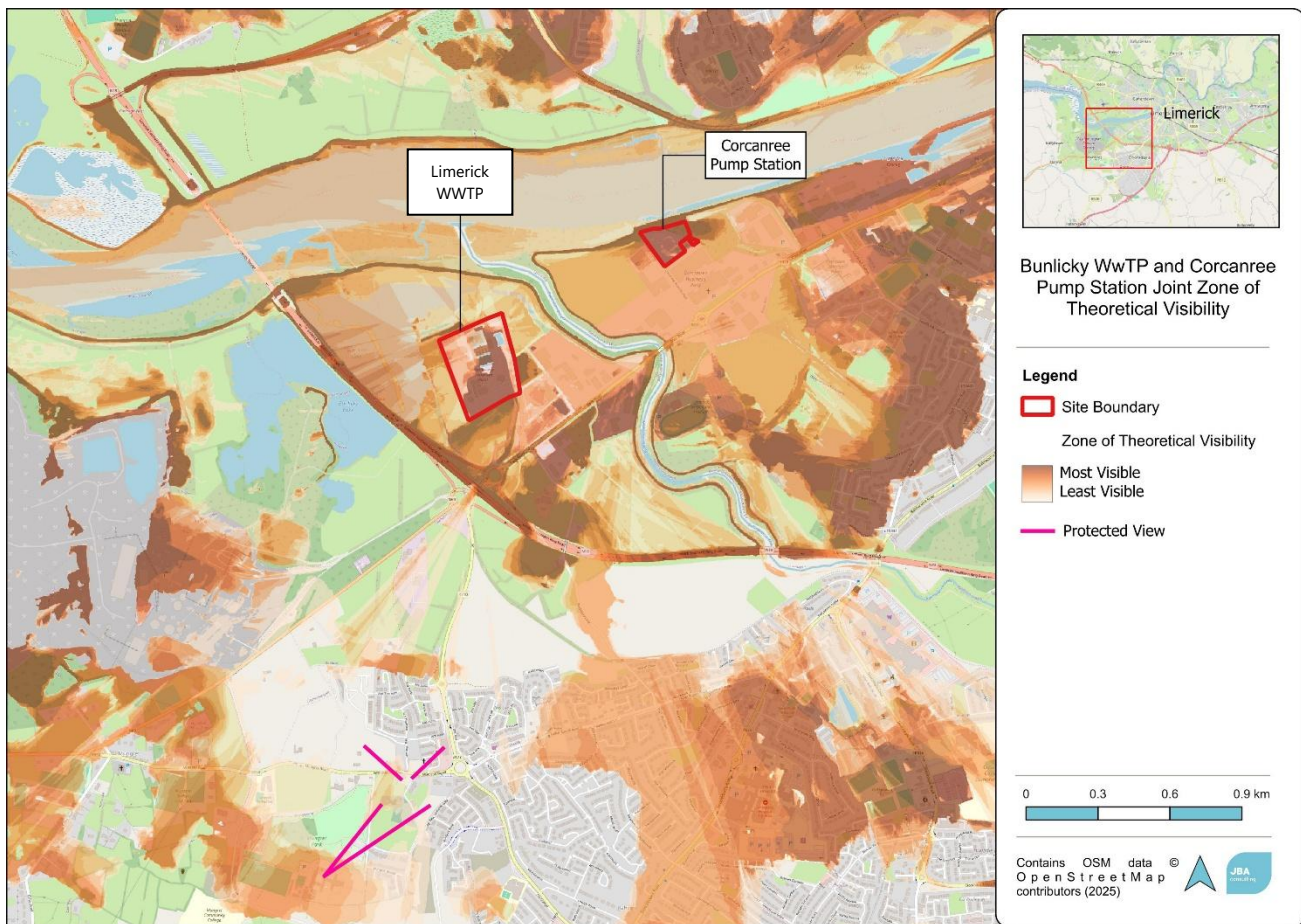


FIGURE 15-21: PROTECTED VIEWS

15.6 Potential Impacts

15.6.1 Do-Nothing Impacts

The do-nothing scenario will result in a continuation of the existing landscape and visual environment in the area. There would be no construction work at both sites and no new structures. There is the possibility that without upgrade works taking place, the Limerick WWTP and Corcanree PS would have insufficient capacity, which could result in untreated sewerage being discharged to the River Shannon. This would impact negatively on the landscape and views from visual receptors. The visual and landscape effect in this scenario is low.

15.6.2 Assessment of effects during Construction Phase

The construction phase will be temporary and is expected to be approximately at between 36 and 48-months in duration. Construction is likely to be completed on a phased basis with periodical use of construction cranes that would temporarily break beyond the ridge of the existing site boundary screening vegetation for both developments.

Construction is expected to be confined to the Limerick and Corcanree sites. All the proposed works are expected to remain partly concealed by the existing mature vegetation surrounding both sites as well as by the existing buildings within the sites.

15.6.3 Assessment of Effects on Landscape Character

UCA 1 City Centre, where the existing Corcanree PS is located, is a small-scale character area comprising the most historic section of Limerick City. It is characterised by a diverse composition of regions, ranging from the medieval layout of English Town and the market-based heritage of Irish Town to the Georgian architecture of Newtown Pery. Industrial history is evident in the Transition Area, Docklands, and Cleaves, while modern development and civic functions are prominent in the Quays, Colbert Quarter, and surrounding districts.

UCA 4 Southern Environs, the location of Limerick WWTP, is similarly a small-scale urban character area, located along the edge of the River Shannon. This UCA is characterised by modern housing developments from the 1960s onward, alongside major institutions such as the Regional Hospital, Raheen Business Park, and the Crescent Shopping Centre.

During construction, temporary hoarding will be put in place on the edge of the construction zone for both sites. This will be of timber construction with an approximate height of approximately 2.5m. Construction traffic, machinery and plant, materials, and personnel will form new temporary elements in both landscapes. It is expected that construction will be contained entirely within the existing sites. There would be a temporary removal of some mature vegetation for site access, but these trees would be reinstated. Removal of the tree line between existing and new areas at Corcanree PS will be permanent, but a new tree line on the outer perimeter of the new site will compensate loss and provide screening.

A site compound for the main Limerick WWTP will be constructed in an adjacent field north of the existing site boundary. The area comprises an existing hardstanding that has previously been used as a construction and storage compound and is characterised by disturbed ground with limited vegetation. The EIAR also assesses a potential use of an additional construction compound located to the southern part of the existing WWTP site. The field is bounded by existing mature treeline/hedgerow that will help partially screen works. Security fencing will also be used on the perimeter of the field to help provide screening, should this area be utilised as additional construction compound. Corcanree works will make use of site compound within the site's footprint, surrounded by timber hoarding similar to that surrounding the construction zone.

The construction process will result in an increase in activity at both sites and on the surrounding access roads, which will have a negative effect on the surrounding landscape. However, these impacts will be temporary in duration and low in magnitude of change for the construction phase only.

Due to the existing mature vegetation surrounding both sites, views of construction activities and associated materials, machinery, and personnel will be intermittent, experienced primarily through glimpse views from the riverside walk visiting the Spillanes Tower by the Corcanree PS, or surrounding buildings. The works will be filtered to a large degree by this vegetation.

