

DRAFT SOUTHERN ENVIRONS LOCAL AREA PLAN 2021 - 2027



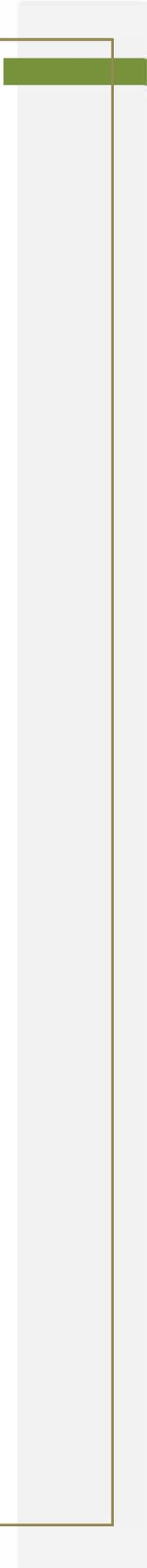
Forward/ Strategic Planning

10th October 2020



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council



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1 INTRODUCTION

The Councils of Limerick County Council and Limerick City Council amalgamated in 2014 to form Limerick City and County Council.

The area known as the Southern Environs previously came within the functional area of Limerick County Council and currently comes under the remit of the Limerick County Development Plan 2010 – 2016 (as extended).

The Limerick City Development Plan 2010 – 2016 (as extended) and the Limerick County Development 2010 – 2016 (as extended), will be replaced by the proposed Limerick Development Plan, which will be adopted in 2022. The provisions of the proposed Limerick Development Plan will then directly apply to the Southern Environs. However, given the expiration of the extension to the lifetime of the current Southern Environs Local Area Plan in 2021, a new Local Area Plan (LAP) is required in the interim. The Planning Authority envisages that this Draft LAP, in conjunction with the Castletroy LAP 2019 – 2025 will be incorporated into the proposed Limerick Development Plan following adoption in 2022, and then the aforementioned LAPs will be revoked.

This Draft Southern Environs Local Area Plan has been prepared in accordance with the requirements and provisions of the Planning and Development Act 2000, as amended (hereafter referred to as “the Act”). The Draft LAP sets out an overall strategy for the proper planning and sustainable development of the Southern Environs, in the context of the National Planning Framework, the Regional Spatial Economic Strategy for the Southern Region and the Limerick County Development Plan 2010 – 2016

(as extended). Preparation of the Draft LAP has 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).

This Draft LAP will inform and manage the future development of the Southern Environs pending the adoption of the proposed Limerick Development Plan. The Draft LAP comprises a written statement and accompanying maps. The written statement shall take precedence over the map should any discrepancy arise. In the full interpretation of all objectives for the Southern Environs, it is essential that both the Limerick County Development Plan 2010 – 2016 (as extended) and the Draft LAP are read together. Where conflicting objectives arise between the CDP and the Draft LAP, the objectives of the CDP or any replacement thereof shall take precedence.

The majority of objectives, policies and development management standards that will apply to the Southern Environs will be set out in the proposed Limerick Development Plan. The objectives and policies that are specific to the Southern Environs or necessary to emphasize their importance are included in the Draft LAP. This approach will facilitate the streamlining of this LAP to the issues relevant to the Southern Environs and allow an overall reduction in the duplication of content, pending incorporation into the new CDP. This approach should not be viewed as a diminution of the level of importance or indeed protection afforded to this area.

2 LEGISLATIVE REQUIREMENTS

Given the expiration of the extended lifetime of the current Southern Environs Local Area Plan in 2021, a new LAP is required for the Southern Environs, pending the adoption of the proposed Limerick Development Plan in 2022.

Section 20 of the Planning and Development Act 2000 (as amended) sets out the process for the making of a Local Area Plan as follows:

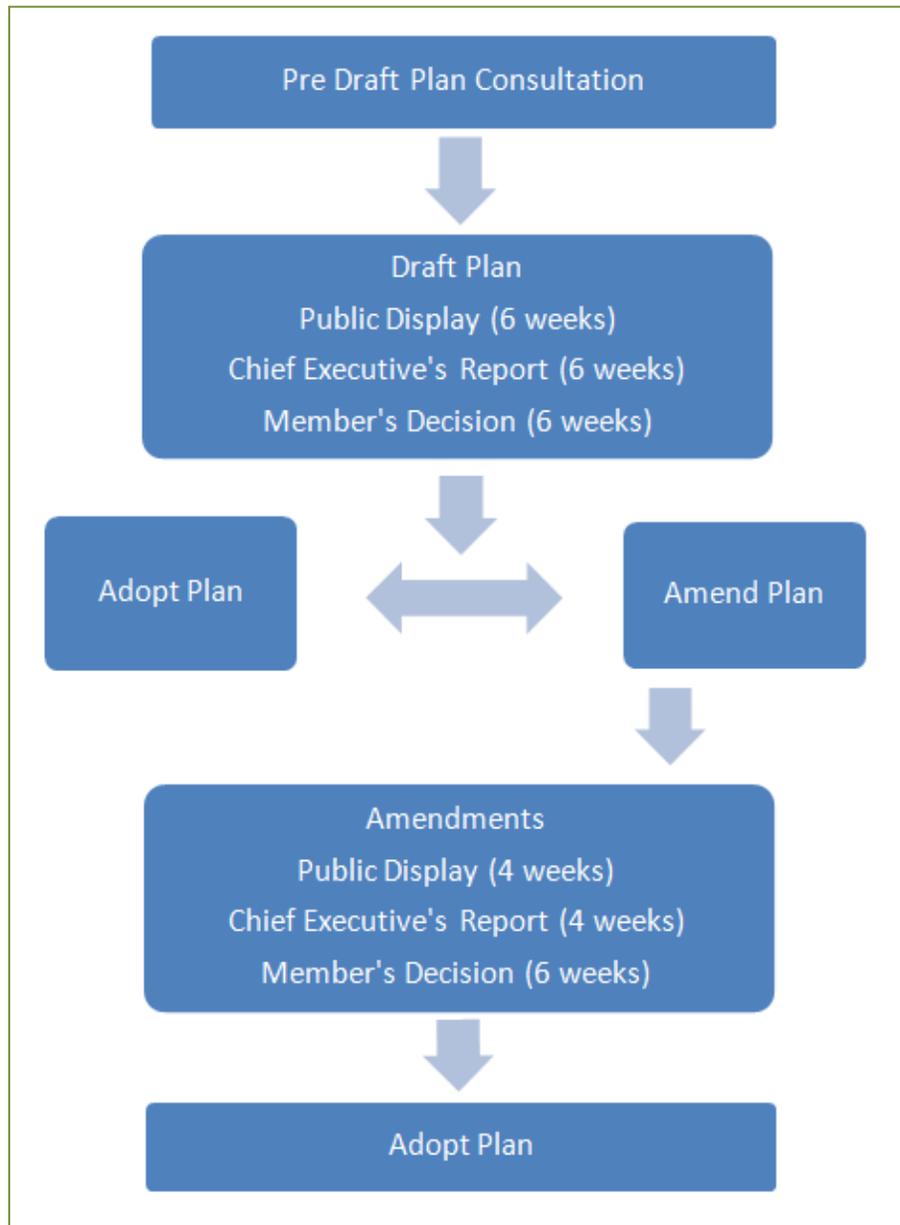


Figure 1: LAP Process

In accordance with Sections 19 and 28 of the Act, the Draft LAP is subject to the following environmental considerations:

2.1 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. SEA is mandatory for plans for areas with a population of 5,000 or more persons and is therefore required for the Draft Southern Environs LAP.

An SEA Environmental Report has been prepared informing the likely environmental impacts of

implementing the policies and objectives of the plan and integrating relevant environmental considerations into the plan. The SEA Environmental Report (SEA ER) accompanies this Draft LAP and recommended mitigation measures have been incorporated into this Draft. This report sets out the likely environmental consequences of decisions regarding the location and type of developments within the plan area, mitigation measures to offset potential adverse effects of the plan and monitoring proposals.

2.2 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 screening for AA, it was determined that the Southern Environs Draft LAP is likely to have impacts on an area designated as a Natura 2000 site, therefore a Natura Impact Report is required. The mitigation measures identified in the Stage 2 Appropriate Assessment (Natura Impact Report) have been incorporated into the Draft LAP.

2.3 STRATEGIC FLOOD RISK ASSESSMENT

A Strategic Flood Risk Assessment (SFRA) is required in accordance with *"The Planning System and Flood Risk Management – Guidelines for Planning Authorities"* as amended by Circular PL2/2014. The primary purpose of the SFRA is to determine flood risk within a particular

geographical area and to support planning decisions in relation to developing the plan. The information gathered in the Stage 1 SFRA has informed the Land Use Zoning Map of this Draft LAP.

3 SPATIAL PLANNING POLICY

The Irish spatial planning hierarchy is outlined in the following figure:



Figure 2: Planning Hierarchy

The Draft Southern Environs LAP has been prepared having regard to the higher level national, regional and local policy documents, in addition to Guidelines issued under Section 28 of the Planning and Development Act 2000 (as amended).

Section 11 (5) of the Planning and Development Act, 2000 (as amended) requires that following adoption of the Regional Spatial and Economic Strategy (RSES) for the Southern Region, the Limerick County Development Plan and Limerick City Development Plan are reviewed in the context of the National Planning Framework and

RSES. The statutory process for the making of the proposed Limerick Development Plan commenced on 15th of August 2020 with the display of the Issues Paper.

The reader should note that this LAP is therefore an interim plan, pending the adoption of the proposed Limerick Development Plan in 2022. The area covered by this Southern Environs LAP, in conjunction with the area covered by the Castletroy LAP 2019 – 2025 will then be incorporated into the proposed Limerick Development Plan. The two aforementioned LAPs will then be revoked.

Spatial Planning Objective:

It is an objective of Limerick City and County Council, pending the adoption of the Limerick Development Plan in 2022, that the area covered by the Draft Southern Environs Local Area Plan 2021 - 2027 and the Castletroy Local Area Plan 2019 – 2025 shall be incorporated into same. In this regard, the Southern Environs Local Area Plan 2021 – 2027 is an interim plan and will be revoked pending adoption of the proposed Limerick Development Plan in 2022.

4 SOUTHERN ENVIRONS IN CONTEXT

The Southern Environs is located to the south of Limerick City, in close proximity to the City Centre. The Southern Environs comprises all parts of the suburban area to the south of the Ballinacurra Creek/ Ballynaclogh River, including the settlement of Mungret and the built up areas of Dooradoyle, Raheen, Ballycummin, Ballykeefe, and Gouldavoher. The Southern Environs also includes Rosbrien-Rathurd and Georgian Village Crossagalla.

The natural boundaries of the Southern Environs include the Shannon Estuary and the Ballinacurra Creek along the former Limerick City Council boundary line.

The Southern Environs is an area largely urban in nature that has experienced considerable population increase over time. The importance of the Southern Environs to the county and region is reflected in the range and scale of land use in the area, and the provision of important large-scale infrastructural developments including the N18 Limerick Tunnel underneath the River Shannon.

The area accommodates a number of regionally important assets such as the University Hospital Limerick, the Crescent Shopping Centre and Raheen Business Park.

