

Castleconnell Local Area Plan 2023 - 2029



Forward Planning



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

In accordance with the provisions of Section 20 of the Planning and Development Act 2000 (as amended), the Castleconnell Local Area Plan came into effect on the 29th of May 2023, six weeks after the adoption of the Local Area Plan by the Elected Members of the Metropolitan District of Limerick on the 17th of April 2023.

CONTENTS

Chapter 1: Introduction	1
1.1 What is a Local Area Plan	1
1.2 Review Process.....	1
1.2.1 Plan making Stages	1
1.3 Planning Context.....	3
1.4 Environmental Assessments	4
1.4.1 Strategic Environmental Assessment.....	4
1.4.2 Strategic Flood Risk Assessment	5
1.4.3 Appropriate Assessment.....	5
1.5 Plan Area	5
Chapter 2: Castleconnell in Context	8
2.1 Settlement Location.....	8
2.2 Profile	8
2.3 Historical Context.....	8
2.4 Strengths/Challenges/Opportunities/Threats	11
Chapter 3: Development Strategy	12
3.1 Strategic Vision	12
3.2 Spatial/Development Strategy.....	12
3.3 Population and Housing Growth.....	13
3.4 Housing and Residential Development Strategy	15
3.4.1 Density, Housing Type and Mix.....	17
3.4.2 Serviced Low-density Sites	17
3.4.3 Specialised Housing.....	18
3.4.4 Social Housing	18
Chapter 4: Town Centre First Approach	20
4.1 Introduction	20
4.2 Town Centre First and the '10 minute' town concept.....	21
4.3 Town Centre Health Check	21

4.4	Retail	23
4.5	Opportunity Areas.....	24
Chapter 5: Sustainable Communities.....		30
5.1	Community and Education Facilities.....	30
5.2	Parks, Open Space and Recreation	32
Chapter 6: Economic Development and Tourism		36
6.1	Enterprise and Employment	36
6.2	Tourism	37
Chapter 7: Sustainable Mobility.....		42
7.1	Movement and Accessibility	42
7.2	Achieving modal shift.....	43
7.3	Roads.....	46
Chapter 8: Climate Action, Environment and Heritage		48
8.1	Climate Action and the Environment.....	48
8.2	Biodiversity and Blue green infrastructure.....	49
8.2.1	Water Framework Directive.....	55
8.2.2	Special Control Area.....	56
8.3	Built Heritage and Archaeology	58
8.3.1	Protected Structures	58
8.3.2	Architectural Conservation Areas (ACA)	59
8.3.2.1:	Northern ACA.....	59
8.3.2.2:	Central Core ACA.....	60
8.3.2.3:	Southern ACA.....	61
8.4	Archaeological Heritage	62
Chapter 9: Infrastructure and Utilities.....		66
9.1	Water and Wastewater infrastructure	66
9.2	Surface Water Management and SuDS.....	67
9.3	Flood Risk Management	68
9.4	Energy Generation	69
9.5	Waste Management and the Circular Economy	70
Chapter 10: Land Use Framework, Zoning Matrix and Settlement Capacity Audit.....		72
10.1	Land Use Zoning and Implementation	72

10.2	Advice when submitting a Planning Application.....	75
10.3	Land Use Zoning Matrix	77
10.4	Settlement Capacity Audit	80
Chapter 11: Monitoring and Evaluation		86
11.1	Implementation of the Local Area Plan	86
11.2	Identified Local Area Plan Actions	86
Appendix I – Maps		88
Appendix II - Record of Protected Structures		93
Appendix III – Sites and Monuments Record.....		125
Strategic Environmental Assessment Screening, Strategic Flood Risk Assessment, Appropriate Assessment Screening and Natura Impact Report for the Castleconnell Local Area Plan 2023-2029		126
Part A – Strategic Environmental Assessment Screening		127
Part B – Strategic Flood Risk Assessment		136
Appendix I - Flood Justification Tests.....		154
Part C - Appropriate Assessment Screening		168
Part D - Natura Impact Report		179

List of Maps

Map 1: Land Use Zoning Map

Map 2: Flood Map

Map 3: Amenity and Sustainable Transport Map

Map 4: Record of Protected Structures Map

Map 5: National Monuments Map

Map 6: Settlement Capacity Audit Map

Chapter 1: Introduction

1.1 What is a Local Area Plan

The Local Area Plan (LAP) is a statutory document prepared by the Planning Authority, in accordance with the requirements of the Planning and Development Act 2000 (as amended), thereafter referred to as “the Act”. The Castleconnell LAP 2013 - 2019 was extended until 2023 under Section 19 of the Planning and Development Act 2000 (as amended).

This proposed LAP sets out a land use strategy for the proper planning and sustainable development of the village of Castleconnell, complying with the provisions of higher-level spatial plans. The adoption of the LAP is a reserved function of Elected Members of the Metropolitan District of Limerick.

The LAP consists of a written statement and maps indicating objectives for zoning of land, residential development, economic development, community infrastructure, built and natural heritage, open space and recreation, active travel and transport, environmental protection and climate action. This Plan also includes a Settlement Capacity Audit, which informed the quantum and location of the land zoned in the Plan. The written statement generally takes precedence over maps should any discrepancy arise.

Preparation of this LAP has also been informed by Ministerial Guidelines issued pursuant to Section 28 of the Act, together with EU requirements, regarding Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA).

When interpreting the objectives for the village of Castleconnell, it is essential that both the Limerick Development Plan 2022 – 2028 and the LAP are read together.

1.2 Review Process

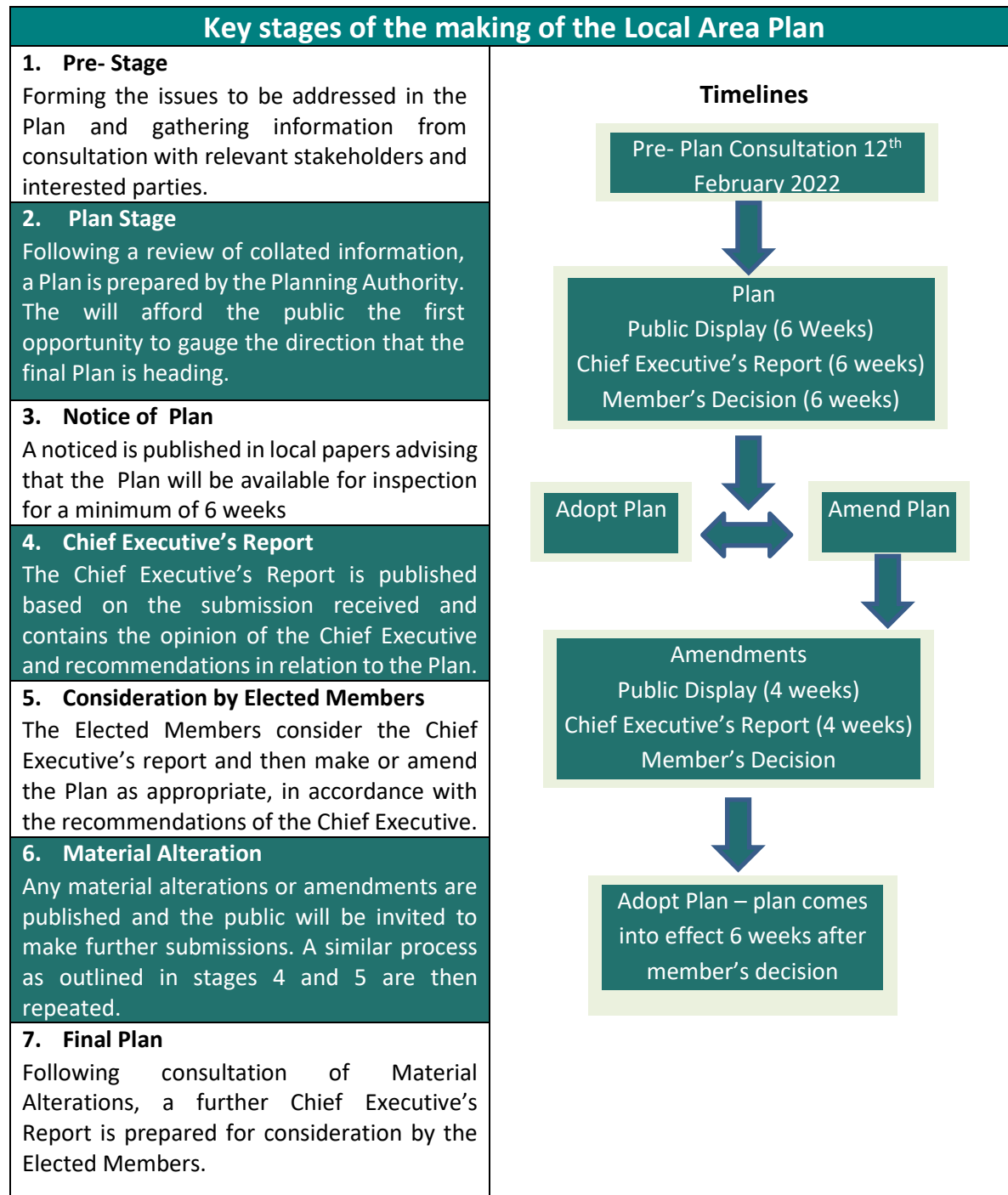
1.2.1 Plan making Stages

Given the expiration of the extended lifetime of the existing Castleconnell Local Area Plan in 2023, a new LAP is required for the village. Section 20 of the Planning and Development Act 2000 (as amended) sets out the process for the making of a Local Area Plan as outlined in Figure 1 below. The formal process, for the preparation of this Local Area Plan commenced on 12th of February 2022, with the publication of the Issues Paper. Public consultation during this stage of the process, included a schools consultation event, an online webinar, a public consultation evening and an online social media campaign.

Public consultation is an important aspect of any plan-making process, in order to address local issues relating to Castleconnell, and to ensure that the final LAP acknowledges community aspirations and concerns.

During the first issues public consultation period, 39 no. written submissions were received. Two further public consultation periods were undertaken during the course of making the Local Area Plan. 48 submissions were received at Draft stage in the Plan and a further 9 submissions were received at Material Alterations stage. These were considered in Chief Executive's Reports which issued to the Elected Members of the Metropolitan District of Limerick. Preparation of the Plan has been informed by these consultations which included members of the public, Castleconnell National School, stakeholders, service providers, Elected Members of the Metropolitan District of Limerick, Statutory Bodies, Government Departments and with the various Directorates of Limerick City and County Council.

Figure 1.1: Key Stages – LAP Process



1.3 Planning Context

The LAP must be consistent with the objectives of the higher-level spatial plans, including the National Planning Framework (NPF), the Regional Spatial and Economic Strategy for the Southern Region (RSES) and the Limerick Development Plan 2022 – 2028.

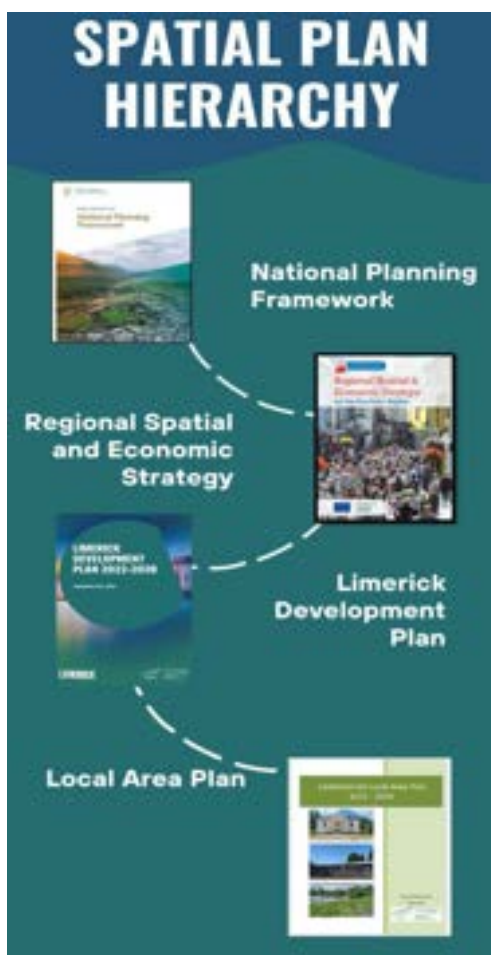


Figure 1.2: Spatial Plan Hierarchy

Spatial Planning Objective 01:

It is an objective of the Council to ensure that provisions of the Castleconnell Local Area Plan 2023 – 2029 for population and economic growth align with the policies and objectives of the higher-level spatial plans, such as the National Planning Framework (NPF), the Regional Spatial and Economic Strategy for the Southern Region (RSES) and the Limerick Development Plan 2022-2028.

1.4 Environmental Assessments

In accordance with the Planning and Development Act 2000(as amended), the LAP is subject to the following environmental assessments.

1.4.1 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is required in accordance with the SEA Directive (2001/42/EC). SEA is a formal, systematic evaluation of the likely significant environmental effects of implementing a plan, policy or programme. An SEA screening has been carried out and

accompanies this plan. It concludes that it is not necessary to progress beyond screening and that full SEA is not required at this stage.

1.4.2 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment has been prepared in accordance with *“The Planning System and Flood Risk Management – Guidelines for Planning Authorities”* and Circular PL2/2014 and the information gathered has informed the preparation of the Local Area Plan.

1.4.3 Appropriate Assessment

Appropriate Assessment (AA) is required in accordance with Article 6(3) and 6(4) of the EU Habitats Directive (92/43/EEC). AA is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site in view of the site’s conservation objectives. Following a screening exercise, it was determined that having regard to, inter alia, the proximity of the Natura 2000 sites to the village of Castleconnell, Stage 2 AA is required and to this effect, a Natura Impact Report accompanies this Plan.

1.5 Plan Area

The Castleconnell LAP covers approximately 2.4 square kilometres in area and falls into the Castleconnell Electoral Division (ED). It contains parts of the townlands of Lacka, Derreen, Cloon and Commons, Coolbane, Coolereiry, Stradbally North and South, Woodpark and Ruan. In order to ensure compliance with high-level plans, the settlement boundary for Castleconnell is defined by the principle of a compact settlement, prioritising the development potential of the village centre, sequential development from the village centre out and maximising under-used/vacant brownfield infill sites and existing buildings. This is in line with the NPF requirement that the proportion of new homes within the built-up footprint of each settlement should be at least 30% for all settlements. This built up footprint refers to the CSO boundary for Castleconnell, which is marginally smaller than the settlement boundary of the LAP. The Census Data available for the settlement is a crucial element of plan preparation as it provides the only robust, credible, systematic source of data available to analyse at a local level. This includes socio-economic trends and mobility/transport patterns available to support the policies and objectives of the LAP for the sustainable development of the village. Considering the existing built footprint of the village and to align with national spatial policy, the settlement boundary for the LAP has been determined as per the Land Use Zoning Map, Appendix 1.

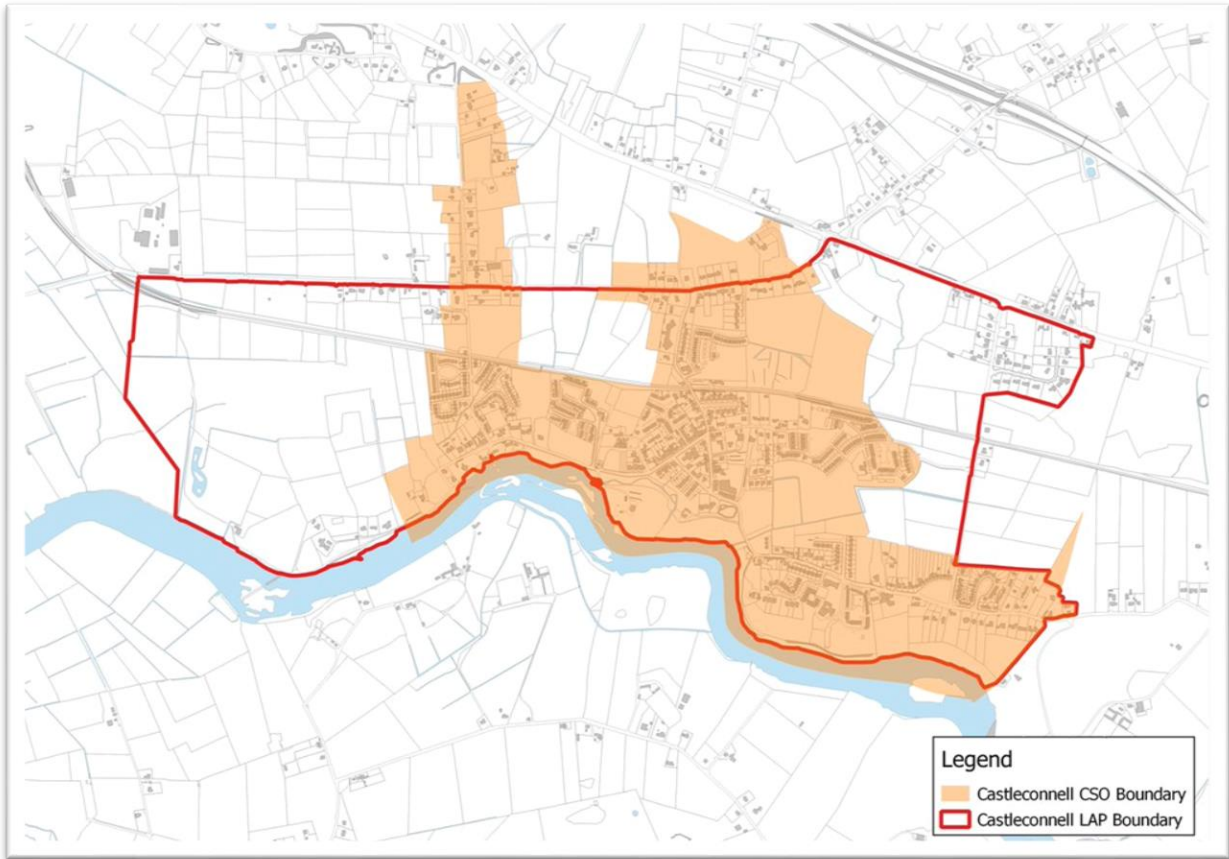


Figure 1.3 Castleconnell Census boundary and LAP boundary

Chapter 2: Castleconnell in Context

2.1 Settlement Location

Castleconnell is located approximately 10km north east of Limerick City. Its hinterlands form the rural area between it and the suburbs of Limerick City. The village centre is located approximately 1km off the R445, the former national Limerick/Dublin route. The village adjoins the River Shannon, which is the county boundary between County Limerick and County Clare. The village has developed in a linear fashion along the banks of the River Shannon with the Main Street running parallel to the River. The topography of Castleconnell and the surrounding areas is largely low lying.

2.2 Profile

The principal demographic trends for the Castleconnell as set out in Census data 2016 are outlined below. This data is significant in terms of determining demand for service provision, such as schools and childcare facilities, housing, health-care, employment opportunities as well as availability of labour force, standards of education/training attained and disposable income.

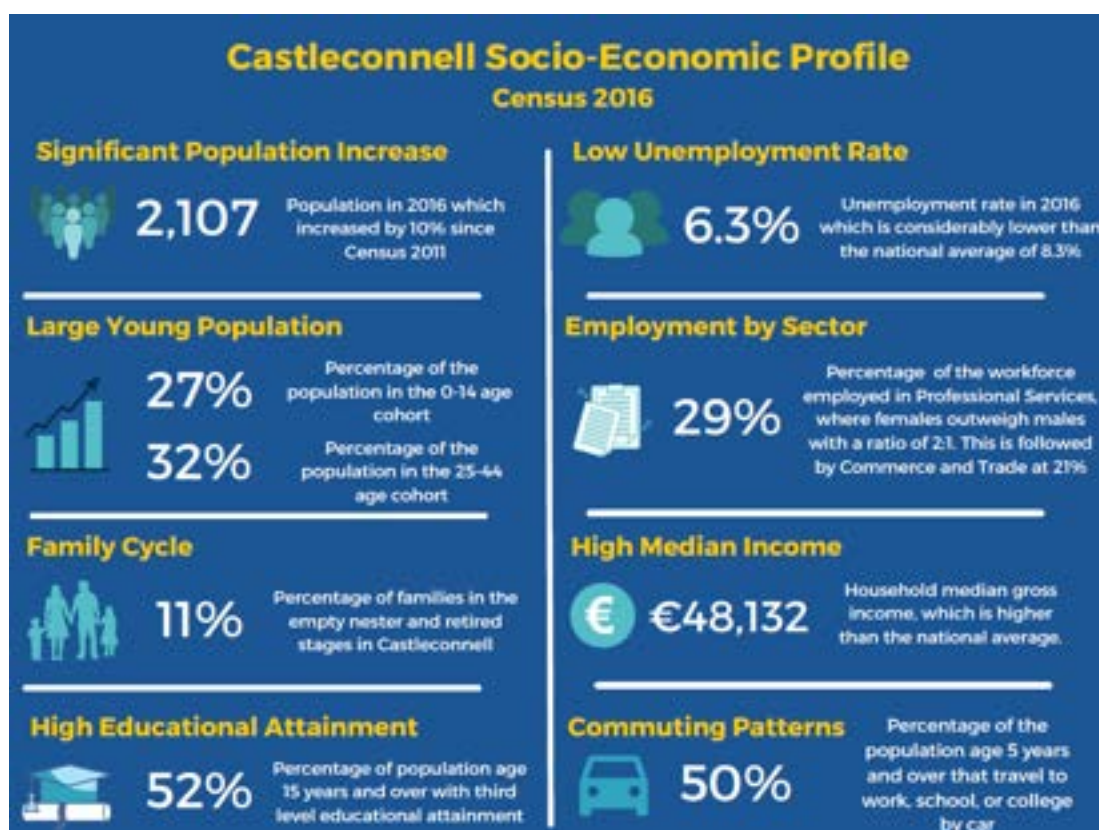


Figure 2.1 – Socio economic profile of Castleconnell(Census 2016)

2.3 Historical Context

Castleconnell lies on the River Shannon which was an important route way from pre-historic times. During the development of the Castleconnell Sewerage Scheme, excavation in the adjoining townland of Hermitage found evidence of Mesolithic burials over 9,500 years old. Evidence of Bronze Age and Iron Age remains on the nearby banks of the River were also discovered.

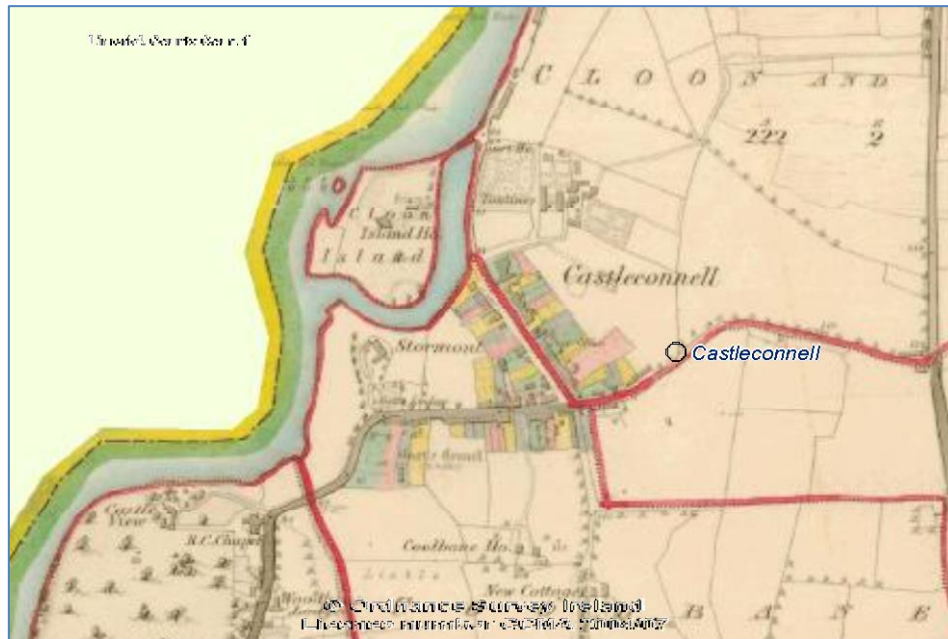


Figure 2.2 Map of Castleconnell, from the first Ordnance Survey edition, 1840



Figure 2.3 Map of Castleconnell, from Ordnance Survey, 25 inch map, 1900

In later times, Castleconnell became the traditional territory of the Eoghanacht chieftains. The O' Brien's of Thomond were resident in Castleconnell by 1174. King John granted Castleconnell to William de Burgo in 1199, on condition that he build a fortified castle. The structure at Castleconnell was one of the three earliest Norman Castles constructed in Co. Limerick. It featured in many of the events in Irish history, the Bruce invasion (1315), The Desmond Rebellion(1569-1575), it was garrisoned by General Ireton in 1651 and it was

garrisoned on behalf of James II in 1690 and 1691. It was surrendered in 1691 and was blown up by order of General de Ginkell.

The religious site at Cloon and Commons is said to have been founded about 1300 possibly by the Augustinian Friars. A small portion of this medieval building remains behind the current Church of Ireland Church, which dates to 1809. In 1750, a Mass House was built in the village. It remained in use until the current Catholic Church was built in 1839.

From circa 1750, Castleconnell became renowned for its Spa waters. A dispensary was established in 1819 and by 1831, there were 178 houses in the village, many of which were modern villas and cottages. There were also two good hotels, several lodging houses and a daily coach to Limerick. From the middle of the 18th century, many large houses were built in the locality. By the beginning of the 19th century, however, the popularity of the spa had declined and fishing took over as the main industry in the village.

In recent times the village has developed to the east beyond the railway line with the construction of a crèche and dwellings at Coolbawn Meadows. The village has also continued to expand in a southerly direction with the Castlerock estate and additional housing under construction here presently. Infill/backland development has also taken place in the village centre at Bruach na Sionna.

Castleconnell has a tightly concentrated village centre consisting of residential dwellings with some retail, commercial and public/institutional buildings. The village has retained its 18th and 19th century character with traditional facades to the shops and pubs. The village performs an important civic, trade/market and service function for the resident population and for the surrounding hinterlands.

Having regard to its historic importance, location in the metropolitan area and its quality connections via rail and road, the Limerick Development Plan promotes Castleconnell as a Level 3 settlement in the settlement hierarchy for Limerick, in terms of population growth. Castleconnell is home to a network of residential estates and for it to fulfil its role as a level 3 settlement, the village requires consolidation of land use, investment in services, infrastructure, sustainable transport options, amenities and local employment balanced with supporting the existing residential, community and providing for additional housing growth.

The map below identifies existing housing schemes currently in Castleconnell categorised by those taken in charge and not. The development of the village is mainly focused around the core of the village with good linkages to the Main Street.

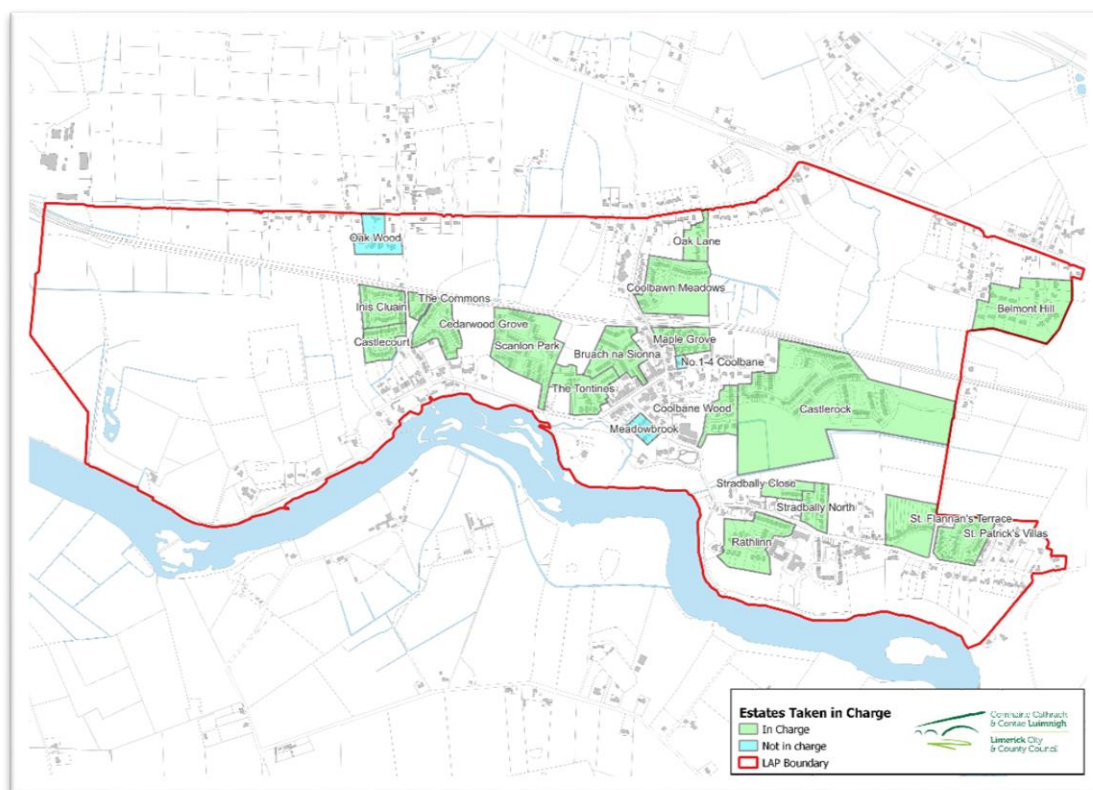


Figure 2.4 Housing estates in Castleconnell

2.4 Strengths/Challenges/Opportunities/Threats

The SCOT Analysis is an analysis of the Strengths, Challenges, Opportunities and Threats that exist within Castleconnell. This assessment identifies both the key issues in Castleconnell and the opportunities that exist to address these issues. The SCOT Analysis has helped inform the overall development strategy for the Plan Area.



Figure 2.5 – SCOT analysis of Castleconnell

Chapter 3: Development Strategy

3.1 Strategic Vision

The purpose of the Castleconnell Local Area Plan is to set out the policies and objectives that will guide the sustainable future growth of the village between 2023-2029 and beyond and to ensure alignment with the provisions of higher-level planning policy. The vision of the plan is to improve the local environment focusing on the sustainable growth of the built environment, employment generation, and the provision of community and social services together in a low carbon, compact, consolidated and connected manner.

The strategic vision for Castleconnell is to fulfil the role of a Level 3 settlement as identified in the Limerick Development Plan. This will include the provision for growth in population and employment, through a mix of high quality residential development (choice and tenure), education and employment opportunities, sustainable mobility choices, a strengthened retail/commercial village centre, community infrastructure, active lifestyles and recreational choices, while sustaining Castleconnell's unique heritage assets. The future development of Castleconnell will provide for low carbon, sustainable and consolidated growth in a coherent spatial manner.

3.2 Spatial/Development Strategy

The overall development strategy for Castleconnell is to meet the population targets as set out in the Limerick Development Plan, by focusing growth within the settlement boundary and in doing so, assisting in the regeneration, repopulation and development of the village. The future of Castleconnell is one where the quality of life and wellbeing of its inhabitants are enhanced, building a resilient and sustainable compact village, that supports improved local employment and economy, protects its local culture and heritage, while supporting the village's transition to a low carbon society.

Overall Strategic Development Objectives

It is an objective of the Council to:

1. Seek the sustainable intensification and consolidation of the existing built environment, in accordance with the objectives for compact growth in higher-level spatial plans, through appropriate infill, brownfield development, supported by the necessary physical and community infrastructure.
2. Promote sustainable economic development, enterprise and employment opportunities and prioritising the village centre, as the primary location for retail and services.
3. Promote and facilitate sustainable modes of transport, prioritising walking, cycling and public transport, whilst protecting and improving existing road infrastructure.
4. Protect, conserve and enhance the built environment, through promoting awareness, utilising relevant heritage legislation and ensuring quality urban design principles are applied to all new developments, respecting historic and architectural heritage.
5. Protect, enhance and connect areas of natural heritage, blue green infrastructure and open space for the benefits of quality of life and biodiversity, capitalising on climate action and flood risk measures.
6. Ensure the highest quality of public realm and urban design principles apply to all new developments.

7. Have cognisance of the Limerick Climate Change Adaptation Strategy 2019 - 2024, and any forthcoming climate adaptation and mitigation strategies that emerge during the lifetime of this plan.
8. Guide the future development of Castleconnell, in accordance with the Town Centre First policy approach seeking to bring people and appropriate business/services back into the heart of Castleconnell through place-making, good quality urban design, and sustainable mobility as promoted by the Department of Housing, Local Government and the Heritage and the Department of Rural and Community Development.
9. Ensure the future development of Castleconnell supports the transition to a low carbon society and economy, implementing national policy to reduce gas emissions, improve environmental quality and contribute to national targets for climate change.

3.3 Population and Housing Growth

The Core Strategy for Limerick is set out in Chapter 2 of the Limerick Development Plan 2022 – 2028. Section 19 (2) of the Planning and Development Act 2000 (as amended) requires that: *“A Local Area Plan shall be consistent with the objectives of the Development Plan, its Core Strategy, and any Regional Spatial and Economic Strategy that apply to the area of the plan...”*

This LAP aims to balance the provision of good quality housing that meets the needs of a diverse population, in a way that makes Castleconnell an attractive and inviting place to live. Meeting the housing needs of Castleconnell is an important element of this plan. Adequate housing provision is essential for the creation of an environment to attract business and enterprise to Castleconnell and this plan provides the quantum of zoned lands to meet this demand. The quantum of zoned land for residential development complies with the population targets set out in the Core Strategy of the Limerick Development Plan. The Council is also informed by the Department of Housing, Local Government and Heritage’s Town Centre First approach, seeking to attract a vibrant community, including attracting families back into the heart of the towns through place-making, good quality urban design and sustainable mobility.

Castleconnell is identified as a Level 3 settlement in the Limerick Development Plan and is allocated population growth of 28% up until 2028. The allocation of growth targets, seeks to ensure that the growth will be sustainable and in keeping with the scale of Castleconnell. This ensures that the capacity of the village to accommodate this additional growth can occur without damage to the settlement’s character and the carrying capacity of its environment and infrastructure.

According to the Census, Castleconnell had a population of 2,107 persons in 2016, representing a 10% increase on the 2011 population. The unique characteristics of the village, its location adjacent to the River Shannon and its proximity to the education and employment centres of Castletroy and Limerick City saw the village experience a growth rate of 44% between 2006 and 2011.

The Core Strategy of the Limerick Development Plan makes assumptions with respect to population projections and allocation throughout Limerick. These assumptions include the additional residential units and zoned land requirements for each settlement in accordance with the NPF, the Implementation Roadmap for the NPF and the RSES. The assumed

Castleconnell population growth allocation is an additional 590 persons to 2028 (+28% on the 2016 Census figure) which equates to an additional 205 units. For the purposes of this Local Area Plan, the projected requirement for population growth is 239 units. The provision of 239 units is realised by taking the proposed population growth per annum, as outlined in the Core Strategy of the Limerick Development Plan, and applying this figure for the seven year period (from 2022-2029) as illustrated in Figure 3.1 below. In addition, extant planning permissions need to be considered and there are 7 units permitted within the village which have not commenced.

Figures 3.1 Core Strategy Units Allocated

Limerick Development Plan Additional Households Forecasted 2022-2028 for Castleconnell	205 units
Forecasted households per year	34.16 units
Forecasted households for years 2022-2029 for Castleconnell	239 units (34.16 x 7 year period from 2022- 2029)
Vacancy Q2 2022 Geodirectory	13 units (1%)
Extant Planning Permission	7 residential units
No. of new units required 2023-2029	219 units
New Residential @ 22 uph Residential Serviced Sites @ 10uph	219 @80% = 176(8.1 ha) 219 @20% = 44 (4.4ha)
Additional Provision +25%	55 units @22uph – 2.5 ha
Total Hectares Required	15 ha

Residential vacancy is an issue for consideration in devising a new Local Area Plan and according to the 2016 Census, 26 dwellings or 2.9% of the housing stock were deemed 'temporarily absent' and 86 dwellings were deemed 'other vacant dwelling' accounting for 9.7% of the total housing stock. Therefore according to the Census 12.6% of residential properties were vacant in the village in 2016. However, data gathered from Geo directory analysis for Q2 2022 identified residential vacancy in Castleconnell at just 1% (13 units) which is in line with a vacancy survey undertaken by the Forward Planning Section in January 2022. In the interest of a compact settlement, prioritising brownfield, infill development, vacancy and dereliction, and the existing built-up area of the settlement, it is a requirement of higher-level spatial planning policy to consider vacancy.