Views of the digester tanks located in the Bunlicky site can be experienced from the N18 due to the raised road compared to the lower lands in which the site sits. Vehicles and traffic are classified as low sensitivity receptors. The N18 route, located to the west of both sites, is not a protected route and is not designated as a scenic corridor. This view is screened by existing mature vegetation that only allows limited visibility. As shown in Figure 15-15 to Figure 15-21, the proposed sites have a level of visibility from the N18.

In accordance with the methodology, within 0.5km the localised magnitude of change during construction will be medium. In accordance with Table 15-1 and Table 15-2 the effect on landscape character during the Construction Phase within 0.5km will be temporary, moderate, negative.

Effects will reduce with distance and beyond 0.5km the magnitude of change on the Landscape Character Area will be negligible. In accordance with Table 15-1 and Table 15-2 the effect on landscape character beyond 0.5km will be temporary, slight, negative reducing to imperceptible with distance.

The highest effects on the landscape character are expected to be moderate, experienced during the construction phase and will be temporary to short-term and reversible.

The expected effects on Landscape are **not significant**.

15.6.4 Assessment of Effects on Visual Amenity

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. Receptors with the same function and general location were grouped. The receptor groups were organised into three categories, combined receptors associated with both Limerick WWTP and Corcanree PS, receptors specific to Limerick WWTP, and receptors specific to Corcanree PS. See Figure 15-22

to Figure 15-24 for a plan of the receptor groups. These receptor groups are discussed below with an assessment of the effects on their visual amenity.

Where receptors are expected to be impacted by both sites, the distance from both sites has been included in the receptor description. Where only one distance has been provided, it is expected that the proposals from only one site may have an impact on the relevant receptor.