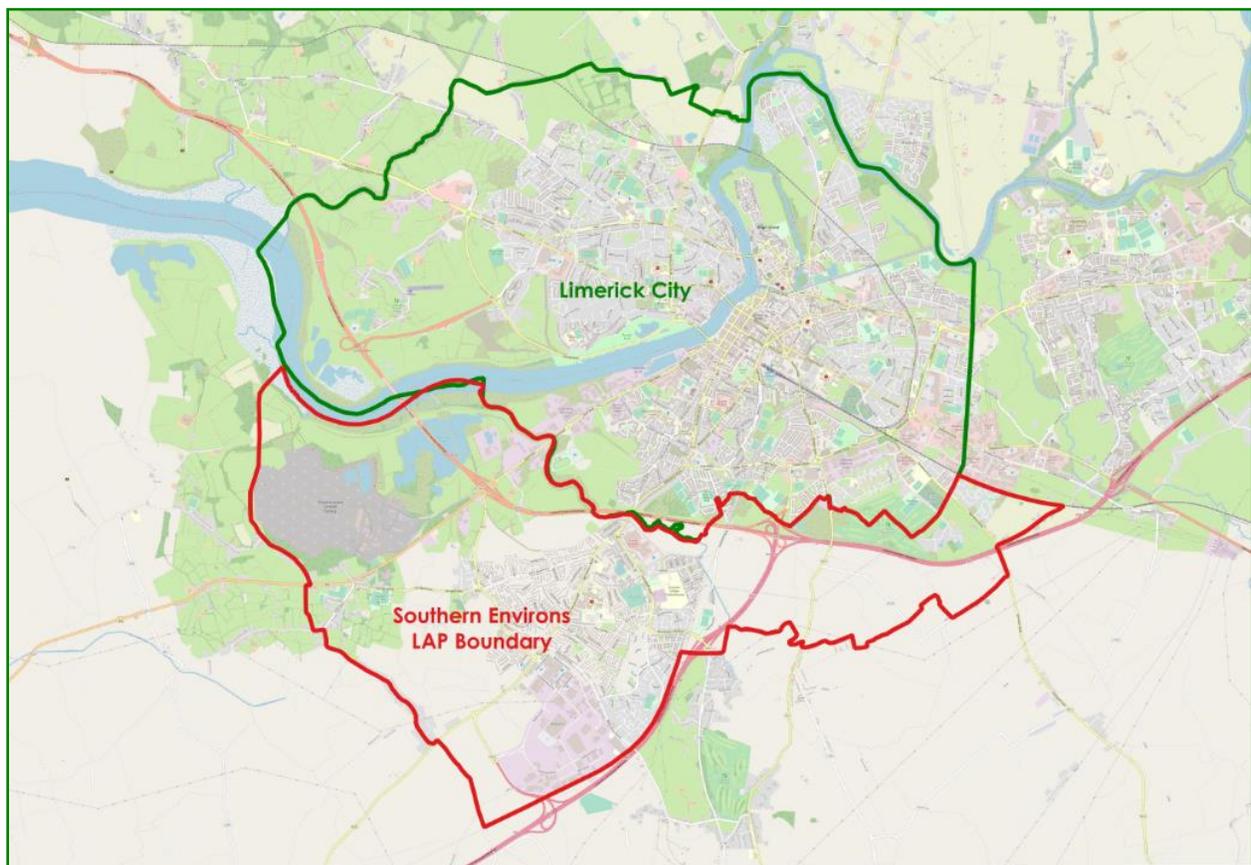


Figure 3: Southern Environs, Limerick

4.1 DEMOGRAPHIC PROFILE

The principal demographic trends for the Southern Environs as set out in CSO Census data are outlined in the following sections.

4.1.1 Population

The Southern Environs had a population of 19,073 persons in 2016, representing an increase of 5% on the 2011 population figure of 18,092 persons. The 2011 Census indicated a population growth rate of 12% on the 2006 population figure of 16,065.

The slowdown of population growth in the Southern Environs occurred concurrently with a marked reduction in the rate of dwelling construction during the recession following the 2008 economic crash. The area in general continued to grow in population however, but at a slower rate than in the previous inter Census period.

4.1.2 Age Profile

In terms of age profile, the Southern Environs has a relatively young population. The 2016 Census data indicates that the 0-14 age cohort accounted for 23.51%, whereas for the remainder of the city area, this age cohort only accounts for just over 14% of the population. The other category that is particularly important in the Southern Environs is the 25-44 age group, which accounts for 35.82% of the population, far exceeding the 23% equivalent for the remainder of the city area. In contrast, the middle and older age groups are less important in the Southern Environs than they are for the rest of the city area.

all residents of age 65 and over, whereas it only accounts for 32% of the areas' population. This reflects the fact that Dooradoyle is the oldest part of the Southern Environs.

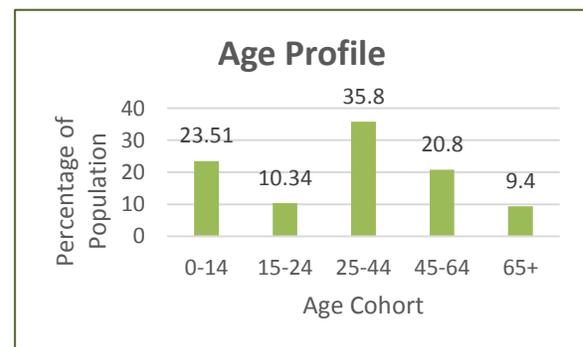


Figure 4: Age Profile Census 2016

The rural areas of Mungret and Rosbrien-Rathurd are the highest ranking in terms of the importance of older people relative to their populations. However, in terms of the contribution to the overall numbers of older people in the Southern Environs, Dooradoyle is by far the most important. It accounts for 45% of

These cohorts are significant in terms of the requirements for service provision such as schools and childcare facilities, the provision of housing, health care and employment opportunities.

4.1.3 Age Dependency Ratio

The Age Dependency Ratio shows the ratio of people aged under 14 years and over 65 years compared to people of working age (15-64 years). The Age Dependency Ratio nationally increased from 49.3% in 2011 to 52.7% in 2016,

meaning the number of people who are aged under 15 or over 65 years of age is more than half the number of people who are of working age. Nationally, the main factor in the increase in the total age dependency ratio is the increase of

older people. The young dependency ratio only increased by 0.5 points while the old dependency ratio increased by 3.0 points.

The Southern Environ's age dependency ratio was 49.2% in 2016 (increasing from 43.8% in 2011). The population is aging in line with national trends, but the increase in dependency

ratio is split more evenly between young and old, with the young dependency ratio increasing by 2.37 points and the old dependency ratio increasing by 3.04. The youth dependency ratio accounts for 70% of the dependency ratio in the Southern Environs, whereas in Limerick city as a whole it accounts for 60%.

4.1.4 Family Cycle

The Central Statistics Office (CSO) provides the following classifications of family units:

- **Pre-family:** Married or cohabiting couple without children where female is under 45 years;
- **Empty-nest:** Married or cohabiting couple without children where female is aged between 45 and 64 years;
- **Retired:** Married or cohabiting couple without children where female is aged 65 years and over;
- **Pre-school:** Oldest child is aged 0-4 years;
- **Early-school:** Oldest child is aged 5-9 years;
- **Pre-adolescent:** Oldest child is aged 10-14 years;

- **Adolescent:** Oldest child is aged 15-19 years;
- **Adult:** Oldest child is aged 20 years and over.

In the Southern Environs the most important stages in the family cycle, are the pre-school and early school groups, which together account for 28% of all families. This profile will place pressure on childcare and school places in the Southern Environs.

Families in the empty nester and retired stages account for 16.6% of all families in the Southern Environs. Transitions in the family cycle will require additional services such as healthcare and options for the downsizing of dwellings.

The average number of children per family in the Southern Environs is 1.35, slightly below the national average number of children per family in the State, which was 1.38.

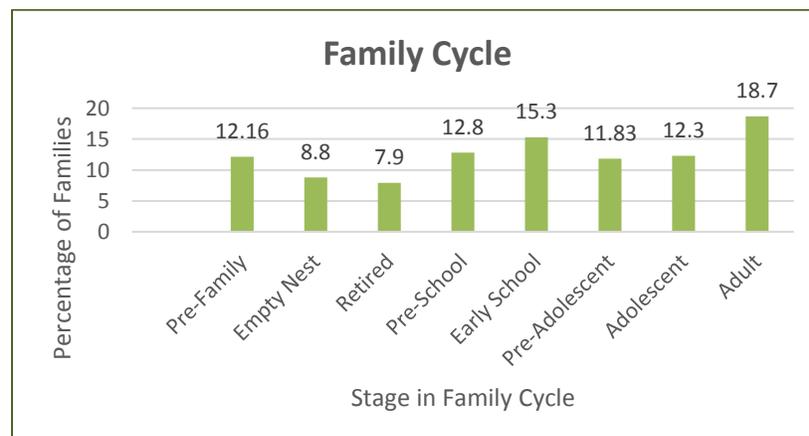


Figure 5: Family Cycle Census 2016

4.1.5 Average Household Size

The 2016 Census found an average household size of 2.83 persons in the Southern Environs, compared to an average of 2.62 in Limerick City and a national average of 2.75 persons in 2016.

This represents a slight increase from an average of 2.77 persons per household in the Southern Environs in 2011.

4.1.6 Student Population

The 2016 Census data indicates that 1,672 persons or 11.12% of the population in the Southern Environs were students of age 15 years or over. The overall student population in

Limerick City was 16%. This statistic reflects the age profile base of the population and the proximity of third level institutes to the Southern Environs.

4.2 SOCIO ECONOMIC PROFILE

The principal socio economic trends for the Southern Environs set out in the CSO Census data in the following sections.

4.2.1 Education

Having regard to the Census 2016 data, 2.6% of the population in the Southern Environs had left education by 15 years of age, 1.15% had no formal education and 5.36% received a primary education. It is noted that 13.5% of the population aged 15 and over in Limerick City and County left school with no formal education or having received a primary education, which is marginally higher than the national rate of 12.5%. However, in the Southern Environs, the combined proportion of 6.51% of the population aged 15 and over, having a primary education is much lower than the City and County average.

Third level or higher qualifications were attained by 44.3% of the Southern Environs' population, compared to 30% in Limerick City and 33.4% nationally.

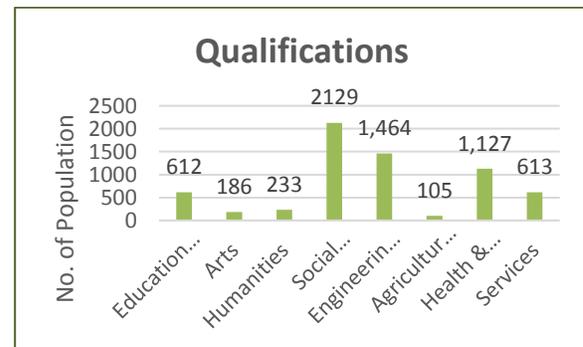


Figure 6: Qualifications Census 2016

In terms of qualifications, the 2016 Census for Southern Environs indicated that 17.9% were qualified in Social Sciences, Business and Law, 12.3% in Engineering, Manufacturing and Construction and 9.47% in Health and Welfare. The remaining qualifications included Education, Services, Arts and Humanities.

4.2.2 Employment & Unemployment

The 2016 Census data indicates that 59% of the population of the Southern Environs at age 15 or over were at work, 11.5% were retired, 11.2% were students and 6.8% were unemployed. The working population was above the national average of 53%. The result of the 2016 Census

showed the beginnings of a recovery in the labour market among the area’s residents. These statistics indicate that the community in the Southern Environs comprises working households with high employment rates.

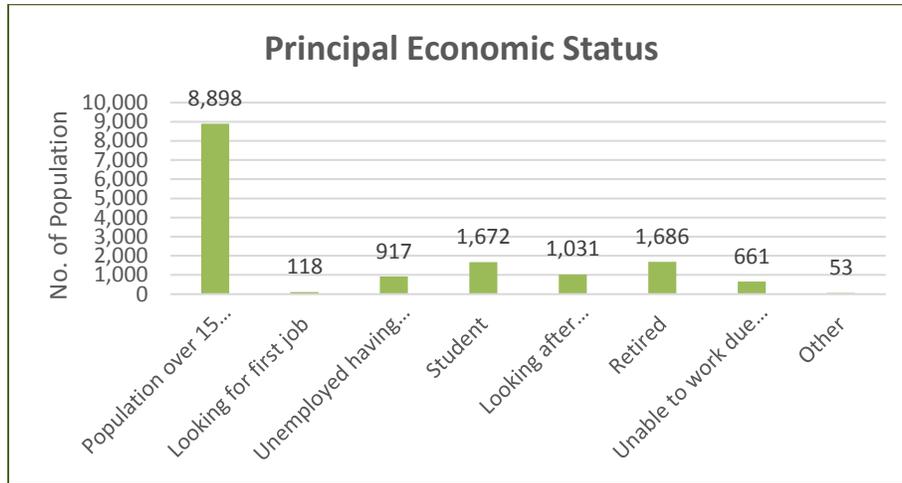


Figure 7: Principal Economic Status Census 2016

4.2.3 Social Class

In 2016 the Census data indicated that the workforce in the Southern Environs comprised 31% managerial and technical staff, which is the most important class in the study area. In descending order of importance from this are

non-manual at 18%, all others ‘gainfully occupied and unknown’ at 14.5%, and then professional workers at 12.3%. The percentage of the workforce accounted for by managers, directors and senior officials is 7.76%.

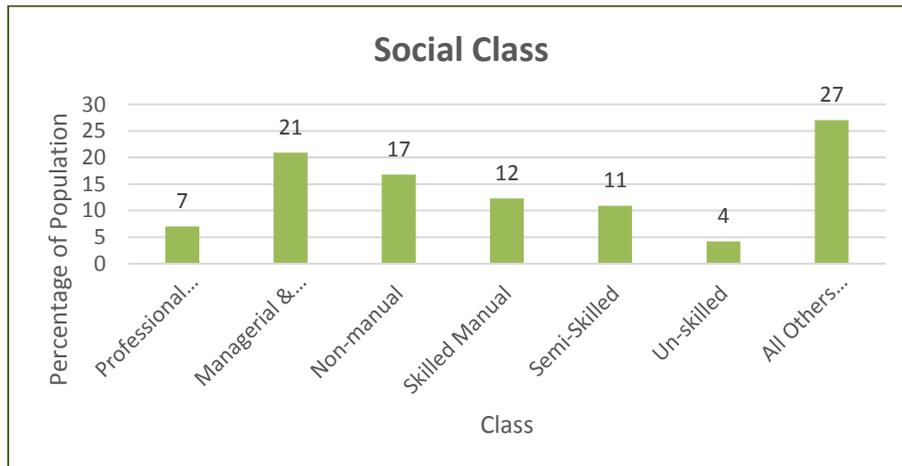


Figure 8: Social Class Census 2016

4.2.4 Income

The Southern Environs area displays a variation of median gross household incomes. However, the median incomes are above the national median average of €45,256.