In June 2022 The Development Plans Guidelines for Planning Authorities was published and allows for the zoning of additional lands in the order of 20-25% above the required quantum of zoned residential or a mix of residential and other use lands, in certain circumstances. "Additional Provision", as identified in The Guidelines must be identified, quantified and explained.

Castleconnell's location within the Limerick Shannon Metropolitan area and the host of natural amenities in the village makes it a very attractive place to live and there is a demand for housing in the area. To this end this Local Area Plan has identified an additional 25% of zoned land for residential purposes within the plan. These lands have been identified as

suitable for residential development given they are serviced or serviceable over the lifetime of the Plan and are located within close proximity to the village centre. In total 2.5 hectares of Additional Lands, have been zoned for residential development in the village with a potential residential yield of 55 units. They have been identified in the Settlement Capacity Audit set out in Appendix I of this Plan.

Settlement Tier	Census Pop. 2016	Additional households forecasted 2023-2029	Total Quantum of land required	Total land zoned Serviced Sites	Total Land zoned New Residential
3	2107	274	15ha	4.4ha	10.6ha

Table 1: Residential units and land quantum required in Castleconnell in line with the Core Strategy projections of Limerick Development Plan 2022 – 2028 including Additional Provision Lands in line with The Development Plan Guidelines for Planning Authorities June 2022

Given the level and diversity of services and amenities available in Castleconnell as a Level 3 settlement, its location within the Limerick Shannon Metropolitan area and its accessibility to Limerick City and suburbs, its ease of connectivity, availability of serviced and serviceable lands, it is anticipated that Castleconnell will attract inward investment for future population growth, in accordance with the objectives of the NPF and RSES. On this basis, the assumed scale of growth for Castleconnell is considered reasonable and will be progressed on lands including opportunity, infill and brownfield sites. The National Planning Framework requires that 30% of all new housing within Castleconnell occurs within the existing village footprint.

A Settlement Capacity Audit (SCA) assessing availability of key infrastructure to the individual sites zoned for the provision of residential development and Enterprise and Employment has been set out in Appendix I. The SCA identifies the infrastructure necessary to support future development. An indicative timeframe for the delivery of critical infrastructure i.e. short, medium or long term and costing to provide this infrastructure is included.

Policy DS 1: Core Strategy: It is a policy of the Council to:

Ensure compliance with the population projections of the Core Strategy (or any revision thereof). The Planning Authority will monitor the type of developments permitted in Castleconnell, including the number of residential units constructed on an annual basis.

3.4 Housing and Residential Development Strategy

Central to the NPF, RSES and the Limerick Development Plan is a focus on sustainable development across Limerick, the compact growth of urban areas optimising the use of serviced lands by focusing development on infill, brownfield, backland and vacant/derelict sites and in doing so, maximising the viability of investment in social and physical infrastructure. A key focus of the Department of Rural and Community Development's Rural Development Policy 2021-2025 is the Town Centre First Approach, which supports the regeneration, repopulation and development of rural towns and villages. The primary focus behind the Town Centre First Approach is to create the conditions for individuals and families to move back into the heart of the towns and villages through place-making, good quality urban design and sustainable mobility.

This LAP aims to balance the provision of good quality housing that meets the needs of a diverse population, in a way that makes Castleconnell an attractive and inviting place to live in. Castleconnell shall accommodate growth in new housing to serve population growth and new household formation, in accordance with the population targets of the Core Strategy of the Limerick Development Plan 2022-2028 and the Development Plan Guidelines for Planning Authorities published in June 2022. In this respect 15 ha of residential lands have been zoned to accommodate this planned growth. Adequate housing provision is essential for the creation of an environment to attract business and enterprise to Castleconnell.



Figure 3.2 – Examples of good quality housing in Castleconnell

Policy DS2: Development Strategy: It is policy of the Council to

Deliver new residential development, in accordance with the Limerick Development Plan 2022 – 2028, supporting a choice of quality housing, mixed tenure and unit size/type universally designed for ease of adaption to the lifecycle and universally accessible.

Objective H1: Residential Development: It is an objective of the Council to

- a) Require the use of Design Briefs, Masterplans, Sustainability Statements, Social Infrastructure Assessments and any other supporting documents deemed necessary to ensure the coherent planning of residential development. A masterplan for the development of residentially zoned lands at Coolbawn shall be submitted with any planning application made on these lands. Early engagement with all utilities providers including Irish Water is strongly advised.
- b) No one proposal for residential development shall increase the existing housing stock by more than 10 – 15% within the lifetime of the Plan, unless the applicant can demonstrate that the settlement has adequate capacity, in terms of both physical and social infrastructure to support additional growth
- c) Ensure all new residential layouts prioritise walking and cycling and are fully permeable for pedestrians and cyclists to access a range of local services and enable the efficient provision of public transport services.
- d) Ensure new residential development provided high quality public open space and play lots proportional to the number of residential units, having cognisance to accessibility, safety, permeability and public realm.

Objective H2: Residential Compact Growth: It is an objective of the Council to:

- a) Ensure the sequential development of the serviced residential lands identified to cater for the envisaged population growth.
- b) Ensure that at least 30% of all new housing development is delivered within existing built-up areas and on infill, brownfield and backland sites.
- c) Consolidate existing development and increase existing residential density, through a range of measures, including re-use of existing buildings and infill development schemes.
- d) Ensure that in any proposed alterations to the streetscape of the village centre, adequate consideration is given to conservation, restoration and reconstruction, where it would affect the settings of protected structures, or the integrity of the eighteenth and nineteenth century streetscapes.

3.4.1 Density, Housing Type and Mix

Higher-level planning policy requires Local Authorities to apply a sequential approach to zoning land for residential development with a primary focus on the consolidation of settlements, through zoning of lands for residential development, within or contiguous to the centre and within the existing built-up/ zoned area of Castleconnell.

This LAP places a strong emphasis on providing high quality residential developments with mixed type and tenure provided on brownfield, infill, vacant sites and greenfield sites. Changing demographic trends such as changing household size have consequences for housing type demands and this sees an increased demand for 1 and 2 bedrooomed units, and smaller units to facilitate downsizing for an increasing older population. An assessment of the housing waiting list for the Metropolitan District of Limerick, which includes Castleconnell, indicates that 73% of requests for Council accommodation are for single or two bedrooomed units. These are important considerations for future housing provision in the village. A statement demonstrating an appropriate mix of units shall be submitted as a requirement of a planning application to demonstrate that consideration has been given by the developer to meeting this requirement in all residential applications.

The following minimum densities shall apply to residential zoned lands in Castleconnell.

Zoning	Minimum Densities
New and Existing Residential	22 uph
Residential Serviced Sites	10 uph

Table 2: Density Standards

Objective H3: Density and New Residential Development: It is an objective of the Council to: Ensure that all residential development complies with the residential density requirements set out in Table 2 and encourage a range of densities on New Residential and other mixed use lands, in accordance with the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas: Cities, Towns and Villages (2009).

3.4.2 Serviced Low-density Sites

A number of serviced sites have been constructed in Castleconnell along the Commons Road and are in high demand as a low density serviced alternative to the unserviced one-off rural house in the open countryside. These individual residential plots will have access to services such as utility connections, water and sewerage, footpaths, lighting and are within walking

distance of the village centre. The density shall generally be 10 housing units per hectare. Whilst individual house design on serviced sites is encouraged, the overall design of the scheme must be consistent in terms of boundary treatments and landscaping.

Objective H4: Serviced Sites: It is an objective of the Council to:

Permit serviced sites on adequately zoned lands within the settlement boundary of Castleconnell in line with the requirements outlined in the Limerick Development Plan. The Council requires a minimum net density of 10 dwelling units per hectare on lands zoned Serviced Sites.

3.4.3 Specialised Housing

The need for older persons' dwellings, sheltered housing, nursing homes, modular homes and residential care homes in Castleconnell is anticipated to grow into the future, by reason of a general aging of the population, the need to cater for those wishing to downsize and reside in proximity to services and amenities and those in need of refuge in times of war and unrest. These facilities should be integrated into the established or planned residential areas, well served by appropriate levels of infrastructure, and within walking distance of shopping and other community services, public transport and open space. They should be designed based on the principles of universal design and accessibility for all.

Limerick City and County Council has an adopted Traveller Accommodation Programme 2019-2024, which outlines the accommodation needs, policy and implementation measures to address the accommodation needs of the Traveller Community. The current plan does not identify a need for specialised traveller accommodation in Castleconnell. Objective HO 015 of the Limerick Development Plan, 2022-2028 outlines Limerick City and County Council's objective to support the quantity and quality of delivery of traveller-specific accommodation with the relevant agencies, in accordance with the Traveller Accommodation Programme and any subsequent updates.

3.4.4 Social Housing

'Housing for All - a New Housing Plan for Ireland' is the government's housing plan to 2030. The plan includes ambitious actions to address homelessness, the provision of affordable housing and accelerating the delivery of social and affordable housing schemes. The Housing Delivery Plan for Limerick 2022-2026 identifies Castleconnell as an area in high demand for social housing with a requirement of 135 units to be delivered by 2026. Part V of the Planning and Development Act 2000 (as amended) is one of the means through which Limerick City and County Council can seek to address demand for social housing in Limerick. The Council works in partnership with the Department of Housing, Local Government and Heritage and Approved Housing Bodies to deliver and manage social housing.

Objective H5: Social and Affordable Housing: It is an objective of the Council to:

Promote the provision of social and affordable housing in accordance with Part V of the Planning and Development Act 2000(as amended), Objective HO 013 of the Limerick Development Plan, the Limerick Housing Strategy, the Housing Needs Demand Assessment, and the government housing policy 'Housing for All' (2021), Limerick City and County Council's Housing Delivery Action Plan 2022-2026 and any subsequent replacements thereof.

Chapter 4: Town Centre First Approach

4.1 Introduction

The Limerick Development Plan acknowledges the challenges facing rural communities and the important role that rural towns and villages play as local drivers for their surrounding areas.



Figure 4.1 Castleconnell Village Centre

Recent government policy publication, Town Centre First seeks to create vibrant communities in urban settlements, including smaller villages, such as Castleconnell to encourage families back into living in the heart of towns and villages. The policy outlines the need for towns and villages to be climate resilient, well-connected, accessible locations where digital technology is integrated into daily commercial and social life and where the urban built heritage is sustainably managed and conserved.

The Council has a proactive regime in place, which aims to tackle the issues of dereliction and vacancy throughout Limerick. A dedicated team within the Council work on a continuous basis seeking to reduce vacancy and dereliction, through the various tools available, including compulsory purchase orders of vacant and underutilised properties. The Council will continue to monitor vacancy and work with the relevant stakeholders to address issues that exist and utilise the various tools available to implement urban regeneration.

Policy TCF 1: Town Centre First: It is a policy of the Council to:

Support the implementation of the Town Centre First policy in Castleconnell in creating a viable, vibrant and attractive village centre to live, work and visit while also functioning as the service, social, cultural and recreational hub for the local community through the enhancement of the village's rich architectural heritage and enhancement of the public realm.

4.2 Town Centre First and the '10 minute' town concept

This Plan promotes the 'Town Centre First' approach with a focus on creating a thriving village centre with a strong service and social function. This is based on the principle of the '10 Minute' Town concept, whereby a sustainable compact settlement, such as Castleconnell, provides a range of community facilities, services, recreational and cultural amenities and employment opportunities, which are accessible in short walking and cycle timeframes from homes, or accessible by public transport services connecting people to larger-scaled settlements such as Limerick City and Environs. Through the re-use of buildings, infill development, re-purposing of under-utilised lands within the village centre for mixed uses including residential, small local shops or creative workspaces, the Plan seeks to consolidate the village rather than encourage sprawl. In addition, the Plan supports the investment in high quality pedestrian/cyclists friendly public realm and attractive public spaces where people can gather socially and provide green spaces that facilitate local communities.

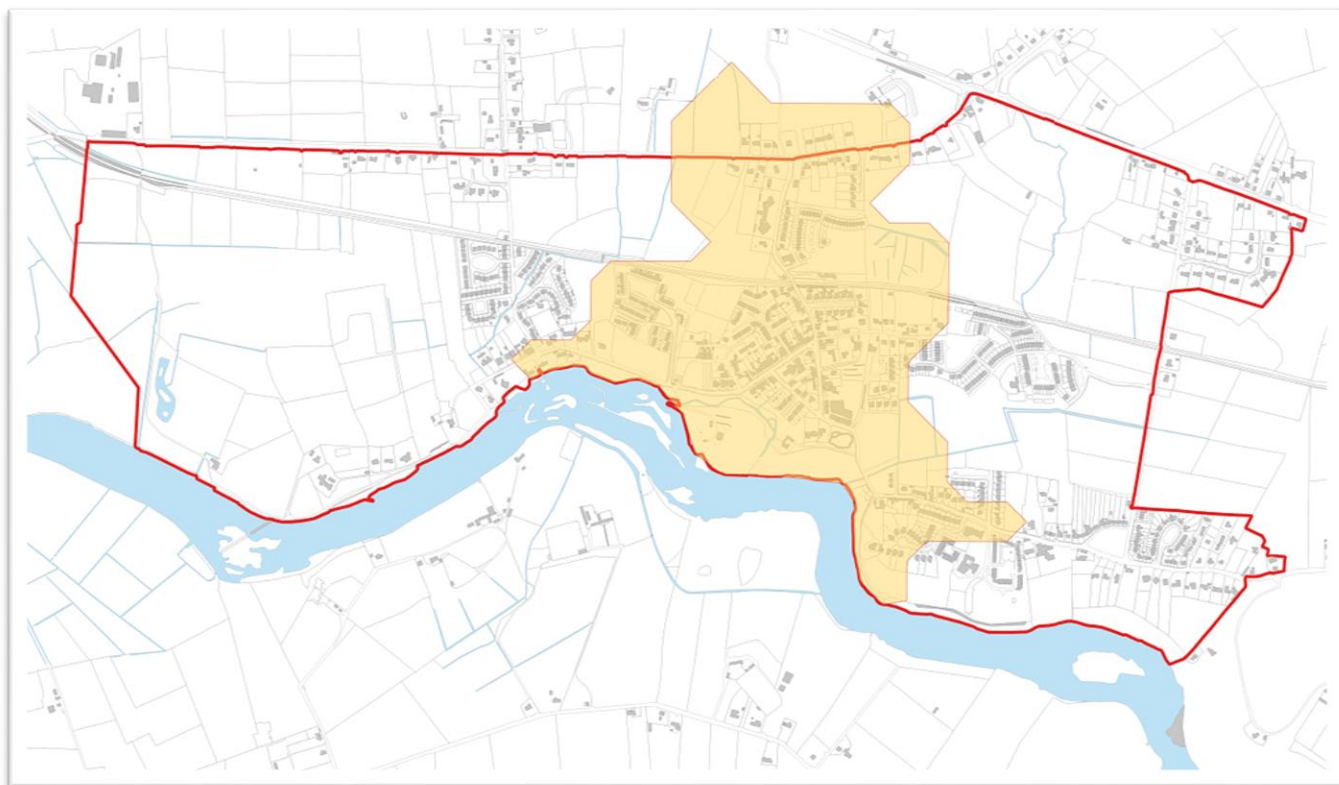


Figure 4.2 – 10 minute walking network Castleconnell

4.3 Town Centre Health Check

Castleconnell has a vibrant village core with much of the day to day needs of the community met within the main streets of the village. Vacancy levels for residential and commercial use in the village is low at 1%.

This Plan will provide support for continued diversification of services within the village core to sustain the residential population. Opportunities for the reuse of these buildings will be supported in the Plan as will the provision of new services within the village core.

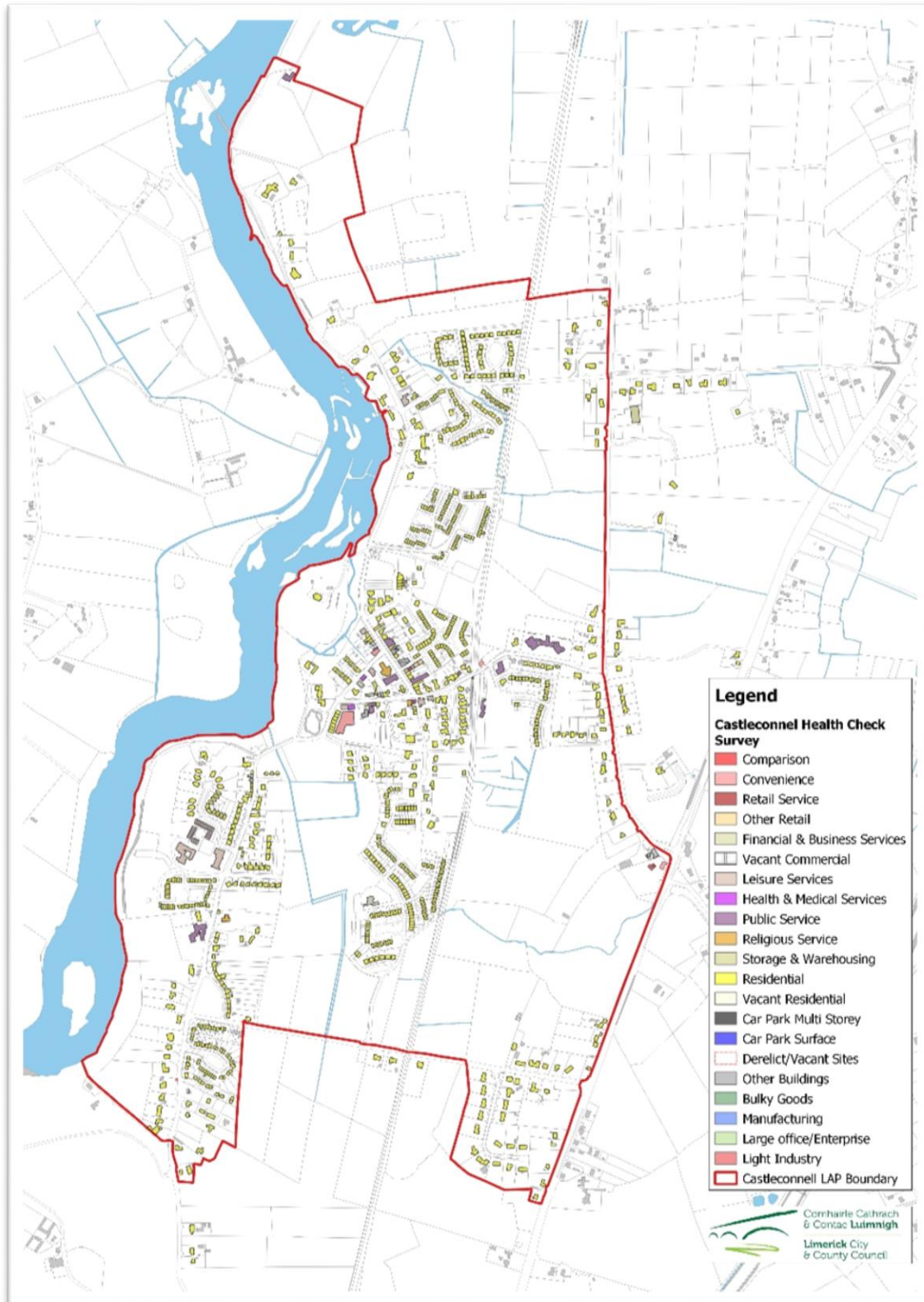


Figure 4.3 Town Centre Health Check January 2022

4.4 Retail

The Retail Strategy for Limerick Shannon Metropolitan Area and County Limerick designates Castleconnell as a Tier 4, Level 1 Large Village on a par with Caherconlish. The Strategy recognises that small towns, villages and local centres play an important role in the retail hierarchy, fulfilling the everyday needs of the communities they serve.

The Council supports the ‘town centre approach’ for the provision of retail as promoted by Government policy and the Retail Strategy when assessing planning applications. Development proposed on the ground floor in the village centre should be restricted to shopping and related services with active frontages to address the street. Out-of-centre locations for retail business and services are generally not permitted in efforts to consolidate the existing retail centre, encourage the reuse of vacant units within centre and provide services close to the existing development. The level of commercial vacancy as identified through a village centre health check in January 2022 is 6 units. This is testament to the vibrant range of services within the village core. This plan will support the delivery of new retail units and diversification of services to support the residential population. The LAP anticipates that additional retail development in Castleconnell will be achieved through the redevelopment of vacant units or the change of use of existing units.



Figure 4.4 Retail units in Castleconnell

All retail development will be subject to compliance with the Retail Strategy which forms part of the Limerick Development Plan.

Policy RL 3: Retail Strategic Policy: It is the policy of the Council to:

To support the sustainable long-term retail growth of Castleconnell as a Tier 4 Large Village Level 1, in accordance with the Limerick Development Plan and the Retail Strategy for the Limerick Shannon Metropolitan Area and County Limerick 2022 – 2028.

Objectives RL 01: Retail Development: It is an objective of the Council to:

Enhance the vitality and viability of Castleconnell as a retail service centre and to improve the quantity and quality of retail provision in the village by:

a) Emphasising the village centre as the primary shopping location.

- b) Encouraging the upgrade and expansion of existing retail units and the development of new units in the village centre.
- c) Ensuring that proposals with retail development elements comply with the provision of the Retail Strategy for the Limerick Shannon Metropolitan Area and County Limerick 2022 – 2028 in relation to site suitability and the sequential approach and ensure proposals which would undermine the vitality and viability of Castleconnell village centre will not be permitted.
- d) Encourage proposals at ground floor level within the village core for commercial uses.
- e) Prohibit the proliferation of uses in the village centre which would detract from the amenities, or the vitality and viability of the area such as fast food outlets, amusement arcades, off-licences, bookmakers and other non-retail uses. Storage use is not permitted as the primary use of ground floor units.
- f) Encourage the use of upper floors in retail premises for commercial or residential uses.
- g) Enhance the physical environment of the village centre as a location for shopping and business through measures aimed at improving conditions for pedestrians.
- h) Encourage the upgrade and refurbishment of existing retail units and the maintenance of original shopfronts, or the reinstatement of traditional shopfronts, where poor replacements have been installed, and discourage the use of external roller shutters, internally illuminated signs or inappropriate projecting signs.

4.5 Opportunity Areas

The Council has identified two areas that have the potential to enhance community vitality and create a positive public realm experience in the village. These sites have been chosen as the Council seeks to capitalise on the existing assets of Castleconnell.

Objective TCF2: Opportunity Sites: It is an objective of the Council to:

- a) Encourage and support the appropriate and sustainable development or redevelopment where appropriate of lands identified as development opportunity sites in line with the principles set out in Table 3.
- b) Ensure that new development in the village centre and in particular the opportunity areas comprises the highest of qualitative and design standards, complimenting the existing historical built fabric, or national heritage, sustaining Castleconnell, as a village in which to live, work, invest in and do business.

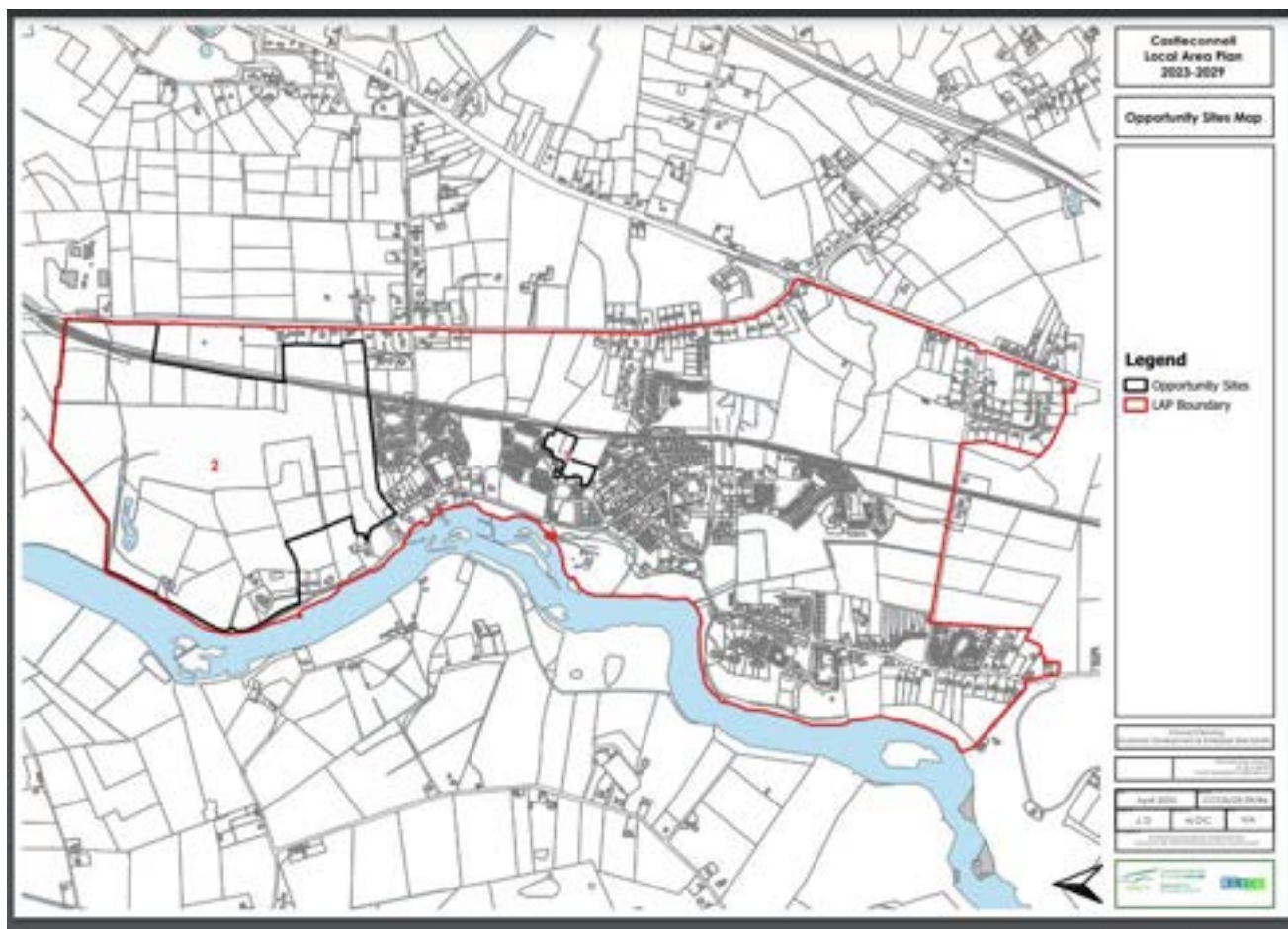


Figure 4.5 Opportunity Sites Castleconnell

Table 3: Opportunity Sites in Castleconnell

<p>Opportunity Site 1:</p>	<p>Site Description: Proposed local park on land between Scanlon Park and Bruach na Sionna adjoining the graveyard with connections to the village centre.</p> <ul style="list-style-type: none"> - 1.119 ha site zoned 'Community and Education' and New Residential Development Area - The site consists of two parcels of land separated by a roadway. The first parcel sits to the front of the graveyard, to the rear of the roadway access to Tontines and between Scanlon Park and Bruach na Sionna housing development. The site is bounded to the graveyard by a low concrete wall, to Bruach na Sionna by a high stone wall, by a concrete post and wire fence to Scanlon Park with a gate entrance and to Tontine by mature hedgerow, a shed and palisade fencing. - The second parcel sits to the rear of single and two storey dwellings with some allotments to the rear. There is also a redundant wastewater compound in the southern corner of the site. - Both parcels of lands are unoccupied and the lands zoned for residential use offer an opportunity for overlooking of the community and education zoned lands. - It is vital to ensure that any works undertaken does not inadvertently or otherwise, harm the residential amenity of the adjoining properties in Scanlon Park, Bruach na Sionna and properties at Tontines and include opportunity for the upgrade of the public realm in Bruach na Sionna <p>Development Potential/Principles:</p> <ul style="list-style-type: none"> - The development of a local park for public use. - To create a park that provides connectivity to Castleconnell village and a community amenity through a safe and attractive network of walkways and cycle paths. This will involve connections from Scanlon Park through to Bruach Na Sionna. - The overall development of the site shall occur in a coordinated fashion and shall have regard to the indicative layout set out underneath for both the park and residential development. - The Council will seek to safeguard the residential amenities of the neighbouring lands to this park. - Improve access and quality permeability to the village centre via Bruach na Sionna will also need to be incorporated.
-----------------------------------	--

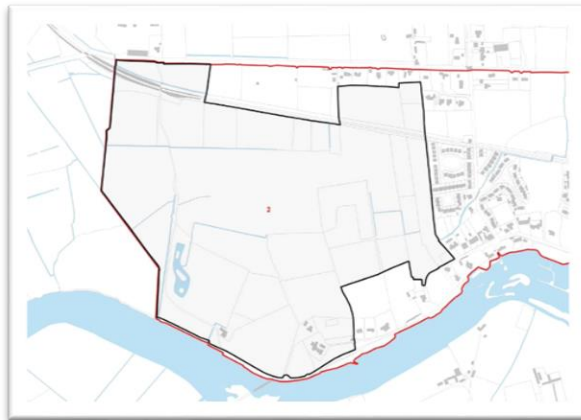


Opportunity Site 2:**Site Description: Worlds End**

The area is located adjoining the River Shannon at Worlds End. The entire opportunity area is 59.14 hectares, comprising of lands under forestry with forestry access roadways and a railway underpass. The site is accessed from the L11031 and extends through undeveloped lands with frontage onto the Regional Road R525.

Development Potential/Principles:

- The Council will seek to develop the area an amenity/recreation area.
- A comprehensive Masterplan to demonstrate a planned, integrated scheme for the area to reinforce the riparian character of the banks of the river safeguarding the natural habitat of the river its banks and the surrounding lands.
- Supporting documentation, including appropriate environmental assessments will be required to ensure there will be no adverse impacts on the integrity of the Lower River Shannon SAC.
- Public realm improvements will be a key element of the masterplan
- Lands have the potential to complement the proposed UL to Montpelier greenway which is currently undergoing a feasibility study and there may be opportunities for synergies in terms of recreation amenities.





Chapter 5: Sustainable Communities

Community infrastructure of a social, sporting, educational, and amenity value are crucial to provide opportunities for inclusion of all community members and provides benefits to health and helps attract inward investment. An Age Friendly Strategy for Limerick was adopted in 2015 and this commits to improving key areas of infrastructure service, information and overall social response to older persons issues and aims to improve overall quality of life. The Castleconnell Local Area Plan 2023-2029 provides policy support for the expansion of existing community infrastructure and development of new services in Castleconnell that meets the needs of all sectors of the community.



Figure 5.1 – Castleconnell Playground

Policy C1: Community Infrastructure, Recreation and Open Space Strategic Policy: It is a policy of the Council to:

Support the provision of a broad range of high quality social/community, educational, healthcare and recreational facilities and infrastructure in Castleconnell.

5.1 Community and Education Facilities



Figure 5.2 Castleconnell National School

The provision of good quality educational and childcare facilities is important to support the development of sustainable communities and facilitate economic development in Castleconnell. There are currently 3 childcare facilities located in Castleconnell village (ACM Kidz, Castle Crèche and Sunny Lane Crèche), providing full-day care facilities, sessional services, preschool, crèche, and after school facilities.

The primary school is located along Railway Road, and in the school year 2021/22 has an enrolment of 215 pupils. There is also Youth Space services in the village in the Parish Hall and the ACM centre. Other community services, include a community café, active social group, sewing club, evergreens club and card nights are also held in the village. Ballyhoura

Development Group also run a number of programmes in the village through day and evening classes such as computers, gardening, flower arranging and art classes.

A recent addition to community services includes an E-hub facility at Shannon House on the Main Street. There is also a part time HSE clinic in the village and a part time Garda Station located on Railway Road.

The primary role of the Planning Authority with regard to community facilities and services is to ensure that there is an adequate policy framework in place inclusive of the reservation of lands, should additional services be required. The Council will continue to support further economic and social progress with regard to community services, including capital investment in community and continuing care services in Castleconnell.

Objective C1: Community and Educational Facilities: It is an objective of the Council to:

- a) Ensure that there are sufficient educational and community facilities to meet the needs generated by proposed developments, by requiring the completion of a Sustainability Statement and Social Infrastructure Assessment for residential developments of 10 or more dwellings.
- b) Ensure that childcare and education facilities are provided in tandem with new residential areas, at accessible locations, which maximise opportunities for walking, cycling and use of public transport and comply with all relevant standards.
- c) Facilitate the development of lifelong learning facilities and digital capacity for distance learning.
- d) Ensure that the existing school site is protected for educational use and that lands adjacent to the school are also protected for future expansion of the school, if required, subject to site suitability.
- e) Support and facilitate the development and expansion of health service infrastructure by the Health Services Executive and other statutory and voluntary agencies and private healthcare providers in the provision of appropriate healthcare facilities and the provision of community based care facilities at appropriate locations, subject to proper planning consideration and the principles of sustainable development.
- f) Require future development of new community facilities to generally meet the following criteria of the 10 Minute Town Concept:
 - Generally located within 800m walking distance of the village centre;
 - Located centrally with respect to the community it serves, taking into account limitations of topography and the road and footpath network;
 - Be either serviced or serviceable by public transport;
 - Clustered with complementary community facilities, local retail services etc. and integrated with housing; and
 - Located where a substantial proportion of the population reside, in particular older and less mobile/mobility compromised members of the community.
- g) Support and facilitate sports clubs, schools, cultural groups and community organisations in the provision, improvement and expansion of community services, sports and recreation amenities, multi-purpose spaces at appropriate locations that are universally accessible. The Council promotes opportunities for multi and co-use active and passive recreational amenities including sports and recreational facilities, playgrounds and outdoor gym equipment within existing areas of open space.

- h) Support the upgrade of the community centre and seek appropriate funding in conjunction with relevant community groups.

5.2 Parks, Open Space and Recreation

Castleconnell has a range of recreational facilities and amenities, including sports clubs for gaelic games, soccer, kayaking, canoeing and a community playground adjacent to the River Shannon, the Castle Oaks hotel and the riverside walk. The playground is well used by the community and equipment upgrades and maintenance works have recently taken place. It is anticipated that an extension to the playground will take place during the lifetime of this plan.

The Plan supports the development of a community park within the confines of the village at the site marked Opportunity site 1 on the Land Use Zoning Map set out in Appendix 1 of this Plan. In this regard a coordinated plan will be required to integrate this park with the adjoining residential developments to ensure adequate overlooking is provided to the park as well as providing a pedestrian link from Scanlon Park through to the village centre, a green space for nearby residents and developing a park and amenity facility to serve the needs of the whole community.

The Strategic vision for Castleconnell set out in Chapter 3 recognises that if Castleconnell is to fulfil its role as a Level 3 settlement as set out in the Limerick Development Plan 2022-2028, it needs to provide community infrastructure in tandem with population growth. To this end new open space/recreation facilities are to be provided in conjunction with new residential developments and there will be a requirement to provide new spaces as part of these developments in line with the following criteria.

Type of Public Open Space	Area Required	Accessibility from residential units	Notes
Play lot/ pocket park – primarily for play for younger children	400m ² – 0.2ha.	Every home within 100m walking distance	All residential areas in excess of 50 units should incorporate a play lot provided at a rate of 4sqm per residential unit. Required in all housing estates, overlooked with passive surveillance by as many houses as practicable; Not to be located to the side or rear of dwellings; Developers will be required to provide a minimum of two permanent play features.
Small Park	0.2ha. – 2.0ha.	Every residential unit within 400m walking distance	To accommodate a small playground with a minimum of 4 play features, kick around space, and passive recreation; Overlooked with passive surveillance by as many houses as practicable; Not to be located to side or rear of dwellings.
Local Park	2.0ha. – 20ha.	Residences to be within 1km	To accommodate a wide range of uses including playing pitches, passive recreation and biodiversity areas.

Table 4: Public Realm Open Space Provision in Residential Developments in Castleconnell

The River Shannon and adjoining riverside walks are important contributors to the quality of life of the residents of the village and surrounding areas. The identification of possible amenity walkways and cycle routes throughout the village forms an important part of the plan.



Figure 5.3 – Fairy woods walk Castleconnell

There are many highly trafficked walking routes both around and within the village. The 3.8km Sli Na Slainte route begins at the car park of the playground and loops out to Daly's Cross along the Dublin Road and back to the village via Belmont Road. There is also a riverside walk which has potential to link into a potential greenway from University of Limerick to Castleconnell with the potential of a link onto Montpelier. The development of this greenway will be of huge amenity value to the residents of the village and also offers tourism potential to the village. Careful consideration of its location will need to be given to any expansion or new walkways at these locations to safeguard the integrity of the SAC site. Another walkway established as a recreational route in the village is the Castleconnell Bog Walk.