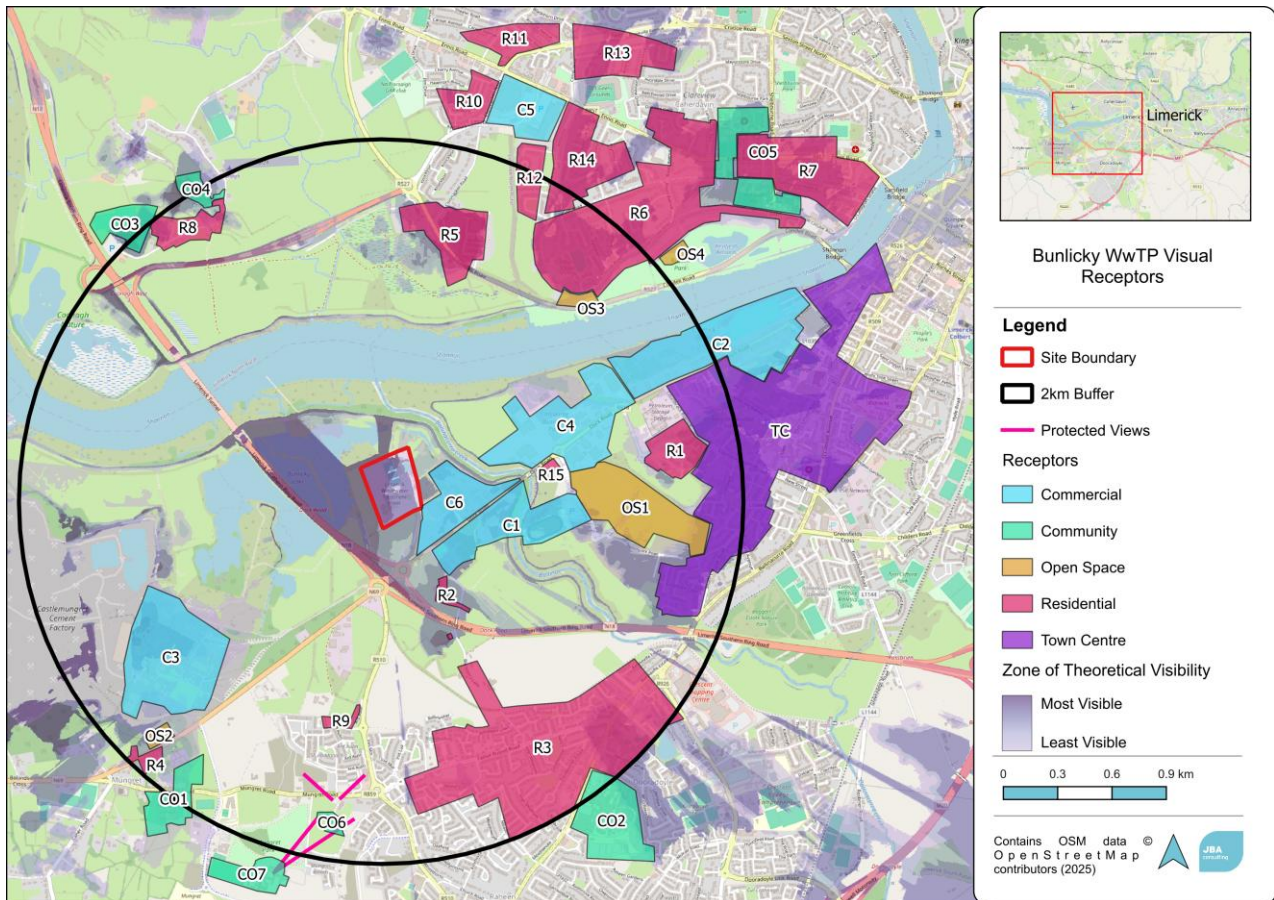


FIGURE 15-22: VISUAL RECEPTORS - LIMERICK WWTP

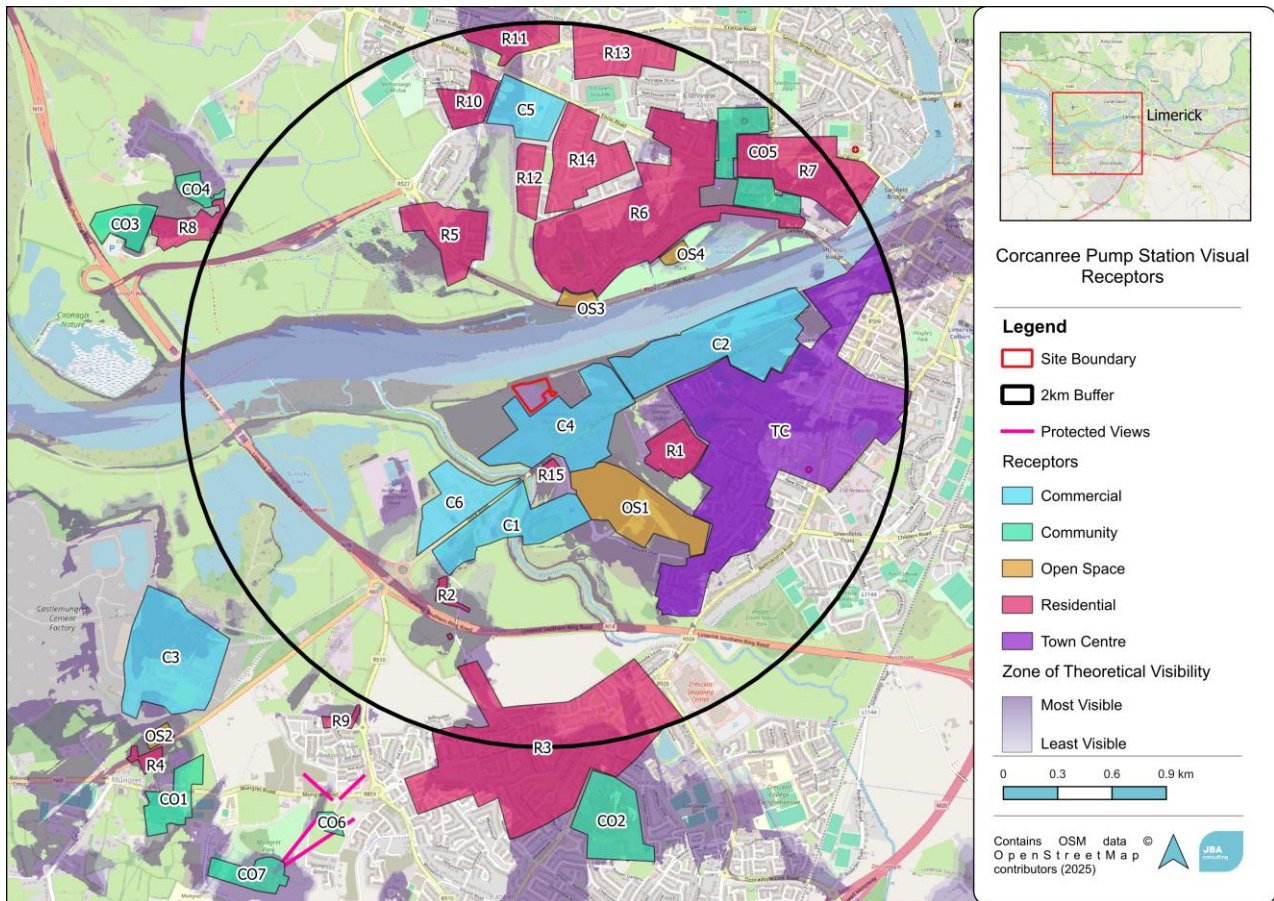


FIGURE 15-23: VISUAL RECEPTORS – CORCANREE PS

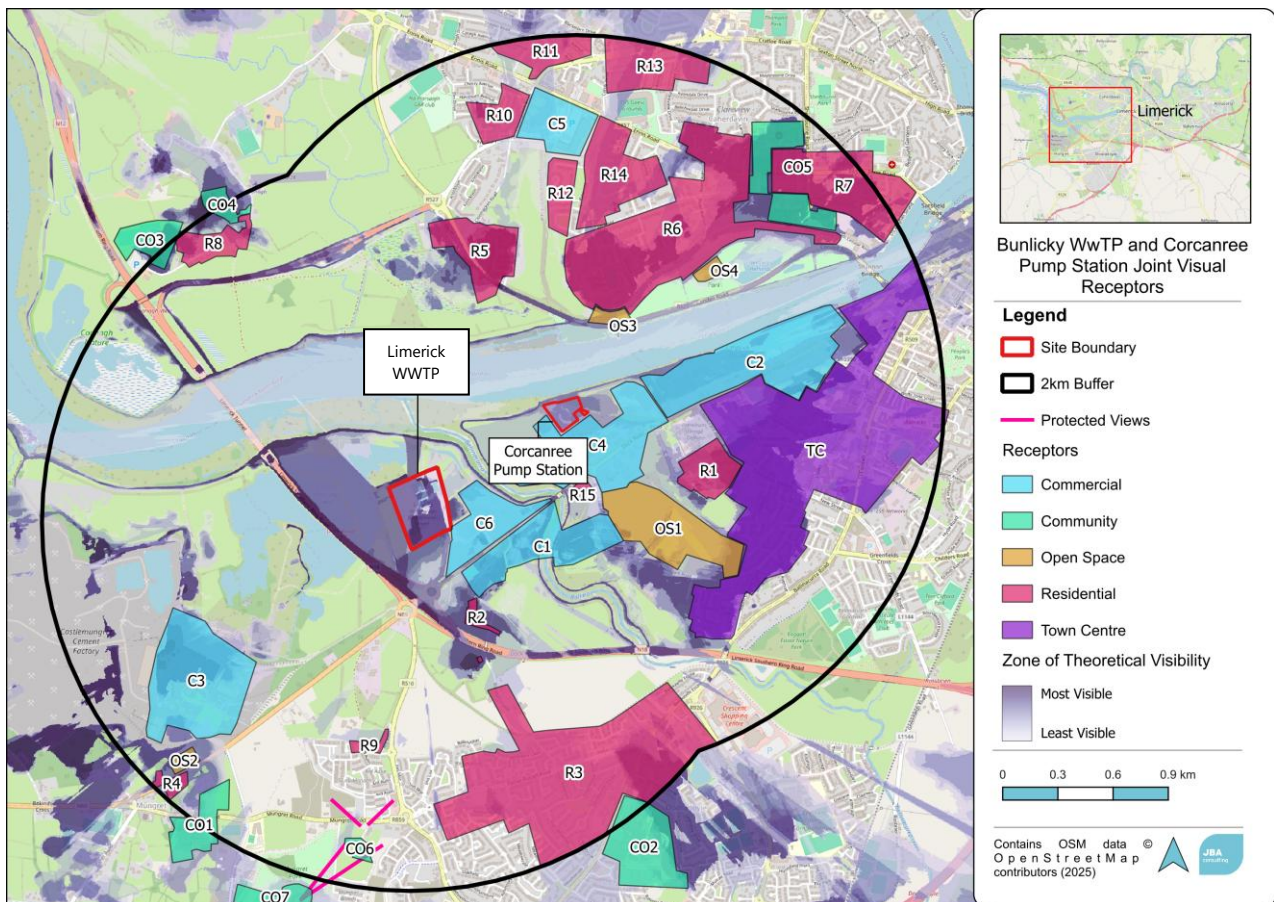


FIGURE 15-24: COMBINED VISUAL RECEPTORS FOR BOTH SITES

15.6.4.1 Residential Receptors and Settlements

R1 (0.6 – 0.9km southeast of Corcanree PS/ 1.3 – 1.6km east of Limerick WWTP) A group of semi-detached and terraced three-storey duplex dwellings.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwellings have main views facing in a variety of directions but predominantly away from the Proposed Developments, with a small number of dwellings facing the northwest, towards the Limerick and Corcanree Sites. Views from the dwellings are expected to be partially filtered by existing tall vegetation along the property boundaries and existing built environment. The existing vegetation is largely retained. In winter, when the absence of deciduous vegetation will be allowing more views towards the Proposed Development, the magnitude of change is expected to be medium to low.

The retention of all existing vegetation surrounding Limerick WWTP, the proposed addition of planting surrounding Corcanree PS and the built-up nature of the surrounding areas are expected to reduce the magnitude to negligible.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, slight, negative.