The proportion of households where working age Social Welfare constituted the majority of household income varies from 3.8% to 15%

across the LAP area. The highest percentage of households (9.6%) which fall into this category are found in Ballycummin ED.

The State Pension constitutes the majority of gross household income for 6.9% of households in Ballycummin ED and Limerick South Rural.

4.2.5 Nationality

The 2016 Census data indicated that 22% of the population in the Southern Environs had a birthplace outside of Ireland, representing a diversification of the community. Of the 19,073

persons in the Southern Environs in 2016, 16,578 persons were of Irish nationality, followed by Polish (1,356 persons) and the rest of the world outside the UK and EU (829).

5 DEVELOPMENT VISION & STRATEGY

The Draft Local Area Plan for the Southern Environs is underpinned by a strategic vision intended to guide the sustainable future growth of the area. The objectives outlined below combine to form a coherent development strategy to 2027 and beyond. These goals cover economic, social and environmental dimensions. The strategic vision recognises the potential of the Southern Environs to align with the key growth objectives set out in higher order spatial plans and to take advantage of the strategic location of the environs. Delivering on these objectives will result in an enhanced quality of

life for all citizens. The Draft LAP and overall vision is underpinned by a number of interlinked strategic objectives that will be realised through the chapters of the plan.

The strategic vision is based on the role of the Southern Environs within the Limerick Shannon Metropolitan Area Strategic Plan (MASP) as set out in the RSES and as defined in the Limerick County Development Plan 2010 – 2016 (as extended), and the aspirations of the people and stakeholders in the Southern Environs. The Strategic Vision reads as follows:

“To fulfil the role of the Southern Environs, by providing for low carbon, sustainable and consolidated growth in a coherent spatial manner, protecting and maximising opportunities presented by the unique natural and built environment for green and public modes of transport, recreation and employment opportunities, while delivering an exemplar quality of life for all”.



Figure 9: Plan Chapters

5.1 DELIVERING THE VISION



Figure 10: National Strategic Outcomes of the National Planning Framework

The Strategic Vision for the Southern Environs is consistent with the Tier 1 Settlement designation under the Limerick County Development Plan 2010- 2016 (as extended) and is supported by the NPF and RSES. The Southern Environs has the ability to achieve the National Strategic Outcomes as briefly outlined below:

-Compact Growth:

Strategic location within the Limerick Shannon Metropolitan Area and proximity to Limerick City Centre, with opportunities for consolidation, regeneration and development of infill and brownfield sites.

-Enhanced Regional Accessibility:

Location on the Regional Road and National Motorway network in close proximity to Limerick

City Centre, Limerick Colbert Railway Station and Shannon International Airport.

-Sustainable Mobility:

Ability to promote the use of sustainable transport modes, including walking, cycling and public transport to the city centre, railway station, employment zones and third level education campuses.

-Strong Economy:

Ability to build on the existing presence of multinational companies in Strategic Employment Zones, such as Raheen Business Park and University Hospital Limerick, and the proximity to third level education providers, including University of Limerick, Limerick

Institute of Technology and Mary Immaculate College.

-Enhanced Amenities:

Ability to enhance existing and provide new community, sports and recreation facilities such as at Mungret Park. Maintaining and protecting the rich built and natural heritage found throughout the Southern Environs.

-Sustainable Infrastructure:

Ability to deliver a strategy for the growth of the Environs to cater for sustainable employment

and residential growth in tandem with the provision of hard and soft infrastructure. This Local Area Plan will include policy support for the provision of adequate amenities and open space, infrastructure and maintenance in a climate altered future.

-Access to Services:

Availability of, and policy support for expansion of existing and provision of new childcare, schools and healthcare services, such as at University Hospital Limerick.

5.2 STRATEGIC OBJECTIVES

This Draft Local Area Plan is based on a number of general objectives designed to improve the quality of life of the citizens of the environs, which the Council will endeavour to implement during the lifetime of the plan. The development of the Southern Environs over the lifetime of this plan focuses on 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 pattern of development.

The following are the interlinked strategic objectives in relation to the delivery of the Strategy:

Strategic Objectives: It shall be the objective of the Council to:

1. Ensure the Southern Environs Local Area Plan is consistent with the hierarchy of statutory plans – The National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region and the Limerick County Development Plan 2010 – 2016 (as extended), or any replacement thereof. The area covered by this LAP will be incorporated into the proposed Limerick Development Plan 2022 and this LAP will then be revoked.
2. Facilitate and promote the Southern Environs' role as part of the Limerick – Shannon Metropolitan Area in accordance with the Limerick – Shannon Metropolitan Area Strategic Plan and the Regional Spatial and Economic Strategy for the Southern Region.
3. Ensure that all development proposals comply with the Development Management Standards of the Limerick County Development Plan 2010 - 2016 (as extended), and any replacement thereof or any relevant Section 28 Guidance.
4. Support and facilitate sustainable intensification and consolidation of the existing built environment including permitting development on zoned land in an orderly manner in accordance with the objectives for Compact Growth in the National Planning Framework and Regional Spatial and Economic Strategy.

5. Deliver population growth targets in line with national, regional and county level policy objectives, by focusing new residential development into appropriate infill, brownfield, regeneration sites and residentially zoned land through the development strategy and development management process, in tandem with physical, community, recreation and amenity infrastructure.
6. Promote, support and enable sustainable and economic development, enterprise and employment generation in strategic locations including Raheen Business Park and University Hospital Limerick, which are accessible by public and sustainable modes of transport.
7. Promote and facilitate sustainable modes of transport that prioritise walking, cycling and public transport, while providing an appropriate level of road infrastructure, road capacity and traffic management to support existing and future development.
8. Protect, conserve and enhance the built environment, through promoting awareness, utilising relevant heritage legislation and ensuring good quality urban design principles are applied to all new developments, based on the principle that well planned and integrated development enhances the sustainability, attractiveness and quality of an area.
9. Protect, enhance and connect areas of natural heritage, green infrastructure and open space for the benefits of quality of life and biodiversity, while having the potential to facilitate climate change adaptation and flood risk measures.
10. Ensure the highest quality of public realm and urban design principles are applied to all new developments including the construction of landmark buildings in appropriate locations.
11. Have cognizance to the Limerick Climate Change Adaptation Strategy 2019 - 2025, and any forthcoming climate adaptation and mitigation strategies and actions that emerge during the lifetime of this plan.
12. Cooperate with the Southern Regional Assembly as part of the monitoring and review procedure.

5.3 CORE STRATEGY & COMPLIANCE

The Core Strategy for County Limerick is set out under Chapter 2 of the Limerick County Development Plan 2010 – 2016 (as extended). 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...”

The National Planning Framework (NPF) is a long-term strategy which sets out broad national, regional and city specific population targets to secure more effective regional development. To facilitate monitoring and review, phased regional population targets to 2026 and 2031 are set out in both the NPF and the Regional Spatial and Economic Strategy for the Southern Region (RSES). The NPF supports ambitious growth targets to enable Limerick City

to grow by at least 50% to 2040 and to achieve its potential to become a city of scale.

The growth of the Southern Environs can be achieved in a sustainable manner through the objectives of this plan, having cognisance to the following:

-Residential:

To ensure compliance with the Core Strategy and associated population targets for the Southern Environs, it is an objective of the Planning Authority to monitor the number of residential units permitted and developed annually.

-Economic Development:

Economic development underpins all chapters in this Draft Local Area Plan. The aim of the plan is to capitalise on the Southern Environs' location on the motorway and regional road networks, while providing a complimentary role to Limerick City.

-Retail:

The Local Area Plan seeks to compliment the role of Limerick City Centre at the top of the retail hierarchy. Any proposals for retail development will be assessed in accordance with the provisions of the Joint Retail Strategy pending the completion of the new Limerick Shannon Metropolitan Retail Strategy.

-Social Infrastructure:

The provision of social infrastructure in tandem with projected population growth in the Southern Environs is a key consideration. The LAP therefore sets out objectives to support the delivery of social infrastructure in tandem with residential and employment growth.

-Key Infrastructure:

Future development proposals are contingent on key infrastructure. Capacity is currently available in the Foul Sewer Network, Waste Water Treatment Plant and Public Water Supply. In the short to medium term, the Mungret Link Street will be delivered and will open up lands for development. This plan includes objectives for the delivery of networks for cycling and public transport.

-Environment and Heritage Protection:

The environmental sensitivities of the area identified in the SEA process have informed the Core Strategy and the role it identifies for the Southern Environs. The Draft LAP responds to environmental factors, including climate change and areas at risk of flooding etc. It also acknowledges the importance of built and natural heritage as an environmental and economic resource and includes significant objectives for its conservation and enhancement

5.4 FUNCTION, POPULATION AND SCALE OF SOUTHERN ENVIRONS

As set out under the Regional Spatial and Economic Strategy for the Southern Region (RSES), the Southern Environs form part of the Limerick Shannon Metropolitan Area and comes within the scope of the Limerick Shannon Metropolitan Area Strategic Plan (MASP). The MASP seeks to strengthen the role of the Metropolitan Area as an international location of

scale, a complement to Dublin and a primary driver of economic and population growth in the Southern Region.

The adoption of the proposed Limerick Development Plan in 2022, will replace both the Limerick County Development Plan 2010 – 2016 (as extended) and the Limerick City

Development Plan 2010 – 2016 (as extended). The new Limerick Development Plan will be required to address the target populations of the NPF and RSES and a revised Core Strategy will be developed. However, pending the adoption of the proposed Limerick Development Plan including a new Core Strategy and Housing Need Demand Assessment, Limerick City and County Council have considered the population targets set out under the the NPF, the Implementation Roadmap for the NPF and the RSES. In this respect, population targets have been allocated for each settlement in Limerick including the Southern Environs.

The NPF sets out a targeted projection of population growth of 47,000 – 56,000 persons for Limerick City and Suburbs to 2040. The RSES population targets provide for Limerick City and Suburbs to grow from 94,000 (2016) to 112,086 in 2026 (+18,086 on 2016) and 123,289 persons by 2031 (+29,289 on 2016). The 2031 target represents a population increase of 31% on the 2016 Census of population figures in the City and Suburbs.

The Southern Environs had a population of 19,073 persons in 2016, representing an increase of 5% on the 2011 population figure of 18,092 persons. As previously stated, in the absence of the adoption of the proposed Limerick Development Plan, the Local Authority has made assumptions with respect to population projections and allocation, additional residential units and zoned land requirements in accordance with the NPF, the Implementation Roadmap for the NPF and the RSES. In this respect, the assumed Southern Environs population growth allocation is an additional 7,420 persons to 2027. This equates to a projected requirement for an additional 2,968 residential units over the period up to 2027, based on 2.5 persons per household. These figures include headroom of 25% for the interim projection to 2026, permissible in Limerick under the Implementation Roadmap for the NPF.

	Population 2011	Population 2016	Population Projection 2027 ¹ (25% Headroom)	Population Projection 2031	Housing Units Required to 2027 (2.5 per household)
Southern Environs	18,092	19,073	+7,420 (26,493)	+9,694 (28,767)	+2,968

Table 1: Population Projections for Southern Environs

Given the Southern Environs' function within Limerick City and Suburbs, it is anticipated that the Southern Environs will attract social and administrative functions as well as economic activity, and will act as a focus for future population growth in accordance with the objectives of the NPF and RSES.

The Southern Environs has the foundations to sustain population growth in accordance with the principles of the National Strategic

Outcomes of the NPF, having regard to the location within Limerick City and suburbs, connectivity to the motorway network, the availability of public transport, serviced land and a range of existing amenities, education, childcare and healthcare services and employment zones. On this basis, the assumed scale of growth for the Southern Environs is considered reasonable and will be progressed on lands including opportunity, infill and brownfield sites.

1 - Estimated by multiplying the projected growth of 17,625 by 2031 allocated to the suburbs of Limerick City formerly in the county by 0.55 (as Southern Environs is assumed to grow relative to Castletroy by a ratio of 55:45 - Castletroy Local Area Plan 2019-2025, Table 4). This yields a population increase of 9,694 between 2016 and 2031 or 6,852 pro-rata by 2026.

5.5 RESIDENTIAL LAND AVAILABILITY & CAPACITY

The National Planning Framework requires that 50% of all new housing within Limerick City occurs within the existing city and suburbs footprint. As outlined under Section 5.4 above, approximately 2,968 residential units are required over the period 2016 to 2027 in the Southern Environs.

At time of writing, approximately 240 residential units have been built in the Southern Environs since 2016 and 54 units were vacant. This equates to a requirement for the construction of an additional 2,674 units to 2027.