Limerick City and County Council are committed to the provision, upgrade, maintenance and expansion of these leisure facilities in the village in conjunction with private, public and voluntary organisations, subject to funding.



Figure 5.4 – Riverside walk

Objective C2 New Amenity Areas Walkways and Cycleways: It is an objective of the Council to

- a) Continue to facilitate the development of walkways and cycleways as indicated on the Amenity and Sustainable Transport Map (Appendix 1, Map 3) in co-operation with local interested parties, including the private, voluntary and public sector subject to funding. Any proposed development adjacent to walkways must incorporate connecting pathways into the designated walkway in their design. Developments shall be designed to overlook proposed walkways and shall link existing and proposed residential areas to each other, to amenity areas and to provide connections to the village centre. Proposals for new Walkways/Cycleways, Greenways and Blueways likely to adversely affect the Special Area of Conservation will be subject to appropriate environmental assessments. Any development which would have significant adverse effects on the integrity of European sites or cause a net loss of bio-diversity will not be permitted.
- b) Encourage walking and cycling as more convenient, popular and safe methods of movement in Castleconnell, and facilitate the provision of an attractive and coherent network of off-road footpaths and cycle facilities. This will be achieved by:
 - Providing a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network.
 - Providing secure cycle parking facilities at appropriate locations as opportunities arise.
 - Encouraging combined footpath and cycleway links along Belmont Road, the regional road R525, as far as Nelsons Cross, Lacka Road and along the River Shannon.
 - Ensuring careful consideration shall be taken in areas containing sensitive habitats and species and in particular, Natura 2000 sites, environmental assessments shall be carried out to an appropriate level and projects identified as damaging important habitats or species will not be permitted.
 - Ensuring that walkways are taken inland from the river bank to prevent disturbance of habitat features and bird life. Adequate buffer distances shall be provided to prevent disturbance of birds, other species and riparian habitats and shall also incorporate where possible screening or use of existing topography to screen human movements. Ecological

assessment will determine the appropriate locations, access types and routes and may also identify sensitive areas which are not suitable for public access.

- Ensuring that any proposals for access to the water or picnic areas, shall be confined to suitable locations within the existing settlement, which are already subject to human disturbance.
- Ensuring that walkways are appropriately designed and developed to allow room for birds and other species to withdraw.
- Avoiding looped walks around the entirety of ponds, lakes and water bodies and habitat features close to the river channel.
- Lighting shall be designed to take account of sensitive habitats and shall only be permitted, if deemed suitable and supported with an appropriate level of environmental assessment.
- Ensuring that any access to the river shall have warning signs regarding biosecurity to prevent the transmission of diseases, such as crayfish plague or invasive species. In areas for waterside access use of bio-security facilities for washing and treating craft such as kayaks shall be made available.

Objective C3 Parks, Open Space and Recreation: It is an objective of the Council to:

- a) Examine the feasibility of blue-way opportunities/potential along the River Shannon in Castleconnell, subject to appropriate ecological assessment.
- b) Protect existing open space by not permitting development, which encroaches on such open space, and protect semi-natural open space from inappropriate development and facilitate/support the provision of allotments or community gardens at appropriate locations.
- c) Ensure new residential development provides high quality public open space and play-lots proportional to the number of residential units, having cognisance to accessibility, safety, permeability, place-making and requirements set out in Table 4 above.
- d) Support the development of a local park at the site marked Opportunity Site 1.
- e) Support equipment upgrade maintenance works and an extension to the community playground at the Ferrybank car park, subject to resources. This extension will be subject to appropriate environmental assessment and any development which would have significant adverse effects on the integrity of European sites or cause a net loss of bio-diversity will not be permitted.

Chapter 6: Economic Development and Tourism

Castleconnell village is a service centre for its own community and its hinterlands. There is a diverse range of services in the village including retail, food and drink sectors, accommodation, professional services and community services. As the village is predominantly a commuter village, there are no large scale manufacturing/industrial facilities within the Plan boundary. This plan provides the appropriate framework for development through the provision of adequately zoned lands and policies, which support economic and tourism development. The Limerick Development Plan 2022 – 2028 sets out the strategic context for economic development in Limerick. The Limerick Local Economic and Community Plan adopted in 2016 sets out the objectives and actions to promote and support economic development and local and community development across Limerick.



Figure 6.1 – Village centre units in Castleconnell

Policy ED 1: Strategic Economic Development: It is a policy of the Council to Promote, facilitate and enable economic development and employment generating activities in Castleconnell on appropriately lands zoned lands, in a sustainable manner, in accordance with the Limerick Development Plan 2022 – 2028.

6.1 Enterprise and Employment

Together with the National Planning Framework, the Regional Spatial and Economic Strategy (RSES) for the Southern Region places a strong emphasis on compact, smart, sustainable, appropriate and inclusive economic growth in settlements.

The 2016 Census identified that the population of Castleconnell aged 15 or over at work was 54%, which is above those at work for the County as a whole of 50%. Additionally unemployment levels were low at 6.3%, well below the state average of 8.2%. There is no manufacturing/industrial facility operating in the village and with over 950 people having a daily commute of less than 30 minutes to school, work or college it is clear that a majority of the village's population have a workplace within that drive time.

With the opportunities afforded by digitalisation and e-working the Council promotes Castleconnell as a location to support remote working, supporting hubs, culture/creative and Smart tech enterprises. In this regard an eHub has been developed as part of the ACM network of community services in the village. A trend of an increasingly skilled workforce is desirable to generate employment, capitalise on the knowledge economy, support enterprise

opportunities and growth in the village. The LAP supports opportunities for employment creation, business and technology development in Castleconnell to facilitate economic activity, in accordance with the Regional Spatial and Economic Strategy and the Limerick Development Plan.

A total of 6.7 hectares of land was zoned for Enterprise and Employment use in the 2013 Castleconnell LAP. These lands are located adjacent to the R445. Presently there is a timber business operating on part of these lands with the vast majority of the land as of yet undeveloped and in use for agricultural purposes. This zoning remains in the proposed plan and an additional 4 hectares of land has been added adjacent to the Belmont Road and the Castlerock housing estate. These lands will provide opportunities for economic development and diversification in the village. Small settlements, such as Castleconnell have important potential to accommodate community based enterprise centres in serviced lands where there is good access to regional and national roads and a pool of local skills. Castleconnell is well placed in this regard given its proximity to the Limerick to Dublin Motorway and it's highly skilled workforce (29% working in professional services). The form and scale of development proposed on these sites shall be appropriate to their location, having regard to surrounding land uses and scale.

Objective ED 1: Enterprise and Employment Objectives: It is an objective of the Council to

- a) Encourage the reuse and redevelopment of vacant units, brownfield, derelict and infill sites for employment creation, subject to normal planning and environmental criteria.
- b) Ensure any proposals for the lands zoned for Enterprise and Employment adjoining the R445 and the R525, include a Traffic and Transport Assessment, to ensure that the local road network and associated junctions with the regional roads have sufficient capacity to facilitate the extent of the development planned. The costs of implementing mitigation measures arising from the assessment shall be borne by the developer. Any proposals at this sites shall ensure the provision of a minimum 20m landscaped buffer zone between proposed development and any existing or proposed residential developments.
- c) Ensure any proposal for part of the lands zoned Enterprise and Employment does not preclude the development of the remaining zoning lands. Any proposal submitted on site shall include an indicative layout which allows for a coordinated development at this location.
- d) Support home based economic activities, which are secondary to the main residential use and which can be accommodated without adverse impacts on the amenities of adjoining residential property, by reason of traffic, noise or other planning criteria.
- e) Retain sufficient lands around the site boundaries where industrial, enterprise or distribution activities are proposed to accommodate landscaping to soften the visual impact and reduce the biodiversity loss of the development.
- f) Early engagement with all utilities providers including Irish Water is strongly advised.

6.2 Tourism

Tourism is a proven economic driver, and can play a significant role in the overall development of Castleconnell, sustaining employment and providing opportunities for new business and services. Access to the River Shannon and the riverside walkways have already stimulated business growth in the village. Its location on the Limerick-Nenagh railway line; it's local heritage, including Castleconnell Castle and the many fine Georgian houses along the

riverbank, such as Stormont, Mountshannon and the Tontines; and the villages traditional streetscape with many fine traditional shopfronts and leisure activities such as fishing, water activities and walking all contribute to the attraction of Castleconnell as a tourist destination.



Figure 6.2 – Tourist amenities at the riverside

The River Shannon offers enormous potential for tourism related activities, such as fishing, boating, sailing, swimming and riverside walks. These activities take place presently in the village at the rear of the Castle Oaks hotel and at Worlds End. For centuries Castleconnell has been renowned for the quality of its angling. Potential business and commercial opportunities related to the river, such as recreation equipment rentals and sales, lessons and other related businesses will be encouraged at appropriate locations in the village. Also the Castleconnell River Walk, Castleconnell Bog Walk and the 3.8km Sli na Slainte walking route could be expanded upon and further developed as an important tourist resource and local amenity. Any expanding walks adjoining or within the SAC which would have significant adverse effects on the integrity of European sites or cause a net loss of bio-diversity will not be permitted.



Figure 6.3 – Worlds End

The Limerick Tourism Development Strategy 2019-2023 identifies the potential of extending the Greenway to Castleconnell onward to Montpelier which offers the potential to attract increased visitor numbers to the village.

The Council are presently engaged in acquiring land for amenity purposes at Worlds End. This has been included in Chapter 4 as Opportunity site no 2 and is identified in the Land Use Zoning Map Appendix 1. Castleconnell Boat Club is located at the end of this roadway within the confines of the village and offers access to the water ways via a slip way to all ages across the community. The area served by a small car park is used by swimmers, boating enthusiasts and walkers alike. It is noted that the roadway serving the amenity is narrow and suffers from congestion at peak times. There is potential to enhance the area as an amenity for the village subject to appropriate Environmental Assessment.



Figure 6.4 – Existing forest walkway at Worlds End

Objective ED 2: Tourism Objectives: It is an objective of the Council to

- a) Support growth in the tourism sector in Castleconnell by facilitating vital connections between complementary sites and attractions, and ensuring visitors can easily avail of services in Castleconnell village centre.
- b) Support the provision of a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network. Proposals for new Walkways/Cycleways, Greenways and Blueways likely to adversely affect the Special Area of Conservation will be subject to appropriate environmental assessments. Any development which would have significant adverse effects on the integrity of European sites or cause a net loss of bio-diversity will not be permitted.
- c) Support Castleconnell's role in the Limerick Tourism Development Strategy 2019 - 2023 and any subsequent replacement document.
- d) Require tourism projects to adhere to appropriate environmental and ecological assessment and to mitigate any adverse environmental, biodiversity and ecological impacts.
- e) Require new tourism projects located within the village to foster synergy with the services and retail business located in the village.
- f) Support community engagement in the development of tourism and amenity projects in the village.

Chapter 7: Sustainable Mobility

National and regional planning policy emphasises the efficient movement of people and goods, through an integrated multi-modal, accessible and affordable transport network. National Active Travel policy promotes reducing the demand for travel and the reliance on the private car in favour of public transport, car-pooling, cycling and walking as means to promote healthier lifestyles, climate change and improved air quality. A key objective of sustainable travel and its infrastructure is to ensure active travel can be seamlessly built into everyday life as part of normal daily routines, including the commute to school, college or work. A transition towards more sustainable modes of transport is essential to reduce Ireland's carbon emissions and reach the Government's goal of a 50% reduction in carbon emissions by 2050.

Compact settlements are conducive to sustaining the critical mass of population or employees to justify infrastructural investment in transport networks. Central to this is the application of the 10 minute town concept whereby all community services, employment opportunities and residences are within walking distance, thereby not requiring transport by car. A fundamental role of a Local Area Plan is to guide the location of land uses considering the integration of good land use planning with transportation. This will unlock significant improvements in quality of life, including more sustainable modes of movement which also have a role in achieving climate targets.

Policy SMT P1: Integration of Land Use and Transport Policies - It is a policy of the Council to Support and facilitate the integration of land use and transportation policies for Castleconnell, as a means of reducing the impact on climate change. The Council will ensure the delivery of a sustainable compact settlement, which can be served by various modes of transport with a focus on reducing the need to travel.

Policy SMT P2: Transport and Movement - Promotion of Sustainable Patterns of Transport Use: It is a policy of the Council to Seek to implement in a positive manner, in cooperation with other relevant stakeholders and agencies, the policies of the NPF, RSES and the Department of Transport's Active Travel publication, to encourage more sustainable patterns of travel and greater use of sustainable forms of transport in Castleconnell, including public transport, cycling and walking.

7.1 Movement and Accessibility

The Council is committed to the development of a network of access routes reflecting the requirements of personal safety, choice and convenience to services and amenities. The access network should facilitate access for all, and should be socially inclusive. These requirements and the desire to minimise dependence on the car for short journeys, means that a permeable matrix type network is preferable to a network with long cul-de-sacs. This plan supports the enhancement of the existing walking and cycling routes in the village as well as the upgrade and creation of new linkages within the village.



Figure 7.1 – Slow zones Castleconnell

There are public and private car parking areas within Castleconnell. The Castlecentre development at Supervalu provides 110 car parking spaces and 8 spaces are provided at the train station. A further 30 car parking spaces are provided at the Ferry Car Park and 20 spaces at Worlds End. On street car parking also takes place in the village centre, which leads to congestion during peak times. To this end, an objective is included in the Plan to support the development of a Traffic Management Plan for the village which will identify and assist in addressing traffic issues. Presently the Council is undertaking work adjacent to the school to improve footpath connectivity and access arrangements.

Objective SM 1: Movement and Accessibility: It is an objective of the Council to

- a) Enhance the walking and cycling networks through the village within the lifetime of the Plan and seek to improve direct pedestrian linkages, cycle networks and infrastructure throughout the village and improve connectivity to the village centre and existing services. Any development of the lands at Coolbawn for Residential and/or Enterprise and Employment use shall provide for pedestrian/cycling permeability between these lands and Station Road/Railway Road.
- b) Deliver a Traffic Management Plan for the village within the lifetime of the Plan, which will consider traffic flow around the village. High quality public realm will be required as part of any village centre redevelopment.
- c) Facilitate and implement school streets and school zones, including slow zones around the school, and promote/facilitate active travel options for school children to reduce the health and safety risks associated with traffic congestion, pollution and inactive lifestyles. This includes the Safe Routes to School (SRTS) Programme in partnership with the NTA and Green schools.
- d) Incorporate Sustainable Travel measures in all new developments in the village.
- e) Protect the existing rail route against encroachment from inappropriate uses that could compromise the long term development of the rail facility and its Park and Ride facility.
- f) Support the development of a new Park and Ride facility in the village.
- g) Support the provisions set out in the 2020 DMURS Interim Advice Note – Covid-19 Pandemic Response.

7.2 Achieving modal shift

In order to achieve more sustainable travel patterns, a significant focus on reducing car dependency and increasing permeability is required as promoted by higher-level spatial plans. These behavioural changes will contribute to healthier lifestyles, lower greenhouse gas emissions and air pollutants, and increase footfall through the village. Vehicles often dominate the streets and vehicle movement can be detrimental to vibrancy and livability of the village, as well as depleting public realm and creating safety issues for pedestrians and cyclists. Redesigning our streets to prioritise walking, cycling and other non-motorised wheel-based modes is just one crucial aspect of enabling and creating a modal shift from the private

car. We also need to support individual citizens to make the choice to active travel through behavioural change projects and support initiatives.



Figure 7.2 – Accessibility signage in the village

Bus services in the village consists of seven return daily services, operated by Bus Eireann to Limerick City, at a number of locations around the village. The railway station in Castleconnell is located centrally in the village and has a parking area to facilitate park and ride. A twice daily rail service runs from the village to Limerick City. In line with national transport and planning policy, the Council welcomes any improvement to public transport services and infrastructure within the lifetime of this Plan. Improvements to connectivity for the daily commute to the wider Limerick City and County are encouraged by the Council to improve accessibility to the services, employment and the educational opportunities of Limerick City.

In accordance to the 2016 Census, just 8% of persons aged 5 years + walked to work, school or college in Castleconnell. In the 2011 Census, this mode of commute accounted for the same percentage of daily journeys. Less than 1% cycled in 2016 which is in line with the figures from the 2011 Census. In the 2011 Census 6% of commuters took the bus and by 2016 this had increased marginally to 8%. The car is still the dominant means of travelling to work, school or college in Castleconnell and either as a driver or as a passenger it accounts for 75% of journeys. Again this is in line with the figures recorded in 2011(75%). Figure 7.3 below outlines the means of travel to work, school or college of all persons over the age of 5 in Castleconnell.

These Census figures are substantially below current national government policy for modern transport, including active travel. With a compact settlement offering a range of residential choice, with access to the services and amenities that Castleconnell currently processes, supports for better connectivity and choice of mode of movement in a safe, efficient and the affordable integrated mobility network there is potential for Castleconnell to progress towards reaching the national targets for more sustainable travel.

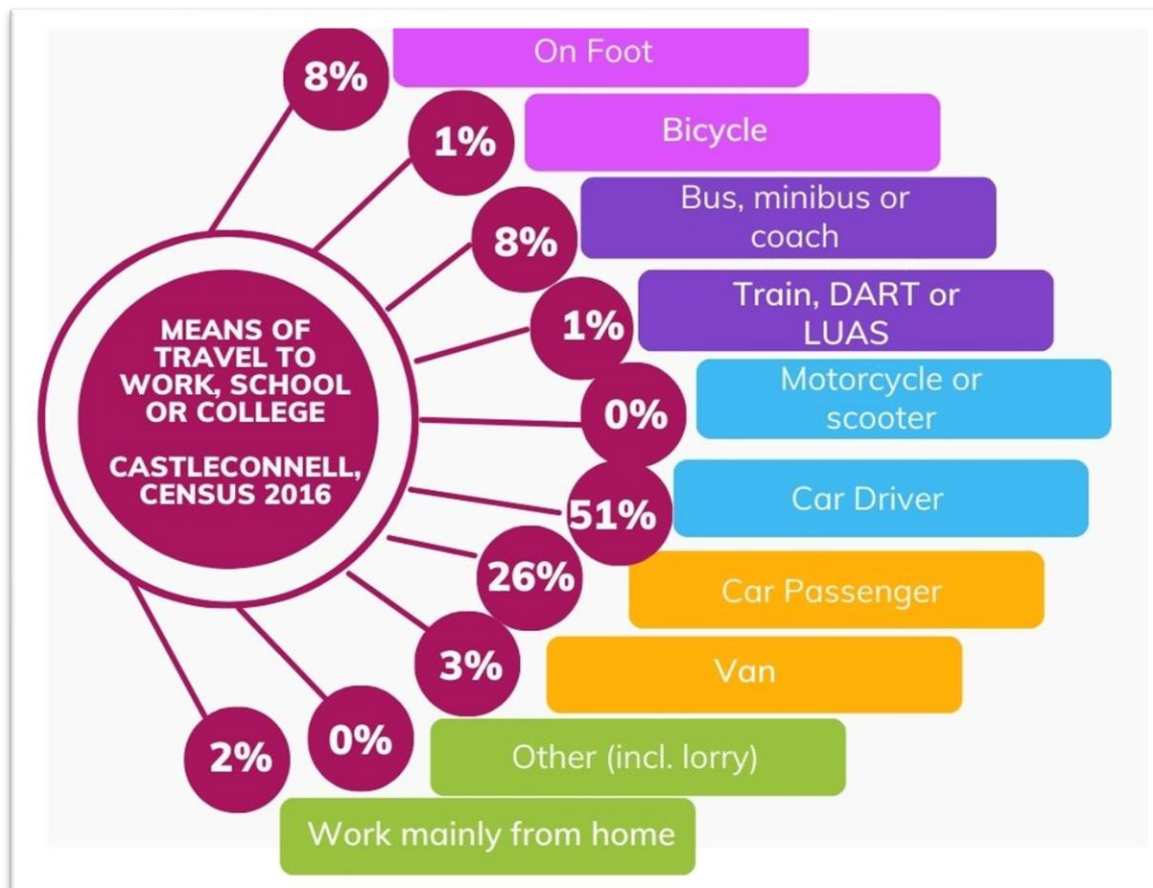


Figure 7.3: Persons Aged 5 years + mode of commute to work, school or college in Castleconnell, Census 2016

The Limerick Development Plan 2022 – 2028 sets the following targets for the modal shift for Tier 3 settlements which includes Castleconnell.

Settlement	Walk	Cycle	Public Transport
Settlement Levels 3-6/Rural Areas (All Work/Education Trips)	15%	5%	12%

Table 5: Mode Shift Targets for commute to work, school or college, by 2028

While there are challenges facing Castleconnell, with regard to promoting a modal shift away from the private car, this Local Area Plan strives to reduce the reliance on the private car, by promoting and facilitating more sustainable modes of transport, based on the principles of the 10 minute town concept, a compact settlement and the town centre first approach. The Council will co-operate closely with other relevant agencies and stakeholders, including the NTA and TII to address modal shift targets as above.

Objective SM 2: Modal Shift and Behavioural Change: It is an objective of the Council to:

a) Encourage, promote and facilitate a modal shift towards more sustainable forms of transport in Castleconnell.

- b) Support and facilitate implementation of an integrated, multi-modal and accessible public transport network catering for all members of society across Castleconnell and its hinterland.
- c) Collaborate with transport providers to improve timetabling, information display and connectivity to adjacent settlements and Limerick City. All future development proposals shall incorporate the relevant objectives of the Limerick Shannon Metropolitan Area Transport Strategy (LSMATS) or any updates thereof.

7.3 Roads

Castleconnell is readily accessible by the regional roads, the R445 and R525, which provides easy access to Limerick City and the adjoining settlements. The eastern boundary of the plan area is the old Limerick/Dublin national road. Since the opening of the M7 motorway, this road has been downgraded to a regional road. Access and egress from the approach road to Castleconnell is now much easier, quicker and safer due to the reduced amount of traffic using this road. In total there are four approach roads to the village, the main approach route being at the junction of Daly's Cross and the R445, which continues onto Montpelier and O' Briensbridge. The other approach roads are at the junction of the Belmont Road and the R445 and further north branching off the R445 passing through Nelsons Cross onto Lacka Road. Also the back road through Lisnagry serves Castleconnell from the southwest.

Castleconnell also benefits from its riverside location and the off road walkway/cycleways along the river's edge. While these pathways provide a special amenity to the village there are opportunities to extend them through connection to adjoining areas and the wider greenway/active travel network. In this regard a feasibility study is presently underway to establish the scope for a connection from UL to Castleconnell and onward to Montpelier. This network would provide further opportunities for active mobility by walking and cycling with its connections to Limerick City and potentially into the adjoining Counties.

Objective SM 3: Roads: It is an objective of the Council to:

- a) Protect the capacity of the regional road network from inappropriate development, having regard to all relevant Government guidance and Objective TR 041 Strategic Regional Roads of the Limerick Development Plan 2022-2028 and ensure development does not compromise the performance of the network or future improvements to network.
- b) Prohibit advertising signage adjacent to the regional road networks.
- c) Ensure all developments protect and safeguard the capacity and efficiency of the drainage regimes of the regional and local network.

Chapter 8: Climate Action, Environment and Heritage

8.1 Climate Action and the Environment

Climate change and the transition to a low carbon society has become a critical element of all land use plans. The effects of climate change is quickly becoming the biggest challenge facing society today posing a serious threat to quality of life, communities, businesses, the environment and biodiversity. Land use planning is a critical tool to mitigate and adapt to climate change and to the protection of our environment. Implementation of the LAP will take into account relevant targets and actions arising from sectoral plans in order to comply with the requirements of the Climate Action and Low Carbon Development (Amendment) Act 2021. This supports Ireland's transition to Net Zero and achieving a climate neutral economy by no later than 2050.

The Limerick City and County Council Climate Change Adaptation Strategy 2019 - 2024 outlines that Climate Action comprising of two elements – (1) Adaptation and; (2) Mitigation. Adaptation is the efforts to manage the risks and impacts associated with existing or anticipated impacts of climate change, while mitigation is the efforts to reduce the emission of greenhouse gases, and reduces the severity of future climate change impacts.

Through the policies and objectives set out in the NPF and RSES, Climate adaptation and mitigation measures are embedded in the plan-making process. The Local Area Plan has been prepared with the purpose of integrating and implementing these policies and provisions where relevant. The approach to density, land use, design and movement is consistent with broader measures to address climate change in the areas of sustainable travel, green infrastructure, flood risk adaptation and renewable energy sources, amongst others.

There are a number of ways in which a Local Area Plan can seek to reduce the carbon footprints and mitigate against the negative impacts of climate change. These include:

- Promoting the provision of blue green infrastructure (planting of trees, hedgerows, woodlands, construction of surface water retention features, such as ponds, lakes or swales);
- Promoting climate proofing in the design of buildings and neighbourhoods;
- Promoting the use of indigenous resources and adaption of new building techniques and designs that minimize energy intensive inputs;
- Seek to improve energy performance ratings on existing and new buildings. All new homes constructed must reach an energy performance rating in accordance with Part L – Conservation of Fuel and Energy 2019, which gives effect to Nearly Zero Energy Building (NZEB) Regulations.



Figure 8.1 – Vista from Castleconnell Castle to the River Shannon

Policy CH 1: Climate Change: It is a policy of the Council to Protect and enhance environmental quality and implement the climate action measures through the planning process to help address climate change.

Objective CH 1: Climate Change: It is an objective of the Council to

- a) Ensure climate-proofing measures are incorporated into the design, planning and construction of all developments, including utilities and their networks. The use of green infrastructure as a mechanism for carbon offsetting and surface water management is encouraged.
- b) Ensure that all residential and commercial developments are designed to take account of the impacts of climate change, including the installation of rainwater harvesting systems, and that energy efficiency and renewable energy measures are incorporated. In the case of large industrial, commercial or newly constructed public buildings, the incorporation of renewable technologies, such as solar energy in the design will be encouraged, subject to compliance with all relevant planning criteria.
- c) Support and promote climate smart and the NZEB standard of building or equivalent for all new developments.
- d) Promote and support development of renewable energy sources, which will achieve low carbon outputs and promote Castleconnell as a low carbon area
- e) Support the development of low carbon and green technological businesses and industries.
- f) Promote responsible development and management of land, drainage systems and natural habitats and to encourage development at appropriate locations, which minimise the use of fossil fuels and maximises the use of local or renewable resources.
- g) Promote the appropriate adaption of built heritage to respond to the effects of climate change.

8.2 Biodiversity and Blue green infrastructure

Blue green infrastructure refers to the incorporation of blue elements (water environments), like rivers, canals, ponds, wetlands, floodplains, water treatment facilities, and green

elements, such as trees, forests, fields and parks, in urban and land-use planning. This infrastructure uses natural processes, such as filtration or absorption to address water and air quality. In some instances blue and green infrastructure can exist side by side in a complimentary relationship, such as the River Shannon, its banks, and mature trees. This Plan promotes networks of blue green infrastructure as aligned with higher-level plans, including the Limerick Development Plan 2022-2028 and the Regional Spatial and Economic Strategy for the Southern Region.

This Local Area Plan can help mitigate further impact on the environment through ensuring that future development takes cognisance of the natural elements of sites and incorporates them within the design of buildings and neighbourhoods, connecting them into the wider blue green infrastructure network. Where there are no natural site features present, the potential for a landscaping plan to re-establish green features and infrastructure should be examined.

Castleconnell is located within the Shannon Coastal Zone Landscape Character Area, as set out in the Limerick Development Plan 2022-2028 and the presence of the River is the defining characteristic of the village. A wide diversity of species, habitats, ecosystems and landscapes make up the biodiversity of the village. Connected green spaces provide the greatest benefit to biodiversity in an urban context. In this regard, there is an opportunity to recognise the key conservation role the River Shannon plays in the village's biodiversity. Existing trees and hedgerows are an important features supporting biodiversity and should be carefully considered in any planning application. Applications shall seek to retain hedgerows, landscaped areas, retention or planting of trees and preservation of natural features etc where possible. Suitable planting new edge or buffer treatments will be encouraged as part of new developments. These areas will emphasize enhancement of local biodiversity and local surface water management, while enhancing visual amenity. Management of invasive species, prior to and during construction shall be considered.



Figure 8.2: Blue Green Infrastructure in Castleconnell



Figure 8.3: Blue green Infrastructure benefits (Image courtesy of Limerick City and Environs Blue Green Infrastructure Strategy).

Limerick City and County Council are currently undertaking a Blue Green Infrastructure Strategy, which will be used to inform and guide the planning and management of BGI within Limerick City and Suburbs. Many of the BGI principles will be relevant to Castleconnell. BGI has far-reaching benefits, including the creation of places, which improve physical and mental health, contributes towards the provision of space for nature, and plays a vital role in climate change mitigation and adaptation along with many economic benefits.

This strategy identifies a number of specific themes which are both interlinked and cross cutting. The Local Area Plan for Castleconnell, includes a number of policies and objectives that will guide the direction and support the delivery and enhancement of BGI within the village. These 'Enhancement Opportunities' are outlined in Table 6 and includes the associated key cross compatible Climate Change themes.

Fig 8.4: Image taken from Limerick City and Environs Blue Green Infrastructure Strategy: Climate Change Interlinking and Cross-cutting Themes



Enhancements Opportunities	Theme
<ul style="list-style-type: none"> The creation of a local park between Scanlon Park and Bruach Na Sionna (Opportunity Site 1) which will provide opportunities for both active and passive recreation whilst creating additional linkages and connections from Scanlon Park through Bruach Na Sionna into the village centre. It will also provide local facilities/services/amenities, including green space for the existing residential development and opportunities for food production in the proposed gardens. 	
<ul style="list-style-type: none"> Expand on existing public open space provision through the inclusion of an Opportunity Site at Worlds End, which will increase linkages and connectivity to the wider network, will provide increased accessible, friendly outdoor seating and recreation provision. 	




















<ul style="list-style-type: none"> Maintain and expand the provision of active travel infrastructure to provide for accessible safe pedestrian and cycling route networks in Castleconnell to minimise the need to travel via private transport. Such opportunities, include the provision of additional active travel infrastructure in proximity to Castleconnell National School and upgrade works to the connections from Castlerock through to the village. 	   
<ul style="list-style-type: none"> Support the delivery of a Traffic Management Plan for the village which will improve movement and accessibility through the village and enhance the public realm. 	  
<ul style="list-style-type: none"> Support the existing Park and Ride facility adjoining the train station and the provision of a new Park and Ride adjoining the Coolbawn housing estate to minimise the need to travel via private transport. 	
<ul style="list-style-type: none"> Enhance the benefits of the River Shannon in the creation of new, and existing walkways utilising the amenity value of the river, whilst creating additional linkages, connections and access points to the River Shannon. 	   
<ul style="list-style-type: none"> Support proposed upgrade and extension works to the playground and the provision of play lots, in tandem with new residential developments. 	
<ul style="list-style-type: none"> Ensure connectivity/linkages and open space provision, are provided for in the design of future developments, in accordance with the Development Management Standards of Chapter 11 of the Limerick Development Plan. 	 
<ul style="list-style-type: none"> Enhance the River Shannon to attract target species as identified in its designation as part of the Lower River Shannon SAC to enhance the ecological corridor. 	 
<ul style="list-style-type: none"> Support the integration of surface water management solutions into the landscape features including nature-based SuDS. 	
<ul style="list-style-type: none"> Safeguard ecological connections across all infrastructure projects for biodiversity. 	

Table 6: LAP Climate Action Opportunities

Feature	Local name	Condition/Description	Asset Value
River Shannon	As indicated	Good – Designated a Special Area of Conservation. Riverside/Forest Walk at the rear of the Castle Oaks Hotel.	The riverside walk facilitates a looped walk in the village, access via a footbridge to wider walkways in County Clare and potential to link into any extended walkway from UL to Montpelier. Mature trees and a fairywood are located on the pathway – biodiversity corridor, connectivity, active lifestyles.
Local walking loops	Sli na Slainte	<ol style="list-style-type: none"> 1. Walking loop from the playground to Skeehan's Cross via the National School, onward to Daly's Cross, along the Dublin Road, back through Belmont Road to the playground. 2. Nelsons Cross – R525 – Skeehans Cross – Daly's Cross – Dublin Road – Gooig – Nelsons Cross 3. Nelsons Cross – L1103 – The Mall – Main St – Castlerock – Dublin Road – Daly's Cross – Forge Road(R525) – Nelson's Cross 	Looped walking routes for the village, well used and popular among locals – infrastructural upgrades needed in places - public amenity value, connectivity and lifestyle.
Playground	Castleconnell Community Playground	Relatively good condition, equipment needs upgrading within the lifetime of the Plan.	Social interaction, active lifestyle.
Opportunity Site 1 site area 1.12 ha	As indicated	The site consists of an enclosed field, separated from the adjoining graveyard by a concrete wall, Bruach na Sionna by	Opportunity site for the development of a park overlooked by new residential development. The park will establish linkages and

		a high stone wall, The Tontines housing development by a mature hedgerow and palisade fencing and Scanlon Park by a concrete post and wire fence with a gated entrance.	connectivity, social interaction, public amenity value and offers ecological potential.
Opportunity Site 2 Worlds End site area of 59.14 ha	As indicated	Important access point to the river and wider area. Any works in this area will require a comprehensive masterplan and appropriate Environmental Assessments to determine if there are any significant effects on the ecology of the Natura 2000 site.	This area has been identified as a valuable amenity that has potential for further appropriate development in the interests of habitat protection and recreational amenity. It currently offers amenity space with a car park, slipway to the river and access to walkway along the river and into woodlands. The potential development of an amenity resource offer further potential. It is important to protect and enable this area to work as an amenity space for the whole village – social interaction, public amenity value, connectivity.

Table 7: Inventory of Blue Green Infrastructure

Objective CH 02: Blue Green Infrastructure: It is an objective of the Council to

- Develop and enhance blue and green infrastructure opportunities throughout Castleconnell and in line with the detail set out in Table 6: LAP Climate Action Opportunities.
- Promote connecting corridors for the movement of species and encourage the retention and creation of features of biodiversity value, ecological corridors and networks that connect areas of high conservation value such as woodlands, hedgerows, earth banks, watercourses, wetlands and designated sites where possible. In this regard, new infrastructural projects and linear developments in particular, will have to demonstrate at design stage, sufficient measures to assist in the conservation of and dispersal of species.
- Where possible remove barriers to species movement, such as the removal of in-stream barriers to fish passage.

8.2.1 Water Framework Directive

The European Union Water Framework Directive (WFD) was signed into law in October 2000. The Water Framework Directive (WFD) brings an integrated approach to managing water quality on a river basin (catchment) basis, in order to protect and enhance both ecological and chemical quality of rivers, lakes, groundwater, estuaries and coastal waters.

The WFD is implemented through River Basin Management Plans (RBMPs) in three six-year cycles. Each cycle providing an opportunity to assess water conditions at different stages and set out actions to achieve water quality objectives. The third cycle runs from 2022-2027. Local authorities are responsible for the development and implementation of RBMPs at a local level.

Policy CH 2 Water Framework Directive Policy: It is a policy of the Council to:

Implement changes to the management of water bodies, taking account of all aspects of the Water Cycle in accordance with the Water Framework Directive and the principal objective of the WFD to achieve good status in all waters and to ensure that status does not deteriorate in any waters.

8.2.2 Special Control Area

The LAP seeks to protect the ecological integrity of the river by maintaining a buffer zone along the River Shannon, which prevents the encroachment of future development onto the riverbank as recommended by Inland Fisheries Ireland.

The River Shannon remains of central importance to the village and is recognised as an important amenity and is valued as a natural habitat. Natura 2000 is a European network of important ecological sites. The EU Habitats Directive (92/43/EEC) placed an obligation on Member States of the EU to establish the Natura 2000 network. The network is made up of Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC), and SACs, established under the Habitats Directive itself. The River Shannon has been designated as a Special Area of Conservation. This designation has implications for development, in terms of buffer zones, but also constitutes an opportunity, as the designation of such areas is generally in recognition of good species, diversity and river quality, which would have implications for angling activities.

The lands adjoining the river are zoned as a Special Control Area. This zoning recognises the importance of the natural habitat of the River Shannon. Development including, holiday homes and holiday apartment shall not be permitted on lands zoned special control area. Ancillary leisure/tourism development may be permitted, where it can be satisfactorily demonstrated that there will be no impact on the integrity of this Special Control Area or on the natural habitat of the river and its designation as part of the Lower River Shannon Special Area of Conservation. The extension, expansion or conversion of existing non-conforming uses in this special control zone shall be assessed on their merit.