R2 (0.4 – 0.65km southeast of Limerick WWTP / 1 – 1.15km southwest of Corcanree PS) One single-storey and one two-storey detached dwellings.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude Main views of these dwellings are in a northwest-southeast orientation, away from both Proposed Developments. These dwellings are expected to have no views of the Proposed Development, due to screening by other buildings and vegetation. Where experienced, the views would be angled and indirect. In accordance with the methodology, the magnitude of change would be negligible.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, slight, negative.

R3 (0.7km southeast of Limerick WWTP/ 1.3km southwest of Corcanree PS) A single-storey detached dwelling.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwelling has main views facing to the northeast, away from the Proposed Development. This dwelling is expected to have limited to no views of the Proposed Developments, due to screening by existing buildings and deciduous vegetation. In accordance with the methodology, the magnitude of change would be negligible.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, slight, negative.

R4 (0.9 – 1.9km southwest of Limerick WWTP/ 1.4 – 2.4km southwest of Corcanree PS) The residential parts of Dooradoyle which are within the combined ZTV for the Proposed Developments. These are mainly two-storey semi-detached homes, arranged in several housing estates, with small front and rear gardens, generally bounded by garden walls and small hedgerows or trees.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwellings are primarily two-storey houses and are arranged in housing estates. Views from the houses are close-distance and are focused on the immediate areas surrounding the houses, i.e., the streets and gardens to their front and rear. The scale and distance of the proposals at Limerick and Corcanree mean that there will be no visibility from this receptor group. In accordance with methodology the magnitude of change will be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R5 (0.9– 1.35km northeast of Limerick WWTP / 0.65 – 1.2km northwest of Corcanree PS) A group of detached single-storey dwellings along the N69.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwellings have main views facing to the north and south. This receptor group is expected to have no views of either of the Proposed Developments due to the indirect angle and screening by vegetation. In accordance with the methodology, the magnitude of change would be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R6 (0.4 – 1.7km northwest of Corcanree PS/ 1.2 – 2.5km northeast of Limerick WWTP) A group of large detached two-storey dwellings in Clonmacken, and Moineir housing estate, which comprises two-storey detached, semi-detached and terraced houses.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwellings have front and rear gardens, typically separated by a low wall or hedge, and are oriented in either a north-south direction or east-west direction. These dwellings are filtered from the Limerick and Corcanree sites by mature trees and hedgerows to the edges of garden areas, and to nearby road boundaries. Construction activities at either site will not be visible from the dwellings. In accordance with methodology the magnitude of change will be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R7 (1.5 – 2.15km northeast of Corcanree PS/ 2.5 – 3.0km northeast of Limerick WWTP) A large group of detached and semi-detached two-storey dwellings within housing estates at Kilrush, Clareview and Farranshone More. The houses have small front and rear gardens, typically separated by a low wall or hedge, and are mostly oriented in a northwest-southeast direction, away from the Proposed Developments.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude These dwellings are filtered from both sites by mature trees and hedgerows to the edges of garden areas, and by existing buildings. Construction activities at the site will not be visible from the dwellings. In accordance with methodology the magnitude of change will be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R8 (1.8 – 2.2km northwest of Corcanree PS/ 1.6 – 1.9km northwest of Limerick WWTP) A large group of semi-detached and terraced two-storey dwellings within housing estates at Farranshone More. The houses

have small front and rear gardens, typically separated by a low wall or hedge, and are mostly oriented in a north-south direction.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude This receptor group is expected to have no views of either of the Proposed Developments due to the indirect angle and screening by vegetation and other buildings. In accordance with the methodology, the magnitude of change would be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R9 (1– 1.15km southwest of Limerick WWTP) A group of detached single-storey and two-storey dwellings at Coonagh West.

Sensitivity Receptors are residents at home. Sensitivity is high.

Magnitude The dwellings have main views facing to the northeast and southwest. These dwellings are expected to have no views of the Proposed Developments, due to screening by other buildings and vegetation. In accordance with the methodology, the magnitude of change would be neutral.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R10 (1.45 – 1.75km north of Corcanree PS) A group of semi-detached two-storey dwellings in Ashbrook housing estate.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude The dwellings have either a north-south or east-west orientation, with rear gardens bordered by vegetation. These dwellings are expected to have no views of the proposed Corcanree PS, due to screening by vegetation and existing buildings. If experienced, the views would be angled and partially filtered by vegetation surrounding the Proposed Development at Corcanree. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, slight, negative.

R11 (1.75 – 2.0km northwest of Corcanree PS) A group of semi-detached two-storey dwellings at Caherdavin. The dwellings have small front and rear gardens, typically separated by a low wall or hedge, and are mostly oriented in a northeast-southwest direction.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude The dwellings are mostly oriented in a north-south direction. Dwellings in this receptor group are expected to have no views of the Proposed Development at Corcanree PS due to either screening by vegetation or existing buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be permanent, imperceptible, negative.

R12 (0.9 – 1.3km north of Corcanree PS) A group of semi-detached two-storey dwellings at Shannabooly.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude These dwellings primarily have views in a have northeast-southwest orientation. These dwellings are expected to have no views of the Proposed Development at Corcanree due to screening by vegetation and other buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

R13 (1.6 – 2.0km north of Corcanree PS) A group of semi-detached two-storey dwellings north of the TUS Gaelic Grounds. The dwellings have small front and rear gardens, typically separated by a low wall or hedge, and are mostly oriented in a northeast-southwest direction.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude The dwellings are mostly oriented in a north-south direction. Dwellings in this receptor group are expected to have no views of the Proposed Development at Corcanree PS due to either screening by vegetation or existing buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

R14 (0.9 – 1.5km northeast of Corcanree PS/ 1.95 -2.1km northeast of Limerick WWTP) A group of semi-detached two-storey dwellings south of the TUS Gaelic Grounds. The dwellings have small front and rear gardens, typically separated by a low wall or hedge, and are mostly oriented in a northeast-southwest direction.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude The dwellings are mostly oriented in a north-south direction. Dwellings in this receptor group are expected to have no views of the Proposed Development at Corcanree PS or Limerick WWTP due to either screening by vegetation or existing buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

R15 (0.5km south of Corcanree PS/ 0.7km east of Limerick WWTP) a collection of mobile homes and caravans with four facility and amenity buildings near the centre. Complex is fenced off with a 6ft wooden fence.

Sensitivity Receptors are residents at home. Sensitivity is *high*.

Magnitude The dwellings are a mixture of orientational direction. Dwellings in this receptor group are expected to have no views of the Proposed Development at Corcanree PS or Limerick WWTP due to either screening by vegetation or existing buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

15.6.4.2 Town Centre Receptors

TC (0.5 – 1.96km east of Corcanree PS/ 1.4 – 2.8 km east of Limerick WWTP) A mixture of residential, community and commercial properties within the city centre of Limerick. Residential dwellings primarily consist of two-storey semi-detached and terraced houses, arranged within several housing estates. These homes

typically include small front and rear gardens, enclosed by low garden walls, hedgerows, or trees. Community facilities in the area include sports grounds, places of worship, and educational institutions. Commercial properties range from larger industrial estates to individual premises located along main streets.