The Draft LAP identifies approximately 90ha. of residential and local centre zoned land suitable for residential development. This includes 85ha. of undeveloped “New Residential” zoned land, located within and adjacent to established residential areas in the Southern Environs. With respect to the identified Local Centres, an

assumed allocation of 25% of the site area for residential development has been included. The majority of lands suitable for development comprises opportunity, brownfield and infill sites.

The residential capacity of the lands identified is approximately 3,430 units as indicated in the table below. Given the role of the Southern Environs in the Limerick Shannon Metropolitan Area, the number of education and community facilities, and the availability of lands for employment uses, it is considered that there is sufficient land zoned. The lands for residential development have been identified with cognisance to the necessity for future proofing of this suburb beyond the plan period, in order to facilitate the role of Limerick City as a Regional City in accordance with the objectives of the NPF and MASP.

Housing Units Required to 2027 (2.5 per household)	Housing Units Built since 2016	Vacant Units	Total Housing Unit Required (Minus Built and Vacant)	Area of Undeveloped Land (ha.)	Assumed Density (units per ha.)	Estimated Residential Capacity (Potential no. of units)	Total Land Capacity (Potential No. of units)
2,968	240	54	2,674	28	45uph	1,260	3,430
				62	35uph	2,170	

Table 2: Land Capacity Assessment

Note: The density and number of residential units permissible will be determined at planning application stage, subject to compliance with the density requirements of Section 7.3 of this LAP, the applicable Development Management Standards and Section 28 Guidance etc.

Table 2 Land Capacity Assessment above sets out an estimation of residential units which can potentially be delivered in the Southern Environs, in a consolidated manner consistent

with the provision of infrastructure including water services, public transport, education, open space and amenities.

A Serviced Land Assessment Matrix (SLAM) accessing the key infrastructure available to the individual sites identified as suitable for the provision of residential development has been set out in Appendix II. The SLAM identifies the infrastructure necessary to support future development. An indicative timeframe for the

delivery of critical infrastructure i.e. short, medium or long term is included.

Core Strategy Policy:

CS P1: To ensure compliance with the Core Strategy (or any revision thereof), the Planning Authority shall monitor the type of developments permitted, including the number of residential units constructed on an annual basis.

6 ECONOMIC DEVELOPMENT



The Southern Environs is an expanding vibrant area with a skilled workforce and the required infrastructure to promote inward investment and the creation of more local jobs. Limerick City & County Council is committed to facilitating the creation of employment within the environs. This plan provides the appropriate framework for development through the provision of adequately zoned lands and policies, which support economic and appropriate retail development.

The objectives for each of the land-use zones provide agility to respond to the demands from those looking to invest in the Southern Environs. This plan sets the right conditions to secure inward investment and interest in the Southern Environs as a business location and firmly embeds an economic development agenda into all other goals making their successful delivery more achievable.

PART A: ENTERPRISE

6.1 ENTERPRISE CONTEXT

The National Planning Framework (NPF) sets out a vision for the development of a strong economy supported by enterprise, innovation and skills as a National Strategic Outcome (NSO5), which will depend on creating places that foster enterprise and innovation and attract investment and talent. The NPF states that this can be achieved by building regional economic drivers. Together with the Regional Spatial and Economic Strategy (RSES) for the Southern Region, the NPF places a strong emphasis on compact, smart, sustainable and inclusive economic growth.

fully functioning and progressive Metropolitan Area to prosper. The RSES therefore recognises the need to collaborate, rather than compete, for the greater benefit of the Metropolitan Area on the issue of employment creation.

The Metropolitan Area Strategic Plan (MASP) for Limerick Shannon sets out a 12-year strategic planning and investment framework for the Metropolitan Area. The Metropolitan Area needs a dynamic, diverse and high profile City Centre to function, and the City Centre needs a

The RSES seeks to re-intensify employment in Limerick City and Shannon and activate strategic employment locations to complement existing employment hubs in the City Centre and near third level institutions. The RSES identifies the University Hospital Limerick and Raheen Business Park as Strategic Employment Locations in the Southern Environs. These locations have the potential to support sustainable development of brownfield and greenfield sites for large scale employment uses in tandem with associated infrastructure requirements.

The Limerick County Development Plan 2010-2016 (as extended) sets out the strategic context for economic development of the County.

6.2 ECONOMIC PROFILE

The economic profile of the Southern Environs reflects its strategic location on the National Motorway and Regional Road network, its proximity to Shannon International Airport, Limerick City and the synergies with the third level education providers at University of Limerick, Limerick Institute of Technology and Mary Immaculate College.

The employment generating land uses of the Southern Environs are concentrated in Ballycummin. In this regard, according to CSO POWSCAR workplace data, the Electoral Division of Ballycummin had a daytime working population of 11,527 persons in 2016. This renders the Southern Environs the second most important area for employment outside of Limerick City Centre (12,427 working persons) and ahead of Castletroy (Ballysimon and Ballyvarra) (10,145 working persons).

The population of the Southern Environs aged 15 or over at work was 59% in the 2016 Census. The workforce in the Southern Environs comprised 31% managerial and technical staff and 18% non-manual workers. The most popular means of travel to work, school or college was by car, which accounted for 71.3% of journeys. The

6.3 ECONOMIC STRATEGY

As part of the Limerick Shannon Metropolitan Area, the Southern Environs must ensure that the conditions for economic resilience are embraced and developed, through creating a vibrant and diversified enterprise base with strong, healthy and connected clusters.

The LAP supports opportunities for employment creation, business and technology development

Subsequently, the Limerick Local Economic and Community Plan was adopted in 2016 and should be read in tandem with this chapter.

Census also indicated that 49.5% of commuters left home for work, school or college between 8am and 9am, indicating a relatively short to medium commute distance. In addition, the majority (73.3%) of journey times were less than half an hour.



Figure 11: IDA Raheen Business Park

Existing employment is concentrated in three areas of the Environs including Raheen Business Park (5,060 persons), University Hospital Limerick (2,860 persons) and Dooradoyle District Centre (1,369 persons).

in the Southern Environs to facilitate economic growth of the Metropolitan Area, in accordance with the Regional Spatial and Economic Strategy and the Limerick County Development Plan 2010 – 2016 (as extended).

6.3.1 Supporting Employment Growth

The MASP indicates that in accordance with a projected population of 30,134 persons in 2026 and 45,132 persons in 2031, additional jobs would be in the order of at least 19,000 to 2026 and 28,200 to 2031 in the Metropolitan Area.

In accordance with the RSES, the Metropolitan Area has capacity for economic expansion of scale at Strategic Employment Locations outside of the City Centre. In the Southern Environs, Raheen Business Park and the University Hospital Limerick have been identified as Strategic Employment Locations. These strategic locations offer the capacity to cater for investment that requires greenfield or brownfield sites, access to an international airport and third level graduates.

University Hospital Limerick (UHL) is the Model 4 hospital for the region providing major surgery, cancer treatment and care and emergency services, as well as a range of other medical, diagnostic and therapy services. The hospital is

the hub for three smaller hospitals in the region located at Ennis, Nenagh and St. John's. UHL has recently opened a new Accident & Emergency Department and a new 60-bed hospital unit is under construction.

IDA Ireland's Raheen Business Park has an additional capacity of 31.5ha. of development land. The Business Park serves a number of large multinational companies including Regeneron Pharmaceuticals, Analog Devices, Dell, Banta and Stryker Corp. The LAP supports the on-going operations of this business park and any further appropriate levels of development during the lifetime of the LAP.

The Local Authority will work with local and national agencies and Departments to facilitate continued investment and ensure the role of UHL and Raheen Business Park as Strategic Employment Locations in the Metropolitan Area is fulfilled.

6.3.2 Availability of Zoned Land

The zoning and servicing of land for high tech/ manufacturing, enterprise, employment and industrial uses, in the Southern Environs, in the immediate vicinity of national strategic transport infrastructure, represents a unique opportunity to develop clusters of complementary enterprises and more generally a larger, more resilient and diverse economic basis for the Metropolitan Area, county and region.

Given the high demand for employment type lands in the Metropolitan Area additional land

has been included for Enterprise and Employment uses. In this regard, an area of 204ha. of "High Tech/ Manufacturing", 110ha. of "Enterprise and Employment" and 340ha. of "Industrial" zoned land is available for development in the Southern Environs.

Economic Development: Strategic Policy:

To promote, facilitate and enable economic development and employment generating activities in Strategic Employment Locations and other appropriately zoned locations in a sustainable manner.

Objectives: It is an Objective of the Council to:

- ED O1:** Facilitate the future sustainable development of the Southern Environs to optimise the benefits of its strategic location in the Limerick Shannon Metropolitan Area, in accordance with the National Planning Framework and the Regional Spatial and Economic Strategy.
- ED O2:** Facilitate and support University Hospital Limerick and Raheen Business Park as Strategic Employment Locations, in accordance with the Limerick Shannon Metropolitan Area Strategic Plan.
- ED O3:** Promote a diverse range of employment opportunities by facilitating appropriate development, improvement and expansion of enterprise and industry on appropriately zoned lands, subject to compliance with all relevant Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) and any replacement thereof.
- ED O4:** Ensure development on the “High Tech/ Manufacturing” zoned lands to the west of Raheen Business Park shall be subject to the following:
- a) Cognisance to the residential amenities of the properties to the north and western side of the site and the adjacent agricultural land;
 - b) Access to the “High Tech/ Manufacturing” zoned land to the west of the R510 will be limited to the existing roundabout to the east of the site;
 - c) Applications for development in the low-lying area in the southern section of this zone shall have regard to the attenuation infrastructure and shall include a site specific flood risk assessment, including proposals to mitigate and control the level of run off and attenuation.
- ED O5:** Encourage the redevelopment of vacant commercial units, brownfield, derelict, and infill sites for enterprise and industry creation.
- ED O6:** Work with IDA Ireland, Enterprise Ireland, the Local Enterprise Office and other agencies, organisations and individuals in promoting enterprise and industry in the Southern Environs.
- ED O7:** Support and promote start-up enterprises, small to medium scale industries and services in co-operation with the Local Enterprise Office.
- ED O8:** Facilitate and promote the provision of incubator units for start-up businesses and Small and Medium Enterprises (SMEs).
- ED O9:** Facilitate the provision and expansion of all services and infrastructure, which would contribute positively to the attraction of the Environs to economic development.
- ED O10:** 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. This objective can facilitate the achievement of climate targets by reducing the need to travel.

ED O11: Support the continued operation and reasonable expansion of non-conforming uses, subject to maintenance and protection of existing environmental, visual and residential amenity.

ED O12: Ensure large-scale employment development proposals incorporate opportunities for the active and passive recreation of employees.

PART B: RETAIL

6.4 RETAIL CONTEXT

An objective of the Limerick Shannon MASP is to promote the Metropolitan Area as a cohesive area, with the City Centre as the primary location at the heart of the area and Region. The City Centre is to be the primary commercial area, supporting a range of retail, tourism, social and

cultural activities. Limerick City Centre is to be repositioned at the top of the retail hierarchy through improving the range and quality of shopping on offer and creating an enhanced customer experience of visiting the City Centre.

6.5 RETAIL STRATEGY

The Joint Retail Strategy for the Mid-West Region 2010 - 2016, indicated that too much trade was being lost to suburban locations and sought to re-establish the City Centre at the top of the regional hierarchy, as the preferred location for new retail development. It is now an objective of the MASP to support Limerick City Centre in maintaining its dominant retail function in the Mid-West hierarchy.

hierarchy and outline the location, quantity and type of retail required in support of the settlement hierarchy. The Strategy will identify any requirements for additional retail floor space in the Metropolitan Area, based on population projections and income and having regard to the degree of vacancy in existing retail areas.

The Regional Spatial and Economic Strategy for the Southern Region requires the preparation of a Joint Retail strategy for the Metropolitan Area, which will form the basis for retail planning in the city and environs. The RSES supports and promotes the continued expansion and enhancement of retail development within the City Centre. The Strategy will support the retail

In accordance with the Regional Spatial and Economic Strategy, the proposed Limerick Development Plan will aim to consolidate Limerick City Centre as the primary retail destination in the region and to be the prime focus for future retail development, in particular, higher order comparison shopping. In this regard, the retail sector in the Southern Environs will have a role in supporting the primacy of the City Centre.

6.6 SUPPORTING THE CITY CENTRE

The County Development Plan 2010 – 2016 (as extended) indicates that the Crescent Shopping Centre in Dooradoyle is the only Tier 2, Level 1

Retail Centre in the Metropolitan Area. The main components of the centre are the Crescent Shopping Centre, Limerick County Council

buildings and a public library. The Crescent Shopping Centre functions as a major retail destination for the Mid-West region.

There are also a number of Local Centres in the Southern Environs including at Mungret Village, Courtfield Shopping Centre at Gouldavoher, Racefield Centre at Father Russell Road, Dooradoyle Road Neighbourhood Centre at Sluggary and Ballycummin Neighbourhood Centre.