Figure 8.3 – Special Control Area Castleconnell

Indicative walkways have been indicated on the Land Use Zoning Map in the Plan. These contribute to the role of the river as an amenity and can also help to reinforce the idea of a buffer zone between the river and development. Careful consideration must be given to any impact upgrade or extension works relating to walkways would have on the integrity of the Lower River Shannon Special Area of Conservation.

There are a number of impressive trees groups and freestanding trees that exist particularly along the River walk from the village centre south to Doonass Falls and on the lands opposite the castle. These are particular landscape features which future development patterns should have regard to. A number of field boundaries within the plan area, while lacking mature impressive trees, nonetheless form an essential part of the natural fabric of the area.

Another important feature in Castleconnell is the natural stone boundary walls. These should be retained where possible and be integrated into future developments.

This Local Area Plan seeks to protect, preserve and enhance the natural heritage for the benefit of future generation as well as safeguarding the continued and sustainable use of this asset.

Objective CH 04: Special Control Area: It is an objective of the Council to

- a) Protect and maintain the integrity of the Special Control Area and protect the watercourses in Castleconnell providing a buffer zone, in accordance with the Special Control Area zoning designation on the Land Use Zoning Map;
- b) Ensure that development including holiday homes and holiday apartments shall not be permitted on land zoned Special Control Area. Ancillary leisure/tourism development that are water compatible may be permitted, where it can be satisfactorily demonstrated that there will be no impact on the integrity of this Special Control Area or on the natural habitat of the River and its designation as part of Lower River Shannon Special Area of Conservation.

Objective CH 05: Tree Protection and Nature Conservation: It is an objective of the Council to

Seek to protect natural stone boundary walls, ponds/wetlands, other natural features of local importance and mature trees, where possible. Development that requires the felling or harming of such trees will not generally be permitted, unless supported by a tree survey

establishing that the subject trees are of no ecological or amenity value. Such report shall be undertaken by a suitably qualified and competent person.

Objective CH 06: Designated Sites and Nature Conservation: It is an objective of the Council to

- a) Protect the integrity of the Lower River Shannon Special Area of Conservation site, through the establishment of buffer zones along the river.
- b) Ensure that appropriate waste water infrastructure is available to support new developments to safeguard water quality.
- c) No projects which will be reasonably likely to give rise to significant adverse direct or indirect or secondary impacts on the integrity of any Natura 2000 sites, having regard to their conservation objectives arising from reduction in species diversity, shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).

8.3 Built Heritage and Archaeology

8.3.1 Protected Structures

There are 37 Protected Structures in Castleconnell and 30 of these structures are also listed on the National Inventory of Architectural Heritage (NIAH) such is their significance at a regional and national level. The diversity of structures on the Record of Protected Structures lists, includes railway buildings, religious buildings, the buildings and terraces of the traditional vernacular streetscape and shopfronts, mausoleums and medieval structures (Refer to Appendix III). There is an onus on the owner and/or occupier of a protected structure to ensure that the structure or any element of it is not endangered. Endangering a structure can mean either directly or indirectly damaging any element of the structure or neglecting the structure to the extent that it is damaged. When considering works, including minor works to a Protected Structure you are advised to contact the Conservation Officer to ascertain obligations in terms of the proposed development to avoid damage to the integrity of the historical built fabric of the structure. Some minor works, while exempt from planning permission in general circumstances may not apply to Protected Structures.

Limerick City and County Council is obliged to compile and maintain a Record of Protected Structures (RPS) under the provisions of the Planning and Development Act 2000 (as amended). Under the Act, Local Authorities must include objectives for the protection of structures, or parts of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The complete list for Limerick City and County is available as Volume 3 of the Limerick Development Plan. A Protected Structure, unless otherwise stated, includes the interior of the structure, the land lying within the curtilage of the structure, and other structures lying within that curtilage and their interiors. The protection also extends to boundary treatments.

The National Inventory of Architectural Heritage (NIAH) was established under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record and evaluate post 1700 architectural heritage. The Department of Culture, Heritage and the Gaeltacht carried out the survey to inform the preparation of the NIAH.



Figure 8.4 – Guerins Pub

8.3.2 Architectural Conservation Areas (ACA)

Castleconnell has three main areas of architectural interest: the northern ACA, the central core ACA and the southern ACA. Throughout these areas the River Shannon's presence is a significant topographical feature and it makes an immense contribution to the character and ambience of Castleconnell and its surrounds. The collective arrangement of buildings within these areas are considered of significance to the built heritage of the village and contributes to the character and established street and townscape. It is the objective of the Council to preserve the character of these areas and therefore they are designated as Architectural Conservation Areas (ACA). The ACA is defined in the Protected Structures and ACA Map 4. The designation of the ACA does not preclude future development, but the carrying out of works to the exterior of structures within the ACA shall not be considered as exempted development where those works would materially affect the character of the ACA. In assessing development proposals within the ACA, the Council shall take into account the material effect that the proposed development would be likely to have on the character of the ACA.

8.3.2.1: Northern ACA

The northern ACA was a significant area of economic and social activity. The spa-well, still extant, was the focus of activity and during the early part of the 19th century a building known as the Assembly Rooms was built between it and the Shannon. Around this location were a number of country houses and landmark buildings such as a Hotel and the Police Barracks and also the high amenity area of Worlds End.



Figure 8.5 – Part of northern ACA

Significant buildings in this area, include Lacka House, two semi-detached houses to its south-east and their neighbouring building; Grange House and the complex of structures associated with the chalybeate well to its south, the former Charco's Public House on the junction and, to its east, Meskell's Shop and its associated residence.

8.3.2.2: Central Core ACA

During the latter half of the 19th century, the layout of the approach road into the core of Castleconnell from the south was altered. The primary effect of these modifications was to bring the ruins of Castle Connell, from which the village takes its name, into the grounds of Stormont, one of the many houses constructed along the banks of the River Shannon. The second effect of this road alteration was the formation of a triangular space which was to become the core of the village, the location of several amenities, and the focal point of economic and civic activities. The eastern side of the triangle became the location for the Roman Catholic Church and the national school, with its attached teacher's residence. To the eastern and southern side of the triangle, structures were demolished and replaced with new buildings, or altered and put to new use. Within this area there are buildings considered to have stature, such as Island House and the church, or to have a distinct character, such as The Tontines, and historical importance, such as the former Shannon Hotel. There are more modest structures, such as the terraced cottages along the southern side of the triangle.



Figure 8.6 - Ruin of Castle Connell

The building lines found in Castleconnell are similar to those found in many Irish towns and villages. Each individual building, tended to have its own distinct plot of land. The buildings tended to be constructed in terraces, though this was not adhered to in all instances. While many of the buildings within the centre of Castleconnell's historic core, address the footpaths directly, many are characterised by a distinct set-back which can be demarked by a small front garden, or a yard undifferentiated from the path through the use of a boundary wall.

8.3.2.3: Southern ACA

The lands within the Southern ACA comprises of former small estates and demesne lands associated with country houses, some of which have survived, though modified and altered. The essential feature of these houses was the prized views and vistas of the River Shannon to be had from their principal rooms and locations within the property. Land management features, such as ha-has, which allowed for uninterrupted views of the river's waters, still survive, along with demesne walls, gateways, and the occasional building associated with the estates. The value of the landscape, and its contribution to the amenities and character is highly valued and every effort has been made to preserve the views down to, and across the River Shannon. A notable feature in recent years has been the construction of new houses that reflect the period of design and creation. The planning authority welcomes development and encourages it as a reflection of best practice in the area of architecture.

In undertaking repairs or maintenance works to buildings in the Castleconnell Architectural Conservation Area, property owners and their contractors should be aware of the materials traditionally used in the county, and more specifically, in the village itself and its immediate surrounds.

Works in Conservation Areas must retain existing surviving elements, aim to re-instate lost elements or character, with new builds complementing the original streetscapes, building lines and open areas. Proposals for new buildings should not seek to dominate the historic core and should respect the historic fabric of the buildings and the morphology of their plots.

Where original or early surviving elements, such as windows and doors, rainwater goods of rolled mild steel or cast iron (or a combination of both), natural slate roofing and lime renders, and so forth, then these should be repaired sensitively. The guidance here is to "do as much as necessary and as little as possible". If replacement proves necessary, then they must be replaced on a "like-for-like" basis.

In replacing elements that were installed as replacements in recent decades, such as aluminium windows or smooth finish artificial slate, there are good reasons, apart from those put forward on the basis of architectural heritage, to return to the original materials, such as timber windows and natural slate. These reasons include the compatibility of traditional materials with one another and the fact that the historic material allows the building to breathe, thereby providing a healthier internal atmosphere for those using the buildings.



Figure 8.7 Part of the ACA on Castle Street

Objective CH 07: Protected Structures: It is an objective of the Council to

Resist the demolition of Protected Structures, in whole or in part, the removal or modification of features of architectural importance, and design element that would adversely affect the character or setting of a Protected Structure, unless exceptional circumstances can be clearly demonstrated by a suitably qualified professional.

Objective CH 08: Architectural Conservation Areas (ACA's): It is the objective of the Council to:

- a) Protect, conserve and where appropriate, enhance the ACA's as identified in Map 4.
- b) Proposals for development within the ACA's shall;
 - Reflect and respect the scale and form of existing structures within the ACA's in proportioning, overall scale and use of materials and finishes, particularly with reference to the street frontages and seek to contribute to or enhance the character and streetscape of the ACA's;
 - Seek to retain/incorporate/replicate exterior features which contribute or enhance the character and streetscape of the ACA's such as shop fronts, sash windows, gutters and down pipes, decorative plasterwork etc;
 - Ensure priority is given to the pedestrian, to inclusive access, and to facilitating the improvement of the quality of the public realm: the latter will include for consideration of the planting of trees in the wider public open spaces, benches for sitting and the articulation of uses through appropriate paving.

8.4 Archaeological Heritage

Archaeological heritage is comprised of all material remains of past societies with the potential to add our knowledge of such societies. Castleconnell has a significant cluster of early and medieval monuments, suggesting that the area was the nucleus of a settlement at least from medieval times. There is also significant evidence of much earlier occupation surrounding the village outside the LAP boundary. Significant discoveries dating to the Mesolithic period have been made in the adjoining townland of Hermitage. Castleconnell's location on the banks of the River Shannon is particularly significant. There are 12 individual monuments within the Local Area Plan boundary. All of these monuments are contained within the boundary of the historic town as shown on the accompanying map in Appendix IV. The location of each archaeological monument is provided in the Record of Monuments and Places, which is maintained and up-dated by the Archaeological Survey of Ireland, a branch of the National Monuments Service. Under the provisions of the National Monuments Act Section 12, 1994 Amendment any person proposing any works (this includes exempted

development) 'at or in relation to such a monument' has to give written notification two months in advance to the Minister for the Department of Housing, Local Government and Heritage. Sites continue to be discovered, some of those found subsequent to the publication (1997) have been included in the Site and Monuments Database which is available on the website www.archaeology.ie. Under Section 14 of the National Monuments (Amendment) Act 2004, proposed development or works within or in the vicinity of archaeological monuments in Local Authority or State ownership or guardianship may require authorisation in the form of Ministerial Consent to proceed and the National Monuments Service, Department of Housing, Local Government and Heritage shall be consulted in this regard in advance of site works. Proposed developments and/or works, dredging schemes etc. within or in the vicinity of watercourses have the potential to impact on previously unrecorded wrecks or small craft that may be over 100-years old and which are therefore protected under the National Monuments (Amendment) Act 1987. The Underwater Archaeological Unit of the National Monuments Service, Department of Housing, Local Government and Heritage shall be consulted in advance of any works on the River Shannon.



Figure 8.8 – Castleconnell graveyard

Limerick City and County Council is committed to protecting the archaeological heritage, including the preservation of unrecorded or newly discovered archaeological material. Consequently, the planning authority will include a condition of archaeological monitoring on developments whose scale and nature may have an impact on previously unknown archaeological materials.

Objective CH 09: Archaeological Heritage: It is the objective of the Council to:

- a) Seek the preservation (in situ, or at a minimum, preservation by record) of all known sites and features of historical and archaeological interest, including wreck, sites and objects underwater. This is to include all the sites listed in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act 1994. In securing such preservation, the Council will have regard to the advice and recommendations of the National Monuments Service, Department of Housing, Local Government and Heritage, the National Museum of Ireland and the Local Authority Archaeologist.
- b) Protect and preserve (in situ, or at a minimum, preservation by record) all sites and features of historical interest discovered subsequent to the publication of the Record of Monuments and Places.
- c) Ensure that any proposed development shall not have a negative impact on the character or setting of an archaeological monument. In assessing proposals for development the Council will take account of the Archaeological potential of rivers and other waterways.
- d) Ensure that the area of a monument and the associated buffer area shall not be included as part of the open space requirement demanded of a specific development, but should be additional to the required open spaces, and if appropriate, where such a monument lies within a development, a conservation and/or management plan for that monument shall be submitted as part of the landscape plan for that development.

- e) Protect and preserve the industrial, military, maritime, riverine and post-medieval archaeological heritage of the plan area. Proposals for refurbishment, works to or redevelopment of these sites should be subject to a full architectural and archaeological assessment, including where appropriate underwater archaeological impact assessment

Chapter 9: Infrastructure and Utilities

The sustainable social and economic growth of Castleconnell is dependent on the satisfactory provision of high quality infrastructure associated with the provision of services for new residential and commercial developments. Key infrastructural provisions, undertaken in a plan led manner will support the economic development of the village and ensure the development of good quality place making, where health and well-being is safeguarded, while also protecting the environment. The provision of high quality infrastructure networks and environmental services is fundamental to ensuring the long-term physical, social and economic development of the village.

Policy IU P1: Infrastructure and Utilities: It is the policy of the Council to:

Ensure the provision of adequate infrastructure capacity to accommodate future development and the timely provision of infrastructure needed for the sustainable growth of Castleconnell.

9.1 Water and Wastewater infrastructure

Irish Water is responsible for the provision and operation of public water and wastewater services across the country. Limerick City and County Council delivers water services in accordance with a Service Level Agreement. The Water Services Strategic Plan (WSSP) published in 2015 by Irish Water sets out strategic objectives for the delivery of water services over a 25-year period and a context for investment and implementation plans. Irish Water and Limerick City and County Council work together to identify the water services required to support planned development in line with national and regional planning policies for inclusion in the Irish Water Capital Investment Plans.

Castleconnell's public water supply is currently provided from the Clareville Water Treatment Plant located to the southwest of the village and there is capacity in the system to cater for future population growth.

In terms of waste-water, effluent is pumped to Castletroy and there is spare capacity in the system to cater for the projected growth in Castleconnell. Project upgrade works are taking place to the plant presently to increase this capacity with an expected completion date of 2026 and this along with existing capacity will accommodate the envisaged population growth to 2029.

Objective IU 01: Infrastructure: It is an objective of the Council to:

Ensure compliance for infrastructure led-growth in accordance with the DHPLG Water Services Guidelines for Planning Authorities.

Objective IU 02: Wastewater Infrastructure: It is an objective of the Council to:

- a) Support the implementation of the Irish Water Investment Plans, in accordance with the settlement strategy of the RSES and Development Plan.
- b) Ensure adequate waste water infrastructure is available to cater for existing and proposed development, in collaboration with Irish Water, avoiding any deterioration in the quality of receiving waters and ensuring discharge meets the requirements of the Water Framework Directive. This includes the separation of foul and surface water through the provision of sewerage networks and nature-based rainwater management measures.

Objective IU 03 Water Infrastructure: It is an objective of the Council to:

- a) Facilitate improvements to the existing water supply system to cater for the needs of an expanding population.
- b) Ensure that development proposals provide adequate water infrastructure to facilitate proposed developments.
- c) To promote water conservation and demand management measures, along all water users, and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements including innovative solutions in specific locations.

9.2 Surface Water Management and SuDS

Adequate storm water drainage and retention facilities are necessary to accommodate surface water runoff from existing and proposed developments. Rivers, streams and ditches containing watercourses are important blue green infrastructure corridors and habitats in Castleconnell, providing multi-functional eco-system services such as land drainage, recreational amenity, and clean/cool air and wildlife corridors. In the past, surface water management has tended to focus on intervention with the use of methods such as piping, culverting and installation of underground attenuation tanks. Using natural solutions to manage surface water can be cost effective and yield results that improve environmental quality. The use of natural drainage systems at surface level through utilisation of existing drains, natural slopes and existing ponds and natural wetland areas should be considered in the first instance. Approaches to manage surface water that take account of water quantity (flooding), water quality (pollution), biodiversity (wildlife and plants) and amenity are collectively referred to as Sustainable urban Drainage Systems (SuDS). SuDS can contribute to surface water retention and a reduction in the potential for flooding by acting as natural drainage. Proposals shall have regard to the Nature-based Solutions to the Management of Rainwater and Surface Water Run-off in Urban Areas – Best Practice Interim Guidance’ document.

Objective IU 04: Surface Water Management and SuDS: It is an objective of the Council to:

- a) Maintain, improve and enhance the environmental and ecological quality of surface waters and groundwater, including reducing the discharges of pollutants or contaminants to waters in accordance with the River Basin Management Plan for Ireland 2022-2027 (DHPLG) and associated Programme of Measures.
- b) Require all planning applications to include surface water design calculations to establish the suitability of drainage between the site and the outfall point;
- c) Require all new developments to include Sustainable Urban Drainage Systems (SuDS) to control surface water outfall and protect water quality.
- a) Require applicants to investigate the potential for the provision of porous surfaces, where car parking and hard landscaping is proposed.
- b) Protect the surface water resources of the plan area and in individual planning applications request the provision of sediment and grease traps, and pollution control measures, where deemed necessary.

9.3 Flood Risk Management

Flooding is a natural process that can happen at any time in a wide variety of locations and the severity of which is set to increase due to the effects of climate change. Flooding from rivers and prolonged, intense and localised rainfall can also cause sewer flooding, overland flooding and groundwater flooding. Flooding has significant impacts on human activities as it can threaten lives, livelihoods, housing, transport, and public service infrastructure and commercial/ industrial enterprises. The impacts of both flooding and climate change can be significant and wide reaching. Developments in inappropriate locations can exacerbate the problems of flooding by accelerating and increasing surface water run-off, altering watercourses and removing floodplain storage.

Climate change increases flood risk, leading to more frequent flooding and an increase in the depth and extent of flooding. A new approach is needed to manage our future in a planned, productive and sustainable way with increased emphasis on travel patterns, energy use and the protection of the environment. The challenges of climate change and the transition to a low carbon society is a key component of national and regional policies and is a significant cross cutting theme to be included throughout much of the policy and objectives in the Limerick Development Plan and the Castleconnell LAP. Careful consideration of flood risk is now a key requirement in the preparation of the LAP and in determining planning applications. Presently a Flood Relief Scheme is being progressed for Castleconnell.

To comply with the EU Floods Directive and in line with the guidelines for Planning Authorities, an assessment of flood risk has been formally taken into account in the preparation of this plan. The objective of “The Planning System and Flood Risk Management Guidelines” is to integrate flood risk management into the planning process, thereby assisting in the delivery of sustainable development. For this to be achieved, flood risk must be assessed as early as possible in the planning process.

This LAP has been prepared to ensure that: (a) flood risk is avoided where possible; (b) where avoidance is not possible, less vulnerable uses have been substituted for more vulnerable ones, and; (c) risk is mitigated and managed where avoidance and substitution are not possible.

A Strategic Flood Risk Assessment has been prepared for Castleconnell and is included with the Environment reports in this Plan. OPW flood risk indicative maps are available for Castleconnell under the CFRAMs study. Detailed assessment and modeling has been carried out as part of the Flood Relief Scheme by JBA Consulting Engineers and these have informed the flood map. These indicate that substantial areas of land to the north east and south west of the village are located in Flood Zone A. In this zone most developments are considered vulnerable to flooding. As a response to this the LAP designated most lands located in Flood Zone A as open space or agricultural use.

Objective IU 05: Flood Risk Management: It is an objective of the Council to:

- a) Manage flood risk in accordance with the requirements of “The Planning System and Flood Risk Management Guidelines for Planning Authorities”, DECLG and OPW (2009) and any revisions thereof and consider the potential impacts of climate change in the application of these guidelines.

- b) Ensure development proposals within the areas outlined as being at risk of flooding are subject to Site Specific Flood Risk Assessment as outlined in “The Planning System and Flood Risk Management Guidelines”, DECLG and OPW (2009). These Flood Risk Assessments shall consider climate change impacts and adaptation measures, including details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events. Reference shall be made to Section 5.8 requirements of the Flood Risk Assessment in the SFRA of the Limerick Development Plan 2022-2028.
- c) Support and co-operate with the OPW in delivering the Castleconnell Flood Relief Scheme.
- d) Ensure that future developments in flood prone areas is generally limited to minor developments in line with the Circular PL 2/2014 and the Flood Risk Management Guidelines for Planning Authorities.
- e) Developments on lands benefitting from Arterial Drainage Schemes shall preserve the maintenance and access to these drainage channels. Land identified as benefitting from these systems may be prone to flooding, as such site specific flood risk assessments will be required as appropriate, at planning application stage. Ensure future development of lands within Flood Risk Zone A/B, is in accordance with the plan-making Justification Tests in the SFRA.

9.4 Energy Generation

Castleconnell is served by the ESB and Gas Networks and the village is served by 110KV overhead electricity lines. The higher level spatial plans indicate there is significant potential to use renewable energy to achieve climate change emission reduction targets through electricity and gas networks. Low carbon technologies present an economic opportunity and green technology development is emerging as a major field of innovation and growth. The Council recognises the importance of developing renewable energy resources in the interest of delivering NZEB (Near Zero Energy Buildings).

As indicated in the Census 2016 data, 76% of households have broadband internet services in the Castleconnell. The fibre broadband network will give significant economic and social advantage to Castleconnell, as a place to set up internet-based business, facilitate working from home and the creation of smart homes and smart buildings. Broadband Connection Points (BCPs) and WiFi4EU Access Points (APs) have been installed in the village at McDermott’s Butchers and the ACM Community Centre.

In terms of telecommunications infrastructure, the Local Authority seeks to balance between facilitating the provision of mobile telecommunications services in the interests of social and economic progress and sustaining residential amenities, environmental quality and public health. When considering proposal for telecommunication masts, antennae and ancillary equipment, all proposals will have regard to the Telecommunications Antennae and Support Structures Guidelines and subsequent advisory documents issued by the DECLG.

Objective IU 06: Energy Generation: It is an objective of the Council to:

- a) Support the providers of national gas and electricity grid infrastructure by safeguarding existing infrastructure from encroachment by development that might compromise the efficiency of the networks.

- b) Facilitate cooperation between utility and service providers to ensure their networks are resilient to the impacts of climate change, both in terms of design and ongoing maintenance.
- c) Facilitate improvement of telecommunications, broadband, electricity (including renewables) and gas networks infrastructure on an open access basis subject to safety requirements and proper planning and sustainable development
- d) Seek the undergrounding of all electricity, telephone and television cables.
- e) Facilitate delivery of E-Charge Points for electric vehicles at suitable locations and in new developments in line with the Limerick Development Plan.
- f) Promote and encourage the use of renewable energy technologies and sources in existing and proposed developments subject to consideration of environmental, conservation, residential and visual amenity.
- g) Support the development of Smart Homes and Smart Buildings and facilitate the foundation for Smart Limerick in accordance with the Limerick Digital Strategy 2017 – 2020.
- h) Support and promote the NZEB standard of building or equivalent for all new developments

9.5 Waste Management and the Circular Economy

The Circular Economy and Ireland's Waste Management policy is part of the waste hierarchy established by the EU's Waste Framework Directive, which sets out to prioritise waste prevention, followed by re-use, recycling, recovery and finally disposal into landfill. The Southern Region Waste Management Plan 2015 – 2021 is a framework for the prevention and management of wastes in a safe and sustainable manner.

Refuse collection is carried out by a number of private contractors in the Castleconnell area. The nearest Civic Amenity Recycling facilities are located at Mungret and there is a private waste recycling facility located in the Castlerock and Coolbawn Meadows estate for residents only.

Objective IU 07: Waste Management: It is an objective of the Council to:

- a) Support the Regional Waste Management Office in implementation of the EU Action Plan for the Circular Economy – Closing the Loop, to ensure sustainable patterns of consumption and production.
- b) Require all commercial and residential development to provide an adequate internal and external space for the correct storage of waste and recyclable materials.

Chapter 10: Land Use Framework, Zoning Matrix and Settlement Capacity Audit

10.1 Land Use Zoning and Implementation

This Local Area Plan outlines specific policies and objectives for the development of Castleconnell. The overarching policies and objectives of the Limerick Development Plan 2022 - 2028 and any replacement thereof also apply. All development requiring planning permission must adhere to the Development Management Standards of the Limerick Development Plan 2022 - 2028, or any replacement thereof. All proposed developments will be screened on a case-by-case basis for Environmental Impact Assessment, Appropriate Assessment and Flood Risk Assessment.

The purpose of zoning is to indicate to property owners and the public the types of development, which the Planning Authority considers most appropriate in each land use category. Zoning is designed to reduce conflicting uses within areas, to protect resources and ensure that land suitable for development is used to the best advantage of the community as a whole. The Land Use Zoning Map should be read in conjunction with the Land Use Zoning Objectives below, and the Land Use Zoning Matrix set out under Appendix I.

Land Use Zoning	Objective and Purpose
Village Centre	<p>Objective: To protect, consolidate and facilitate the development of Castleconnell's commercial, retail, educational, leisure, residential, social and community uses and facilities.</p> <p>Purpose: To consolidate Castleconnell's Village Centre through densification of appropriate commercial and residential developments ensuring a mix of commercial, recreational, civic, cultural, leisure, residential uses and urban streets, while delivering a high-quality urban environment, which will enhance the quality of life of residents, visitors and workers alike. The zone will strengthen retail provision in accordance with the Retail Strategy for the County Limerick, emphasise urban conservation, ensure priority for public transport, pedestrians and cyclists, while minimising the impact of private car-based traffic and enhancing the existing urban fabric.</p>
Existing Residential	<p>Objective: To provide for residential development, protect and improve existing residential amenity.</p> <p>Purpose: This zoning reflects established housing areas. Existing residential amenity will be protected while allowing appropriate infill development. The quality of the area will be enhanced with associated open space, community uses and where an acceptable standard of amenity can be maintained, a</p>

	limited range of other uses that support the overall residential function of the area, such as schools, crèches, doctor's surgeries, playing fields etc.
New Residential	<p>Objective: <i>To provide for new residential development in tandem with the provision of social and physical infrastructure.</i></p> <p>Purpose: This zone is intended primarily for new high quality housing development. The quality and mix of residential areas and the servicing of lands will be a priority to support balanced communities. New housing and infill developments should include a mix of housing types, sizes and tenures, to cater for all members of society. Design should be complimentary to the surroundings and should not adversely impact on the amenity of adjoining residents. These areas require high levels of accessibility, including pedestrian, cyclists and public transport (where feasible).</p> <p>This zone may include a range of other uses particularly those that have the potential to facilitate the development of new residential communities such as open space, schools, childcare facilities, doctor's surgeries and playing fields etc</p>
Residential Serviced Sites	<p>Objective: <i>To offer an alternative to the rural one off house, providing an opportunity for people to design a house to their individual needs and supported by existing services.</i></p> <p>Purpose: Provides an element of housing choice within the settlement boundary, and facilitate an element of housing choice on serviced lands within Castleconnell, supporting the principle of compact growth and sustainable development.</p>
Education and Community I	<p>Objective: <i>To protect and provide for education, training, adult learning, community, healthcare, childcare, civic, religious and social infrastructure.</i></p> <p>Purpose: Protect existing community facilities and allow for expansion if required to sustain a thriving community.</p>
Enterprise and Employment	<p>Objective: <i>To provide for and improve general enterprise, employment, business and commercial activities.</i></p> <p>Purpose: Provides for enterprise, employment and general business activities and acknowledge existing/permitted retail uses. This land use zone may accommodate light industry, low input and emission manufacturing, logistics and warehousing and office developments. The form and scale of development on these sites shall be appropriate to their location, having regard to surrounding uses and scale. A proliferation of retail uses will not be permitted. Proposals may generate a considerable amount of traffic by both</p>

	<p>employees and service vehicles and traffic assessments may be required. Sites should be highly accessible, well designed and permeable with good pedestrian, cyclist links to the town centre and public transport. The implementation of mobility management plans will be required to provide important means of managing accessibility to these sites.</p>
Open Space and Recreation	<p>Objective: <i>To protect, provide for and improve open space, active and passive recreational amenities. Limit future development within Flood Risk Zone A/B to water compatible development.</i></p> <p>Purpose: To provide for active and passive recreational resources including parks, sports and leisure facilities and amenities including greenways and blueways. The Council will not normally permit development that would result in a substantial loss of open space. Linked green spaces/corridors are encouraged.</p>
Special Control Area	<p>Objective: <i>To protect the natural habitat of the river and its designation as part of the Lower River Shannon Special Area of Conservation. Limit future development within Flood Risk Zone A/B to water compatible development.</i></p> <p>Purpose: The Special Control Area designation will facilitate the preservation in situ of the identified archaeological, including any subterranean, remains. Developments including holiday homes and holiday apartments will not be permitted on lands zoned special control area. Ancillary leisure/tourism development may be permitted where it can be satisfactorily demonstrated that there will be no impact on the integrity of this Special Control Area or on the natural habitat of the river and its designation as part of the Lower River Shannon Special Area of Conservation. The extension, expansion or conversion of existing non-conforming uses in this special control zone shall be assessed on a case by case basis.</p>
Utilities	<p>Objective: <i>To provide for the infrastructural needs of transport and other utility providers.</i></p> <p>Purpose: Park and Ride facilities and commercial development associated with the provision of public transport services are considered appropriate in this zone. This zoning also provides for and preserves land for the provision of services such as electricity and gas networks, telecommunications, the treatment of water and waste water etc. Such proposals shall demonstrate resilience to climate change.</p>
Agriculture	<p>Objective: <i>To protect and improve rural amenity and provide for the development of agricultural uses. Limit future development within Flood Risk Zone A/B to water compatible development.</i></p>

	<p>Purpose: Protect rural amenity and agricultural lands from urban sprawl and ribbon development and provide a clear demarcation to the adjoining built up areas. Uses which are directly associated with agriculture or rural related business activities which have a demonstrated need for a rural based location, and which would not interfere with rural amenity are open for consideration. Compliance is required with the criteria for Small Scale Home Based Businesses In Rural Areas as set out in the Limerick Development Plan 2022 - 2028 or any replacement thereof.</p> <p>One off dwellings will only be considered on agriculturally zoned land outside of Flood Zones A and B, subject to the terms and conditions of the rural housing policy as set out in the Limerick Development Plan.</p>
--	---

The approach of Limerick City and County Council to various types of developments is determined by the zoning objective for the area in which the site is located. This approach is set out in the following Land Use Zoning Matrix, and should be read in tandem with the Land Use Zoning Map.

The Land Use Zoning Matrix outlines the types of developments considered appropriate or otherwise in each land use zone and are indicated as below.

Generally Permitted indicated as /	A generally permitted use is one the Council accepts in principle in the relevant zone, subject to compliance with all relevant planning criteria, including applicable policies, objectives, development management standards and Section 28 Guidance.
Open for Consideration indicated as O	A use open for consideration is one which the Council may permit where it is satisfied that the suggested form of development will be compatible with the policies and objectives for the zone, will not conflict with existing uses or the proper planning and sustainable development of the area.
Generally Not Permitted indicated as X	A use incompatible with the zoning policies or objectives for the area, would conflict with the permitted/ existing uses and would be contrary to the proper planning and sustainable development of the area.

Non-Conforming Uses are uses which do not conform to the zoning objective for the area in which they are located. Where legally established, extensions or improvements to these uses shall be considered on their merits, on a case-by-case basis where they do not adversely affect the amenities of properties in the vicinity, and are not prejudicial to proper planning and sustainable development.

10.2 Advice when submitting a Planning Application

The Planning Authority encourages applicants to avail of pre-planning meetings to discuss policy issues regarding their proposal prior to submitting a planning application. Such

meetings are of particular value if specific assessments are required given the sensitivity, type of development and location of the site in Castleconnell. Applications are advised to avail of pre-connection enquiries with Irish Water to ascertain if connection to the public mains and sewer is feasible prior to submitting a planning application.

Table 6: Total Zoned Lands

Zoning	Total Area Zoned in 2023 LAP - ha	Total Area Zoned in 2013 LAP - ha
Agriculture	26.889	102.82
Enterprise and Employment	10.773	6.72
Education and community facilities	7.283	6.37
Utilities	0.331	0.107
New residential/ Phase 1	10.6	8.17
New residential Phase 2	No designation	3.80
New residential Phase 3	No designation	7.61
Existing Residential	50.845	74.25
Residential Serviced Sites/ Phase 1	4.4	5.88
Residential Serviced Sites Phase 2	No designation	0
Open Space and Recreation	74.121	22.39
Village Centre	3.849	4.52
Special Control Area	46.991	45.82

10.3 Land Use Zoning Matrix

Land Use Zone	Village Centre	Existing Residential	New Residential	Education and Community	Enterprise and Employment	Open Space and Recreation	Special Control Area	Utilities	Agriculture
Abattoir	X	X	X	X	X	X	X	X	O
Advertising and Advertising Structures	/	X	X	O ¹	/ ¹	/ ¹	X	O	X
Aerodrome/ Airfield	X	X	X	X	X	O	X	X	O
Agricultural Buildings	X	X	X	X	X	X	X	X	/
Agricultural Supplies/ Machinery Sales	/	X	X	X	/	X	X	X	X
Allotments	X	/	/	/	X	O	O	X	O
Amusement Arcade/ Casino	/	X	X	X	X	X	X	X	X
Bank/ Credit Union	/	X	X	/	X	X	X	X	X
Bed and Breakfast/ Guesthouse	/	/	/	X	X	X	X	X	/ ²
Betting Office	/	X	X	X	X	X	X	X	X
Boarding Kennels	X	X	X	X	/	X	X	X	/ ²
Bring Banks/ Bring Centres	/	/	/	/	O	X	X	/	X
Builders Providers/ Yard	X	X	X	X	/	X	X	X	X
Burial Grounds	X	X	X	O	X	O	X	X	/
Campsite/ Caravan Park - Holiday Use	X	X	X	X	X	X	X	X	X
Car Park	/	X	X	/ ¹	/ ¹	/ ¹	X	/	X
Childcare Facilities	/	/	/	/	O	X	X	X	X
Civic Recycling/ Waste Facility	X	X	X	X	/	X	X	/	X
Community/ Cultural/ Tourism Facility*	/	/	/	/	X	/	X	X	X
Conference Centre	/	X	X	O ¹	O	X	X	X	X
Dancehall/ Nightclub	/	X	X	X	X	X	X	X	X
Education/ Training Facility	/	/	/	/	/	X	X	X	X
Enterprise Centre	/	X	X	O ¹	/	X	X	X	X
Extractive Industry/ Quarry	X	X	X	X	X	X	X	X	O

¹ Ancillary to the primary use only

² Where the use is ancillary to the use of the dwelling as a main residence

Land Use Zone	Village Centre	Existing Residential	New Residential	Education and Community	Enterprise and Employment	Open Space and Recreation	Special Control Area	Utilities	Agriculture
Fast Food Outlet/ Take-Away	/	X	X	X	X	X	X	X	X
Food Drink Processing/ Manufacturing	X	X	X	X	/	X	X	X	/ ¹
Fuel Depot/ Storage	O	X	X	X	/	X	X	X	X
Funeral Home	/	O	O	X	/	X	X	X	X
Garden Centre	/	X	X	X	/	X	X	X	O
General Public Administration	/	X	X	O	O	X	X	X	X
Hair & Beauty Salons	/	X	X	X	X	X	X	X	X
Halting Site	X	O	O	X	X	X	X	O	X
Health Centre	/	/	/	/	O	X	X	X	X
Health Practitioner	/	/	/	/	O	X	X	X	X
High Technology Manufacturing	X	X	X	X	O	X	X	X	X
Hospital	/	X	X	/	O	X	X	X	X
Hotel	/	X	X	X	O	X	X	X	X
Industry - Heavy	X	X	X	X	X	X	X	X	X
Industry - Light	O	X	X	X	/	X	X	X	X
Leisure/ Recreation Facility*	/	X	X	X	O	O	X	X	X
Logistics	X	X	X	X	/	X	X	X	X
Nursing Home/ Residential Care or Institution/ Retirement Village	/	/	/	O	X	X	X	X	X
Offices	/	X	X	X	/	X	X	X	X
Park and Ride Facilities	/	O	O	/ ¹	O	X	X	/	X
Petrol Station ³	/	X	X	X	O	X	X	X	X
Place of Worship	/	O	O	/	O	X	X	X	X
Plant Storage/ Hire	X	X	X	X	/	X	X	X	X
Professional Services*	/	X	X	X	/	X	X	X	X
Public House	/	X	X	X	O	X	X	X	X
Renewable Energy Installation	O ¹	O ¹	O ¹	O ¹	/	X	X	/	O

³ Petrol station shops shall not exceed 100m2 (net) as per the Retail Planning Guidelines

Land Use Zone	Village Centre	Existing Residential	New Residential	Education and Community	Enterprise and Employment	Open Space and Recreation	Special Control Area	Utilities	Agriculture
Research and Dev./ Science & Technology	/	X	X	X	O	X	X	X	/ ⁴
Residential	/	/	/	X	X	X	X	X	/ ⁵
Restaurant/ Café	/	X	X	O	O	X	X	X	X
Retail	/	X	X	X	X	X	X	X	X
Retail - Warehouse	X	X	X	X	O	X	X	X	X
Scrap Yard	X	X	X	X	O	X	X	X	X
Sports Facility	O	/	/	/	O	/	X	X	X
Telecommunications Structures	/	X	X	/	/	O	X	/	/
Vehicle Sales Outlet	X	X	X	X	/	X	X	X	X
Vehicle Servicing/ Maintenance/ Repairs	X	X	X	X	/	X	X	X	X
Veterinary Clinic	/	X	X	X	O	X	X	X	/ ⁶
Warehousing	X	X	X	X	/	X	X	X	X
Waste Disposal & Recover Facility	X	X	X	X	/	X	X	/	X
Wholesale - Cash and Carry	X	X	X	X	/	X	X	X	X

Special Control Area - *Community/ Cultural/ Tourism Facility – Development shall be in line with the provision of Objective CH 04: Special Control Area

***Leisure/Recreation Facility** – Cinema, Theatre, Concert Halls, Bingo Halls, Bowling Alley, Commercial Play etc.

***Professional Services** - Including for example accountants, architects, solicitors

⁴ Rural related research and development only

⁵ Subject to compliance with the Rural Housing Policy

⁶ Only where the need to locate in a rural environment has been demonstrated because of the nature of the clinic required

10.4 Settlement Capacity Audit

In accordance with Appendix 3 of the National Planning Framework (NPF), the tiered approach to zoning has been applied to zoned lands as laid out in Fig.11.1 below. Tier 1 refers to lands that are adequately serviced and can connect to existing services (road, path, public lighting, water supply and surface water drainage). Tier 2 lands refer to lands that have constraints in terms of connecting to services, but have the potential to become fully serviced over the lifetime of the Plan. The Settlement Capacity Assessment sets out the sites identified for new residential development, serviced sites and enterprise and employment with respect to availability of key infrastructure to ensure that these lands are developable over the lifetime of the plan. The sites are identified as being serviced (utilities), served by public transport and community infrastructure and satisfies the principles of the Ten Minute Town Concept and compact growth, all promoted by higher level spatial plans. Where existing infrastructure is located in close proximity to a site and can potentially extended to service the site, these services have been indicated as available. It should be noted that the table below is for information purposes only and developers are advised to avail of pre-planning consultation with the service providers regarding development of these lands prior to submitting a planning application.