Sensitivity Receptors are residents at home, staff, students, employees and customers. Sensitivity is *low* to *high*.

Magnitude This receptor group has main views facing in a variety of directions, with only a small number of properties having an orientation directly towards the Proposed Developments. Most properties in this group are expected to have limited to no views of the Proposed Development due to either screening by vegetation or existing buildings, or the indirect angle. If views are experienced, they would be mid to long-range and the same as the view of the surrounding industrial units. In accordance with the methodology, the magnitude of change would be *negligible* to *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, slight* to *imperceptible, negative*.

15.6.4.3 Open Space Receptors

OS1 (0.4 - 1.2km southeast of Corcanree PS / 0.8 - 1.6km southeast of Limerick WWTP) former Greenpark Racecourse, a former horse racing venue which is set to be developed as a large residential development.

Sensitivity Receptors are users of the open space. Sensitivity is *low*.

Magnitude Due to the dense vegetation surrounding this receptor, views of the Proposed Developments are not anticipated. If views are experienced, they would only be from the northwest corner of the space and would be heavily filtered by vegetation. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

OS2 (1.6km southwest of Limerick WWTP/ 2.6km southwest of Corcanree PS) Castlemungret Football Pitch has primary views in a northeast-southwest orientation.

Sensitivity Receptors are users of the football pitch. Sensitivity is *low*.

Magnitude The park has main views facing towards both sites, however views are not anticipated due to heavy screening by a mixture of deciduous and evergreen vegetation, in addition to screening by other buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

OS3 (0.4km northeast of Corcanree PS/ 1.1km northeast of Limerick WWTP) Ted Russell Park located at Kilrush along the north bank of the River Shannon.

Sensitivity Receptors are users of the riverside park. Sensitivity is *medium*.

Magnitude The park has main views facing to the west and east, away from the Proposed Developments. However, the most scenic views are to the south, over the River Shannon and towards the Proposed Developments, particularly the development at Corcanree. There is some screening of views due to deciduous vegetation surrounding the park and on the bank of the River Shannon, as well as surrounding both Proposed Developments. Any views of either Proposed Development would be similar to the existing views of the neighbouring commercial properties and industrial estates. In accordance with the methodology, the magnitude of change would be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, slight, negative*.

OS4 (0.9km northeast of Corcanree PS/ 1.7km northeast of Limerick WWTP) Westfields Amenity Area located at Farranshone More, along the north bank of the River Shannon.

Sensitivity Receptors are users of the riverside park. Sensitivity is *medium*.

Magnitude The park has main views facing to the north and south, towards the River Shannon. Views of the Proposed Developments would be indirect and heavily screened by deciduous vegetation, both surrounding the park and on both side of the River Shannon. Any views of either Proposed Development would be similar to the existing views of largely industrial areas. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

15.6.4.4 Community Receptors

CO1 (1.6 – 2.15km southwest of Limerick WWTP / 2.6 – 3.15km southwest of Corcanree PS) Mungret St Pauls GAA Club and Castlemungret Cemetery. The GAA club has one full size playing pitch and a training pitch.

Sensitivity Receptors are players, spectators and visitors of the cemetery. Sensitivity is *low to medium*.

Magnitude The main pitch has primary views facing in a northeast-southwest orientation and the cemetery has primary views in an east-west direction. If experienced, views of the Proposed Developments would be filtered by existing buildings and vegetation. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

CO2 (1.7 – 2.3km southeast of Limerick WWTP/ 2.0 – 2.6km south of Corcanree PS) University Hospital Limerick includes the main hospital building, an emergency department and several car parks.

Sensitivity Receptors are staff, patients and visitors. Sensitivity is *high*.

Magnitude The site is currently well screened by the existing vegetation, and the buildings to the north and northwest of the hospital campus. Any views towards either Proposed Development will be experienced in this context, and thus are highly constrained. The Proposed Developments may be partially visible from upper floors, and these views would be angled. In accordance with the methodology the magnitude of change will be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, slight, negative*.

CO3 (1.7 – 2km northwest of Limerick WWTP/ 2 – 2.5km northwest of Corcanree PS) Shannon Rugby Football Club and The Acres Driving Range. Shannon Rugby Club includes two full size playing pitches, two training pitches, a clubhouse and a car park. The driving range caters to individuals, events and parties.

Sensitivity Receptors are players, spectators, staff and customers of the driving range. Sensitivity is *low*.

Magnitude Main views of this receptor group face away from both Proposed Developments. Views of either Proposed Development are not expected due to heavy screening by vegetation and other buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

CO4 (1.9 – 2.2km northeast of Corcanree PS/ 1.6 – 1.9km northeast of Limerick WWTP) St Camillus Hospital, Limerick Lawn Tennis Club, John F Kennedy Memorial School, Our Lady of The Rosary Parish and Ardscoil Rís are all located within Farranshone More.

Sensitivity Receptors are players, spectators, staff, students, patients and visitors. Sensitivity is *low to high*.

Magnitude This receptor group primarily has main views in a north-south orientation, away from both Proposed Developments. Views of either Proposed Development is not anticipated from this receptor group due to screening by other buildings and vegetation. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

CO5 (1.4 – 1.9km southwest of Corcanree PS) Mungret Monastic Complex is a site of historical and cultural significance and contains several features protected by the National Monuments Service including a church, cemetery and historic town.

Sensitivity Receptors are visitors to the site and cemetery. Sensitivity is *high*.

Magnitude The Monastic Complex has main views facing in a northwest-southeast direction, away from the Proposed Development at Corcanree. If views are experienced, they would be indirect and partially screened by vegetation and existing buildings, including existing industrial buildings which are taller than the Proposed Development. In accordance with the methodology, the magnitude of change would be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, slight, negative*.

CO6 (2.45km southwest of Corcanree PS/ 1.6 – 1.7km south of Limerick WWTP) Mungret Community College is a secondary school which includes a large building, outdoor basketball courts, a playing pitch and a car park.

Sensitivity Receptors are staff and students. Sensitivity is *low*.

Magnitude The site is located on higher elevation than the surrounding area and may have long-range views of the Proposed Development at Corcanree PS, particularly from upper floors of the building. Any views will be partially screened by vegetation and other buildings. Similarly views of Limerick WWTP are screened by residential dwellings and vegetation that separate the site from the receptor. In accordance with the methodology the magnitude of change will be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

15.6.4.5 Commercial Receptors

C1 (0.25 – 0.95km southeast of Limerick WWTP/ 0.4 – 1.0km southwest of Corcanree PS) Urban One Fitness, Riverside Park, Alltec Fibre Ltd and Limerick Greyhound Stadium.

Sensitivity Receptors are employees, truck drivers and customers. Sensitivity is *low*.

Magnitude The properties of this receptor group located along Dock Road are expected to have partial, short-range views of both Proposed Developments. These views will be filtered by deciduous vegetation and other

industrial and commercial buildings. The view of the Proposed Developments would be similar to the existing surrounding buildings. In accordance with the methodology, the magnitude of change would be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

C2 (0.4 – 1.5km east of Corcanree PS/ 1.2 – 2.4km northeast of Limerick WWTP) The Limerick Docks receptor group contains several commercial and industrial businesses including Hi Vis Workwear, James J O'Donnell Engineering Ltd, Atlas High Performance Centre and Limerick Cargo Handling.