The success of the shopping centres in the Environs is in contrast to the stagnation and decline of the retail sector in the City Centre, where a large number of vacant units are evident in the core retail area. The migration of retail footfall from the City Centre to the suburbs is

6.7 DISTRICT CENTRE

The Tier 2, Level 1 Crescent Shopping Centre in Dooradoyle functions as a significant District Centre acting as a major retail destination in the Limerick Metropolitan area and Mid-West region. The Centre has ease of access to the national road network, attracting customers from a wide catchment area to a large combination of comparison and convenience shopping and leisure facilities.



Figure 12: The Crescent Shopping Centre

In accordance with the objectives of the National Planning Framework and Regional Spatial and

exacerbated by the increasing trend towards on-line retailing.

All new retail development in the Southern Environs will be considered premature pending the completion of the Limerick Shannon Metropolitan Retail Strategy, in order to protect the vitality of the City Centre in accordance with the objectives of the NPF and RSES.

Pending the completion of the Limerick Shannon Metropolitan Retail Strategy, the LAP anticipates that additional retail development in the Southern Environs will be achieved through the redevelopment of vacant commercial units in the first instance.

Economic Strategy, the new Limerick Shannon Metropolitan Retail Strategy will respond to the effects of suburban retail development by re-establishing the importance of Limerick City Centre at the top of the regional retail hierarchy. In this regard, Limerick City Centre is the preferred location for new retail development in the Limerick Shannon Metropolitan Area and must recapture trade lost to the Crescent Shopping Centre and other out of centre shopping facilities. Pending the completion of the new Limerick Shannon Metropolitan Retail Strategy, no additional retail floor space will be permitted at the Crescent. However, there is significant scope to provide for an improved civic amenity at the Crescent Shopping Centre including:

- Provision of a civic square within the shopping centre site appropriately located to take advantage of existing and proposed public transport links and community uses;
- Pedestrian connections between the various uses within the Shopping Centre and the wider Dooradoyle area. The Draft Limerick

Shannon Metropolitan Area Transport Strategy includes an objective for the enhancement of the pedestrian and cycle network on St. Nessian's Road connecting UHL, Dooradoyle, Ballinacurra and the Crescent Shopping Centre;

- Public transport connections via the proposed BusConnects networks in accordance with the Draft Limerick Shannon Metropolitan Area Transport Strategy;

- Potential for traffic calming and pedestrian priority on the access roads to the shopping centre;
- Hard and soft landscaping and street furniture.

6.8 LOCAL CENTRES

There are a number of Local Centres (Neighbourhood Centres) throughout the Southern Environs providing top-up and day-to-day shopping and service functions, which play an important role in serving the needs of those without access to a car, particularly the elderly. However, such centres should not extend beyond their local function or undermine the role of the City Centre.

The Local Authority will support and facilitate expansion of existing Local Centres where significant additional population growth is planned, or where a demonstrable gap in existing provision is identified.

The opportunity exists for centres to gradually diversify, with a more balanced mix of residential uses and employment spaces alongside the retail and leisure facilities. Such diversification will respect the priority of the City Centre in the

Retail Hierarchy while allowing improved integration with the surrounding land uses.

Given the projected population growth in Mungret and the brownfield and underutilised nature of the landmark Mungret College buildings, there is potential for the provision of a Local Centre development comprising a mix of residential, office, education, cultural, arts, civic, community and retail development. In addition, given the availability of undeveloped lands at the existing Local Centre on the Dooradoyle Road, there is also potential for the consolidation of development at this location, comprising residential, office and retail development.

All retail development will be subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.

Retail: Strategic Policy:

To support the sustainable long-term growth of the Southern Environs, in accordance with the Core and Retail Strategies of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof, including the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.

Objectives: It is an Objective of the Council to:

- R O1:** Support and enhance the role of Limerick City Centre as the primary retail centre in the Limerick Shannon Metropolitan Area and Mid-West Region in accordance with the objectives of the National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region.
- R O2:** Ensure proposals which would undermine the vitality and viability of Limerick City Centre will not be permitted. The sequential approach to retail development set out in the “*Retail Planning – Guidelines for Planning Authorities, 2012*” will be strictly enforced, in the interests of supporting the City Centre at the top of the retail hierarchy. Any retail development in the District or Local Centres or Retail Warehousing zone shall comply with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy when completed.
- R O3:** Protect and enhance the mix of services and facilities in existing District and Local Centres, which provide for the day-to-day needs of local communities, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.
- R O4:**
- a) Ensure the role of Local Centres is not allowed to expand to encompass a materially broader range of comparison goods than currently exists in such areas, as this could lead to further competition with the City Centre;
 - b) In order to enable the sustainable development of the substantial greenfield area of Mungret, support and facilitate residential, office, education, tourism, cultural, arts, civic, community uses and retail development at the Mungret College Local Centre. Retail development intended to serve the needs of new/existing neighbourhoods and residential areas will be considered, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed;
 - c) The significant opportunities associated with the undeveloped nature of a large area of the Dooradoyle Road Local Centre is recognised. The site is therefore identified as having capacity to support and facilitate office and residential development. Retail development intended to serve the needs of new/ existing neighbourhoods and residential areas will be considered, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.
- R O5:** Prohibit the proliferation of uses in the centres which would detract from the amenities of the area or the vitality and viability of the area such as fast food outlets, amusement arcades, off-licences, bookmakers and other non-retail uses.
- R O6:** 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, discourage the use of external roller shutters, internally illuminated signs or inappropriate projecting signs.

7 HOUSING



This Draft LAP aims to balance the provision of good quality housing that meets the needs of a diverse population, in a way that makes the Southern Environs an attractive and inviting place to live now and in the future. To meet the housing needs of the Southern Environs is an important element of this plan. Adequate housing provision is essential for the creation of an environment to attract business and

enterprise to the Metropolitan Area and this plan provides the quantum of zoned lands to meet this demand. The quantum of zoned lands is in compliance with the population targets set out under the the National Planning Framework, the Implementation Roadmap for the NPF and the Regional Spatial and Economic Strategy as outlined in Chapter 5 of this Draft LAP.

7.1 RESIDENTIAL PROFILE

The Census of 2016 recorded a housing stock of 7,394 no. dwellings in the Southern Environs, with the majority of households (52%) accommodated in houses built since 1991 (3,843). A significant majority of households (87%) reside in houses/ bungalows, which are by

far the most common type of dwelling in the Southern Environs. With respect to tenure, 63.35% of dwellings were owner occupied within the settlement. The majority of these households comprise couples with children.

7.2 RESIDENTIAL DEVELOPMENT

The Limerick Shannon MASP supports a sequential approach with a primary focus on the consolidation of development, within or contiguous to the existing built up and zoned area of Limerick City and Suburbs. This LAP places a strong emphasis on providing high quality residential developments, through intensification and consolidation of the existing built envelope of the Environs, which presents significant housing development opportunities, through redevelopment of brownfield, infill and vacant sites.

Masterplan for 42ha. of residential land at Mungret Park, including the former Mungret College and associated buildings. These strategic residential lands have the potential to yield approximately 1,950 no. dwelling units. Further details in relation to this Masterplan are set out under Chapter 8 of this LAP.

The MASP recognises the potential for sustainable residential development in Mungret. In this regard, Limerick 2030 DAC has prepared a

As set out under the Core Strategy of this LAP a number of sites have been identified, which are served by infrastructure and located in close proximity to public transport and are suitable for higher density developments.

7.3 DENSITY AND HOUSING TYPE

To cater for the projected population growth, a mix of dwelling types and sizes will be required to meet the housing needs of all members of society. This plan emphasises a requirement for universal design to cater for specific housing requirements of older persons, persons with disabilities and the members of the travelling community.

Government policy outlined in *Sustainable Residential Development in Urban Areas: Guidelines for Planning Authorities* (DECHG, 2009) and *Urban Development and Building Heights: Guidelines for Planning Authorities* (DHP&LG, 2018) state that land is a scarce resource and should be managed efficiently. These guidelines set out a range of appropriate densities for different site locations having regard to the level of transport available.

As a general principle, higher densities and mixed-use developments must be targeted in areas where opportunities exist for sustainable transport provision, and in a manner that better aligns the provision of transport with demand. Public Transport Orientated Development is development which is consolidated around existing or planned along high frequency bus corridors, at a magnitude and density that provides a critical mass to support the viability of high capacity public transport.

On brownfield, infill and greenfield sites within 800m of the University Hospital and Raheen Business Park, and within 500m of a bus stop, the Planning Authority shall require densities in excess of 45 dwelling units per hectare. Where a proposed site exceeds the distance requirements above, a minimum density of 35 units per hectare shall be applied.

In order to ensure the delivery of a high quality housing mix in a sustainable manner, residential development will be required to:

- Ensure compliance with the Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) or any replacement thereof;
- Ensure compliance with the Specific Planning Policy Requirements of the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018), the Urban Development and Building Heights, Guidelines for Planning Authorities (2018) and any other relevant Section 28 Planning Guidelines;
- Consider the nature of the existing housing stock and social mix in the area and the need to create socially inclusive communities;
- Be delivered where homes and the appropriate supporting services including schools, childcare and other community services can be delivered more efficiently and effectively at least cost to the State in the long-run;
- Ensure all layouts prioritise walking and cycling, are fully permeable for pedestrians and cyclists to access a range of local services and enable the efficient provision of public transport services, helping to tackle climate change;
- Consolidate existing development and increase existing residential density, through a range of measures including reductions in vacancy, re-use of existing buildings, infill development schemes, area or site-based regeneration and increased building heights;
- Provide high density and mixed use development in central and easily

accessible locations particularly along public transport corridors and at station nodal points;

- Provide a high-quality, accessible and safe public realm;
- Have an excellent standard of high quality design, layout and finish;
- Provide an appropriate mix of housing types and tenures catering for all members of society through all stages of the life cycle;
- Compliment the character of the Environs.



Figure 13: New Housing

7.4 OLDER PERSONS' HOUSING

The need for older persons' dwellings, supported housing, Nursing Homes and residential care homes in the Environs is anticipated to grow into the future, by reason of a general aging of the population and the need to cater for those wishing to downsize and reside in proximity to services and amenities. These facilities should be

The Southern Environs is considered suitable for apartment development subject to local determination, having regard to the proximity and accessibility provisions of the *Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities* (March 2018). The provision of apartments allows for greater diversity and flexibility in a housing scheme and an increase in overall density. Accordingly, apartments may be considered as part of a mix of housing types in a given housing development at any appropriate suburban location.

In accordance with the specific planning policy of the *Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities* (March 2018), the quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the location broadly based on proximity and accessibility criteria as set out in the Guidelines.

integrated wherever possible into the established or planned residential areas, based on the principles of universal design and an age friendly public realm with seating, lighting, landscaping etc. Such facilities should be located within walking distance of shopping and other services, public transport and open space.

7.5 REGENERATION

In accordance with the Limerick Regeneration Framework Implementation Plan 593 no. new

dwelling units were to be delivered and 1,504 no. dwelling units upgraded across the areas of

Moyross, Southill, Ballinacurra Weston and St. Mary's Park.

A portion of the Southill Regeneration Area comes within the boundary of the Southern Environs Local Area Plan. Variation 6A of the Limerick City Development Plan 2010 – 2016 (as extended) includes comprehensive text and objectives in relation to the Regeneration Areas and should be read in tandem with this LAP. Any development proposed in the Regeneration Area of Southill shall be in accordance with the

policies and objectives for Regeneration as set out under the Limerick City Development Plan 2010 – 2016 (as extended), or any replacement thereof.

The ongoing programme of social and economic initiatives are scheduled to be completed by 2023. However, there is a need for a long-term commitment to support continued social and economic regeneration of the most deprived areas of Limerick in the new Local Area Plan. An objective to this effect has been included below.

7.6 NOISE

The design of residential schemes in close proximity to heavily trafficked road networks should have regard to the noise levels from such roadways. Developers should engage an acoustic

specialist in the early design process for new residential developments in order to mitigate any negative impacts concerning noise.

Housing: Strategic Policy:

To deliver new residential development in accordance with the Core Strategy allocation, to ensure that every household has access to a choice of good quality housing and that all new residential development includes a sustainable mix of universally designed housing types and tenures catering for all members of society.

Objectives: It is an objective of the Council to:

- H 01:** Ensure the sequential development of serviced residential lands identified to cater for the envisaged population growth, in accordance with the Core Strategy of the Limerick County Development Plan 2010 – 2016 (as amended) and any replacement thereof.
- H 02:** Promote and facilitate the development of the strategic residential lands at Mungret in a planned and sustainable manner in accordance with the Mungret Masterplan.
- H 03:** Encourage and ensure that at least 40% of all new housing development is delivered within existing built up areas on infill, brownfield and backland sites, subject to preservation of existing residential amenity, the provision of a high quality design respecting the established character, density and layout, and compliance with all traffic safety, quantitative, qualitative and Development Management standards of the Limerick County Development Plan 2010 – 2016 (as amended).
- H 04:** a) Seek a higher density of a minimum net density of 45 dwelling units per hectare at appropriate intermediate urban locations, particularly on lands within 800m of University Hospital Limerick

and Raheen Business Park, and within 500m of existing or proposed quality public transport route stops and public transport nodes;

b) Require a minimum net density of 35 dwelling units per hectare on all other lands.