Site No.	Zoning	Area (ha)	Density	Est. Yield	Lighting	Footpath	Public Transport	Road Access	Water	Foul	Surface Water	Flood Risk	Infill/ Brown-field	Cost	Comments if applicable	Tier
1	NR	0.26	22 units /ha	6	✓	✓	●	✓	✓	✓	✓	✗	✓		Infill site <350m from Village Centre	1
2	NR	0.63	22 units /ha	14	✓	✓	●	✓	✓	✓	✓	✗	✓		Part of Opportunity Site 1(refer to Section 4.5 Opportunity Sites for Development Potential and Guidance). Site <250m from village centre. Sewer and water mains diameters may need upgrading.	1
3	NR	0.62	22 units /ha	14	✓	✓	●	✓	✓	✓	✓	✗	✓		<250m from Village Centre with potential to provide residential frontage to the Scanlon Park estate and frame the entrance to the existing estate. Sewer and water mains diameters may need upgrading.	1

Site No.	Zoning	Area (ha)	Density	Est. Yield	Lighting	Footpath	Public Transport	Road Access	Water	Foul	Surface Water	Flood Risk	Infill/ Brown-field	Cost (K)	Comments if applicable	Tier
4	NR	6.1	22 units /ha	134	✓	✓	●	✓	✓	✓	!	✗	✓	€600 K	Site <350m from village centre and adjacent to the National School. Part of site included as Additional Lands (2.5 ha), anticipated yield 55 units as per <i>Development Plans Guidelines for Planning Authorities June 2022</i> . A masterplan will be required for the overall development of the lands.	1
5	NR	0.49	22 units/ha	11	✓	✓	●	✓	✓	✓	!	✗	✓	€75K	Extension of Duration granted for a dwelling 21/7001 which expires during the lifetime of the LAP. (14/3/26)	2

Site No.	Zoning	Area (ha)	Density	Est. Yield	Lighting	Footpath	Public Transport	Road Access	Water	Foul	Surface Water	Flood Risk	Infill/ Brown-field	Cost	Comments if applicable	Tier
6	RSS	1.1	10 units/ha	11	✗	✗	✗	✓	✓	✓	!	✗	✗	€165	Adjacent to a successful cluster of Residential Serviced Sites within the village boundary.	2
7	RSS	1.4	10 units/ha	14	✗	✗	●	✓	✓	✓	!	✗	✗	€210 K	Site adjacent to the National School <500m from village centre	2
8	RSS	1.6	10 units/ha	16	✗	✗	✗	✓	✓	✓	!	✗	✗	€240 K	Adjacent to a successful cluster of Residential Serviced Sites at the outer edge of the village boundary.	2
9	E and E	6.5	n/a	n/a	✓	✓	●	✓	✓	✓	!	✗	✗	€975 K	Site located <1km from village centre adjacent to the R445. Applicants will have to provide a TTA and a minimum landscaped buffer zone of 20m to the adjoining residential properties. An extension of the sewer/water network will be required and the cost will be borne by the developer.	2

Site No.	Zoning	Area (ha)	Density	Est. Yield	Lighting	Footpath	Public Transport	Road Access	Water	Foul	Surface Water	Flood Risk	Infill/ Brown-field	Cost	Comments if applicable	Tier
10	E and E	4	n/a	n/a	✓	✓	●	✓	✓	✓	!	✗	✗	€600 K	Applicants will have to provide a TTA and a minimum landscaped buffer zone of 20m to the adjoining residential properties. The water network is available On the road. The sewer network is located in the northern part of the site and must be protected and/or diverted.	

Figure 11.1 Settlement Capacity Audit

Legend			
Serviced/Yes	✓	Serviceable/ Investment required	!
Not required/No	✗	Located within a 500m walk	●
NR	New Residential	RSS	Residential Serviced Sites
E and E	Enterprise and Employment	Cost (K)	Cost in Thousands

Note:

Where there are limitations in relation to sewerage networks developers will be advised to consult with Uisce Eireann at an early stage in the process and where third party legal agreements are necessary for connections to the network on private lands consent will be required.

Chapter 11: Monitoring and Evaluation

11.1 Implementation of the Local Area Plan

The Plan sets out the Council's vision and strategy for Castleconnell, including specific policy and objectives to provide a framework for the sustainable development of the village over the period 2023-2029. Regular monitoring of the progress made in relation to ensuring the effective delivery of the objectives set out in the Plan will take place. This will include a review of identified actions to be implemented within the timeframe of the plan. Coordination between other key departments in the Local Authority will be critical in ensuring that those objectives relating to issues such as roads, housing and community development are achieved.

11.2 Identified Local Area Plan Actions

The implementation of the Local Area Plan requires the cooperation and participation of all stakeholders. The Council will continue their leadership role in progressing and securing the policies and objectives of the Plan. The Council will also continue to foster a collaborative approach with citizens, communities, stakeholders, sectoral interests, government and non-government agencies to achieve collective support and successful implementation of the Plan. Table 7 below outlines the identified actions and associated lead responsibility, in implementing identified actions within the plan timeframe. Some of these actions are outside the control of the Local Authority and will be dependent on private bodies (such as developer's/landowner's) to be delivered.

Time frame	Years
Short Term	1-2
Medium Term	2-4
Long Term	5+

Table 7: Castleconnell Local Area Plan – Plan Actions

	Action	Lead Responsibility	Timeline
Action 1	Opportunity Site 1: Local Park and associated infrastructure to facilitate pedestrian and cycling access from Scanlon Park through Bruach na Sionna to the village	LCCC Planning, Environment and Place-making Directorate	Short-medium term
Action 2	Opportunity Site 2: Worlds End	LCCC Community, Tourism and Culture Directorate	Medium – Long term
Action 3	Village Centre Traffic Management Plan and public realm upgrades	LCCC Transport and Mobility Directorate /Planning, Environment and Place-making	Medium – Long term
Action 4	Extension of existing and develop further Walking and Cycling facilities in the village	LCCC Transport and Mobility Directorate	Medium term
Action 5	Equipment upgrade, maintenance and Playground Extension	LCCC Planning, Environment and Place-making Directorate	Short-medium term
Action 6	Feasibility project for a Greenway extension from the University of Limerick through Castleconnell to Montpellier	NTA, Roads Design Office, Department of Transport, LCCC Transport and Mobility Directorate	Short – medium term
Action 7	Improved active travel connectivity and safety works including: between Castlerock and the village centre	LCCC Transport and Mobility Directorate	Medium term
Action 8	Provision of a Park and Ride	LCCC, NTA and Iarnród Éireann	Medium – Long term
Action 9	Upgrade of Community Centre	LCCC, relevant community group	Medium-Long term

Appendix I – Maps



**Castleconnell
Local Area Plan
2023-2029**

Zoning Map

Legend

- Agriculture
- Education and Community
- Enterprise and Employment
- Existing Residential
- New Residential
- Open Space and Recreation
- Residential Serviced Sites
- Special Control Area
- Utilities
- Village Centre
- Opportunity Sites
- Castleconnell P&R
- LAP Boundary

Forward Planning
Economic Development and
Enterprise Directorate

Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie

DATE: April 2023 DWG. No. CCZN/23-29/R21

DRAWN BY: J. D. CHECKED BY: N.O'C

OSI LICENCE No. © Ordnance Survey Ireland. All rights reserved.
Licence No. 2017/09/CCMA/Limerick City & County Council



Legend

- Agriculture
- Education and Community
- Enterprise and Employment
- Existing Residential
- New Residential
- Open Space and Recreation
- Residential Serviced Sites
- Special Control Area
- Utilities
- Village Centre
- Flood Zone A
- Flood Zone B
- Opportunity Sites
- Castleconnell P&R
- Castleconnell LAP Boundary

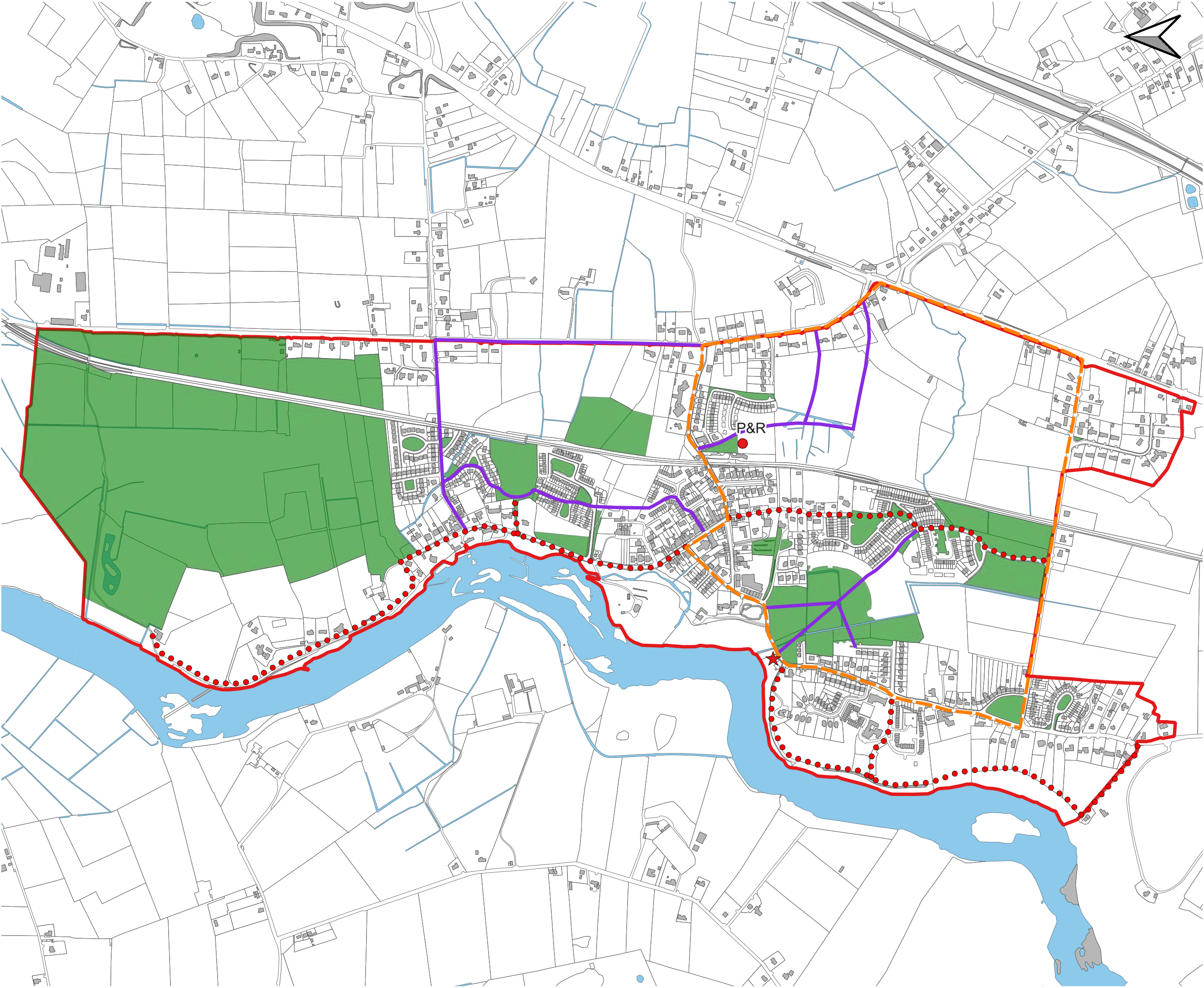
Forward Planning
Economic Development and
Enterprise Directorate

Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie

DATE: April 2023 DWG. No. CCFD/23-29/R20

DRAWN BY: J. D. CHECKED BY: N.O'C

OSI LICENCE No. © Ordnance Survey Ireland. All rights reserved.
Licence No. 2017/09/CCMA/Limerick City & County Council



Castleconnell
Local Area Plan
2023-2029

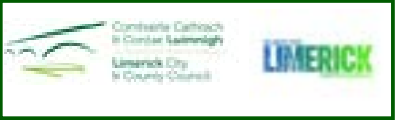
Amenity and
Sustainable Transport
Map

- Legend**
- Existing Pedestrian/
Cycle Routes/Links
 - Castleconnell
Sli Na Slainte
 - Potential Pedestrian/
Cycle Routes/Links
 - Castleconnell P&R
 - Open Space
and Recreation
 - Playground - LCCC
 - LAP Boundary

Forward Planning
Economic Development
and Enterprise Directorate

Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie

DATE:	April 2023	Dwg. No:	CCAT/23-29/R6
DRAWN BY:	J. D	CHECKED BY:	N.O'C
© Ordnance Survey Ireland. All rights reserved. Licence No. 2017/09/CCMA/Limerick City & County Council			



Castleconnell
Local Area Plan
2023-2029

Record of Protected
Structures Map

Legend

- Protected Structures
- Architectural Conservation Areas
- LAP Boundary

Forward Planning
Economic Development and
Enterprise Directorate

Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie

DATE:	April 2023	Dwg. No:	CCRPS-23/29-R7
DRAWN BY:	J. D	CHECKED BY:	N.O'C
OSI LICENCE No. © Ordnance Survey Ireland. All rights reserved. Licence No. 2017/09/CCMA/Limerick City & County Council			



National Monuments Map

Legend

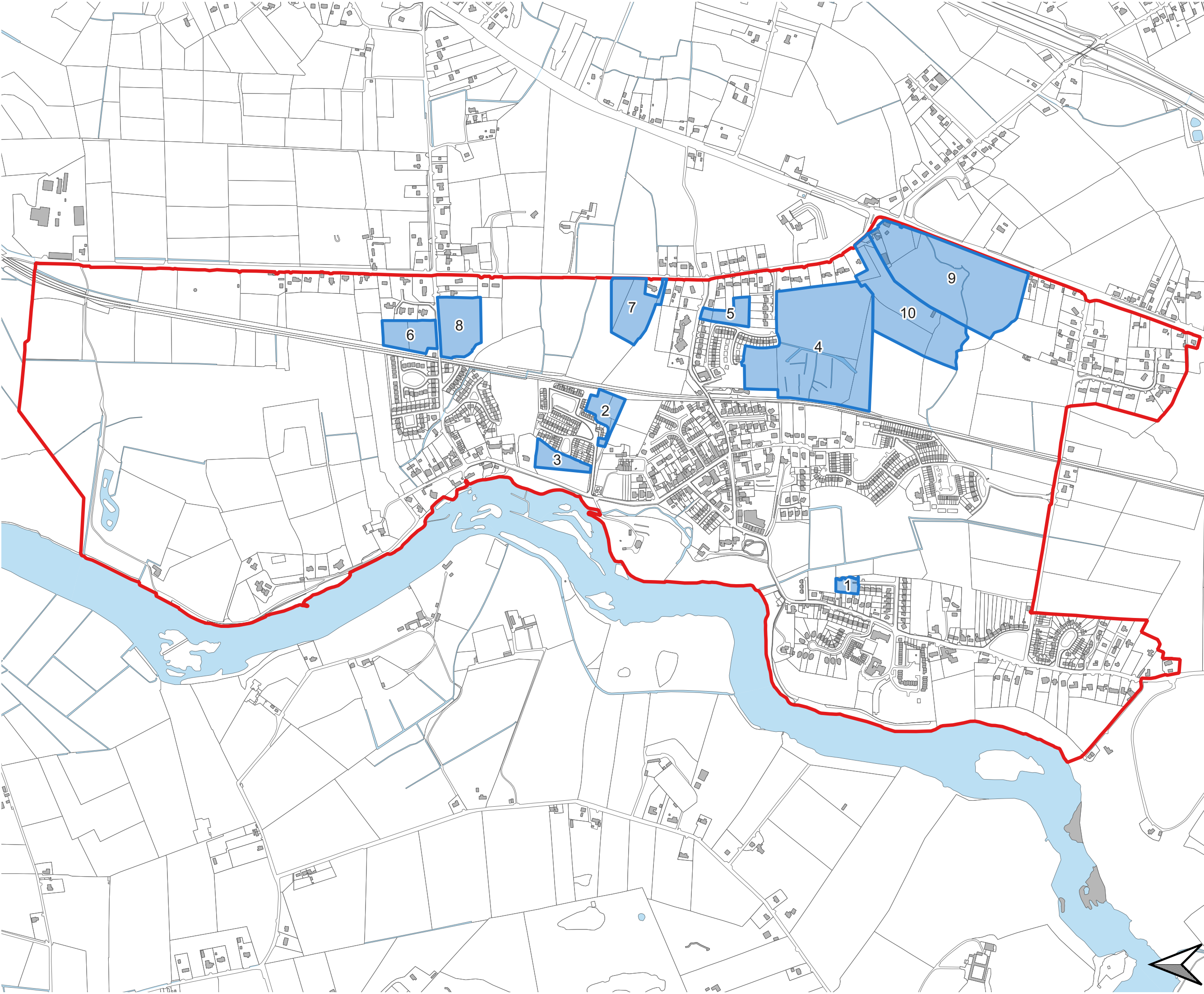
- National Monuments
- Zones of Notification
- ▭ LAP Boundary

Forward Planning
Economic Development and
Enterprise Directorate

Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie



DATE: April 2023	DRAWN BY: J. D	CHECKED BY: N.O'C	SCALE: N/A
CCNM/23-29/R8			
© Ordnance Survey Ireland. All rights reserved. Licence No. 2017/09/CCMA/Limerick City & County Council			





**Castleconnell
Local Area Plan
2023-2029**

**Settlement Capacity
Audit**

- Legend**
-  Settlement Capacity Audit Sites
 -  LAP Boundary



Forward Planning
Economic Development and
Enterprise Directorate


Merchants Quay, Limerick
Tel: (061) 556600
E-mail: forwardplanning@limerick.ie



DATE:	April 2023	Dwg. No:	CCSCA/23-29/R14
DRAWN BY:	J. D	CHECKED BY:	N.O'C
OST LICENCE No. © Ordnance Survey Ireland. All rights reserved. Licence No. 2017/09/CCMA/Limerick City & County Council			





Appendix II - Record of Protected Structures


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
535	None	Worlds End	Lacka, Castleconnell	Country house	
1072	21900109	Lacka House	Lacka, Castleconnell	Country House Detached five bay two-storey house, built c. 1830, with pitched roof, square headed window openings with replacement six over six windows.	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1073	21900110	"Edmonds"	Brooklands, Castleconnell	Urban Structure – Dwelling Semi-detached five bay two storey house, built c. 1830, comprising two-bay two-storey extension to east, single bay single storey lean-to and single bay single storey addition to south. Pitched slate roof with cast-iron ridge crestings and rendered chimney stacks. Roughcast rendered walls and rendered plinth course, timber sliding sash windows and painted concrete sills	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1074	21900111	Dundons	Lacka, Castleconnell	Urban Structure – Dwelling Semi-detached five bay two storey house, built c. 1830. Pitched slate roof with cast iron ridge crestings and rendered chimney stacks. Roughcast rendered walls and plinth course. Square-headed openings, having six-over-six pane timber sliding sash windows and painted sills. Round-headed opening with spoked cast-iron fanlight over timber panelled door and sidelights.	
1075	21807037	Grange House	Lacka, Castleconnell	Country House Detached three-bay two storey double pile house, built in 1828, having bows to the front (south) elevation end bays and canted three-bay single-storey entrance bay. Lean-to conservatory to west elevation and lean-to extensions to rear (north)	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				elevation. Pitched slate roofs with rendered chimney stacks, render eaves course and cast-iron rainwater goods. Rendered parapet having cornice to front elevation	
1076	21807038	Glenbrook	Lacka, Castleconnell	Urban Structure – Dwelling Detached three-bay two storey house, built c. 1830, having bay windows to ground floor. Hipped slate roof with rendered chimney stacks and overhanging eaves having timber brackets. Roughcast rendered walls with render plinth course. Square-headed openings to first floor having concrete sills, six-over-six pane timber sliding sash windows and flanking four-over-four pane timber sliding sash windows.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1079	21807040	Meskells	Lacka, Castleconnell	Urban Structure – Dwelling Detached 7 bay two storey house, built c. 1810, comprising four-bay two-storey house to east and three-bay two-storey house to the west, having timber shopfront to ground floor. Pitched slate roof with rendered chimney stacks, cast-iron rainwater goods and render eaves course. Roughcast rendered walls. Square headed openings with concrete sills and one-over-one pane timber sliding sash windows. Timber shopfront to west house comprising pilasters supporting fascia with raised lettering and cornice.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1080	21807008	Rectory The Tontines(i)	Cloon and Commons, Castleconnell	Urban Structure – Dwelling End-of-terrace four-bay three-storey over basement house, built in 1812, having porch to the front (west) elevation. Pitched slate roof with overhanging eaves, timber brackets, rendered chimney stacks and cast iron rainwater goods. Roughcast walls having render plinth course. Square-headed openings to second floor with six-over-three pane timber sliding sash windows. Limestone sills throughout. Wrought-iron balconies to first floor.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1081	21807007	The Tontines(ii)	Cloon and Commons, Castleconnell	Urban Structure – Dwelling Terraced two-bay three-storey house over basement, built 1812. Pitched slate roof having overhanging eaves with timber brackets, rendered chimney stack and cast-iron rainwater goods. Roughcast rendered walls having render plinth course. Round-headed opening having cobweb fanlight over timber panelled door. Limestone step to entrance.	
1082	21807006	The Tontines(iii)	Cloon and Commons, Castleconnell	Urban Structure – Dwelling Terraced two-bay three-storey house over basement, built in 1812. Pitched slate roof having overhanging eaves with timber brackets, rendered chimney stack and cast-iron rainwater goods. Roughcast rendered walls. Square-headed openings to second floor with	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				replacement timber casement windows. Limestone sills throughout. Square-headed openings to first and ground floors having six-over-six pane timber sliding sash windows. Wrought-iron balconies to first floor. Round-headed opening having cobweb fanlight over timber panelled door.	
1083	21807005	The Tontines(iv)	Cloon and Commons, Castleconnell	Urban Structure – Dwelling End-of-terrace two-bay three storey house over basement, built in 1812. Pitched slate roof having overhanging eaves with timber brackets, rendered chimney stack and cast-iron rainwater goods. Roughcast rendered walls having limestone plinth course. Square-headed openings to second floor with six-over-three pane timber sliding sash windows. Limestone sills	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				throughout. Square-headed openings to first and ground floors having six-over-six pane timber sliding sash windows. Wrought-iron balcony to first floor.	
1084		Church(in ruins)	Cloon and Commons, Castleconnell	Medieval Structure – Church Small early medieval church which may date from the 11 th Century. Located in the grounds of Island House. Converted to an out-house for island house in early 1800's	
1085	21807009	Island House	Cloon and Commons, Castleconnell	Country House Detached three-bay two-storey over basement villa style house built c. 1840. Comprising pedimented fluted Doric portico to front (east) elevation and gable-fronted breakfront to rear (west) elevation with flanking full height conservatories. Hipped slate roof having overhanging eaves with	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				timber brackets, rendered chimney stacks and cast iron rainwater goods. Square headed openings to ground floor with painted stone sills.	
1086		Kingston's	Coolbane, Castleconnell	Urban Structure – Dwelling Terraced five-bay two storey house, built c. 1800. Pitched slate roof with rendered chimney stacks, overhanging eaves and timber brackets. Rendered walls having render quoins. Square headed openings with render surrounds, painted stone sills and one over one pane timber sliding sash windows. Round-headed opening having render surround and glazed overlight over square-headed timber panelled door. Limestone step to entrance	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1087		Hickeys	Cloon and Commons, Castleconnell	Urban Structure – Domestic End of terrace three-bay two storey house, built c. 1850, with pitched artificial slate roof with overhanging eaves having timber brackets and rendered chimney stacks. Rendered walls with render plinth course. Square-headed openings having render surrounds and concrete sills. Round-headed opening having render pilasters with keystone over glazed overlight and half glazed timber panelled door.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1088	21807012	Shannon Hotel	Cloon and Commons, Castleconnell	<p>Urban Structure – Commercial</p> <p>Terraced five-bay two-storey house, built c. 1800 having render shopfront to front (south-west) elevation. Pitched slate roof with rendered chimney stacks, overhanging eaves having timber brackets and cast-iron rainwater goods. Lined-and-ruled rendered walls with render plinth course and recent bronze plaque. Shopfront comprising render pilasters supporting fascia and cornice over square-headed openings.</p>	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1089	21807013	Sunnyside	Cloon and Commons, Castleconnell	Urban Structure – Dwelling Terraced two-bay two-storey house, built c. 1800. Pitched slate roof with rendered chimney stacks and overhanging eaves having timber brackets. Lined-and-ruled rendered walls. Square-headed openings with painted stone sills and render surrounds. Pair of rendered square-profile piers to southwest having render caps and single-leaf cast-iron gate.	
1090	21807002	Catholic Church	Coolbane, Castleconnell	Urban Structure – Catholic Church Freestanding gable-fronted cruciform-plan Roman Catholic Church, begun in 1863, comprising four-bay nave, transepts and channel having extension to rear (south-east) elevation and two-bay single-storey lean-to to northeast and southwest	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				elevation. Pitched slate roofs with limestone coping, cross finials, open work bellcote to rear, cast-iron rainwater goods and limestone bracketed eaves course.	
1091	21807001	Castle View House	Coolbane, Castleconnell	<p>Urban Structure – Commercial</p> <p>Detached three-bay two-storey house, built c. 1870, having late nineteenth shopfront to front (north) elevation and extensions to rear (south) elevation. Pitched slate roof with overhanging eaves having timber brackets, rendered chimney stacks, render copings and cast-iron rainwater goods. Square-headed openings having painted concrete sills and timber sliding sash windows. Round-headed opening having spoked fanlight over timber</p>	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				panelled door. Shopfront comprising render pilasters supporting fascia and cornice	
1092	21807014	Worrall's Inn	Cloon and Commons, Castleconnell	<p>Urban structure – Commercial</p> <p>Detached five-bay two storey house, built c. 1820, having render shopfront and bay window to front elevation. Pitched slate roof with rendered chimney stacks and decorative timber bargeboards. Lined-and-ruled rendered walls having render quoins. Shopfront comprising Doric style pilasters supporting fascia and cornice. Square-headed display openings timber mullions.</p>	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1093	21807015	Community Hall	Coolbane, Castleconnell	Urban structure – Civic Detached three-bay single storey community hall, built in 1956. Comprised stepped pediment to front elevation, single storey extension to south-east elevation and lean-to to northwest elevation. Pitched slate roof. Channel rendered walls with render plinth course. Square-headed opening with concrete cantilevered canopy over double-leaf timber panelled doors.	
1094	21807016	Stradbally School	Main Street, Stradbally North, Castleconnell	Semi-detached four-bay single-storey L-plan Gothic Revival style former school, built in 1853.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1095	21807018	Station	Coolreiry, Castleconnell	Industrial Railway Station Detached eight-bay single storey railway station, built in 1858, having single-bay single-storey extension to south elevation, uPVC porch to north elevation and cantilevered canopy to front elevation. Pitched slate roof with red brick chimney stacks and roof lights. Rendered walls having render quoins and plinth course. Square-headed openings with concrete sills, replacement uPVC windows and cast iron sill guards.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1096	21807019	Guerin's Bar	Coolbane, Castleconnell	<p>Urban structure – Commercial</p> <p>Detached four-bay two-storey former coaching inn, built c. 1810, comprising late nineteenth-century timber shopfront to north elevation, two bay single-storey extension having porch to east elevation and single-bay two-storey extension to south elevation. Pitched slate roof with rendered chimney stacks and render eaves course. Render walls having render plinth course and quoins</p>	
1097		ACM Community Resource Centre 14 Castle Street	14 Castle Street, Castleconnell	<p>Mid-terraced four-bay single-storey house, built c. 1820. Pitched slate roof with rendered chimney stack. Lined-and-ruled rendered walls. Square-headed openings with painted sills and one-over-one pane timber sliding sash windows. Square-</p>	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				headed opening having timber battened half door.	
1098		ACM Community Resource Centre 15 Castle Street	15 Castle Street, Castleconnell	Mid -terraced four-bay single-storey house, built c. 1820. Pitched slate roof with rendered chimney stack. Lined-and-ruled rendered walls having render quoins. Square-headed openings with one-over-one pane timber sliding sash windows and painted sills. Square-headed opening having timber battened half door.	


RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1099		Castle Connell(in ruins)	Coolbane, Castleconnell	Medieval Site – Castle Located on the top of a steep flat topped rocky plateau to the south west of the village centre. The ruin is badly damaged with remains of the southwest and northwest towers protruding. Site of fortified structures since 1174. The castle was blown up in 1691.	
1100	21807020	Shanacloon House	Coolbane, Castleconnell	Country House Detached three-bay two-storey house, built in 1863, comprising shallow breakfront to front elevation and three-bay two-storey extension to rear. Hipped slate roof with rendered chimney stacks and overhanging eaves having timber brackets. Lined and ruled rendered walls with render quoins and stringcourse. Round-headed opening to	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				first floor having limestone sills and render surrounds. Square-headed openings to ground floor.	
1101	21807032	Shannon View	Stradbally North, Castleconnell	Country House Detached three-bay two-storey over basement house, built c. 1830, having two-bay two-storey extension to rear elevation. Pitched slate roof with rendered chimney stacks, render eaves course and copings. Hipped slate roof extension. Square-headed openings with limestone sills. Round-headed opening with cobweb fanlight over timber panelled door.	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1102	21807031	Stradbally School	Stradbally North, Castleconnell	<p>Urban structure – Institutional</p> <p>Detached six-bay two-storey cruciform-plan former school, built in 1867. Comprising gable-fronted breakfront to front and rear elevations, recent uPVC conservatory and timber portico to south elevation. Hipped slate roof having pitched slate roofs to breakfronts and red brick chimney stacks. Limestone walls with tooled limestone quoins, platband and plinth course. Inscribed limestone date stone to front elevation.</p>	
1103		Castle Oaks Hotel	Stradbally North, Castleconnell	<p>Country House</p> <p>Detached five-bay two-storey over basement house, built c. 1790. Comprising shallow breakfront and recent porch to front elevation, bows to north and south elevation, canted bays and</p>	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				recent extension to rear elevation. Split-level extension to south elevation. Hipped slate roof with rendered chimney stacks and render bracketed eaves course. Render parapet to breakfront. Square-headed openings with limestone sills and replacement uPVC windows.	
1104	21807030	Courthouse	Stradbally North, Castleconnell	Urban Structure – Civic Detached three-bay two-storey former courthouse built c. 1810. Single-bay single-storey extension to south elevation. Hipped slate roof having red brick chimney stack and cast-iron rainwater goods. Half-hipped slate roof to extension. Rubble limestone walls. Square-headed window openings to ground floor with painted stone sills.	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				Camber-headed window opening to first floor having painted stone sill and painted red brick surround.	
1105	21807042	Rock Lodge	Coolbane, Castleconnell	Country House Detached three-bay two-storey house, built c. 1790, having timber porch to front elevation. Hipped slate roof with rendered chimney stacks and overhanging eaves having timber brackets. Rendered walls with render plinth course. Square-headed openings having six-over-six pane timber sliding sash windows and limestone sills. Square-headed opening to porch with glazed overhead and flanking sidelights.	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1106	21807027	Church of Ireland	Stradbally North, Castleconnell	<p>Church of Ireland</p> <p>Freestanding gable-fronted Board of First Fruits style Church of Ireland church, built in 1809, enlarged in 1826, and in 1844 and may also incorporate earlier fabric. Comprising crenellated apex to gable front, octagonal limestone spire with cast-iron finial to front elevation, five bay nave having gablets and three-bay single-storey L-plan vestry to north elevation. Pitched slate roof with limestone copings, cast-iron rainwater goods and limestone pinnacles to corners.</p>	



RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1107	21807028	Lodge	Stradbally North, Castleconnell	Church of Ireland gate lodge Detached two-bay two storey former gate lodge, built c. 1810. Comprising gable-fronted projecting end bay and verandah to front elevation. Pitched slate roof having rendered chimney stack and overhanging eaves with timber barge boards. Rendered walls having rendered plinth course. Square-headed openings to first floor with painted rusticated stone block-and-start surrounds, concrete sill and replacement uPVC windows.	
1108		Graveyard	Stradbally North, Castleconnell	Graveyard Church of Ireland, late 18 th century, enlarged in 1831, has many monuments and octagonal spire typical of Limerick, suggest medieval element to building. Interesting mausoleum and grave markers.	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
1109		Mausoleum	Stradbally North, Castleconnell	Mausoleum Burial chamber of General Sir Richard Bourke, K.C.B., early Governor General of New South Wales, founder of Melbourne.	
1110		Tomb	Stradbally North, Castleconnell	Tomb Grave of Major T Gill, Early use of concrete and cast iron	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
5056	21807010	Bridge	Cloon and Commons, Castleconnell	Single-arch sandstone road bridge across the River Shannon, built c. 1815. Crenelated rubble parapet walls with render copings. Cut sandstone voussoirs to round-headed arches	
5057	21807035	Post Box	Cloon and Commons, Castleconnell	Wall-mounted cast-iron post box, c. 1890, with inscribed VR raised lettering, and raised crown motif. Set in rubble limestone wall. Manufacturer's name on base: 'W.T. Allen and Co. London'	
5058	21900101	Limestone Pier	Stradbally North, Castleconnell	Pair of octagonal limestone piers with carved caps, c. 1870, and double-leaf spear-headed wrought-iron gates. Spear-headed cast-iron railings set in limestone plinths terminating in pair of	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				square-profile piers. Rubble limestone boundary walls	
5059	21807036	Spa House	Lacka, Castleconnell	Detached five-bay two-storey former assembly room, built c. 1771, having recent gable-fronted canopy to entrance and three-bay single-storey extension to front (southeast). Pitched slate roof with rendered chimney stacks and cast-iron rainwater goods	
5061	21807039	Charco's	Lacka, Castleconnell	Detached seven-bay two-storey house, built c. 1820, having shopfront to ground floor and single-bay single-storey extension to rear. Pitched slate roof with rendered chimney stacks, overhanging eaves and cast iron rainwater goods	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
5062	21807003	Shannon Stores	Coolbane, Castleconnell	Detached four-bay two-storey house, built c. 1870, having shopfront to front (south-east) and north-east elevations. Hipped slate roof with overhanging eaves having timber brackets and rendered chimney stacks	
5063	21807023	Unknown	Castle Street, Coolbane, Castleconnell	Terraced two-bay two-storey house, built c. 1820, having late 19 th Century shopfront to ground floor. Pitched artificial slate roof with cast-iron rainwater goods. Lined-and-ruled rendered walls to ground floor	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
5064	21807024	Unknown	Castle Street, Coolbane, Castleconnell	End-of-terrace four-bay single-storey house, built c. 1820. Pitched slate roof having rendered chimney stack, render copings and cast-iron rainwater goods. Lined-and-ruled rendered walls with render quoins	
7015	21807022	Greystone	Coolbane, Castleconnell	Urban structure – Institutional Semi-detached two-bay single storey T-plan school house and four-bay single-storey L-plan Gothic Revival style former school, built in 1853, having recent porch to front elevation of schoolhouse. Pitched artificial slate roof with rendered chimney stacks and limestone copings. Roughly dressed limestone walls having tooled limestone quoins, buttresses and inscribed plaque to front elevation. Porch on school comprising	

RPS Reg. No.	NIAH Reg. No.	Name	Location	Description	Photo
				timber battened walls with dressed limestone plinth.	