Sensitivity Receptors are employees and customers. Sensitivity is *low*.

Magnitude Main views of this receptor group are either in a northwest-southeast direction, or in a northeast-southwest direction, towards the Proposed Developments. Most of this receptor group is expected to have no views of the Proposed Development due to the heavy screening by existing buildings and some vegetation. If views are experienced, they would be mid-range and partially screened by vegetation and buildings, and would be similar to other views in the surrounding area. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

C3 (1.0 – 1.76km southwest of Limerick WWTP/ 2.1 – 2.8km southwest of Corcanree PS) Irish Cement Limerick compound.

Sensitivity Receptors are employees and truck drivers. Sensitivity is *low*.

Magnitude Irish Cement contains several buildings facing in different orientations, none of which are directly towards either Proposed Development. Any views of either of the Proposed Developments would be mid-range, angled and partially screened by vegetation or other buildings. In accordance with the methodology, the magnitude of change would be *negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

C4 (immediately adjacent - 0.5km southeast of Corcanree PS/ 0.35 – 1.3km east of Limerick WWTP) Commercial properties located within Corcanree Business Park including Amber Safety Park and Orona MidWestern, and commercial properties located along Dock Road including Grassland Agro Limited and Roche's Feeds.

Sensitivity Receptors are employees and customers. Sensitivity is *low*.

Magnitude Main views of this receptor group face in either a northwest-southeast or northeast-southwest orientation, directly towards the Proposed Development. Properties directly bordering the Proposed Development are expected to have views which will be partially filtered by deciduous vegetation, and which will be similar to existing views of the Corcanree PS. Properties which are further away from the Proposed Development are expected to have limited to no views due to screening by other buildings. In accordance with the methodology, the magnitude of change would be *low to negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

C5 (1.3 - 1.7km north of Corcanree PS) Jetland Shopping Centre and Ennis Road Retail Centre at Caherdavin.

Sensitivity Receptors are employees and customers. Sensitivity is *low*.

Magnitude Main views of this receptor group face in a northwest-southeast orientation, away from the Proposed Development. This receptor group is expected to have no views of the Proposed Development due to the indirect angle and screening by vegetation and existing buildings. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2 the visual effect would therefore be *permanent, imperceptible, negative*.

C6 (immediately adjacent - 0.6km southeast Limerick WWTP/ 0.4 – 1.05km north of Corcanree PS)

Several commercial properties along Dock Road including Mr Binman, AutoXpress Limerick, Auto Diesel Services, Tara Oil and Sign Zone.

Sensitivity Receptors are employees and customers. Sensitivity is *low*.

Magnitude Main views of this receptor group primarily face in a northeast-southwest orientation, away from the Proposed Development. If visible, the Proposed Development will be heavily screened by vegetation and other buildings for most of this receptor group. Properties closest to the Proposed Development may experience more direct views during winter months when the surrounding deciduous vegetation is not in full leaf. In accordance with the methodology, the magnitude of change would be *low to negligible*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

15.6.4.6 Protected Focal Points and Views

There are two protected views identified within the Limerick Development Plan 2022-2028 located in the study area (Figure 15-21).

Other Protected Focal Points and Views are more distant and outside the study area, and are scoped out of this assessment as no effects are expected.

View from Mungret College northeast to the Monastic Complex This view is located at Mungret Community College and looks towards the Mungret Monastic Complex to the northeast.

Sensitivity is *very high*.

Magnitude Staff, students and visitors to the school may have long-range views of the Proposed Development at Corcanree. Any views will be partially screened by vegetation and other buildings. In accordance with the methodology the magnitude of change will be *low*.

Effect In accordance with Table 15-1 and Table 15-2, the highest visual effect would therefore be *permanent, moderate, negative*.

Views northwest across the Monastic Complex This view is located at the Mungret Monastic Complex and contains views to the northeast and northwest.

Sensitivity is *very high*.

Magnitude Visitors are not expected to experience views of the Proposed Development due to the presence of existing buildings and tall dense vegetation. In accordance with the methodology, the magnitude of change would be *neutral*.

Effect In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible, negative*.

15.6.4.7 Summary of Visual Impacts

The highest visual effects during the construction phase arise from temporary, moderate, negative impacts within 0.5 kilometres of the sites, where the magnitude of change reaches medium due to construction activity, hoarding, cranes, and increased movement within the existing boundaries. Although extensive mature vegetation provides substantial screening, the most pronounced construction-related visual effect occurs at the protected view from Mungret Community College toward the Monastic Complex, where sensitivity is very high and the temporary construction effect is assessed as moderate and negative. All other receptors experience only slight or imperceptible effects because of distance, orientation, or effective screening and the construction impacts are temporary, short-term, and reversible.

In the operational phase, the magnitude of change reduces across all receptor groups, with most experiencing negligible or imperceptible permanent effects due to retention and enhancement of vegetation, the built-up context, and the limited visibility of the completed development. The most notable operational effect again occurs at the protected view from Mungret Community College to the Monastic Complex, where a permanent moderate negative effect is predicted because of the high sensitivity of the view and the low but perceptible magnitude of change. Across all remaining receptors, operational effects remain slight or imperceptible, and no significant landscape or visual effects are expected beyond this single protected view.

The expected effects on Visual amenity are **not significant**. Table 15-3 shows a summary of the identified receptors for both Limerick WWTP and Corcanree PS.

TABLE 15-3 VISUAL IMPACT SUMMARY TABLE

Receptor	Description	Sensitivity	Magnitude of change		Predicted Impact & Duration	
			Construction	Operation	Construction	Operation
R1	Semi-detached and terraced three-storey duplex dwellings 0.6–0.9km SE C/ree PS 1.3–1.6km E Limerick WWTP	<i>High</i>	<i>Medium–Low</i>	<i>Negligible</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
R2	One single-storey and one two-storey detached dwelling 0.4–0.65km SE Limerick WWTP 1–1.15km SW C/ree PS	<i>High</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
R3	Single-storey detached dwelling 0.7km SE Limerick WWTP 1.3km SW C/ree PS	<i>High</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
R4	Residential estates in Dooradoyle 0.9–1.9km SW Limerick WWTP 1.4–2.4km SW C/ree PS	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R5	Detached single-storey dwellings along N69 0.9–1.35km NE Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>