H O5: Require the creation of sustainable communities and high quality universally designed residential area, with a mix of unit types, sizes, tenures, heights, amenities and facilities to create and maintain a sense of place and local distinctiveness. All new developments shall meet the standards, guidance and specific planning policy requirements of:

- The development management standards of the Limerick County Development Plan 2010 -2016 (as extended) and any replacement thereof;
- Sustainable Residential Development In Urban Areas, Guidelines for Planning Authorities, DEHG (2009);
- Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018);
- Urban Development and Building Heights, Guidelines for Planning Authorities (2018);
- The Design Manual for Urban Roads and Streets, DTTS and DECLG (2013);
- Technical Guidance Document L – Conservation of Fuel and Energy – Dwellings;
- Building for Everyone: A Universal Design Approach.

H O6: 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.

H O7: Ensure an appropriate and sustainable mix of lifetime adaptable dwelling types, sizes, heights and tenures to cater for all members of society, including homeless persons, the elderly, disabled and members of the travelling community.

H O8: Facilitate the provision of independent and or assisted living for older people and people with disabilities, by supporting the provision of purpose built accommodation including Nursing Homes in accordance with the “National Standards for Residential Care Settings for Older People in Ireland”, or the adaption of existing premises, particularly vacant units.

H O9: Ensure new residential developments comply with the open space hierarchy set out under Table 3: Open Space Hierarchy below. Every dwelling unit shall be positioned within 100m of a pocket park/ play lot, small park, or local park. Open space shall be provided proportional to the scale of the number of residential units proposed, with consideration of access to existing open space and the principles of permeability, accessibility, linkages, safety and place making.

H O10: Ensure compliance with the provisions of Part V of the Act (as amended) and to integrate such housing so as to prevent social segregation within residential developments. Social housing shall be provided on all lands zoned for residential use in accordance with the “Joint Housing Strategy for the Administrative Areas of Limerick City & County and Clare County Council” and any replacement thereof.

H O11: Utilise the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy) to

facilitate the appropriate development of vacant sites (residential zoned lands) that are in need of renewal or regeneration.

- H O12:** Support any regeneration initiatives proposed and or implemented in the designated regeneration areas.
- H O13:** Integrate Limerick City Regeneration Areas and their communities into the mainstream social economic & community life of the city through a long-term commitment to support social and economic regeneration of the most deprived areas.
- H O14:** Identify and provide suitable sites, accommodation and facilities for the housing and re-settlement of travelling families in accordance with the provisions of the Traveller Accommodation Programme 2019 and any replacement thereof.
- H O15:** Permit housing on agriculturally zoned land for the permanent habitation of farmers and the sons and/or daughters of farmers only and subject to the terms and conditions of the rural housing policy as set out in the Limerick County Development Plan 2010 – 2016 (as extended).
- H O16:** Require residential developments in close proximity to heavily trafficked roads to be designed and constructed to minimize noise disturbance, follow a good acoustic design process and clearly demonstrate that significant adverse noise impacts will be avoided, in accordance with “Professional Practice Guidance on Planning and Noise” (2017) and predicted noise levels shall be in accordance with WHO recommendations.
- H O17:** Ensure proposed developments have cognizance to climate change mitigation as part of the design process, including use of sustainable building materials, micro-renewables or other design elements to reduce the carbon footprint of the proposed development.

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	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 3: Open Space Hierarchy

8 DEVELOPMENT OPPORTUNITIES



New developments provide opportunities to create attractive places in which to live, work and spend leisure time. High quality urban design and an attractive public realm are essential for the creation of character and a sense of place. Safe, accessible and integrated neighbourhoods offer the opportunity to create stronger nodes that provide a better experience and attract a diversity of employment, as well as other complementary and recreational uses.

8.1 URBAN DESIGN

The built and natural heritage of the Southern Environs are valuable assets, which provide the context for good urban design. A high quality urban design can facilitate the creation of places that are successful and sustainable. The design of a place can contribute to energy use, the efficiency of transport systems and the success of economic development. The objectives relating to design and the public realm throughout this LAP aim to raise the quality of design and the creation of successful places.

In creating a high quality urban environment, the spaces between and around buildings, such as the streets, squares and public realm require as much consideration as the design of the buildings themselves. In this regard, the arrangement of streets and spaces, the position and style of street furniture, the mass, scale, height and design of buildings and the use of materials and colours in the finishes of buildings, roads and footpaths, all combine to achieve the quality of the urban design. An appropriate mix of complementary land uses also contributes to the quality of this urban design. A well-designed urban area has a clear character and distinct

A number of sites for development have been identified, which could contribute to the planned growth, renewal, enhancement and regeneration of the particular area in which they are located. These sites have been identified for various reasons such as opportunities for infill development, underutilization of brownfield land and greenfield lands that would be readily adaptable for new uses.

sense of place, facilitating the creation of communities and pride, in a place that is both desirable and safe. New developments through their design and contribution to place making, should enhance the overall character and quality of the environment in the Southern Environs.

The following are an example of the documents, which can guide high quality urban design in proposed developments in the Southern Environs:

- Sustainable Residential Development In Urban Areas, Guidelines for Planning Authorities, DEHG (2009);
- Urban Design Manual, A Best Practice Guide (2009);
- Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018);
- Urban Development and Building Heights, Guidelines for Planning Authorities (2018);

- The Design Manual for Urban Roads and Streets, DTTS and DECLG (2013);
- Building for Everyone: A Universal Design Approach.



Figure 14: Urban Design 12 Criteria - Urban Design Manual, A Best Practice Guide (2009)

The success of the design of a new residential area is based on the 12 Criteria set out under the Urban Design Manual as indicated in Figure 14 above.

In accordance with the Limerick County Development Plan 2010 – 2016 (as extended), a Design Statement is required to be submitted with a planning application for 5 or more dwellings, or for commercial/ industrial

developments over 1,000 sq. metres. A Design Statement is a short document, which enables the applicant to explain why a particular design solution is considered the most suitable for a particular site. The Design Statement should outline a justification for the development as proposed and any alternative design options considered. The Design Statement should reference up to date guidelines, detail how the site and context have been appraised, and

demonstrate how the design meets the objectives to achieve a high quality urban design and public realm as set out throughout this plan.

The accompanying Sustainability Statement and Social Infrastructure Assessment should also demonstrate the design considerations having regard to the transport, energy, ecology and social quality needs of the area.

8.2 KEY BUILDINGS

Gateway and landmark buildings can emphasise the urban identity of a place. These buildings provide a signal of a significant place, either in terms of movement or use. Having the potential to act as important landmarks, these buildings should address the significance of the site.

Suitable locations for these buildings include important street corners or junctions, corner sites, the end of vistas and gateways, local centres and the edges of public squares or open space. High quality urban design, which makes a statement in terms of distinctiveness and creation of a sense of place, will be required at

such locations, in particular on the approaches to Limerick City. Gateway and landmark buildings will be expected to provide visual interest and create a stimulating streetscape. In this regard, the Local Authority will encourage the highest quality innovative and modern design, which respects the site context, contributes to a sense of distinctiveness and “sense of place”, reflects arrival at the city and enforces a positive image of both the Southern Environs and the greater metropolitan area.

Development Opportunities: Strategy Policy:

To ensure that new development comprises the highest of qualitative and design standards, and promotes the creation of safe, desirable and characteristic places in which to live, work and do business.

Objectives: It is an objective of the Council to:

- DO 1:** Ensure the highest quality of public realm and urban design principles are applied to all new developments.
- DO 2:** Ensure development proposals have given proper consideration to the urban design criteria of site context, connectivity, inclusivity, variety, efficiency, distinctiveness, layout, public realm, adaptability, privacy and amenity, parking and detailed design.
- DO 3:** Ensure the construction of the highest quality and innovative designed landmark buildings in appropriate locations, including on the approaches to Limerick City, important street corners or junctions, corner sites, the end of vistas and gateways, local centres and the edges of public squares or open space.

8.3 DEVELOPMENT OPPORTUNITIES

The following section outlines the vision for the sustainable residential development of Mungret as set out in the Mungret Masterplan.

Developers should prepare Masterplans as part of the planning application process for large-scale sites, to demonstrate how their proposals will achieve high quality urban design and place making objectives.

8.3.1 Mungret

The Limerick Shannon MASP recognises the potential for sustainable residential development in Mungret. Limerick 2030 DAC commissioned the preparation of a Masterplan for residential zoned land comprising 59.6ha. including 27.1ha. of lands owned by Limerick City and County Council.



Figure 15: Mungret College Buildings

The Masterplan will deliver much needed housing for Limerick, however the vision is about much more than housing. The plan proposes to create a vibrant neighbourhood that accommodates and facilitates a variety of uses and that nurtures a strong sense of community. A place that is safe, with people friendly streets and spaces and that relates well both to its surroundings and with Mungret Village and the adjacent neighbourhoods at Dooradoyle and Raheen.

The vision for Mungret is expressed through ten masterplan principles:

- 1) *To deliver an exemplar new neighbourhood with a clear identity and character that responds to the natural and historic environment and provides a great place to live.*
- 2) *To deliver a green neighbourhood that encourages healthy lifestyles, offering easy and safe access to amenities and opportunity for play, recreation and learning.*
- 3) *To create a strong and legible structure that leads people to a mixed-use centre at Mungret College, integrates the site with the wider area and strengthens existing centres.*
- 4) *To grow the existing community hub at Mungret College so that it forms a heart for the new neighbourhood and is accessible to all residents.*
- 5) *To protect and celebrate the site's historic assets including the College, Mungret Abbey and medieval ringforts.*
- 6) *To embrace the wider landscape and create a green framework across the site that retains the site's green assets and enhances biodiversity.*
- 7) *To create a walkable and cycle friendly neighbourhood that provides easy access to schools and amenities through a safe and attractive network of streets and paths.*

- 8) *To create a legible network of streets defined by new buildings and laid out as part of a clear hierarchy.*
- 9) *To incorporate bus routes through the heart of the neighbourhood reducing the need to travel by car.*
- 10) *To provide a mix of high quality homes that give the opportunity to up or downsize within the neighbourhood.*

Mungret College and the assemblage of buildings around it will form the centre of the neighbourhood, where a mix of uses will be promoted to bring renewed life and vibrancy to the College.

Funding has been secured through the Local Infrastructure Housing Activation Fund (LIHAF) to deliver a link street, which will unlock substantial lands within public and private ownership and allow construction of residential development supported by community and employment uses. This Opportunity Area has the potential to deliver approximately 1,950 dwelling units. The first phase will deliver approximately 250 dwelling units. All dwellings will be located within 100m of a pocket park and 400m of a small park.

Two new primary school campuses (Educate Together & Gaelscoil An Raithin) have been constructed on the lands, while a third campus for a new secondary school is seeking planning permission.

In addition, a Neighbourhood Park of 11ha. including a fully equipped inclusive playground and walking track has already been completed. The pedestrian connection between these facilities and Mungret Village has undergone public realm improvements along the R859 and in Mungret Village. Additional cycle facilities have also been introduced on the R859. The Masterplan will accommodate bus services on the link streets, which will link into existing bus routes in the wider area. These measures, in addition to delivering a more connected network of walking routes that can enable people to walk to and from destinations within the neighbourhood and wider area are essential to create a shift away from use of the car and facilitate a more sustainable form of development.

The Masterplan has cognisance to the environmental and historical assets in the area including Loughmore Common proposed Natural Heritage Area and the Mungret Monastic Complex.

Mungret Opportunity Site: Strategic Policy:

To deliver the key future growth enablers for Limerick identified in the National Planning Framework, including progressing the sustainable development of Mungret for housing and the development of supporting public transport and infrastructure.

Objectives: It is an objective of the Council to:

MM 01: Promote and facilitate the development of the Strategic Residential Area of Mungret in a planned and sustainable manner in accordance with the Mungret Masterplan and applicable objectives throughout this LAP.

8.3.2 Other Opportunity Sites

Opportunity sites can be presented for appraisal. Such proposals should have cognizance to the key strategic objectives of Limerick City and County Council as outlined in this Local Area Plan. An emphasis on compliance with the principles of urban design and public realm should be demonstrated in any proposal.

Some of the sites may be owned by different parties and would require an element of site assembly for a coherent development strategy to progress. This approach to re-development will be encouraged over a piecemeal approach.