Appendix III – Sites and Monuments Record

Archaeological sites are included in the Sites and Monuments Record under the provisions of Section 12(1) of the National Monuments (Amendment) Act, 1994.

Section 12(3) of the Act states “When the owner or occupier...of a monument or place which has been recorded under subsection (1) or any person proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such monument or place, he shall give notice in writing of his proposal to carry out the work to the [Minister for the Environment, Heritage and Local Government] and shall not, except in the case of urgent necessity and with the consent of the [Minister] commence the work for a period of two months after having given the notice.”

Section 16 of the Act prohibits the use or possession of detection devices “in, or at the site of, a monument recorded under Section 12.”

The following table lists the Recorded Monuments and Places located in Castleconnell:

RMP Ref. No.	Classification	Townland
LI001-002001	Church	Stradbally North
LI001-002002	Graveyard	Stradbally North
LI001-003	Castle	Coolbane
LI001-004001	Religious House	Cloon and Commons
LI001-004002	Cross-inscribed slab	Cloon and Commons
LI001-004003	Cross-inscribed slab	Cloon and Commons
LI001-007	Souterrain	Stradbally North
LI001-008001	Burial Ground	Stradbally North
LI001-008002	Metal-working site	Stradbally North
LI001-004004	Ritual Site Holy Well	Cloon and Commons
LI001-004005	Cross	Cloon and Commons
LI001-002003	Architectural features	Stradbally North

Castleconnell Local Area Plan 2023 – 2029

Strategic Environmental Assessment Screening, Strategic Flood Risk Assessment, Appropriate Assessment Screening and Natura Impact Report for the Castleconnell Local Area Plan 2023-2029

Part A – Strategic Environmental Assessment Screening

1.0 Introduction

This screening document is prepared during the preparation of the Castleconnell Local Area Plan 2023 - 2029. The review of the Castleconnell Local Area Plan is necessary in order to ensure that its policies, objectives, and population projections are in line with those of the core strategy of the Limerick Development Plan 2022-2028 and the contents of the National Planning framework and the Regional Spatial and Economic Strategy for the Southern Region.

The Planning and Development (Strategic Environmental Assessment) Regulations 2004-2011 (S.I. No. 436 of 2004, SI 201 of 2011) requires case by case screening of individual plans and programmes based on the criteria in Schedule 2A to the Planning and Development Regulations 2001 (as amended). These criteria must be taken into account in determining whether or not significant effects on the environment would be likely to arise as a result of the preparation of this plan.

Castleconnell is located approximately 10km northeast of Limerick city. The village centre is located approximately 1km off the old Limerick/Dublin national road. Since the opening of the M7 Motorway, this road has been downgraded to a regional road, R445. The village adjoins the River Shannon, which is the county boundary between Counties Limerick and Clare. The village has developed in a linear fashion along the banks of the River Shannon with the Main Street running parallel to the River. The topography of Castleconnell and surrounding areas is largely low-lying.



Figure 1: Castleconnell Village located on the banks of the River Shannon

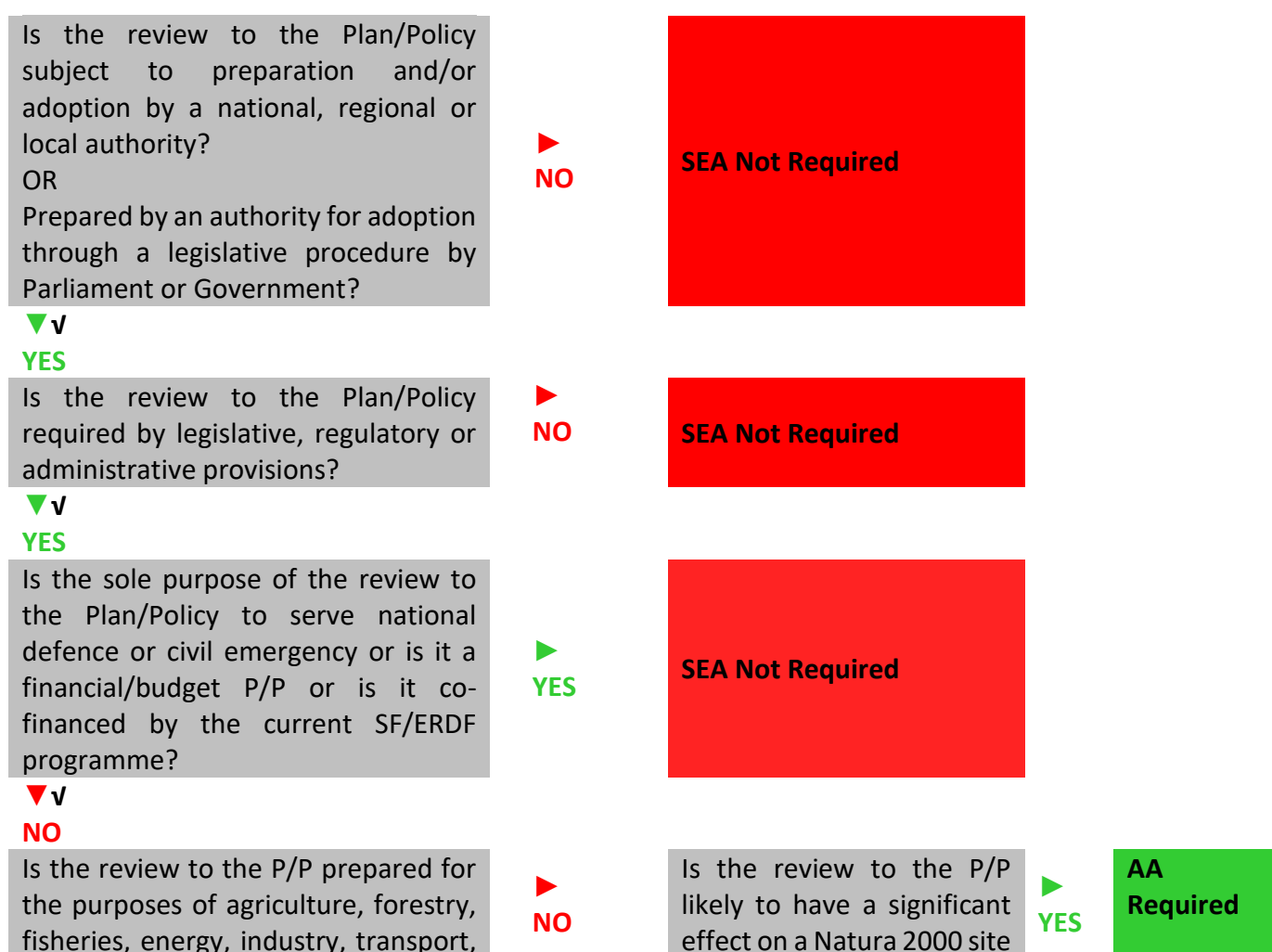
The Limerick Development Plan 2022 -2028 identifies Castleconnell as Level 3 settlement in Limerick. These provide local retail and business services for their surrounding areas. Census 2016 identified a population of 2,107 people in the village.

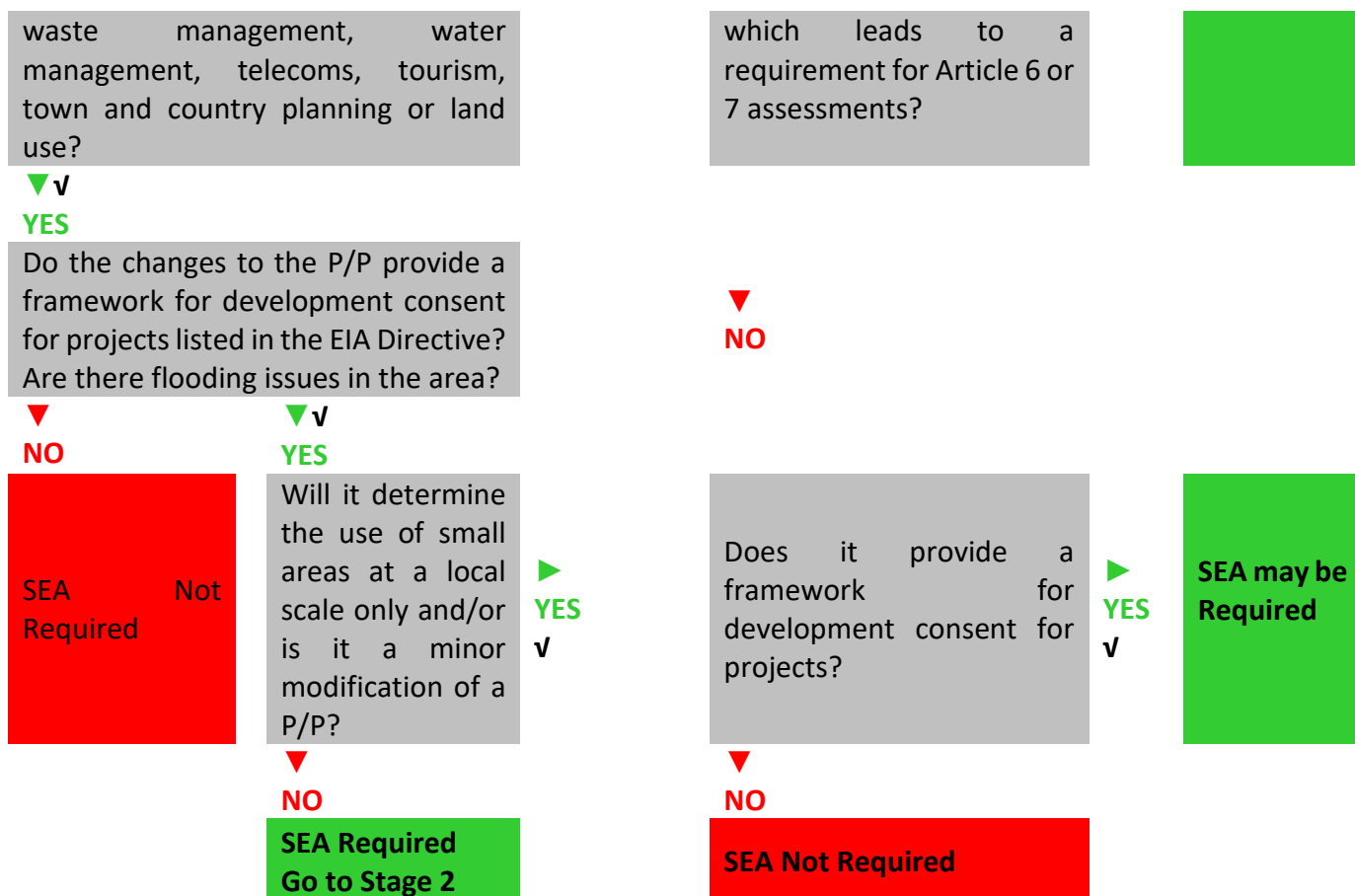
1.1 Stage One - Pre-Screening

The first step in determining whether the Castleconnell Local Area Plan 2023 – 2029 would require a SEA, involves a pre-screening check. It allows rapid screening-out of reviews of plans and policies that are clearly not going to have any environmental impact and screening-in of those that definitely do require Strategic Environmental Assessment.

It is necessary to conduct screening to determine if a Strategic Environmental Assessment of the review of the Local Area Plan (LAP) is required. The review of the Plan will provide a framework for development. It is necessary to determine whether an SEA would be required by testing the LAP against environmental significance screening criteria. The screening assessment is based on the information identified in the 2023 – 2029 plan. Under the updated SEA Guidance (March 2022) the population threshold for mandatory SEA is 5,000 people and the threshold area is 50km². The plan area, within the existing LAP boundary, is 2.4 km² which is below the 50km² threshold for mandatory SEA. The existing population of Castleconnell (Census 2016) is 2,107 (LAP p.8), which is also below the threshold for SEA. The projected population growth for Castleconnell, as outlined in the Plan, is that the village will grow to 2,906, by 2029, which remains below the SEA threshold. Policies and objectives set out in the Local Area Plan, will ensure that growth occurs in a controlled manner and in line with the provision of services and infrastructure.

Figure 1 Pre-Screening Decision Tree





1.2 Stage Two - (A) Environmental Significance Screening

The application of environmental significance criteria is important in determining whether an SEA is required for small plans/policies or modifications to Plans/Policies. Annex II (2) of Directive 2001/42/EC sets out the “statutory” criteria that should be addressed when undertaking this stage.

Criteria for Determining the Likely Significance of Environmental Effects

Characteristics of the Plan/Programme

- i. *the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;*

The Local Area Plan guides development within the settlement boundary of Castleconnell, by allocating zoning to different land uses in accordance with Section 28 guidelines and the requirements of the National Planning Framework (NPF), Regional Spatial and Economic Strategy for the Southern Region (RSES), and the Limerick Development Plan 2022 – 2028. The Local Area Plan will guide the amount and type of development that will take place in Castleconnell, over the lifetime of the plan. The different zoning categories will permit developments within the appropriate zoning, in accordance with the zoning matrix for each land use. The review of the existing Local Area Plan will ensure that the population projections

and hence the zoning patterns of the plan will reflect the policy guidance and population figures of the NPF and RSES and the contents of the core strategy of the Limerick Development Plan 2022 – 2028.

The SEA Directive supports the use of brownfield and infill sites and also the development of “vibrant city, towns and village centres”. So too does the NPF, RSES and the Limerick Development Plan. The Sustainable Residential Development in Urban Areas Guidelines from May 2009, also states that “new development should contribute to compact towns and villages” (DEHLG, 2009 p.48). By encouraging the re-use of vacant and partially completed developments, particularly those located close to the settlement centre, this will help to achieve the aim of more compact settlements. The plan places further emphasis, as outlined in Chapter 4 - Town Centre First Approach, on the development of brownfield and infill sites, which reflects the recent government policy document Town Centres First, which encourages the revitalisation and reoccupation of towns and villages.

ii. the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;

The Local Area Plan is set within the context of the National Planning Framework (NPF), Regional Spatial and Economic Plan for the Southern Region (RSES), and the Limerick Development Plan 2022 – 2028, and the provisions of relevant planning guidelines, issued by the Department of Housing, Local Government and Heritage. These tend to influence the contents of the Castleconnell LAP rather than the other way around. The plan will influence and guide individual projects and planning decisions within the LAP, both through the zoning mechanism and the policy content of the Local Area Plan.

iii the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;

The existing Castleconnell LAP, being reviewed under the Planning and Development Act 2000 (as amended), takes into account relevant environmental considerations. The plan is being reviewed to update its policy content as it nears the end of its extended statutory time frame. It will be updated to take into account the need to incorporate the Limerick Development Plan core strategy, policies and objectives. The Circular letter PSSP 6/2010 *Core Strategies under the Planning and Development (Amendment) Act 2010* and the accompanying Guidance Note on Core Strategies November 2010 (pp. 2-3), highlights that the incorporation of the core strategy “*must integrate relevant EU directive related considerations that development plans must comply with*”, amongst them the SEA Directive, Water Framework Directive and the Habitats Directive and environmental legalisation.

The River Shannon forms the western boundary of the village. This is a designated site (Lower River Shannon Special Area of Conservation site) and a valuable local amenity. Parts of the land adjoining the river have been designated as a Special Control Area or as “open space/amenity”, these are in the western part of the plan area. This buffer zone was also zoned as ‘open space/amenity’ as it was identified as being unsuitable for development as a result of flood risk. The protection of these lands, with only limited development on what is both a flood risk area and an important natural amenity in the village, is considered important

from an environmental perspective. The inclusion of policies ensuring growth takes place in parallel with the provision of adequate waste treatment facilities, means that the possibility of ex-situ effects on the river, as a designated site (Lower River Shannon Special Area of Conservation) is reduced. The inclusion of a buffer zone along the river also helps to avoid encroachment on the river. Consequently, the chances of direct pollution, such as contaminated over land flow, are reduced. This riparian zone also functions as a wildlife corridor. There is policy support in the Plan, regarding the potential development of a greenway extension from the University of Limerick to Montpelier. Having regard to potential effects on the Lower River Shannon SAC site, it was decided to prepare a Natura Impact Statement (NIS) to assess possible effects. This is presented with the plan documentation. Since the issues that arise are confined to the river and the Natura 2000 site network, it is considered that the preparation of an NIS is best way to address these issues.

iii. environmental problems relevant to the plan or programme;

The underlying environmental issues of the existing Castleconnell Local Area Plan include:

- Sensitive development of the historic townscape of Castleconnell;
- Avoidance of pollution and damage to the River Shannon;
- Preservation of key features of the village's natural environment and protected structures and listed buildings;
- Inclusion of climate action policies and plan content;
- Dealing with the flooding issues that occur in the settlement, this could be viewed as an extension of the point above regarding climate action policies, as it is a form of climate adaptation.

In the review of the existing Local Area Plan, it is considered appropriate to update the policies and objectives relating to Architectural Conservation Areas and architectural issues generally, having regard to the quality of the architecture in the settlement.

iv. The relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

The review of the existing LAP is being carried out, in accordance with the Limerick Development Plan 2022-2028. In addition, the Castleconnell LAP is being prepared with the Regional Spatial and Economic Strategy and National Planning Framework (NPF) as a backdrop which take cognisance of community legislation and guidelines in relation to environmental issues. The importance of the protection of water quality is fully recognised in the plan. Section 8.2.1 of the plan and Policy CH2 sets out the need to achieve good water quality.

Characteristics of the Effects and of the Area Likely to be affected

i. the probability, duration, frequency and reversibility of the effects

Changes are likely as the zoning mechanism guides both the amount and location of development. Changes to the built environment are generally permanent in nature and are

difficult to reverse. As indicated above by rationalising the zoning pattern, it is expected that the overall effects of developments would be much more controlled, both in terms of reduced areas proposed for development but also through consolidation of the village core, which will try and address issues of under use of buildings at the settlement core.

Changes to the built environment are generally long term (with perhaps a 50 year lifespan), but the zoning template and the emphasis on centre out development allied to the use of core strategy figures will ensure that the village will not be overwhelmed by such development and will grow at an appropriate rate relative to the availability of services.

ii. the cumulative nature of the effects

Cumulative negative environmental effects are likely to be localised within the plan boundary and limited in nature. As outlined above, with the use of guidance, such as the core strategy and robust planning policies, it is considered that the scale of development will integrate well into the existing settlement, thereby reducing adverse cumulative effects.

iii. the trans-boundary nature of the effects

The Plan notes that some of the existing walkways lead into County Clare (Table 6). These are existing trails and are long established. Their effects are not regarded as being significant. However the potential greenway proposal, which is currently at feasibility stage, is considered to potentially have significant effects due to scale and distance, from Limerick to Montpelier and the increased level of human disturbance, which may potentially be close to the river banks.

iv. the risks to human health or the environment (e.g. due to accidents)

None. The waste water treatment plant in Castletroy to which waste is pumped has a Population Equivalent of 45,000 which is sufficient to cater for the population growth anticipated in Castleconnell, Irish Water are developing proposals to upgrade the existing plant to enhance the capacity of the plant in Castletroy.

v. the magnitude and spatial extent of the affects (geographical area and size of the population likely to be affected)

The area that will be affected is that within the development boundary of Castleconnell, see zoning map in the Local Area Plan. The Plan area is 2.4km², which is an overall reduction in size from the existing plan area and has population of 2,107. Section 1.1 above contains details of projected population figures.

vi. the value and vulnerability of the area likely to be affected due to
- Special natural characteristics or cultural heritage;

The Limerick Development Plan and the Local Area Plan identify the following protected areas/elements of the natural/cultural heritage:

- Protected Structures;

- Architectural Conservation Areas;
- Sites of Archaeological Significance;
- Areas with natural history designations, in particular the Lower River Shannon SAC site.

The village of Castleconnell is of particular architectural interest. Of particular note is the streetscape and the built environment contributing to the creation of a series of unique views along and beyond the streets of the village. Changes to the plan following review are not expected to have any adverse effects, but to consolidate the protection of these assets. Section 8.3.1 of the plan indicates the variety of protected structures in the plan. They are listed in Appendix 3 of the Local Area Plan. Section 8.3.2 describes the three Architectural Conservation Areas (ACAs) in the plan, the northern, central (core) and southern which indicate different features of the historical development of Castleconnell's built environment.

- exceeded environmental quality standards or limit values;

It is not expected that any environmental quality standards will be exceeded or that the value of vulnerable areas, will be impacted, as a result of the review, it is recommended that policies which conserve aspects of both the built and natural environment are carried forward and reinforced in the review. Other policies in the plan such as Policy CH2 (see above) sets out the need to achieve good water quality, in line with the requirements of the Water Framework Directive.

- Intensive land-use;

Any revision to take into account the core strategy will result in rationalisation of existing zoning patterns through measures, such as additional zoning, which will be progressed in the Plan. This would seek to reduce the impact on land use by limiting the amount of land used for development by concentrating development in core areas, including brown field/infill sites, while protecting environmentally sensitive areas from development. The measures outlined above, such as the continuance of policies to protect the ACAs and the Special Control Area along the river are expected to lessen the overall effects of development within the LAP boundary. The emphasis on the village centre first policy is designed to encourage reuse of existing building stock particularly the village core, which is intended to result in revitalization of this part of the village.

vii. The effects on areas or landscapes which have a recognised national, community or international protection status.

As indicated above, the inclusion of policies relating to the proposed Limerick to Montpelier greenway and its possible effects has determined the need for a Natura Impact Statement. Since effects are considered to be confined to the Natura 2000 network, the NIS is considered the best mechanism to adequately assess the effects.

1.3 Stage Two – Summary, Conclusion and Statement

At this stage in the plan preparation process, no significant environmental impacts can be identified in relation to the above issues. The greenway issue is being dealt with by the preparation of a Natura Impact Statement.

Following the screening process, whereby the specific context of the review to the Castleconnell Local Area Plan has been assessed against the environmental significance criteria as contained in Annex II (2) of the SEA Directive, **it is concluded that a Strategic Environmental Assessment is not required for this stage for the preparation of the Castleconnell Local Area Plan.**

Part B – Strategic Flood Risk Assessment

1.0 Introduction

The preparation of the Castleconnell Local Area Plan has been subject to a Strategic Flood Risk Assessment (SFRA), in accordance with The Planning System and Flood Risk Management - Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL 2/2014. The SFRA provides an assessment of flood risk and includes mapped extents of Flood Risk Zones. This report considers flood extents to inform the preparation of a land use plan.

The Local Area Plan is a land use plan and provides an overall strategy for the proper planning and sustainable development of the functional area of the village of Castleconnell over the six-year period 2023 – 2029. The principles on which the plan has been developed upon is compact growth, promotion of a self-sustaining settlement supported by sustainable transport choices, to promote the growth of the village, in an environmental manner.

Castleconnell is located approximately 10 kilometres northeast of Limerick City. The village adjoins the River Shannon, which is the county boundary between Counties Limerick and Clare. The village has developed in a linear fashion along the banks of the River Shannon with the Main Street running parallel to the River. The topography of Castleconnell and surrounding areas is largely low-lying. Flood risk in Castleconnell is largely dominated by the River Shannon and its associated tributaries.



Figure 1: Castleconnell village located on the banks of the River Shannon

1.0 Flood Risk Management Policy

1.1 EU Floods Directive

The European Directive 2007/60/EC provides the overarching European legalisation, in relation to managing flood risk, it seeks to reduce and manage the risks that flooding pose to humans, the environment, cultural heritage and the environment. The legalisation applies to both inland and coastal water sources and requires EU states to:

- Carry out a preliminary assessment in order to identify the river basins and associated coastal areas, where potential significant flood risk exists;
- Prepare flood extent maps for the identified areas;
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences.

Implementation of the EU Floods Directive is required to be coordinated with the requirements of the EU Water Framework Directive and the current National River Basin Management Plan.

1.2 National Flood Policy

In line with evolving European legalisation and evolving national legalisation, the government in 2004 established a Flood Policy Review Group and carried out an interdepartmental review of national flood risk management policy and approved a Flood Policy Review Report. The recommendations of the Report included appointment of the OPW as lead agency for co-ordinating delivery of flood risk management policy. The OPW carries out this role by co-ordinating the implementation of flood risk management policy and measures across three strategic areas:

- Prevention - avoiding construction in flood-prone areas;
- Protection - taking feasible measures to protect areas against flooding.
- Preparedness - planning and responding to reduce the impacts of flood events.

The review also identified a number of key measures for implementation in relation to flood risk management, most relevant to plan preparation is the "Planning System and Flood Risk Management Guidelines" published in 2009, which provide guidance to Local Authorities on plan formulation and decision making in areas at risk of flooding. The review also resulted in an enhancement to availability of data on flood risk and reporting on flood events, which assists in decision making in relation to land use planning.

2.2.1 National CFRAM Programme

The OPW undertook the National Catchment-based Flood Risk Assessment and Management (CFRAM) Programme in consultation with the Local Authorities and supported by external engineering consultants. The objectives of the CFRAM Programme was to:

- Identify and map the existing and potential future flood hazard and flood risk in the areas at potentially significant risk from flooding, called Areas for Further Assessment (AFAs);
- identify feasible structural and non-structural measures to effectively manage the assessed risk in each of the AFAs, and
- Prepare a set of Flood Risk Management Plans, and associated Strategic Environmental and Habitats Directive (Appropriate) Assessments that set out the proposed feasible measures and actions to manage the flood risk in these areas and their river catchments.

The Programme is being implemented through CFRAM studies that have been undertaken for each of the river basin districts in Ireland. The CFRAM Programme comprises three phases as follows:

- The Preliminary Flood Risk Assessment (PFRA) mapping exercise, which was completed in 2012, these have been superseded by the national indicative fluvial, coastal and groundwater mapping;
- The CFRAM Studies and parallel activities, with Flood Risk Management Plans and
- Implementation and Review.

The CFRAM programme has provided invaluable background information in relation to flooding throughout Ireland and is invaluable in terms of plan formulation. These maps have recently been updated with the National Indicative Fluvial Mapping and National Coastal Flood Hazard Mapping and probabilistic and historical ground water flood maps prepared by the Geological Survey of Ireland.

2.2.2 Flood Risk Management Guidelines

In 2009, the OPW and the Department of the Environment and Local Government (DEHLG) published Guidelines on flood risk management for Planning Authorities - **The Planning System and Flood Risk Management - Guidelines for Planning Authorities**. These Guidelines seek to establish a regime to assist with flood risk identification, assessment and management and embed this into the planning process.

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and
- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

The Guidelines follow the principle that development should not be permitted in flood risk areas, particularly floodplains, except where there are no alternative and appropriate sites available in lower risk areas that are consistent with the objectives of proper planning and sustainable development.

One of the key areas identified in the Flood Guidelines is around identifying flood risk, which is an expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. It is normally expressed in terms of the following relationship:

$$\text{Flood risk} = \text{Likelihood of flooding} \times \text{Consequences of flooding}$$

Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year.

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development and the presence and reliability of mitigation measures).

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

There are three types of flood zones defined for the purposes of the Flood Guidelines:

- Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- Flood Zone B – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- Flood Zone C – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding).

Flood Zone C covers all other areas that are not in zones A or B.

3.0 Flood Risk Identification

3.1 Introduction – Stage 1 Flood Risk Identification

Flood risk identification was undertaken in order to identify whether there may be any flooding or surface water management issues within or adjacent to zoned lands and consequently whether Stage 2 SFRA (flood risk assessment) should be proceeded to. Stage 1 SFRA is based on existing information on flood risk indicators based on available flood detail.

In Castleconnell, the River Shannon forms the western boundary of the village and tributaries of the River Shannon, such as the channel, which enters the river at Ferrybank, run through the village.



Figure 2: Channel entering the river at Ferrybank

Such tributary streams and channels extend throughout the plan area. Some of these are entirely artificial, while others have been heavily modified. All of them are designed to convey

water as quickly as possible to the River Shannon. Given the rate of flow in the river during flood conditions, Castleconnell is susceptible to fluvial flood risk. Castleconnell and the surrounding area was badly flooded most recently in 2009, 2015 and 2020, following periods of prolonged rainfall. The rise in water levels in the main river channel has the effects of backing up those tributaries in the plan area which drain into it and this contributes further to local flood risk within the plan boundaries.

CFRAMS provides for project-level development and assessment of a Flood Relief Scheme for Castleconnell, including environmental assessment as necessary and further public consultation, for refinement and preparation for planning / exhibition and, if and as appropriate, implementation. The potential measure would protect at-risk properties against the 1% AEP Fluvial flood event by a combination of flood defences, improved channel conveyance and other works. Limerick City and County Council in conjunction with OPW have engaged consultants to progress a flood relief scheme for Castleconnell.

To date, significant quantities of data has been gathered which has provided valuable insight into previous flooding mechanisms and issues throughout Castleconnell. As part of the development of the flood relief scheme, the project team reviewed a number of previous flood events (including 2009, 2015 and 2020) within Castleconnell in order to develop a detailed understanding of the relevant flood mechanisms throughout the scheme area. In particular, the flood event that occurred in February 2020 has been important in calibrating the 2D hydraulic model to accurately represent flooding in Castleconnell.



Figure 3: Maps produced from Drone footage showing the extent of flooding in March 2020

3.2 Flood Risk Indicators

In 2009, major flooding took place in Castleconnell. Approximately 70 houses were affected by flooding. The majority of these houses were located in the western portion of the plan area, close to the existing village centre. These are located to the east, south east and Further flooding took place in 2015 and in 2020, where infrastructure, such as roads were rendered impassable in Castleconnell village, south of the castle ruins. Commercial properties to the east, southeast and south of the castle ruins have been flooded. The health care centre southeast of the castle ruins was also flooded as was the pumping station north of the castle ruins. All of these are considered to be of high vulnerability risk.

Additional flooding events had taken place in 1990, so over a 30-year period at least four significant flood events had taken place in the village.



Figure 4: Taken from www.floodinfo.ie, this shows the concentration of Flood events in Castleconnell



Figure 5: High water levels close to Ferrybank, following heavy rain in early 2018

3.3 Conclusion of Stage 1 SFRA

The information detailed above indicates elevated levels of flood risk in various locations across the Plan area; therefore, a Stage 2 SFRA has been proceeded to.

4.0 Stage 2 Strategic Flood Risk Assessment

Introduction

Stage 2 SFRA is being undertaken to:

- Confirm the sources of flooding that may affect zoned and adjacent areas;
- Appraise the adequacy of existing information as identified by the Stage 1 SFRA; and
- Scope the extent of the risk of flooding through the preparation of a Flood Zone Map.

4.1 Assessment of information outlined above and Delineation of Flood Zones

In order to inform the Stage 2 assessment, the village of Castleconnell was inspected, which involved numerous site visits in order to examine, the potential source and direction of flood

paths from fluvial sources, locations of topographic features that coincide with the flood boundaries and to identify vegetation associated with a high frequency of flood inundation. As the preparation of this report is coinciding with the preparation of the flood relief scheme for Castleconnell, various studies being carried out to support the scheme, has assisted in informing this report and has informed the zoning decisions in the Draft Local Area Plan.

Three factors influence the zoning decisions in relation to these areas. The first is the existence of the flood risk as presented by the CFRAM flood maps (see Figure 6 below) and discussions with Local Authority personnel, the second is the low-lying nature of the lands and history of flood risk. The six inch map series indicates regular drainage features identifying the potential for water logging. It was noted that streams run through part of this area, and some of them had been straightened and deepened to increase their conveyance capacity. The third factor to be considered is the core strategy that informs the Draft Plan. The Core Strategy Figures set out in Table 3.1 of the draft plan indicates that 15.0 ha is required for residentially zoned land. This is less than in the existing plan. In accordance with the Flood Guidelines for Planning Authorities, it is not considered appropriate to zone lands at risk of flooding. The reduction in zoned lands will also lead to a potential increase in lands, which have permeable, i.e. undeveloped surfaces within and close to the plan area, which would help manage surface water runoff, which is a factor to consider in flood risk management.

Discussions regarding drainage and flooding issues took place with Local Authority personnel, which indicated the vulnerability of Castleconnell to flooding and specific locations, which have been vulnerable to flood risk in the past and the need for progress in terms of the development and implementation of a Flood Relief Scheme in Castleconnell. The flood maps have informed the new zoning extent so that in these areas zoning is for uses compatible with flood risk, such as open space or amenity uses or agricultural uses. As noted above, much the Special Control Area is also subject to flood risk and this zoning pattern is also compatible with the relevant flood risk. This approach to zoning has evolved in the preparation of the plan, considering submission received to date and also as a result of analysis being carried out to support the Castleconnell Flood Relief Scheme.

Hydrology and hydraulics tasks are currently being finalised with the final reports to be published in the coming weeks. To facilitate this, a number of surveys including (but not limited to); topographic surveys, drainage (including CCTV) have been undertaken over the course of the project to gather a detailed understanding of flood risk in Castleconnell. This study has included a detailed review of all relevant watercourses and tributaries, which flow into and potentially affect Castleconnell with the main outputs consisting of predicted flood extents mapping for the design events, namely the Cedarwood Stream.

As a result of this work, it is considered that the 2009 flood event was of a similar magnitude to a 1% Annual Exceedance Event (AEP) also known as the 1 in 100-year event. The proposed scheme will be designed to protect against a 1 in 100-year event and will also take appropriate account of the unique flow conditions that are experienced in Castleconnell downstream of Parteen Weir.

The Flood Relief Scheme is currently in the options appraisal phase. The project team have considered an extensive list of potential flood management measures, including flood walls, embankments, road raising, demountable barriers, river restoration and maintenance works, flow diversion, storage and more. Each of these measures have been assessed by technical, social, environmental or economic criteria. From this appraisal, three options are being brought forward to the public consultation stage for a more detailed assessment.

4.2 Flooding from Other Sources

While pluvial flood risk has not featured to great degree in flood risk assessment in the village, due to the far greater effects from fluvial flooding posed by the River Shannon, it is often the case in modern developed areas that it can have local effects. To date much development has not tended to rely on attenuation or nature friendly measures to try and control water flow and run off and local rain fall events can generate considerable volumes of water. In submissions to other plans and in the PFRA for Castleconnell, the OPW draws attention to the importance of local factors in determining flood risk and possible movement and in built up areas this is an important element.