Receptor	Description	Sensitivity	Magnitude of change		Predicted Impact & Duration	
			Construction	Operation	Construction	Operation
	0.65–1.2km NW Corcanree PS					
R6	Detached dwellings in Clonmacken and Moineir housing estate 0.4–1.7km NW C/ree PS 1.2–2.5km NE Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R7	Housing estates at Kilrush, Clareview and Farranshone More 1.5–2.15km NE C/ree PS 2.5–3.0km NE Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R8	Semi-detached and terraced houses at Farranshone More 1.8–2.2km NW C/ree PS 1.6–1.9km NW Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R9	Detached dwellings at Coonagh West 1–1.15km SW Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R10	Semi-detached houses in Ashbrook estate 1.45–1.75km N C/ree PS	<i>High</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
R11	Semi-detached dwellings at Caherdavin 1.75–2 km NW C/ree PS	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible negative</i>	<i>Permanent, imperceptible negative</i>
R12	Semi-detached houses at Shannabooly 0.9–1.3km N C/ree PS	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible negative</i>	<i>Permanent, imperceptible negative</i>
R13	Semi-detached dwellings north of TUS Gaelic Grounds 1.6–2km N C/ree PS	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R14	Semi-detached dwellings south of TUS Gaelic Grounds 0.9–1.5km NE C/ree PS 1.95–2.1km NE Limerick WWTP	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
R15	Mobile homes and caravans complex with amenity buildings 0.5km S C/ree PS	<i>High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>

Receptor	Description	Sensitivity	Magnitude of change		Predicted Impact & Duration	
			Construction	Operation	Construction	Operation
	0.7km E Limerick WWTP					
TC	Mixed residential, community and commercial properties in Limerick city centre 0.5–1.96km E C/ree PS 1.4–2.8km E Limerick WWTP	<i>Low–High</i>	<i>Negligible</i>	<i>Negligible–Neutral</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight–imperceptible, negative</i>
OS1	Former Greenpark Racecourse open space 0.4–1.2km SE C/ree PS 0.8–1.6km SE Limerick WWTP	<i>Low</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
OS2	Castlemungret Football Pitch 1.6km SW Limerick WWTP 2.6km SW C/ree PS	<i>Low</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
OS3	Ted Russell Park riverside park 0.4km NE C/ree PS 1.1 km NE Limerick WWTP	<i>Medium</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
OS4	Westfields Amenity Area riverside park 0.9 km NE C/ree PS 1.7 km NE Limerick WWTP	<i>Medium</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
CO1	Mungret St Pauls GAA Club and Castlemungret Cemetery 1.6–2.15km SW Limerick WWTP 2.6–3.15km SW C/ree PS	<i>Low–Medium</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
CO2	University Hospital Limerick 1.7–2.3km SE Limerick WWTP 2–2.6km S C/ree PS	<i>High</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
CO3	Shannon Rugby Club and Acres Driving Range 1.7–2km NW Limerick WWTP 2–2.5km NW C/ree PS	<i>Low</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
CO4	Hospitals, schools, parish and tennis club at Farranshone More 1.9–2.2km NE C/ree PS	<i>Low–High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>

Receptor	Description	Sensitivity	Magnitude of change		Predicted Impact & Duration	
			Construction	Operation	Construction	Operation
	1.6–1.9km NE Limerick WWTP					
C05	Mungret Monastic Complex heritage site 1.4–1.9km SW C/ree PS	<i>High</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, slight, negative</i>	<i>Permanent, slight, negative</i>
C06	Mungret Community College 2.45km SW C/ree PS 1.6–1.7km S Limerick WWTP	<i>Low</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C1	Commercial premises along Dock Road including Greyhound Stadium 0.25–0.95km SE Limerick WWTP 0.4–1.0km SW C/ree PS	<i>Low</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C2	Limerick Docks commercial and industrial businesses 0.4–1.5km E C/ree PS 1.2–2.4km NE Limerick WWTP	<i>Low</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C3	Irish Cement Limerick compound 1–1.76km SW Limerick WWTP 2.1–2.8km SW C/ree PS	<i>Low</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C4	Corcanree Business Park and Dock Road businesses Adjacent–0.5km SE C/ree PS 0.35–1.3km E Limerick WWTP	<i>Low</i>	<i>Low</i>	<i>Low–Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C5	Jetland Shopping Centre and Ennis Road Retail Centre 1.3–1.7km N C/ree PS	<i>Low</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
C6	Commercial properties along Dock Road Adjacent–0.6km SE Limerick WWTP 0.4–1.05km N C/ree PS	<i>Low</i>	<i>Low</i>	<i>Low–Negligible</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>
PV1	Protected view from Mungret Community College to Monastic Complex	<i>Very High</i>	<i>Low</i>	<i>Low</i>	<i>Temporary, moderate, negative</i>	<i>Permanent, moderate, negative</i>

Receptor	Description	Sensitivity	Magnitude of change		Predicted Impact & Duration	
			Construction	Operation	Construction	Operation
	Long-range view					
PV2	Protected view northwest across the Monastic Complex Long-range view	<i>Very High</i>	<i>Neutral</i>	<i>Neutral</i>	<i>Temporary, imperceptible, negative</i>	<i>Permanent, imperceptible, negative</i>

15.6.5 Photomontages

5no. viewpoint locations were used to create a photomontage Booklet. These viewpoints were agreed with An Coimisiún Pleanála (ACP) through consultation between ACP and the Agents' planning team. The Photomontages can be found in Appendix 15.2 in Volume 4 of this EIAR.

In comparing the existing Baseline and Proposed views, the magnitude of change is Low to Negligible. Views of the Limerick WWTP and Corcanree PS are screened by existing mixed vegetation and urban clutter across the landscape.

15.6.5.1 Photomontage1

Address: Barrington's Pier, Condell Road, Kilrush, Limerick, Ireland, looking southwest

Description: This viewpoint would be visited by individual recreational users such as walkers. long-distance view of the Upper Shannon Estuary. Looking southward toward the opposite side of the river (direction of proposal), the riverbank has established mixed vegetation screening views beyond the river. A Predominant feature is the Irish Cement building, which appears as three towers in the distance.

Sensitivity: *Medium to High*

Magnitude of Change: *Neutral*

Significance of Landscape and Visual Impacts: In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *permanent, imperceptible negative*

15.6.5.2 Photomontage 2

Address: Carpark adjacent to Ashbourne roundabout, Ashbourne Ave, Courtbrack, Limerick, V94 E2R8, Ireland. Looking west-northwest

Description: This viewpoint would be visited by local residents of Ashbourne Avenue. Short views of hedging and security fencing that encompass the residential carpark and dwelling estate. Medium views of Dock Road commercial buildings, with other more established vegetation further screen viewing. Long-distance views are screened by vegetation and existing built environment. Concrete road blocks are visible in the left side of the view, the area is marked for further development of residential developments. Further development would provide additional screening in this direction.

Sensitivity: *Low*

Magnitude of Change: *Neutral*

Significance of Landscape and Visual Impacts: In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *Permanent, imperceptible negative*

15.6.5.3 Photomontage 3

Address: greenspace opposite 80- 84 Gouldavoher Estate, Limerick, County Limerick, looking north-northwest

Description: This viewpoint would be visited by local residents of Gouldavoher Estate and adjoining estates. Medium to long views of greenspace/ maintained vegetation (grass and trees). Residential dwellings are visible beyond the green space. Views of the Proposed Development are screened by existing dwellings

Sensitivity: *Medium-high*

Magnitude of Change: *Neutral*

Significance of Landscape and Visual Impacts: In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *Permanent, imperceptible negative*

15.6.5.4 Photomontage 4

Address: Mungret Monastery, Dromdarrig, Limerick, Ireland. Looking north-northeast

Description: views from Mungret Monastery, which include short views of the cemetery and stone wall. Medium views cover adjacent agricultural fields and dwellings. Some long-distance views can be experienced through breaks in vegetation. This location would be accessed by people visiting graves or walkers enjoying the built heritage. The focus of the viewpoint would be the Mungret Monastery and the graves themselves, compared to outward views from the site.