9 COMMUNITY INFRASTRUCTURE



Community infrastructure of a social, sporting, educational, and amenity value are crucial to provide opportunities for participation, for health and to attract inward investment. This plan provides for the expansion of existing community infrastructure and development of new services. This plan also puts an emphasis on promoting and developing a stronger cultural dimension in

the Southern Environs. Culture plays a key role in ensuring that communities are mixed, sustainable and dynamic. Developing and promoting culture in the Southern Environs will maximise the physical, social and economic benefits of the cultural offer. Promoting cultural development shapes the identity of the area and helps set it apart in terms of its distinctiveness.

9.1 **CONTEXT**

The Limerick Shannon MASP supports ongoing collaboration with regional stakeholders to ensure that social infrastructure such as education, health and community facilities are provided, and opportunities for social as well as physical regeneration are realised.

conjunction with private, public and voluntary organisations.

The creation of sustainable and inclusive communities requires the provision of, and access to education, childcare, health and support services, recreation and leisure facilities and a good quality built environment to create a sense of place. The Local Authority is committed to the provision, upgrade and expansion of community facilities and social infrastructure in

Limerick City and County Council established the Local Community Development Committee (LCDC) in 2014. The LCDC performs a role in developing, coordinating and implementing a coherent and integrated approach to local and community development, through the Local Economic and Community Plan 2016 – 2021 (LECP). The LECP is central to promoting economic and local community development in the county over a six-year period and should be read in tandem with this chapter.

9.2 **EDUCATION & CHILDCARE**

The provision of good quality childcare and educational facilities is important to support the development of sustainable communities and facilitate economic development in the Southern Environs.

sessional services, preschool, crèche, Montessori and after school facilities. The Limerick Childcare Committee have indicated that there are sufficient sessional preschool services to meet demand in Ballycummin. However, additional childcare/afterschool facilities are required in Raheen, as well as full day-care services in Dooradoyle and Mungret.

There are approximately sixteen childcare facilities dispersed in the Southern Environs, including a variety of full day care facilities,

With respect to education, there are six primary schools and two secondary schools in the Southern Environs. Two of these primary schools are located on new campuses at Mungret College. Proposals are also underway for a new 1,000-pupil secondary school in Mungret. In addition, the Limerick and Clare Education and Training Board Administration Office is located in Dooradoyle.

The Council has sought to work with schools and the Department of Education and Skills to

identify and develop sites for new schools as necessary. In this regard, given the projected population growth to 2031, the plan includes the zoning of land for new schools and expansion of existing educational facilities where necessary in accordance with the requirements of the Department. The requirement for additional primary and secondary educational facilities will be monitored having regard to the development of residential land during the lifetime of the Draft LAP.

9.3 HEALTH

Limerick is a recognised World Health Organisation Healthy City affiliated with the National Healthy Cities and Counties Network. The initiative aims to improve health, wellbeing and quality of life by ensuring all sectors are aware of and collaborate to achieve a healthy society.

The University Hospital Limerick is located in the Southern Environs. This is the Model 4 hospital

for the region (See Section 6.3.1). There are a number of GPs, health centres, dentists, pharmacies and other health care related facilities dispersed throughout the Environs. There is some clustering of these services in Dooradoyle in proximity to the University Hospital.

9.4 LEISURE FACILITIES

The Southern Environs has a range of community facilities including a Branch Library at Dooradoyle.



Figure 16: Dooradoyle Library

There are a wide range of leisure activities in the plan area including approximately nine sports clubs with a range of playing pitches for GAA, rugby and soccer. A golf course is also located at Rathbane.

An 11ha. neighbourhood park with walking routes and a substantial inclusive playground is located at Mungret. An outdoor gym is also located at Mungret Park. A second playground is located at The Crescent Shopping Centre.

As identified in Census 2016, there are a number of different faiths found in the Southern Environs. These faiths are serviced by a number of churches and a Mosque in the plan area.

Limerick City and County Council are committed to the provision, upgrade and expansion of leisure facilities in the Southern Environs in

conjunction with private, public and voluntary organisations.

9.5 AGE FRIENDLY

Limerick County Council adopted the “*Age Friendly Limerick 2015-2020*” strategy in 2015. The strategy commits to improving key areas of infrastructure, services, information and an overall social response to older person’s issues.

The strategy aims to achieve measurable outcomes for older people that demonstrate improvement in their quality of life. The strategy should be read in tandem with this chapter.

Community Infrastructure: Strategic Policy:

To deliver, facilitate and support the provision of a broad range of high quality community, educational and healthcare facilities and infrastructure to meet the needs of the existing and projected population.

Objectives: It is an Objective of the Council to:

- CI 01:** Ensure provision of sufficient zoned lands to allow for expansion of existing and provision of new education, healthcare facilities and community infrastructure in appropriate and accessible locations.
- CI 02:** Ensure all developments in relation to community infrastructure, education, childcare, healthcare, open space and recreation facilities comply with the requirements and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof.
- CI 03:** Continue to work with schools and the Department of Education and Skills to ensure the timely delivery of new and extended primary and secondary schools in the Southern Environs.
- CI 04:** Ensure that there are sufficient educational places to meet the needs generated by proposed developments, by requiring the completion of a Sustainability Statement and Social Infrastructure Assessment for residential developments of 5 or more dwellings.
- CI 05:** Ensure that childcare, primary and secondary education facilities are provided in tandem with new residential areas, at accessible locations which maximise opportunities for walking, cycling and use of public transport.
- CI 06:** Facilitate the development of third-level outreach, vocational and lifelong learning facilities and digital capacity for distance learning including fourth level education, lifelong learning and up-skilling generally.
- CI 07:** Require all large residential developments to include provision of one childcare facility (equivalent to a minimum of 20 child places) for every 75 dwelling units, unless it can be

satisfactorily demonstrated that there is already adequate childcare provision in the area. The provision of the childcare facilities shall be in accordance with the “Childcare Facilities Guidelines for Planning Authorities” (2001) and the Development Management Standards of the County Development Plan 2010 – 2016 (as extended), or any replacement thereof.

- CI O8:** Support and facilitate the delivery of projects for improvement of the public realm.
- CI O9:** Seek delivery of the actions and stakeholder initiatives of the Local Economic Community Plan to strengthen community infrastructure and promote social inclusion for all members of society.
- CI O10:** 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 and children’s play facilities including playgrounds at appropriate locations to cater for all members of society.
- CI O11:** Promote optimum use of community and social infrastructure facilities and encourage the co-location of existing and future facilities including community centres, schools, childcare facilities, healthcare services, playgrounds and amenity spaces.
- CI O12:** Develop in partnership with other agencies 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.
- CI O13:** Facilitate the development of walkways in co-operation with local interested parties including the private, voluntary and public sector. Any proposed development adjacent to such walkways must incorporate connecting pathways into the designated walkway in their design. Developments shall be designed to ensure that properties overlook proposed walkways.
- CI O14:** Develop greenway/ blueway walking and cycling routes and examine the feasibility of a riverside walk between Tervoe Creek and Ballinacurra Creek, subject to adequate ecological assessment including Strategic Environmental Assessment and Appropriate Assessment (SEA / AA).
- CI O15:** Protect existing open space by not permitting development which encroaches on such open space, and protect semi-natural open space from inappropriate development.
- CI O16:** 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 the Open Space Hierarchy requirements set out under Table 3 of Chapter 7 Housing of this LAP.
- CI O17:** Facilitate and support the provision of allotments or community gardens at appropriate locations.
- CI O18:** Support and facilitate development and expansion of health service infrastructure by the Health Services Executive, statutory and voluntary agencies and private healthcare providers at appropriate locations, including at but not limited to, the University Hospital Limerick, District and Local Centres.

CI O19: Support the Healthy Limerick initiatives to deliver recreation, environmental improvements, active travel and health services infrastructure.

CI O20: Support and facilitate implementation of the *Age Friendly Limerick 2015-2020* strategy.

CI O21: Facilitate a good standard of health for the local population through ensuring high quality residential, recreational and working environments.

10 KEY INFRASTRUCTURE



The sustainable social and economic growth of the Southern Environs is dependent on the satisfactory provision of key infrastructure associated with the provision of services for new

residential and commercial developments. Key infrastructural provision will support the economic development of the Environs and needs to be undertaken in a plan led manner.

10.1 CONTEXT

The Southern Environ's infrastructure must keep pace with modern demands. In this regard, the provision of high quality infrastructure networks and environmental services is fundamental to

ensuring the long-term physical, environmental, social and economic development of the Environs.

10.2 WATER

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 & County Council will work jointly 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.

At present, there is capacity in the public water supply and wastewater treatment plant to cater for additional demand created during the lifetime of this LAP.

The Clareville Water Treatment Plant provides water supply to the Environs, which draws water

from the River Shannon. The Treatment Plant is operating below its design capacity of 87 million gallons per day.

The Limerick Main Drainage Scheme has the capacity to cater for future population growth. Foul effluent is treated at the Bunlicky wastewater treatment plant, which is operating below its design capacity of 130,000 population equivalents. The River Shannon acts as the receiving waters for this treated wastewater.

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 green infrastructure corridors and habitats in the Southern Environs, 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

10.3 UTILITIES

The Southern Environs is served by a high capacity electricity system and gas network. There are overhead 110kV transmission lines and a number of substations located in the Environs.

The RSES indicates that there is significant potential to use renewable energy to achieve climate change emission reduction targets. With costs actively driven down by innovation in solar, onshore and offshore wind in particular, the renewable industry is increasingly cost competitive. Low carbon technologies present

10.4 SMART TECH

As indicated in the Census 2016 data, 71% of households have broadband internet services in the Southern Environs. The fibre broadband network will give significant economic and social advantage to the Southern Environs, as a place to set up internet based businesses, facilitate working from home and the creation of smart homes and smart buildings.

and a reduction in the potential for flooding by acting as natural drainage.

Water quality in Ireland has deteriorated over the past two decades. The objective of the EU Water Framework Directive (WFD) is to protect and restore good water quality, which is carried out through the implementation of River Basin Management Plans. The Shannon River and other watercourses in the Southern Environs are located within the Irish River Basin District. The River Basin Management Plan for Ireland 2018-2021 sets out the actions to improve water quality and achieve “good” ecological status in water bodies by 2027. The LAP aims to protect this invaluable resource.

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) and the National Climate Change Adaptation Framework as outlined in Chapter 14 Climate Change & Flood Management of this LAP. Regard will also be had to the contents of the Limerick Climate Change Adaptation Strategy 2019-2024, particularly where reference is made to utilities and infrastructure.

In 2017, Limerick City and County Council adopted the first Limerick Digital Strategy 2017 – 2020 and announced the Council’s ambition to become Ireland’s first digital city. The strategy will support both national and EU digital programmes, the roll-out of the National Broadband Plan and other digital plans and strategies. As part of the Strategy, Smart Homes and Smart Buildings will have high-speed connections to the internet, while sensors and

data will be used for a better, more sustainable use of energy and increased use of clean,

renewable energy sources and forms of transport.

10.5 POLLUTION

Limerick City and County Council seeks to comply with European, national and regional policy in relation to control of pollution from air, noise and light and waste management to maintain and improve environmental infrastructure.

With respect to noise given the thresholds set out under the Environmental Noise Directive (2002/49/EC), the Limerick Noise Action Plan

2018 – 2023 relates to road traffic noise from major roads only and does not relate to other noise sources such as industrial noise, neighbourhood noise etc. The Action Plan includes potential noise mitigation measures and policy measures to prevent exposure to excessive road noise and to protect quiet areas. The Action Plan should be read in tandem with this LAP.

10.6 WASTE

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 Southern Environs. Recycling facilities are located at the Civic Amenity Centre at Mungret while there are a number of Bring Banks throughout the Environs.

Key Infrastructure: Strategic Policy:

To enable development in line with the capacity of supporting infrastructure and to require the timely provision of infrastructure needed for the sustainable development of lands.

Objectives: It is an Objective of the Council to:

- KI 01:** Ensure that all proposed developments comply with the policies, objectives and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) or any replacement thereof.
- KI 02:** Support and facilitate the implementation of the Irish Water Investment Plans in accordance with the settlement strategy of the RSES and MASP.
- KI 03:** Ensure compliance with the Core Strategy's programme for infrastructure led growth in accordance with the DHPLG Water Services Guidelines for Planning Authorities.
- KI 04:** Facilitate Irish Water in the maintenance, expansion and upgrading of wastewater disposal and

water supply infrastructure.