In Castleconnell there has been significant development in the last twenty years which has altered local ground conditions. Even where open space occurs in developments where impermeable surfaces might not exist, the effects of the passage of construction traffic and machinery have often compacted soil and subsoil, which would diminish, water's ability to infiltrate through the soil. This has occurred in the plan area, where an increase in impermeable surfaces and soil compaction has resulted in increased water flow to the local watercourse and hence to the River Shannon. One watercourse would serve as an example, the Stradbally East stream (FRA, 2019 submitted with planning application 19/518). This is now heavily modified and is a straightened and deepened drain. This does increase its conveyance capacity but its original function was to convey water from agricultural land and now forms the boundary of a developed residential site.



Figure 6: The red arrow indicates the east Stradbally Stream on the 25-inch maps dating from c.1900

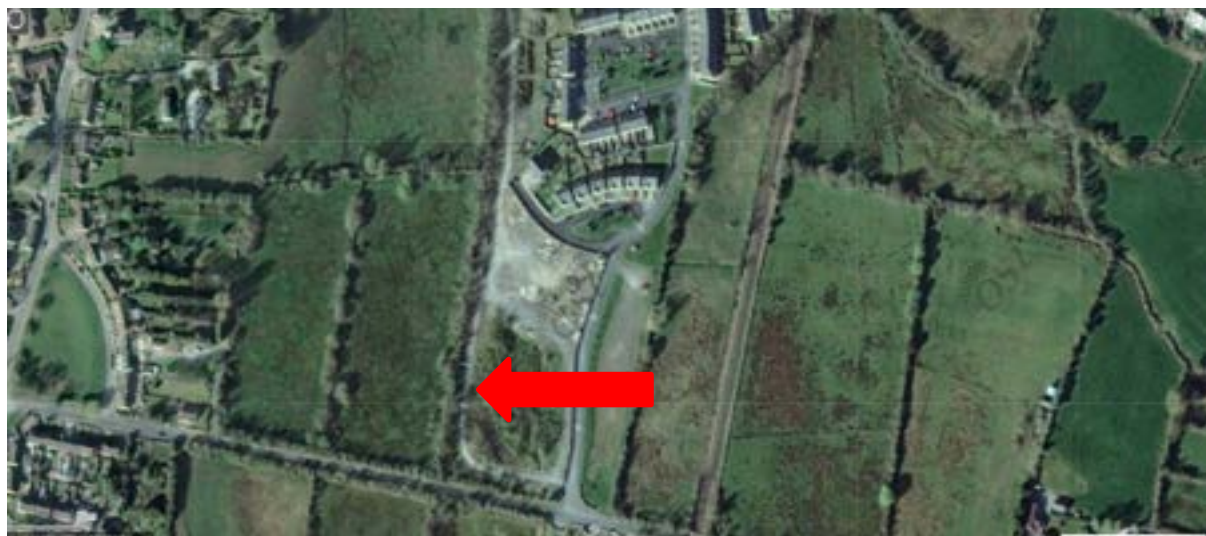


Figure 7: Taken in 2005 this picture shows Castle Rock under construction, and the red arrow shows the watercourse. It now absorbs run off at a rate greater than that associated with the previous agricultural usage

From the above it can be seen that local changes in development patterns and intensification of land usage can have an effects on over land flow and surface water movement in particular. This can exacerbated when the drainage of these tributaries to the River Shannon is impeded by high water levels in the main channel when the river is in flood. This is a factor that is being borne in mind in Castleconnell in the plan and has been reflected in the insertion of policies, which promote nature based solutions and Sustainable Urban Drainage (SuDs). This is dealt with further in Section 3.4 below.

Soil types around Castleconnell tend to be poorly drained. These vary from mineral soils (podzolics) to peat in the northern most part of the plan area. Gleys are present in the southern part of the plan area. All of these would have impeded drainage characteristics and as a result would not have a great deal of absorption capacity. Shown below is the winter 2015/16 surface water flooding map, which reinforces that point.



Figure 8: Locations of 2015/2016 surface water flooding in Castleconnell. Source: GSI website

4.3 Flood defences

In 2010, the OPW financed the construction of impermeable earthen embankment and associated works at rear of Meadow Brooke Estate/ Purchased of temporary booms and pumps /Placement of a sluice onto the bridge culvert at Island House (OPW, Flood Risk Management Plan County Summary). These measures have assisted in dealing with flood events in Castleconnell, however, the requirement remains for a designed flood relief scheme. The Flood Relief Scheme will consist of one or a combination of flood risk management measures: Floodwalls, Embankments, Road Raising, and Barriers. These have been presented to the public in consultation meetings in September of 2022 and their responses are currently being appraised.

4.4 Flood Risk Zone Mapping

A Flood Risk Map has been produced taking into account the findings of the Stage 1 and Stage 2 SFRA as detailed above. The map is illustrated below identifies Flood Zone A (darker blue) and Flood Zone B4 (lighter blue). As per the Guidelines, the flood zones in Castleconnell are as follows:

- Flood Zone A – where the probability of flooding from the River Shannon and its tributaries is highest (greater than 1% or 1 in 100 for river flooding);
- Flood Zone B – where the probability of flooding from the River Shannon and its tributaries is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding); and;
- Flood Zone C – where the probability of flooding from the River Shannon and its tributaries is low (less than 0.1% or 1 in 1000 for river flooding).



Figure 9: Flood extent in Castleconnell. Dark blue shows areas with 1:100 flood risk, while the light blue shows 1:1000

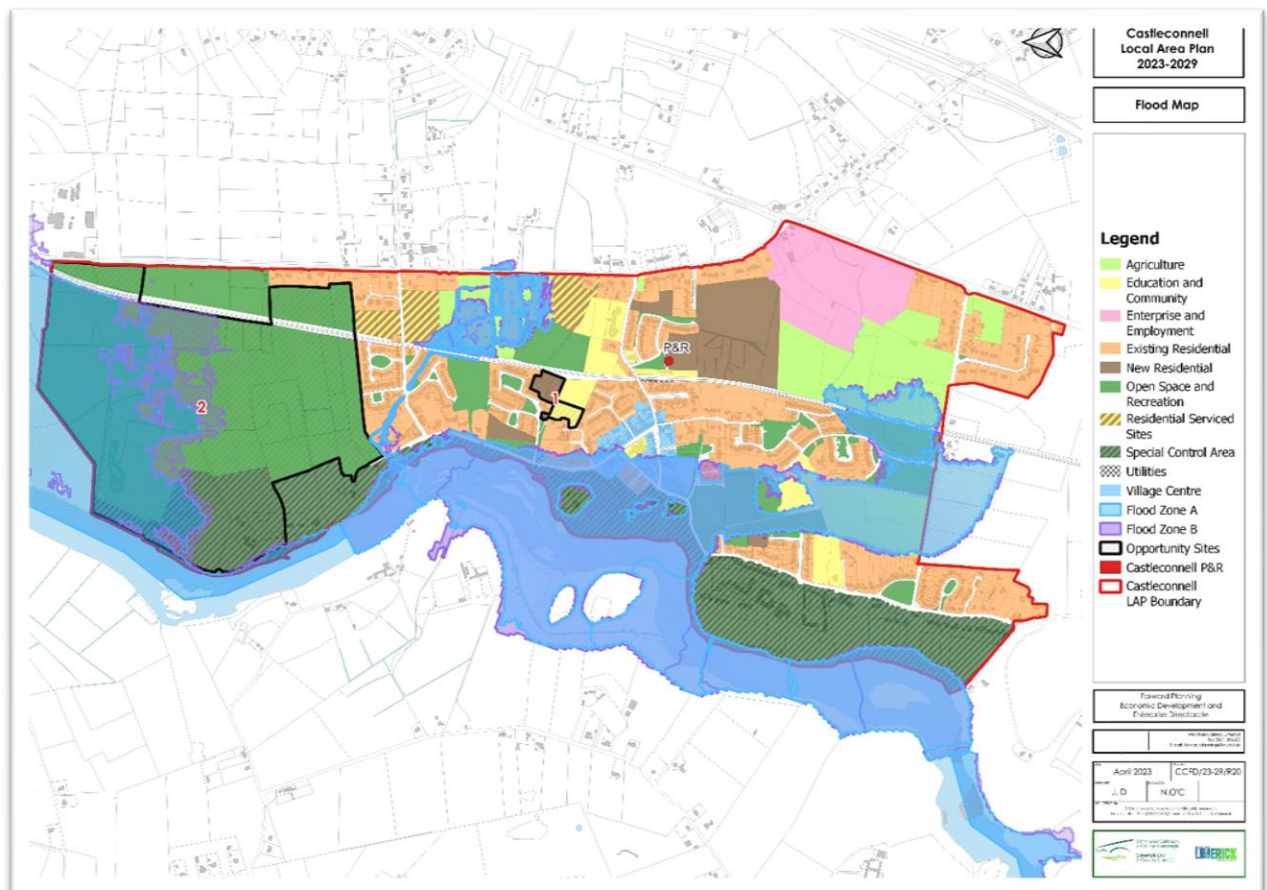


Figure 10: Zoning Map and Flood Extents in Castleconnell

4.5 Climate change considerations

The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009 recommends that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. In this regard, the Guidelines recommends:

- Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;
- Ensuring that the levels of structures designed to protect against flooding such as flood defences, land raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect (normally 85-100 years); and
- Ensuring that structures to protect against flooding and the development protected are capable of adaptation to the effects of climate change when there is more certainty about the effects and still time for such adaptation to be effective

Advice on the expected impacts of climate change and the allowances to be provided for future flood risk management in Ireland is given in the OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009). Two climate change scenarios are considered. These are the Mid-Range Future Scenario (MRFS) and the High-End Future Scenario (HEFS). The MRFS is intended to represent a "likely" future scenario based on the wide range of future predictions available. The HEFS represents an "extreme" future scenario at the upper boundaries of future projections. The mapping provided in the SFRA Flood Zones A and B have been informed by the OPW's CFRAMS Present-Day Scenario.

In addition to considering climate change factors in the SFRA, the Council have embedded the principles of Sustainable Urban Drainage Systems (SuDS) and Nature Based Solutions (NBS) into the Local Area Plan, which not only has climate benefits, but also a range of environmental benefits to support the delivery of sustainable development. The approach taken in the proposed Local Area Plan, in line with the recently adopted Limerick Development Plan 2022 – 2028, which seeks to adopt SuDS and nature based solutions as the best practice approach, not just on key development sites. The Council will work with developers to promote SuDS and nature based solutions on a case-by-case basis and tailor solutions to the specific sites. In Chapter 5 of the Plan, Table 4 *Public Realm Open Space Provision in Residential Developments in Castleconnell*, outlines the requirement to provide new spaces as part of developments. Though part of standard planning practice, the requirement for minimum open space provision will ensure new permeable surfaces within new developments.

Similarly, Section 9.2 of the Plan Surface Water Management and SuDS will ensure the adoption of nature friendly solutions to the issue of surface water management. The contents of the publication *Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas Water Sensitive Urban Design Best Practice Interim Guidance Document*, will be very useful in this regard.

The approach taken in the proposed Local Area Plan, in line with the recently adopted Limerick Development Plan 2022 – 2028, is to seek to adopt SuDS and nature based solutions as appropriate not just on key development sites. The Council will work with developers to promote SuDS and nature based solutions on a case-by-case basis and tailor solutions to the specific sites.

Recommendations and Integration with Local Area Plan

5.1 Introduction

In order to comply with The Planning System and Flood Risk Management - Guidelines for Planning Authorities and Department of the Environment, Community and Local Government

Circular (PL 2/2014) and the Flood Risk Management – Climate Change Sectoral Adaptation Plan 2019 and guidance on potential future scenarios contained therein contribute towards flood risk management within the Plan area, the recommendations below have been made by the SFRA process.

- Previously undeveloped lands within Zones A or B should not be zoned for incompatible uses, unless a Justification Test is passed (including a planning conclusion that there are no alternative locations available for accommodating such uses). With respect to previously developed lands, the potential conflict between zonings and highly vulnerable development will be avoided by applying a limiting land use policy approach, as outlined in Objective IU O5 shall be applied on these lands. Full details of all flood justification tests are included in Appendix 1.
- Incorporate policies and objectives to manage surface water in line with Sustainable Urban Drainage Systems and nature-based solutions.

5.2 Integration of provisions of Flood Risk Assessment and Flood Management into the Local Area Plan

In the formulation of the Local Area Plan to date, the Council have sought to ensure that appropriate integration of the recommendation of the Strategic Flood Risk Assessment for the Draft Castleconnell Local Area Plan has taken place, in order to comply with the Flood Guidelines and the proper planning and sustainable development of the area. Objectives as follows are critical to complying with the relevant legalisation:

- Objective IU O5 – Flood Risk Management – which seeks to comply with the Flood Guidelines and Circular PL2/2014, it also seeks to cooperate with the OPW in delivery of the flood relief scheme and to safeguard access to drainage channels;
- Objective IU O4 – Surface Water Management and SuDS – which relates directly to surface water management and protecting, surface water resources.

Coupled with key policies and objectives in the Limerick Development Plan 2022 – 2028, which are as follows:

- Policy CAF P5 – Managing Flood Risk - It is a policy of the Council to protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate lands, in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any subsequent document) and the guidance contained in Development Management Standards and the Strategic Flood Risk Assessment (SFRA).
- Objective CAF O20 – Flood Risk Assessments – It is an objective of the Council to require a Site-Specific Flood Risk Assessment (FRA) for all planning applications in

Flood Zones A and B and consider all sources of flooding (for example coastal/tidal, fluvial, pluvial or groundwater), where deemed necessary.

- Objective IN O12 – Surface Water and SuDS – The Development Plan sets out that there are many approaches to management of surface water that take account of water quantity (flooding), water quality (pollution), biodiversity (wildlife and plants) and amenity and these are collectively referred to as Sustainable Urban Drainage Systems (SuDS). The use of SuDS to address surface water and its diversion from combined sewers is encouraged, in particular, in infill/brownfield sites and higher density areas as appropriate.

It is considered that the approach outlined above and the policies and objectives of the Limerick Development Plan and the Draft Castleconnell Local Area Plan provide a robust approach to support the Plan making process.

6.0 Conclusion

Stage 2 SFRA has been undertaken as part of the Plan-preparation process and the SFRA has informed the preparation of the Plan. The SFRA has mapped boundaries identifying areas at risk of flooding, taking into account many factors to determine the extent of flooding. In the preparation of this Local Area Plan, significant rationalisation of the zoning pattern has been carried out, the Council have, in so far as possible sought to avoid zoning of lands at flood risk or have zoned lands for water compatible uses. The Council have also sought to incorporate nature based solutions and blue green infrastructure measures into the plan, as a means of dealing with surface water, while also benefitting climate action. The Council, in conjunction with the OPW are currently developing a flood relief scheme for the village of Castleconnell, which will seek to safeguard the village from flood risk.

Appendix I - Flood Justification Tests

As per Section 4.2 of Flood Guidelines, Flood Justification Tests has been undertaken for lands zoned in the Draft LAP, which are identified as liable to flooding, according to the most up to date flooding maps available. These lands are in the main are developed or unsuitable for development and where unsuitable for development have been zoned for purpose of agricultural use, Special Control Area or Open Space and Recreation, which will generally only permit water compatible uses.

(a) Lands located in the village core zoned Village Centre

1 The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.

Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c, 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. Part of the lands within the village centre, are identified as being risk as flooding, however, the lands are predominantly developed and also form the core of the village and in line with national, regional and local planning policy critical to the overall development of the village centre, will facilitate consolidation and by in large is brown field or infill lands.



2	<p>The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:</p>										
	<table border="1"> <tr> <td data-bbox="229 360 727 584">(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement</td><td data-bbox="727 360 1394 584">The lands are zoned village centre, reflecting their existing uses. The lands are essential to facilitate regeneration and expansion of the centre of the settlement.</td></tr> <tr> <td data-bbox="229 584 727 763">(ii) Comprises significant previously developed and/or under-utilised lands</td><td data-bbox="727 584 1394 763">These lands are already developed and currently occupied by existing uses as per their proposed zoning objective.</td></tr> <tr> <td data-bbox="229 763 727 943">(iii) Is within or adjoining the core of an established or designated urban settlement</td><td data-bbox="727 763 1394 943">The lands are zoned village centre and located in the core of the village.</td></tr> <tr> <td data-bbox="229 943 727 1122">(iv) Will be essential in achieving compact or sustainable urban growth</td><td data-bbox="727 943 1394 1122">The redevelopment on these lands will contribute to compact urban growth aligned to higher-level spatial policy.</td></tr> <tr> <td data-bbox="229 1122 727 1435">(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement</td><td data-bbox="727 1122 1394 1435">The lands are currently developed.</td></tr> </table>	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement	The lands are zoned village centre, reflecting their existing uses. The lands are essential to facilitate regeneration and expansion of the centre of the settlement.	(ii) Comprises significant previously developed and/or under-utilised lands	These lands are already developed and currently occupied by existing uses as per their proposed zoning objective.	(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are zoned village centre and located in the core of the village.	(iv) Will be essential in achieving compact or sustainable urban growth	The redevelopment on these lands will contribute to compact urban growth aligned to higher-level spatial policy.	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	The lands are currently developed.
(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement	The lands are zoned village centre, reflecting their existing uses. The lands are essential to facilitate regeneration and expansion of the centre of the settlement.										
(ii) Comprises significant previously developed and/or under-utilised lands	These lands are already developed and currently occupied by existing uses as per their proposed zoning objective.										
(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are zoned village centre and located in the core of the village.										
(iv) Will be essential in achieving compact or sustainable urban growth	The redevelopment on these lands will contribute to compact urban growth aligned to higher-level spatial policy.										
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	The lands are currently developed.										
3	<table border="1"> <tr> <td data-bbox="229 1435 727 1993"> <p>A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.</p> </td><td data-bbox="727 1435 1394 1993"> <p>The extent of Flood Zone A/B across the village centre zoning is limited and risks can be managed by following the sequential approach, guided by an appropriately site specific flood risk assessments.</p> </td></tr> </table>	<p>A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.</p>	<p>The extent of Flood Zone A/B across the village centre zoning is limited and risks can be managed by following the sequential approach, guided by an appropriately site specific flood risk assessments.</p>								
<p>A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.</p>	<p>The extent of Flood Zone A/B across the village centre zoning is limited and risks can be managed by following the sequential approach, guided by an appropriately site specific flood risk assessments.</p>										

4 Conclusion of the Justification Test

Given the measures above, the Flood Relief Scheme currently being prepared for the Village and the objectives of the Draft LAP, the Planning Authority is satisfied that the proposed zoning of these lands as village centre for development is appropriate subject to more detailed site-specific flood risk assessment to be submitted as supplementary information with planning applications on these lands. This Flood Relief Scheme is considered a structural measure in relation to potential flood in the village. The revision set out under Circular PL2/2014 to section 5.28 of the Flood Risk Management Guidelines for Planning Authorities 2009, in terms of minor developments will also be adhered to.

(b) Existing Residential

1 The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.

Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c, 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. Part of the lands within the settlement are zoned existing residential and are identified as being risk as flooding, however, the lands are also close to the core of the village and in line with national, regional and local planning policy critical to the overall development of the village centre, will facilitate consolidation and by in large is brown field or infill lands.



2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:

(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement	The lands are already developed and the zoning reflects their existing uses. They are a reflection of the development of the village. Given the emphasis of the NPF and the RSES on the use of existing development sites, these areas are essential to the viability of the settlement.
(ii) Comprises significant previously developed and/or under-utilised lands	These lands are already developed and currently occupied by existing uses as per their proposed zoning objective.
(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are existing residential and located in the within the development boundary of the plan.
(iv) Will be essential in achieving compact or sustainable urban growth	The redevelopment on these lands will contribute to compact urban growth aligned to higher-level spatial policy.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	The lands are currently developed.

<p>3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.</p>	<p>The extent of Flood Zone A/B across much of this zoning is limited and risks can be managed by limiting development to minor developments in areas that are at risk of flooding as per Section 5.28 of the Flood Guidelines and in line with Circular PL 2/2014.</p>
<p>4 Conclusion of the Justification Test</p>	
<p>Given the measures above, the Flood Relief Scheme currently being prepared for the Village and the objectives of the Draft LAP, the Planning Authority is satisfied that the proposed zoning of these lands as existing residential for development is appropriate subject to the provisions of Section 5.28 of the Planning and Flood Risk Guidance and in line with Circular PL 2/2014. This Flood Relief Scheme is considered a structural measure in relation to potential flood in the village.</p>	

(c) Lands adjoining the River Shannon zoned Special Control Area

<p>1 The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.</p>	<p>Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c, 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. Castleconnell is situated adjoining the River Shannon and has an associated Natura 2000 designation, which is the Lower River Shannon Special Area of Conservation and the lands immediately adjoining the river are at risk of flooding and zoning is in place to safeguard the designated site.</p>
---	---



2	<p>The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:</p>	
(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement	<p>The lands are zoned Special Control Area, having regard to the sensitivities of the lands adjoining the nature designation and to safeguard the river from development, which may affect the designation. These lands, are located on the edge of the settlement, but are important as part of the setting of the Village and because of the sensitivities of the River Shannon, which is designated as an Special Area of Conservation at this point. Limited development is considered open for consideration in this zoning, such as ancillary leisure or tourism, any such development would be subject an appropriate level of flood risk assessment and environmental assessment. Development in this area would be restricted to water compatible development.</p>	
(ii) Comprises significant previously developed and/or under-utilised lands	<p>Having regard to the location of the lands and the sensitive nature of the landscape, only development appropriate to its location would</p>	

		be considered, subject to an appropriate level of assessment.
	(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are located adjoining the River Shannon and contain some development, future development will be limited to ancillary leisure and tourism development. Development in this area would be restricted to water compatible development.
	(iv) Will be essential in achieving compact or sustainable urban growth	The lands are located adjoining the River Shannon and contain some development, future development will be limited to ancillary leisure and tourism development. Development in this area would be restricted to water compatible development
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	The lands are located adjoining the River Shannon and contain some development, future development will be limited to ancillary leisure and tourism development. Development in this area would be restricted to water compatible development
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	The lands are located adjoining the River Shannon and contain some development, future development will be limited to ancillary leisure and tourism development. Development in this area would be restricted to water compatible development.
4	Conclusion of the Justification Test	
Given the measures above, the Flood Relief Scheme currently being prepared for the Village and the objectives of the Draft LAP, the Planning Authority is satisfied that the proposed		

zoning of these lands as Special Control Area, would safeguard the designated site and accordingly, development should be limited to water compatible uses.

(d) Lands zoned Agriculture which is at flood risk within the Plan boundary

1 The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.

Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c, 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. For the main part lands zoned, which is at risk of flooding, is zoned for non-vulnerable uses for Agricultural purposes.



2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:

(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement

The lands are proposed to be zoned Agriculture and development will be limited in terms of the uses permitted.

(ii) Comprises significant previously developed and/or under-utilised lands	Having regard to the location of the lands, only development appropriate to its location would be considered, subject to an appropriate level of assessment.
(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are located within the Plan boundary.
(iv) Will be essential in achieving compact or sustainable urban growth	Only limited development will be considered, subject to an appropriate level of assessment.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	Suitable alternative lands are available for development elsewhere in areas outside of any flood risk.
3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	These lands at flood risk is nearly entirely within Flood Zone A. Applying the sequential approach to flood management means that development within Flood Zones A and B should be avoided.
4 Conclusion of the Justification Test	
Part 2 of the Justification Test has not been passed and the site is at high risk of flooding so should be retained for water compatible uses.	

(e) Lands zoned Open Space and Recreation which is at flood risk within the Plan boundary

1 The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.

Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c, 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. For the main part lands zoned, which is at risk of flooding, is zoned for non-vulnerable uses, such as Agricultural and Open Space and Recreation.



2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:

(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement

The lands are proposed to be zoned Open Space and Recreation; development will be limited in terms of the uses permitted.

(ii) Comprises significant previously developed and/or under-utilised lands	Having regard to the location of the lands, only development appropriate to its location would be considered, subject to an appropriate level of assessment.
(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are located within the Plan boundary.
(iv) Will be essential in achieving compact or sustainable urban growth	Only limited development will be considered, subject to an appropriate level of assessment.
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	Suitable alternative lands are available for development elsewhere in areas outside of any flood risk.
3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	These lands at flood risk is nearly entirely within Flood Zone A. Applying the sequential approach to flood management means that development within Flood Zones A and B should be avoided.
4 Conclusion of the Justification Test	
Part 2 of the Justification Test has not been passed and the site is at high risk of flooding so should be retained for water compatible uses.	

(f) Lands zoned Education and Community

1	The urban settlements is identified for growth under the National Planning Framework, Regional Economic and Spatial Strategy, statutory plans prepared under
---	--

the Planning and Development Act 2000 as amended, relevant Directives and the Planning Guidelines.

Castleconnell is a Level 3 Settlement in the settlement hierarchy, identified in the Limerick Development Plan 2022 – 2028. The Limerick Development Plan promotes Level 3 settlements, as development centres for population growth sustaining a wide range of functions, services and employment opportunities supporting its hinterland. In line with National Policy Objective 3c 30% of all new homes targeted within Level 3 settlements shall be within the existing built-up area of the village. Lands have been zoned for Education and Community use, the access and egress from these lands are identified as being at risk of flooding, however, a site-specific flood risk assessment has been carried out to develop a crèche on the lands.



2	<p>The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the town and in particular:</p>	
<p>(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement</p>	<p>The lands are zoned Education and Community and have a planning application approved for the development of a crèche on the lands, for which a commencement notice has been received.</p>	
<p>(ii) Comprises significant previously developed and/or under-utilised lands</p>	<p>As noted above there is a planning permission granted on the lands for which a commencement notice has been received (19/518).</p>	

	(iii) Is within or adjoining the core of an established or designated urban settlement	The lands are located within the Plan boundary.
	(iv) Will be essential in achieving compact or sustainable urban growth	This is an essential component of social infrastructure in the village, which has been developed to serve the residential development surrounding the lands and it is located close to a key population point in the village.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement	Suitable alternative lands are available for development elsewhere in areas outside of any flood risk.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the local area plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	The lands zoned for Education and Community purposes and within Flood Zone A and B are part of a site which planning permission has been granted for a crèche and for which a commencement notice has been submitted. Planning Reference 19/518 refers. A site-specific Flood Risk assessment was submitted and deemed acceptable during the course of the planning process and subsequent planning appeal granted by An Bord Pléanála (ABP) on this site. As part of the appeal to ABP a Flood Assessment and accompanying supporting documentation set out that the principle of a crèche at this site was conditioned in previous permissions under parent permissions. Further, the report established that 100% of the buildings are within Flood Zone C. The conditions attached to this grant of permission also requires the written agreement of the Planning Authority in relation to an emergency access in the event of a flood at Castlerock. This issue is presently being resolved with the Council.

4	Conclusion of the Justification Test
----------	---

A flood risk assessment to an appropriate level of detail has been carried out in support of planning application 19/518, which has determined that the site is suitable for the development as outlined in the permission. Accordingly, it is considered appropriate to zone these lands Education and Community, based on the detailed assessment of flood risk and mitigation measures to address flood risk, including both Structural and non-structural measures to safeguard the use from flood risk. Construction work has recently commenced on this site which includes for residential development and the construction of a crèche. Future zoning of site will take place in compliance with the Flood Risk Management Guidelines for Planning Authorities 2009 and any update thereof.

This Flood Relief Scheme is considered a structural measure in relation to potential flood in the village. The revision set out under Circular PL2/2014 to section 5.28 of the Flood Risk Management Guidelines for Planning Authorities 2009 in terms of minor developments will also be adhered to.

Part C - Appropriate Assessment Screening

3.0 Introduction:

This is an Appropriate Assessment Screening for the Castleconnell Local Area Plan 2023 – 2029, in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC). Appropriate assessment is a process that takes place in order to establish the ecological effects of a project on Natura 2000 sites. These sites are either Special Areas of Conservations (SAC), where certain habitats and species are protected or Special Protection Areas (SPA) which are designated solely for bird species. The first stage of the process is screening, which establishes whether or not a plan or project would have an effect on these sites. This Local Area Plan has been subject screening.

There is a need to update the plan and take into account the contents of the Limerick Development Plan 2022-2028 and changes to national and regional planning policy, via the NPF and the RSES, this review needs to be screened for 'Appropriate Assessment'. Based on the *Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, a 'Screening Matrix' and a 'Finding of No Significant Effects Matrix' have been completed. The conclusions were that the one element of the LAP did require a progression to Stage 2 Appropriate Assessment.

The principal consideration for an Appropriate Assessment would be if the Local Area Plan were likely to have significant effects on a Natura 2000 site. Special Areas of Conservation and Special Protection Areas (SACs and SPAs) are Natura sites. The Lower River Shannon SAC site forms the western boundary of the plan area.

To ensure that the Local Area Plan will be drawn up to ensure that land uses, developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) will not give rise to significant adverse impacts on the integrity of any Natura sites, having regard to their conservation objectives. It is recommended that the following text be included in the Plan: *No projects which will be reasonably likely to give rise to significant adverse direct or indirect or secondary impacts on the integrity of any Natura 2000 sites, having regard to their conservation objectives arising from reduction in species diversity, shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).*

This provides additional safeguards for areas of natural history significance. Having regard to the availability of water and wastewater capacity to cater for the projected growth in Castleconnell, it limits the risk of pollution and public health issues. In addition, it is recommended, that, the area along the River Shannon, contained within the Special Control Area and also lands zoned Open Space and Recreation are retained. This also provides feeding and resting areas for wildfowl, during the winter months. This will also facilitate the passage of otters, a species of conservation concern generally and is important in the specific context of the Lower River Shannon SAC site.

However there has been policy changes during the preparation of the LAP, which require screening assessment. These are outlined below:

Additions to the Plan, with potential implications for designated sites:

The first was the inclusion of a policy to support the development of a greenway provision in Chapter 5 of the plan. This was part of policy Objective C2 New Amenity Areas Walkways and Cycleways:

(b) Encourage walking and cycling as more convenient, popular and safe methods of movement in Castleconnell, and facilitate the provision of an attractive and coherent network of footpaths and cycle facilities. This will be achieved by

Provide a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network.

The second was the inclusion of Objective C3 Parks, Open Space and Recreation: It is an objective of the Council to:

(a) Examine the feasibility of blue-way opportunities/potential along the River Shannon in Castleconnell, subject to appropriate ecological assessment

The third was parts of Objective ED 2: Tourism Objectives in Chapter 6: It is an objective of the Council to

(b) Support the provision of a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network.

(e) Support community engagement in the development of tourism and amenity projects in the village.

The fourth was parts of Table 6 and Objective CH 02: Blue Green Infrastructure: It is an objective of the Council to

(a) Develop and enhance blue and green infrastructure opportunities throughout Castleconnell and in line with the detail set out in Table 6: LAP Climate Action Opportunities in Chapter 8 which aimed to:

Expand on existing public open space provision through the inclusion of an Opportunity Site at Worlds End, which will increase linkages and connectivity to the wider network, will provide increased accessible, friendly outdoor seating and recreation provision.

And

Enhance the benefits of the River Shannon in the creation of new, and enhancement of existing walkways, utilising the amenity value of the river, whilst creating additional linkages, connections and access points to the River Shannon.

The Worlds End Opportunity Site identifies and includes additional lands to the north of the plan and are identified for the provision and development of a future amenity. These are shown below in Figure 1. This is a block of former commercial woodland. The proposed development of amenity facilities in the area has the potential to create significant disturbance effects during both the construction and operational stage due to its location, partially within the Lower River Shannon SAC site.

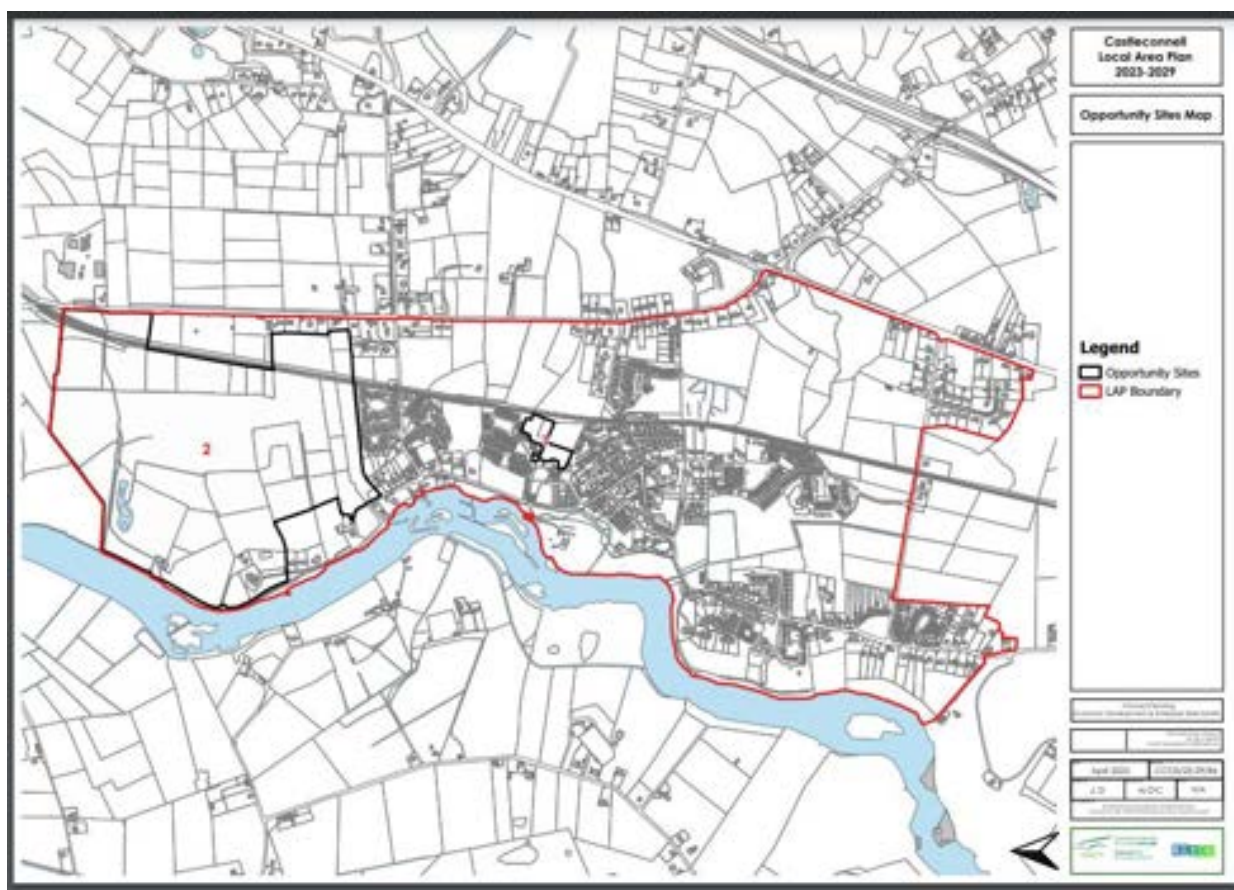


Figure 1: Opportunity Site 2 and its proximity to the Shannon River Channel and the SAC site

3.1 Screening Matrix

Brief description of the project or plan:

The preparation of the Castleconnell Local Area Plan 2023 -2029, is intended to update, planning policy regarding the future development of Castleconnell and to align with the Limerick Development Plan and higher tier plans. It will provide guidance for the planning and development of Castleconnell for a duration of six years, unless amended. The plan is aimed at regulating development, while providing sufficient zoning for the land uses designed to respond to the needs of the village.

The desirable outcome of the implementation of the plan is a village that:

- Has a sustainable level of development appropriate to the character, heritage, amenity and strategic role of Castleconnell as a Level 3 village, as identified in the Limerick Development Plan 2022 - 2028, and a suitable level of development, that allows for the preservation and enhancement of the village character, services and amenities;
- Supports and protects the environment, heritage, character and amenity of the village, and in particular the setting of the River Shannon and the architectural and archaeological heritage of the village centre;

- Has a high quality built environment with a well-developed public realm and appropriate building forms, materials, heights and associated landscaping that complement and enhance the distinctive character of the village;
- Has a suitable range of community and educational facilities and amenities to serve the local community, the wider rural catchment area and visitors to the village;
- Has a safe network of amenity walks within and through the village and linking the various natural and heritage features;
- Has an adequate level of service infrastructure to support existing and future populations in a manner that protects and complements the environment, including an adequate road network, traffic management and parking facilities, improved public transport and safe routes for pedestrians and cyclists, and adequate wastewater disposal, water supply and surface water drainage.

Brief description of the Natura 2000 sites:

The Lower River Shannon Special Area of Conservation (002165) site forms the western boundary of the Plan Area. The River Shannon and Fergus Special Protection Area (004077) is located 10 km downstream. The Special Area of Conservation site has been selected, because of a range of riparian habitats and species, such as wet woodlands, tidal mudflats, estuaries and for species, such as otter, salmon and lamprey. Maintenance of high water quality is an important factor in ensuring the preservation of these habitats. The Special Protection Area site has been selected because of its importance for wintering and migratory wild fowl.