Sensitivity: *High*

Magnitude of Change: *Neutral*

Significance of Landscape and Visual Impacts: In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *Permanent, imperceptible negative*

15.6.5.5 Photomontage 5

Address: Limerick Christian Centre Mungret, Dromdarrig, Mungret, Co. Limerick, Ireland. Looking north-northeast

Description: the site would be visited by a range of recreational users for Mungret Park and customers of the various business within the Centre such as for the 'The Milk Thistle kitchen' restaurant. Short views are of the hedge and fencing which screening the dropped topography of Mungret park allowing predominantly long distance views over the park and of the playground. The boundary of the park is an established mature tree line but occasional breaks allowing views of 'St. Gabriel's Children's Respite House' to the north.

Sensitivity: *High*

Magnitude of Change: *Neutral*

Significance of Landscape and Visual Impacts: In accordance with Table 15-1 and Table 15-2, the visual effect would therefore be *Permanent, imperceptible negative*

15.6.5.6 Photomontage Summary

Across all viewpoints, the comparison between the existing baseline and the proposed development demonstrates a neutral magnitude of change. This is primarily due to the presence of established screening elements within the landscape, including mature vegetation, urban clutter, boundary treatments, and variations in topography. In many instances, these features either fully block or substantially screen potential views of the proposed development.

Overall, while receptor sensitivity varies across the study area, the consistent presence of screening elements and the integration of the proposed development within an already developed and visually complex landscape ensure that there would be no significant adverse visual effects arising. The uniform assessment of permanent, imperceptible negative impacts across all viewpoints confirms that the proposed development will not materially alter the existing visual environment.

15.7 Cumulative Impacts and Interactions

15.7.1 Cumulative Effect Assessment

The Castletroy WWTP is located approx. 5.7km (Corcanree PS) and 6.7km (Bunlicky) northeast of the Proposed Development. Due to the distance between the sites, the height of the tallest elements on site, and the intervening built-up area of Limerick City, there is no intervisibility between the three sites. This is expected to have a *low to negligible* localised impact.

Planning applications in the surrounding area have been considered to evaluate the proposed application with what current and other proposed use classes. The following applications were noted:

1. Mr. Bin Man next to the Limerick WWTP site has a planning application in progress and at the time of writing has been requested for Further information (planning application details ref: 2561339). Application is for alteration to a previous planning application with Limerick City and County Council Planning Reference 16/642. Planning permission is being sought for:
 - a) *The construction of a proposed new access road from the adjacent Bunlicky Waste Water Treatment Plant Road which will result in the closure of the existing temporary vehicular access from the Dock Road and creation of a pedestrian access only.*
 - b) *Construction of an ESB Substation and all ancillary landscaping and site development works.*

Another planning permission has been finalised and granted, located adjacent to the Corcanree PS site (planning application details ref: 221280). This 7-year planning permission is for the following development:

- Demolition of 3 no. commercial buildings and removal/demolition of a number of sheds/outbuildings;
- Refurbishment of existing warehouse building;
- Provision of 3 no. retail warehouse units (total 2,593sqm) fronting onto Dock Road;
- Provision of 2 no. logistics warehouse H (2,790sqm);
- Provision of 34 no. commercial/enterprise units delivered with a total floor area of 9547sqm;
- Optional mezzanine floor area which has the potential to increase the overall floor area by 1,870sqm;
- Primary access to the site will be through the Corcanree Business Park via the Greenpark Roundabout; and
- The existing access serving the site from Dock Road will be restricted to a left in left out junction.

In accordance with the methodology the cumulative magnitude of change for visual receptors would be negligible. In accordance with Table 15-1 and

Table 15-2, the the cumulative visual effect on visual receptors would therefore be *permanent, imperceptible, negative*.

Due to the similar form, scale and location of the three developments, and the minimal change to any landscape features, the proposals would not have any significant cumulative effects on landscape fabric or character. In accordance with the methodology the cumulative magnitude of change for landscape fabric and character would be *negligible*. In accordance with Table 15-1 and

Table 15-2, the cumulative effect on landscape fabric and character would therefore be *permanent, imperceptible, negative*.

15.8 Mitigation Measures

The Limerick WWTP and Corcanree PS are lined with mature vegetation around their boundaries. This vegetation largely screens the sites from the surrounding area. Limited vegetation removal is anticipated for the construction of the Proposed Development at both sites to accommodate the proposed works as well as access to the sites. This vegetation removal is minimal and localised to a maximum width of 5m. The remaining retained existing vegetation at both sites is to be protected and enhanced. To mitigate the losses, reinstating planting at the location where existing vegetation was removed is proposed. Additionally, further tree and herbaceous planting aiming to increase the baseline provision of habitat following the recommendations of the project ecologist has been included to the mitigation.

These measures are expected to reduce further any visual impacts to the assessed visual receptors in the long term as vegetation reaches maturity. They are also expected to have a positive impact to the landscape character along the Upper Shannon Estuary by improving the quality of the vegetation and provided amenity.

15.9 Residual Impacts

As no mitigating measures will be put in place the residual effects will remain the same as the effects described in Section 15.6 of this chapter.

15.10 Difficulties encountered in Compiling Information

The information provided in this document accurately and comprehensively describes the baseline Landscape and Visual Amenity, provides an accurate prediction of the likely visual effects of the Proposed Development; prescribes mitigation as necessary; and describes the residual impacts. The specialist studies, analysis and reporting have been undertaken in accordance with the appropriate guidelines. No significant limitations in the scope, scale or context of the assessment have been identified.

15.11 References

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); the Landscape Institute

Environmental Protection Agency (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports; Environmental Protection Agency (EPA)

Environmental Impact Assessment of Projects: Guidelines on the Preparation of the Environmental Impact Assessment Report (EIAR) (2017); European Commission (EC)

Landscape Character Assessment (LCA) of Meath County Development Plan (Draft Report May 2021); Meath County Council

Limerick County Development Plan 2022-2028; Limerick County Council (Consolidated version which supersedes the older version on the 22nd of May 2023); Limerick County Council

Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment (2013); European Commission (EC)

Guidelines on Landscape and Landscape Assessment (2000); Department of the Environment, Community and Local Government (DOE)

National Landscape Strategy 2015-2025; Department of the Environment, Community and Local Government (DOE)

National Biodiversity Action Plan (2024-2030); National Parks and Wildlife Service

Southern Regional Assembly Regional Spatial and Economic Strategy 2020 – 2032; Southern Regional Assembly

LCA and LVIA of Specified Infrastructure Projects – Overarching Technical Document (Dec 2020); Transport Infrastructure Ireland (TII)

Visual Representation of Development Proposals (UK, 2019); Landscape Institute. Technical guidance notes for photomontages

Amenity Trees and Woodland: A Guide to their Management in Ireland (2010); Tree Council of Ireland

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