Describe the individual elements of the plan (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site:

The main way in which ex-situ impacts could be created is through pollution that would affect water quality in the Lower River Shannon Special Area of Conservation site and downstream in the River Shannon and Fergus Special Protection Area site. The other factor would be direct encroachment into the site through the zoning element of the plan. It is here that the inclusion of development and amenities along the River Shannon, has the potential to have effects on the Lower River Shannon SAC site in particular. There is also an addition of woodland block to the north of the plan area into which amenity routes and facilities may be introduced. There are pools and drains in the woodland, which might be used by otters and this is a species of conservation concern in the Lower River Shannon SAC site.

Given the distance from the Slieve Felim Special Protection Area (004165) site, it is not considered that the plan review would have any effects on the designated site. This is true also of the other sites in the Natura 2000 network. The potential development of amenity facilities may have an influence on the Lower River Shannon SAC site and the Downstream River Shannon and Fergus Estuary SPA.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:

- Size and scale;

The presence of the Special Control Area and the open space designations close to the River Shannon, provide a buffer for the site from inappropriate development. The land use zoning matrix also places limits in activities, in such areas by specifying that only leisure, recreation and open space proposals would be accepted in this area. It is essential for the protection of the Lower River Shannon Special Area of Conservation site and others downstream (i.e. hydrologically connected) that the Special Control Area is retained. The potential of greenways and amenity facilities in and outside the plan area does raise the prospect of direct effects on the riparian habitat of the River Shannon. This of course depends on its route, however, to date pedestrian routes that have been developed downstream close to the city run in close proximity to the Shannon banks. While at concept stage and subject to further feasibility assessment, a potential greenway link from the University of Limerick to Montpelier, would be over 12km long and exert an influence on riparian habitats throughout its length, should it be located adjacent to the River Shannon. These effects could vary from run off, to removal of bankside vegetation to human disturbance along its length. As the policy content of the plan also refers to potential Blue ways, it is likely there would be added boating and traffic on the River Shannon, which when considered cumulatively could impact on the designated site.

- **Land-take;**

The Special Control Area is being retained which reduces potential for land take in the SAC site in this location. However the potential development of greenway and amenity facilities and blue ways does raise concern of the potential land take and other issues which need to be examined. There is the prospect of land take within the SAC site, depending of course on where such amenities and routes are located. However, since location or detailed design are available, this assessment remains more general and considered potential locations, where such land take might take place, e.g. to the north of Castleconnell. See also comments above in relation to size and scale.

Distance from Natura 2000 site or key features of the site;

The River Shannon Special Area of Conservation (002165) site is within the plan area. The River Shannon and Fergus Special Protection Area (004077) is within 10km downstream of the plan boundary, but there is a direct hydrological link and species of conservation interest associated with the SPA, such as Cormorant and Grey Heron use the river in the plan area.

- **Resource requirements (water abstraction etc.);**

No policies within the plan indicate the need for abstraction of water from the River Shannon.

- **Emission (disposal to land, water or air);**

In the Plan, there are policies designed to ensure that the pace of development does not over-reach the capacity of the available treatment systems. However the construction phase of any riverside greenway and amenity facilities may result in sedimentation of river waters, depending on their location.

- **Excavation requirements;**

Any excavation which may be permitted under the scope of the plan will take place within the Local Area Plan boundary. The buffer zone provided by the Open Space and Recreation designation and Special Control Area also ensures that there will be minimal requirement for

excavation in the vicinity of the Special Area of Conservation site. This will minimise the risk of direct disturbance and sedimentation. Excavation for the greenway and amenity facilities is a different matter and as it would take place on long linear footprint along the banks of the river, there are implications for the SAC site. This depends of course on the route and its location relative to the river.

- **Transportation requirements;**

It is not envisaged that any of the transport policies put forward in the Plan will have any effect in terms of encroachment on any designated sites. See above re comments regarding the potential greenway which might be regarded more as amenity infrastructure than transport infrastructure.

- **Duration of construction, operation, decommissioning, etc.;**

See excavation comments above.

- **Other**

None.

Describe any likely changes to the site arising as a result of:

- **reduction of habitat area:**

As indicated above, it is intended to retain the buffer area along the River Shannon. This will continue to be designated as open space and recreation and as a Special Control Area and the buffer will prevent encroachment on the river. It is considered that the concentration of development within the plan boundary, in an area that has access to infrastructure, is preferable to more scattered development in the open countryside which might contribute to diffuse pollution affecting the Special Area of Conservation site. The potential development of greenway, blue way and amenity facilities is likely to result in a reduction of habitat area in the Lower River Shannon SAC site, depending on the location, nature and scale of development, should it traverse along the River Bank.

- **disturbance to key species;**

The potential greenway and blue way could give rise to disturbance to key species for Natura 2000 sites within the boundary of the proposed plan and outside it. Otters, in particular could be affected.

The inclusion of policies that ensure that development takes place only in step with provision of wastewater treatment systems helps to ensure that no ex-situ effects through water pollution issues will take place from development that it services.

- **Habitat or species fragmentation;**

This could be an effect from any potential greenway as pathways could inhibit species movement or bisect bankside habitats such as scrub or woodland and or wet grassland or other riparian habitats.

- **reduction in species density;**

Reductions in species density could take place through the construction and operation of a potential greenway. Distance effects from the greenway could cause species to move away from the river lessening their usage of it and hence their numbers and density within and adjacent to the SAC site. There could also be direct loss of habitats and associated flora through the works themselves.

- **changes in key indicators of conservation value;**

The potential greenway could give rise to significant adverse changes in key indicators of conservation value for Natura 2000 sites are likely given that human disturbance can affect numbers of sensitive species or cause their displacement.

- **climate change;**

The consolidation of development within the boundary of the Local Area Plan, while at the same time recognising the importance of the conservation sites outside the plan boundary is not expected to result in climate change issues that would affect the sites. In relation to potential greenway and blue way, while these are often considered as heaving benefits in terms of promoting sustainable travel, they are in effect amenity routes. They are not integrated with mainstream transport networks, where they could be expected to deliver on the goals of sustainable transport and their location within or adjacent to Natura sites or other ecologically sensitive sites would counter any perceived climate benefits.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

- **interference with the key relationships that define the structure of the site;**

By introducing disturbance and possible fragmentation from habitats in the wider countryside the potential greenway may affect species dispersal or usage of habitat features away from the main river channel.

interference with key relationships that define the function of the site;

See comment just above. Some species for which the site as designated relies on species using other suitable habitats in the wider countryside which are essential breeding or feeding areas for them. This is true of species such as Otter and Grey Heron.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

- **loss;**

Loss of habitat can be significant in long linear features, such as trails. However no dimensions or locations are available in order to establish an exact figure.

- **Fragmentation;**

Should Greenway trails be located along the River Banks, they can impact on riparian habitat, such as riparian vegetation and woodland and serve as a barrier for movement of species and dispersal into the wider countryside.

- **Disruption;**

This can be factor both during construction and operational phases where normal cycles of life such as breeding in the case of birds using the nearby habitats can be disrupted by human traffic associated with the proposed greenway and blue way and related facilities.

- **Disturbance;**

Trails may cause disturbance along their length and outside their immediate footprint.

- **change to key elements of the site (e.g. water quality etc.);**

There may be loss of riparian vegetation and habitats and possible water contamination during construction works are features to consider.

Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.

It is the specific elements of the plan that support greenway and blue way development (see above) that are likely to cause potential significant effects through combination of factors such as habitat loss, disturbance and the scale of these effects which would occur along its length without adequate mitigation or ecological concerns being factored into its design.

3.2 Finding of Significant Effects Matrix

Name of Project or Plan:	Castleconnell Local Area Plan 2023 – 2029.
Name and location of Natura 2000 sites:	<p>Lower River Shannon Special Area of Conservation (Site Code 002165) on western boundary of the existing Local Area Plan.</p> <p>River Shannon and Fergus Special Protection Area site (004077), 10km downstream of the village</p> <p>Slieve Felim Special Protection Areas – 18 km to the north east.</p>
Description of the Project or Plan	As given in Screening Matrix above.

Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?		No. It is land use plan prepared under the Planning and Development Act 2000 (as amended).	
Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?		Proposals for additional trails along the route of the River Shannon, such as an extension from University of Limerick to Annacotty currently being planned could have an effect. There is a Green Blue Infrastructure Strategy being prepared for Limerick City and Environs, which could have possible effects. Further upstream proposals for a greenway between Ballina and Killaloe would also have implications at regional level.	
3.3 The Assessment of Significance of Effects			
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 sites:		Policy support for a greenway between Limerick and Montpelier mentioned in the plan has the potential to affect the Lower River Shannon SAC site in particular. So too does policy support for Blue way, should the policies eventually be implemented.	
Explain why these effects are not considered significant:		These effects may be significant and are examined in an accompanying Natura Impact Statement.	
List of Agencies Consulted: Provide contact name and telephone or email address:		AA Screening Reports were sent to: The Manager, Development Applications Unit Newtown Road, Wexford.	
Response to consultation		Awaited.	
Data Collected to Carry out the Assessment			
Who carried out the Assessment?	Sources of Data	Level of assessment Completed	Where can the full results of the assessment be accessed and viewed
Heritage Officer, Forward Planning Section,	Existing NPWS Site Synopses Ecological literature.	Desktop study, site visits	With plan documentation on request.

Limerick City and County Council	Site visits during plan preparation process.		
----------------------------------	--	--	--

3.4 Conclusion:

It is recommended that a Natura Impact Statement shall be prepared to assess the possible effects of the policy support in the plan for the University of Limerick to Montpelier greenway. Due to the lack of information available, it is likely that the NIS will be general in its assessment as a result, but it will draw attention to potential ecological effects at this early stage.

Part D - Natura Impact Report

4.0 Introduction- the Appropriate Assessment Process

An Appropriate Assessment (AA) is undertaken to establish if any proposed plan or project is likely to have a significant effect or impact on any site that has been designated under the E.U. Habitats Directive (92/43/EEC) i.e., Special Area of Conservation (SAC); or the E.U. Birds Directive (79/409/EEC as amended 2009/147/EC) i.e., Special Protection Area (SPA). Collectively, SAC's and SPA's are considered as Natura 2000 sites and are part of a wider European Network. There are four stages to the AA process. The need to undertake one or more stages of the AA process has arisen from Articles 6(3) and 6(4) of the Habitats Directive; where the Article 6(3) is primarily concerned with the protection of sites from likely significant effects and 6(4) allows derogation from such protection in very specific circumstances involving imperative reasons of overriding public interest. Article 6(3) and 6(4) are outlined below.

Article 6(3) of the Habitats Directive requires that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

And Article 6(4) of the Habitats Directive requires that:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.”

The AA process follows a series of stages. In Stage 1, a screening process is undertaken to identify likely significant effects on a Natura 2000 site are likely to arise from the Plan in question. This is outlined in Part C above. If significant effects are likely to occur or if it is unclear whether significant effects are likely to occur, then the process moves on to Stage 2 where an AA considers potential mitigation measures for adverse effects. If it is considered that mitigation measures will not be able to satisfactorily reduce potential adverse effects on a Natura 2000 site then an assessment of alternative solutions is considered in Stage 3. This is then followed by Stage 4 in the event that adverse effects remain and the proposed activity or development is deemed to be of Imperative Reasons of Overriding Public Interest (IROPI), allowing an assessment of compensatory measures to be considered. The outcome of a Stage 2 and higher assessment is presented in a report known as a Natura Impact Statement (NIS). The Local Authority have considered an NIS is required and is detailed below. Stage 2 of the process sets out possible ecological effects on Natura 2000 sites and mitigation measures to deal with these effects are proposed.

Additions to the plan raised the possibilities of significant effects on the conservation interests of the Lower River Shannon SAC site.

The first was the inclusion of a policy relating to greenway provision in Chapter 5 of the plan. This was part of policy Objective C2 New Amenity Areas Walkways and Cycleways:

(b) Encourage walking and cycling as more convenient, popular and safe methods of movement in Castleconnell, and facilitate the provision of an attractive and coherent network of off-road footpaths and cycle facilities. This will be achieved by:

- Provide a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network.

The second was the inclusion of Objective C3 Parks, Open Space and Recreation: It is an objective of the Council to:

(a) Examine the feasibility of blue-way opportunities/potential along the River Shannon in Castleconnell, subject to appropriate ecological assessment

The third was parts of Objective ED 2: Tourism Objectives in Chapter 6: It is an objective of the Council to

(b) Support the provision of a new Greenway linking Castleconnell with the University of Limerick and Montpelier and the wider Greenway \ Active Travel network.

(e) Support community engagement in the development of tourism and amenity projects in the village.

The fourth was parts of Table 6 and Objective CH 02: Blue Green Infrastructure: It is an objective of the Council to

(a) Develop and enhance blue and green infrastructure opportunities throughout Castleconnell and in line with the detail set out in Table 6: LAP Climate Action Opportunities in Chapter 8 which aimed to:

Expand on existing public open space provision through the inclusion of an Opportunity Site at Worlds End, which will increase linkages and connectivity to the wider network, will provide increased accessible, friendly outdoor seating and recreation provision.

And:

Enhance the benefits of the River Shannon in the creation of new, and enhancement of existing walkways utilising the amenity value of the river, whilst creating additional linkages, connections and access points to the River Shannon.

The Worlds End opportunity site involves the inclusion of additional lands to the north of the plan. These are shown below in Figure 1. This is a block of former commercial woodland. The intention is to develop this as an amenity. Proximity to the Lower River Shannon SAC site has highlighted concerns detailed in the Natura Impact Statement.

The Plan also outlines policy support for the potential development of a greenway connecting Limerick and Montpelier.



Figure 2: Aerial photo of the woodland block. The northern portion is more open and has a greater broadleaf component.

4.1 Habitat Descriptions:

River Shannon: The River Shannon at this stage is a lowland depositing river (Fossitt 2000, p. 22, habitat classification FW2) and is characterised by low gradients and slower water flow under normal (non-flood) conditions. As a result of this under normal flow conditions sediment is deposited on the river bed. These rivers are frequently bordered by emergent water vegetation, which can provide cover for bird species and mammals, such as otters. See Figure 5 below.

Channels and drains leading into the river also offer networks for the movement of species associated with the SAC site. This can include birds and mammals alike. The drains would correspond with the habitat classification drainage ditches (Fossitt 2000, p. 23). This is dealt with in more detail below.

Woodland: The woodland can be broadly divided into two portions. The northern part, north of the informal pathway is more open with broadleaves such as ash present and secondary natural growth of Willow and Alder in places. This woodland block appears to have been thinned in the recent past and corresponds with habitat type mixed broad leaved woodland- (Habitat code WD1, Fossitt 2000, p. 53 Habitat Code WD1) Ground conditions are wetter than those to the south of the existing pathway (See Figure 3).



Figure 3: Open broadleaved woodland to the north.

The area to the south of the pathway is dominated by commercial conifers with patches of broad leaves interspersed. The broadleaves are only intermittent and the habitat corresponds to habitat classification conifer plantation (Fossitt 2000, p. 54 Habitats Code WD4).

What may be of more interest from the point of view of the nearby SAC is the presence of habitats within the woodland, which would be used by species of conservation concern. These would be Species of Conservation Interests (SCI) for sites such as the Lower River Shannon SAC site or the River Fergus Estuaries. As Figure 4 indicates there are a series of drains and ponds within the forestry block which would be attractive for otters. This would draw them away from the river and potentially into the path of human traffic and possible disturbance on the existing pathway. Otters often disperse from the main river channel and would use features, such as ponds and drains both for foraging and travel routes. It is often the case that female otters and young use such features for foraging or to move from the main channel to ensure less disturbance. Otters are born in natal dens which are often up to 1km from main river channels are often located in woodland (NIEA 2010). Shallow waters of drains are often used to introduce otter cubs to swimming, which means that the drains and ponds in the woodland area are of potential use to otters.



Figure 4: Drains from the woodland leading to the main river channel. These allow access to the woodland for riparian species such as otters.

4.2 Bird and mammal usage of the area

A survey of lowland depositing watercourses in 2007 in the border counties, carried out on behalf of the Office of Public Works, similar to the current habitats in Castleconnell, saw a total of 14 riparian bird species recorded. Though the sites were rivers in the north and centre of the country, they give valuable indications of what birds may be present in the LAP area. Grey Heron, Grey Wagtail and Sedge Warbler were relatively widespread, while Mallard and Sedge Warbler were most abundant. Moorhen also featured strongly. Cormorant were also present and these are part of the conservation interest of the downstream River Shannon and Fergus Estuaries Special Protection Areas. Grey Heron are also a species of conservation interest of the River Shannon and Fergus Estuary Special Protection Area. Grey Heron often nest adjacent to water courses or in low trees nearby (Nairn and O Halloran, 2012) and as such would be vulnerable to disturbance. They also tend to hunt at the water's edge and during this hunting activity too would be vulnerable to human disturbance.

From the point of view of the Lower River Shannon SAC site, potentially one of the most affected species is the Eurasian Otter (*Lutra lutra*). For the most part, otters are nocturnal and rest during the day, when human activity is high but often forage during daylight in undisturbed locations or when compelled to do so during adverse conditions.



Figure 5: Existing informal pathway along the main river channel to the north of Castleconnell. Immediately on the right of the picture is the woodland. Of note are the bankside alders and the emergent vegetation which are important riparian habitats. This is within the SAC site, see Figure 6 below.

4.3 Natura sites affected

There are two Natura Sites, which are in question, the first is the Lower River Shannon SAC site, the second, which is 10km downstream is the River Shannon and Fergus Estuary SPA. The direct effects of works on the SPA are expected to be minor due to distance and would be most likely relate to species for which the SPA was designated, but might use the River Shannon in the plan area for feeding or breeding. The Special Protection Area was designated for the range of wildfowl which use it, particularly during the winter months. The downstream tidal areas, with its mudflats, are of particular importance as feeding areas for wildfowl, the populations of which increase dramatically during the winter when migrants return from summer breeding grounds. Some species remain resident throughout the whole year. One example would be Cormorant (*Phalacrocorax carbo*) which was observed in this area during a site visit. The other is the Grey Heron (*Ardea cinerea*).

The effects on the Lower Shannon SAC site, by virtue of its location would be more direct. Table 1 below summaries some of source, pathways and receptors of pollution that could result from potential construction works associated with the greenway, should it be developed.



Figure 6: Grey Heron (*Ardea cinerea*). Source: Bird Watch Ireland.

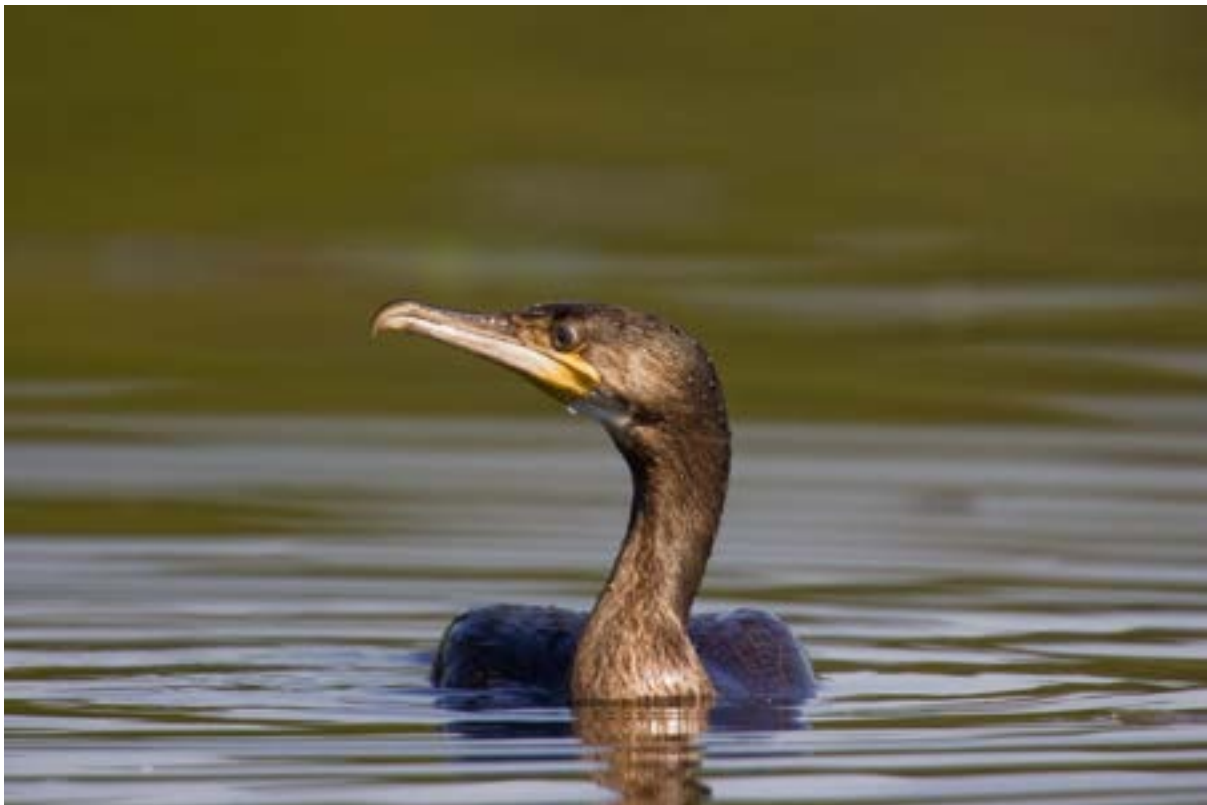


Figure 7: Cormorant (*Phalacrocorax carbo*) Source: Irish Wildlife Trust

Source	Pathway	Receptor
Construction Phase		
The input of silt/fine sediment to a watercourse	Groundworks have the potential to input silt/fine sediment to a watercourse which can black up spawning grounds and the intra-gravel voids in which the juveniles of various protected species live.	Potentially, downstream protected sites, such as the SPA and their designated features. Effects are much more likely on species for which the SAC has been designated such as lamprey species or salmonids.
Destruction of habitat	Riparian works have the potential to destroy habitats, close to the river. The creation of pathways will remove some riparian grassland if located close to the river may have implications for both individual trees and scrub and riparian woodland	Aquatic and riparian species. This can include nesting birds and otters.
Construction works can cause the input of cement based material to a watercourse. It can also remove bankside vegetation.	There is the possibility of the introduction of such material and tarmac residue if this is to be used in the preparation of pathway surfaces. Removal of bankside vegetation would remove cover and habitats for otters and nesting birds such as Coot, Mallard or Moorhen or Grey Heron.	Potentially, the main river Channel, and downstream protected sites and their designated features
Physical disturbance can arise from noise associated with construction; mainly by machinery and to a lesser degree power tools	Woodland drains and the main River Channel.	Water quality, Bird species and otter.
Invasive Species	An invasive species survey will need to be carried out, prior to any works and on site biosecurity protocols should be observed. This would be important to avoid the transport of any diseases, such as cray fish plague between catchments.	River Shannon both riparian areas and instream species such as crayfish.
Operational Phase		
	The ongoing human activity has the potential to disturb both bird species and	Potentially, the main river channel and areas adjacent to

	<p>riparian species such as otters that use the river and its surroundings.</p> <p>The drains in the woodlands can also act as pathways for contaminants, and if they are used by otters, could also be subject to human disturbance from walkways close by.</p>	<p>pathways such as bankside nesting sites or otter holts.</p>
--	--	--

Table 1: Source, pathway, receptor for pollutants and disturbance, which might affect the Lower River Shannon SAC site.

The effects would occur at both construction and operational phases of the development. The construction phase could, if not properly planned, result in loss of habitat, generation of sediments and pollutants and disturbance.

Any potential greenway development may have effect, which would not be uniform throughout the length of the walkway, as the sensitivity of habitats would change along the proposed route. Effects might be more limited in areas of agricultural grassland and in locations where there is more limited potential for wildlife. In areas where habitats, such as alluvial woodland exist the effects would be far more pronounced as bankside trails often result in direct loss of habitat within the woodland and direct disturbance to the wildlife that use such locations. Patches of this habitat does exist along between the University of Limerick and Montpelier.

What would be a common feature, should the trail run parallel to the bank for the entire length of the route would be an extension of human disturbance in a continuous line from Limerick to Montpelier. While informal trails run along the river bank in many locations between Limerick and Castleconnell, particularly in the area of Castletroy and close to the Mulkear River, these are generally informal in nature. Their redevelopment and associated intensification of use will add to disturbance effects and the loss of habitats in the area.

The potential effects of trails is often compounded by the use of these routes for dog walking, particularly when they are let off leads. In situations such as this they pose a direct threat to wildlife and also can cause nest desertion and disturbance. In adverse weather conditions such disturbance can also cause loss of energy when wildlife, fleeing from a perceived threat, can use energy resources, which might otherwise be used for keeping up body temperature or keeping basic bodily functions active. In adverse weather such disturbance can be a significant source of mortality.

4.4 Potential disturbance and its effects

Trails can create a corridor of disturbance outside of their immediate area (Taylor and Knight 2003). This is particularly the case along water courses where bankside works can remove bankside vegetation and trees, which remove cover for nesting birds such as Moorhen and Mallard which use such sites (Ferguson Lees *et al* 2011). Otters “require suitable bankside vegetation” as cover for their holts or resting places (Hayden and Harrington 2000, p. 322). Heron to have been noted to use riparian areas for nesting. Trails may have the effect of removing both cover for the species in question, allowing predation, and the removal of vegetation removes screening so that human traffic is more visible and its disturbance effects greater as a result.

A riparian vegetation belt is an important habitat structure that provides coverage for wildlife in many rural agricultural landscapes. It provides shelter and can function as a corridor for species dispersal and movement, in a similar fashion to drains.

It is likely that this landscape will be increasingly utilised by humans for leisure activities, both terrestrial in the case of walking or cycling, particularly if the walkway goes ahead and water borne in the case of river craft. The loss of the riparian vegetation belt, coupled with an increase of human disturbance on both bankside habitats and on the water can pose a serious threat to wildlife.

Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts:

Direct and Indirect Impacts - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.

Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.

Extent - The area the impact occurs over – this should be predicted in a quantified manner.

Duration - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest (species and habitats) within a site. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a species can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis'. As noted elsewhere potential greenways can have the effects of reducing habitat area, exerting barrier effects through human usage and disturbance and have an effects on the range or dispersal of species.

4.5 Assessment of likely Significant Effects on Designated Sites

Assessment of potential impacts on European Sites was conducted utilising a standard source-path-receptor model. This was summarised in Table 1 above. The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site: loss/reduction of habitat area;

- habitat or species fragmentation;
- disturbance to key species;

- reduction in species density;
- changes in key indicators of conservation value (water quality etc.);
- climate change.

Loss/Reduction of Habitat Area

Potential effects arising from the assessment of the plan include land take, habitat destruction, disturbance effects, light pollution, dust, hydrological interactions, airborne pollution and excessive noise. Of the two Natura 2000 sites, which have the potential to be affected by potential green and blue ways, one in particular, the Lower River Shannon SAC site (002165) may suffer direct encroachment. The SPA would be the subject of indirect effects, such as those from pollutants washed down stream.



Figure 8: Lower River Shannon SAC site location in the northern part of the plan area, extending inwards from the River Shannon

Habitat or Species Fragmentation

The potential creation of bankside greenways along the banks of the River Shannon could introduce disturbance along its length and, particularly when it is being used, would act as a barrier to wildlife movement. In many locations particularly to the north of Castleconnell, the SAC site extends a distance from the river (see Figure 8), often taking in what would have been parts of the natural flood plain. These would be important areas for the functioning of the ecology of the site. While the overall width of a potential walkway might be less than 4 to 5 metres, it can divide habitat and can deter species movement. These effects would be likely to increase over time as usage would grow and potential demand for other facilities such as picnic sites, lighting or access to the river would result. The effects would be long term in nature.

Disturbance to Key Species

The possibility of disturbance to species, such as otters remains significant given the distance from Limerick to Montpelier and its possible extension into the woodland area to the north of Castleconnell. Otter territory is generally linear in nature (Hayden and Harrington, p. 302). The possibility of increased traffic and amenity activity in the woodland in Castleconnell (See Figure 1) with noise and associated works could create disturbance at a distance from the river. There is also the issue of trail dimensions which would have to be wide enough and designed to carry additional human traffic. This would require more construction work and excavation than would the use of existing trails. This would increase disturbance during the construction phase and increase potential for sedimentation. This would have particular effects on species that would use the riparian vegetation for feeding, breeding or resting. In addition to the otter, two species of conservation concern for the SPA would be particularly affected, Grey Heron and Cormorant (mentioned in River Shannon and Fergus Estuary SPA literature). The policy support for blue way could mean additional boating traffic on the river which could cause additional disturbance which would be additional to that on the bank, however, it could also serve as a passageway for the movement of invasive species, such as Quagga Mussel or diseases such as Crayfish Plague. Small craft were one of the factors implicated in the introduction of cray fish plague to Limerick River systems five years ago.

Reduction in species density

Species densities are reliant on habitat condition, connectivity of ecological resources and availability of resources such as prey/food. The potential greenway along the river and the possibility of increased access to the woodlands introduces potential sources for habitat loss and disturbance which would displace not just otters but also some of their prey species, such as birds that might utilise the reed beds for nesting, e.g. Coot and Moorhen. It could also act as a barrier which would affect movement into the wider countryside from the river, which might be part of wider foraging areas. It is often the case that species will move from areas of higher disturbance to areas where such occurrences are less. The trails could prove a barrier in this regard and cause species movement away from disturbed areas.

Changes of Indicators of Conservation Value

Indicators of conservation value are identified as key ecological resources such as water quality, air quality, habitat quality, population health of key species or 'keystone species' etc. In this situation there may be implications for water quality during the construction phase. There are potential implications for habitat quality in that between Limerick and Montpelier associated human disturbance may be introduced along the River Shannon and access into the woodland to the north of Castleconnell will be facilitated. The issue of sedimentation and effects on water quality have been described in Table 1. The possibility of the introduction of diseases and invasive species is also a factor to be considered in relation to water and habitat quality generally. This could result from movement of watercraft or fishing gear from another catchment to the Shannon. This was responsible for an outbreak of crayfish plague in Limerick in the Maigue River in 2017.

Climate change

While greenways are often advocated as means of addressing climate change, they are amenity facilities by nature and not part of an integrated mainstream transport network. They often involve facilitating trails and human access in ecologically sensitive areas, a factor which

could cause damage. It is likely that any perceived climate benefits from such trails would be offset by the ecological disturbance they cause.

Conservation objectives/ interests.	Potential implications	Comments
<p>Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310]</p>	<p>Because of distance and that fact these are downstream in the estuarine area, these are unlikely to be affected.</p>	<p>No mitigation necessary.</p>
<p>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Tursiops truncatus (Common Bottlenose Dolphin) [1349]</p>		

Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099]	Juvenile lamprey depend heavily on bankside muds for concealment at that life stage. Disturbance to the riparian could have effects on local lamprey populations.	Any works need to incorporate buffer areas and minimise any direct works on the bankside itself.
Salmo salar (Salmon) [1106]	Instream work could cause disturbance to spawning areas and generation of sediment from works would cover spawning areas.	Avoidance of instream works and measures required to minimise sediment loss to the river channel required.
Lutra lutra (Otter) [1355]	Direct disturbance particularly during the operational phase of trails, if such is introduced to the woodlands.	Use of existing routes only in the woodlands for pedestrian and cyclist routes. Adequate buffers and trail design to minimise disturbance including moving routes inland from the river in sensitive areas.
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Since these habitats are present along river banks there is a direct threat to them by the creation of pathways in these locations.	Adequate buffers and design to minimise disturbance including moving routes inland from the river in sensitive areas, where these habitats occur.

Table 2: Possible effects of potential greenways on the Conservation Interests of the Lower River Shannon SAC site.

Cumulative impacts

The effects of other developments downstream, such as the existing Limerick City to UL greenway, are well established. These are likely to increase over time, with ever increasing usage. The proposed UL to Annacotty link, currently being planned, is another route which will introduce walkways along the Limerick bank and that of the Mulkear River. Upstream greenways are being proposed between Killaloe in Clare and Ballina in Tipperary. In essence what is happening is the gradual increase of human activity on and close to the river and increasing usage of the river banks.

There will be a gradual intensification of use following the construction of these facilities and further demands for additional facilities such as access to the water and lighting, should trends follow those associated with the Limerick to University of Limerick walkway and to water features in the Limerick City, such as Westfields. The future construction and improvement of flood defences in Castleconnell and the Limerick City area will also have to be considered. This will all increase pressure on the river with its associated designations and species.

As stated above, informal trails exist in many of these locations, particularly adjacent to the city and within the boundaries of the Castleconnell LAP. These are often unsurfaced and are mainly used by locals. At this level of development, they are important local amenities and are often well integrated into the local environment. With the further development and extension of existing facilities such as these, it is likely that there will be increasing demands for additional features such as lights, access to the river bank and picnic areas, all of which will intensify possible effects of these routes. These routes so far are located close to and parallel to the River Shannon with little attempt to move inland and away from the River Shannon and its associated riparian habitats, thereby increasing their ecological effects.

4.6 Conclusion and Mitigation:

As noted at the start of the NIS, the key elements for consideration in the Local Area Plan from an AA perspective is the potential development of a greenways and blue ways and the policy support outlined in the Plan. It is considered that the remainder of the Plan policies and objectives are not likely have the potential to have significant ecological effects on the Lower River Shannon SAC site and other Natura 2000 sites.

The ever increasing amount of proposals for trails and walkways carry with them huge implications for the ecology of the River Shannon and its Special Area of Conservation. It is of huge importance that any proposals would factor in ecological concerns from the outset in order to minimise possible effects on the Shannon and its Natura 2000 site designations. In term of access to the woodlands, it is recommended that only pedestrian access along existing informal trails be considered in order to minimise disturbance sensitive area.

Mitigation measures should include

1. Ensure careful consideration shall be taken in areas containing sensitive habitats and species and in particular, Natura 2000 sites, environmental assessments shall be carried out to an appropriate level and projects identified as damaging important habitats or species will not be permitted.
2. Ensure that walkways are taken inland from the river bank to prevent disturbance of habitat features and bird life. Adequate buffer distances shall be provided to prevent disturbance of birds, other species and riparian habitats and shall also incorporate where possible screening or use of existing topography to screen human movements. Ecological assessment will determine the appropriate locations, access types and routes and may also identify sensitive areas which are not suitable for public access.
3. Ensure that any proposals for access to the water or picnic areas, shall be confined to suitable locations within the existing settlement, which are already subject to human disturbance.
4. Ensure that walkways are appropriately designed and developed to allow room for birds and other species to withdraw.
5. Avoiding looped walks around the entirety of ponds, lakes and water bodies and habitat features close to the river channel.
6. Lighting shall be designed to take account of sensitive habitats and shall only be permitted, if deemed suitable and supported with an appropriate level of environmental assessment.
7. Ensure that any access to the river shall have warning signs regarding biosecurity to prevent the transmission of diseases, such as crayfish plague or invasive species. In areas

for waterside access use of bio-security facilities for washing and treating craft such as kayaks shall be made available.

Sources:

Cerian Thomas & Olivia Crowe (2007) An Assessment of the Effects of Arterial Drainage Maintenance on Birds Dependent on Riparian Habitats. Office of Public Works.

Ferguson-Lees J, Castell R and Leech D (2011) A field Guide to Monitoring Nests. British Trust for Ornithology Norfolk.

Fossitt J (2000) A Guide to Habitats in Ireland. Heritage Council, Kilkenny.

Hayden T and Harrington R (2000) Exploring Irish Mammals. Town and Country House, Dublin.

Marchant JA & Hayde PA (1980) Aspects of the distribution of riparian birds on waterways in Britain and Ireland, Bird Study, 27:3, 183-202, DOI: 10.1080/00063658009476678

Nairn R and O Halloran J (2012) Bird Habitats in Ireland University College Cork.

NPWS (2012) Conservation Objectives: Lower River Shannon SAC 002165. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Site Synopsis: Lower River Shannon SAC (002165) National Parks and Wildlife Services, Department of Arts, Heritage and the Gaeltacht

Northern Ireland Environment Agency (2011) Otters and Development. Belfast.

Taylor AR and Knight RL (2003) Wildlife Responses to Recreation and Associated Visitor Perceptions Ecological Applications [Vol. 13, No. 4 \(Aug., 2003\)](#), pp. 951-963 (13 pages)