- KI O5:** Ensure adequate and appropriate wastewater infrastructure is available to cater for existing and proposed development, in collaboration with Irish Water, to avoid any deterioration in the quality of receiving waters and to ensure that discharge meets the requirements of the Water Framework Directive.
- KI O6:** 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 National River Basin Management Plan for Ireland 2018-2021 (DHPLG) and associated Programme of Measures.
- KI O7:** Address the issue of disposal of surface water generated by existing development in the area, through improvements to surface water infrastructure, including for example attenuation ponds, the application of sustainable urban drainage techniques or by minimising the amount of hard surfaced areas as the opportunity arises.
- KI O8:** a) Require all planning applications to include surface water design calculations to establish the suitability of drainage between the site and the outfall point;
- b) Require all new developments to include Sustainable Urban Drainage Systems (SUDS) to control surface water outfall and protect water quality.
- KI O9:** Support the statutory providers of national grid infrastructure by safeguarding existing infrastructure and strategic corridors from encroachment by development that might compromise the operation, maintenance and provision of energy networks.
- KI O10:** 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.
- KI O11:** Facilitate, promote and encourage the expansion and improvement of telecommunications, broadband, electricity (including renewables) and gas networks infrastructure on an open access basis subject to safety requirements, proper planning and sustainable development.
- KI O12:** Work with and 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.
- KI O13:** Seek the undergrounding of all electricity, telephone and television cables.
- KI O14:** Facilitate delivery of E-Charge Points for electric vehicles at suitable locations and in new developments.
- KI O15:** 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.
- KI O16:** Protect environmental quality in the Southern Environs through the implementation of

European, National and Regional policy and legislation relating to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.

KI O17: 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.

KI O18: Maintain recycling facilities and secure additional facilities in tandem with new development.

11 TRANSPORT & MOVEMENT



While the overarching rationale for the making of a Local Area Plan is to guide land-use, the integration of good land use planning with transportation can unlock significant improvements in the quality of life. Reducing the

need to travel long distances by private car, and increasing the use of sustainable and healthy alternatives, can bring multiple benefits to both our environment and communities.

11.1 CONTEXT

As set out under the Metropolitan Area Strategic Plan (MASP), the transport investment requirements in the Limerick Shannon Metropolitan Area will be identified and prioritised through the Limerick Shannon Metropolitan Area Strategic Transport Strategy (L-SMATS). A Draft L-SMATS has been prepared and is undergoing public consultation. This Strategy will include a full assessment of the transport needs of the Metropolitan Area. It is an objective of the MASP to achieve the National Strategic Outcomes of the NPF, through the sustainable and infrastructure led regeneration, consolidation and growth of strategic residential, employment and nodal locations along strategic bus network corridors.

The Local Authority is committed to the protection of the capacity of the national road network. To this end, the Local Authority shall have regard to all relevant Government guidance including DoECLG “Spatial Planning and National Roads Guidelines” (DoECLG, 2012) in the carrying out of its functions. In addition, care shall be taken in the carrying out of its statutory functions, to ensure development does not prejudice the future development or impair the capacity of the planned core network under TEN-T Regulations, which includes the Foynes to Limerick Road (including Adare Bypass) project.

The Southern Environs is strategically located within the Limerick Shannon Metropolitan Area. The Southern Environs has national road links to the entire country via the M7 (Limerick/ Dublin) and M20 (Limerick/ Cork) motorways, the N18 (Limerick/ Shannon/ Ennis/ Galway), N69 (Limerick/ Foynes/ Tralee), N20 (Limerick/ Tralee), N21 (Limerick/ Newcastlewest/ Tralee via N20) and N24 (Limerick/ Waterford) National Secondary Roads and a network of regional and local roads.

The Environs has international access via Limerick Port, Shannon Airport and Foynes Port. The Environs are easily accessible to the rail network via Colbert Station in Limerick City Centre. A number of local bus routes also provide services in the Environs, including the linking of the City Centre with the Regional Hospital and Raheen Business Park via the Quality Bus Corridor on St. Nessian’s Road.

The accessibility of the Environs provides key advantages for the attraction of economic and residential development to the area.

11.2 CREATING MODAL SHIFT

In accordance with the Draft L-SMATS, in order to achieve more sustainable travel patterns, a significant focus on reducing car dependency and increasing permeability is required. The key to getting people out of their cars and into public transport is to have a reliable, convenient, frequent and fast public transport service available and opportunities for pedestrian and cycle linkages, that bring people to the places they want to go. The Draft L-SMATS sets out a number of key outcomes for walking, cycling and public transport, which should be read in tandem with this chapter.

The L-SMATS will provide the opportunity to integrate new mixed-use development at appropriate densities with high capacity public transport infrastructure, in conjunction with more attractive walking and cycling networks and public realm improvements. This has the potential double benefit of extending the catchment of sustainable modes to more people and places, and improving the viability of future investment in public transport by attracting higher demand.

The improvement of transport infrastructure is a key element of sustainable development and achieving a low carbon economy. At present traffic congestion is an issue which needs to be addressed. Vehicles dominate many streets and largely unrestricted vehicle movement is detrimental to a vibrant and livable environment. This issue can negatively impact on the quality and type of activities that can be accommodated and the attractiveness to, and safety of, pedestrians and cyclists.

Limiting and/ or removing vehicles at certain locations would benefit the public realm in terms of air quality and noise, and make the Environs a more attractive place to live, work and visit. In addition, there is an identified need for upgrades

to, and provision of new vehicular, pedestrian and cycle connections to improve the accessibility to existing residential estates, the Strategic Employment Locations and educational facilities.

The benefits of reducing reliance on the car and prioritising public transport and improving the permeability of the Environs for cyclists and walkers, can be summarised as follows:

- Reduced dependence on fossil fuels, pollutants and greenhouse gas emissions;
- Increased levels of exercise with consequent public health and wellbeing benefits;
- Builds social capital in neighbourhoods through increased social interaction;
- Higher numbers of pedestrians and cyclists increase levels of passive supervision making places safer;
- Reduced congestion on roads makes public transport more viable;
- Reduced transport related emissions;
- Reduced expenditure leakage to larger centres, benefiting local businesses;
- Facilitates the economic case for public transport investment.

Limerick City and County Council will continue to provide for all components of the transportation system, which are within its own remit and will encourage and facilitate the development of those other elements provided by external agencies, such as the National Transport Authority and Transport Infrastructure Ireland.

11.3 PERMEABILITY

A key aim of this Draft LAP is to promote compact, connected neighbourhoods based on street patterns and forms of development that will make walking and cycling, especially for local trips, more attractive. This approach is in line with the Draft L-SMATS and national policy such as the *“Smarter Travel, A Sustainable Transport Future”* (2009) and *“Ireland’s First National Cycle Policy Framework”* (2009), which promote sustainable travel movements and encourage people to find alternative ways to travel and reduce car dependency.

The key principles for maintaining and providing permeability within the plan area are as follows:

- Origins and destinations, such as schools and shops, should be linked in the most direct manner possible for pedestrians and cyclists;
- Greater priority should be given to pedestrians and cyclists;
- The physical design of links should be fit for purpose in terms of attractiveness, capacity, safety and security;
- Junctions should cater for pedestrians and cyclists safely and conveniently.

11.4 SUSTAINABLE TRANSPORT

The NPF identifies the provision of a citywide public transport network as a key enabler for Limerick. This is consistent with the Climate Action Plan, National Development Plan and RSES, which envisage a significantly enhanced bus service in Limerick by 2027. The BusConnects Limerick programme will provide a reliable, high-frequency public transport service to improve connectivity of Limerick City and suburbs.

The proposed BusConnects service will represent a significant upgrade on the existing system and will comprise a more comprehensive network, bus priority and new zero carbon fleet with increased capacity, accessibility and high frequency. It will serve all key destinations and provide modal interchanges with the rail network and proposed Park and Ride services.

The Draft L-SMATS has been prepared with cognisance to the Limerick Metropolitan Network Study (Cycling) and the Limerick Municipal District Movement Framework (Walking) and aims to identify a contiguous network of connected primary, secondary and feeder routes for cyclists and pedestrians.



Figure 17: Pedestrian and Cycleways

The Draft L-SMATS identifies Strategic Walking Routes, which connect residential areas to key areas of employment and third level education in Limerick City Centre and Suburbs. It is envisaged that these will be upgraded in tandem with BusConnects, enhancing the pedestrian and cycle network to enable greater levels of walking commuter trips, or as part of linked trips in combination with public transport modes.

The provision of a continuous cycle network as envisaged in the Draft L-SMATS will encourage

cycling for trips to work, school, recreation and leisure facilities in the Southern Environs. The Dooradoyle, Raheen and Mungret areas currently have a mix of cycling facilities on major arteries including St. Nessian's Road, Dooradoyle Road, Ballinacurra Road and the R510. These vary in terms of type and quality of services.

The Draft L-SMATS sets out proposals for a comprehensive Cycle Network in the Southern Environs. The proposed cycle network has been designed with cognisance to the major trip attractors, major residential trip generators and the desire lines connecting the Raheen network area to the wider Limerick Metropolitan Area.

Transport and Movement: Strategic Policy:

To promote and facilitate a sustainable transport system that prioritises and provides for walking, cycling and public transport facilities while ensuring sufficient traffic management.

Objectives: It is an Objective of the Council to:

- TM 01:** Facilitate implementation and delivery of the proposals set out in the Draft Limerick Shannon Metropolitan Area Strategic Transport Strategy or any replacement thereof.
- TM 02:** Ensure all proposed developments comply with the policies, objectives and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof.
- TM 03:** Support and facilitate implementation of an integrated, multi modal and accessible public transport network catering for all members of society across the Metropolitan Area, in particular the proposed BusConnects program linking strategic residential and employment growth locations with the City Centre.
- TM 04:** Encourage, promote and facilitate a modal shift towards more sustainable forms of transport in all developments.
- TM 05:** Improve and provide clear, safe and direct pedestrian linkages and cycle networks as identified in the Draft Limerick Shannon Metropolitan Area Strategic Transport Strategy, including the greenways between the employment zones, shopping areas and residential areas throughout the Environs.
- TM 06:** Improve and create additional facilities for pedestrians and cyclists as opportunities arise as part of new developments.
- TM 07:** Investigate the feasibility of the provision of “*park and ride*”, carpooling, car sharing and bike sharing facilities to incorporate car parking and a bus stop/terminus at appropriate locations, including in the area of Raheen Business Park as indicated under the Draft L-SMATS.
- TM 08:** Ensure car parking is provided in accordance with the Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) or any replacement thereof.
- TM 09:** Concentrate people intensive development in areas easily accessible to public transport.

TM O10: Require the submission of Mobility Management Plans and Traffic and Transport Assessments for large scale employment related developments, including at the Strategic Employment Locations of Raheen Business Park and University Hospital Limerick.

TM O11: Protect the capacity of the national road network, having regard to all relevant Government guidance including DoECLG “Spatial Planning and National Roads Guidelines” (DoECLG, 2012) in the carrying out of Local Authority functions and ensure development does not prejudice the future development or impair the capacity of the planned core network under TEN-T Regulations, which includes the Foynes to Limerick Road (including Adare Bypass) project.

TM O12: Prevent inappropriate development on lands adjacent to the existing national road network, which would adversely affect the safety, current and future capacity and function of national roads and having regard to reservation corridors to cater for possible future upgrades of the national roads and junctions. Support delivery of strategic road infrastructure identified in the RSES including:

- Foynes to Limerick Road Scheme (including Adare Bypass);
- Upgrade of arterial roads from the motorway network to increase capacity, including the provision of public transport infrastructure and Park and Ride facilities, including at the R527 Dock Road.

TM O13: a) Support and complete delivery of new and improved link roads and junctions accommodating public transport, cycle and pedestrian connections, such as the Mungret Loughmore Area Link Road/ Mungret Link Streets project and indicative proposals outlined on Map No. 4. The layout and design of such works shall have cognisance to the context and interface with surrounding land uses in compliance with the Design Manual for Urban Roads and Streets (DoECLG 2019);

b) Ensure proposals make provision for the accommodation of bus services along the most significant link routes, which shall include identification of bus stopping and turning areas, as well as carriageway capacity and through routes.

It should be noted that the alignment of the new roads in the plan is indicative only. These roads shall definitely be aligned as part of the detailed design and development process. Similarly, the location of junctions is indicative and the exact position for construction purposes will be dependent on detailed design.

TM O14: Implement Supplementary Contribution Schemes to facilitate delivery of link roads, including the link road which will connect the Local Infrastructure Housing Delivery Activation Fund Road to the R526.

TM O15: Close vehicular access from Blackberry lane onto the Dock road once an alternative link is available. Development of lands zoned “Enterprise & Employment” south of the Dock road and east of the R510, which exceeds capacity on the existing Blackberry Lane / Dock Road junction, shall provide for and utilise the new proposed link onto the Dock Road in place of the existing Blackberry Lane – Dock Road junction as shown on Map No.4.

TM O16: Improve the efficiency of junctions to enhance the free flow of traffic through the Environs.

TM O17: Facilitate and implement appropriate measures to reduce or manage traffic associated with schools to regularise vehicular movements and alleviate congestion.

TM O18: Prohibit advertising signage adjacent to the motorway, the national road networks and other major transport routes.

TM O19: Require noise sensitive developments in close proximity to heavily trafficked roads to be designed and constructed to minimise noise disturbance, follow a good acoustic design process and clearly demonstrate that significant adverse noise impacts will be avoided in accordance with “Professional Practice Guidance on Planning and Noise” (2017).

TM O20: Retain the Limerick to Foynes rail line and avoid encroachment of inappropriate development which may compromise the line’s potential future use.

TM O21: Ensure that all future transport infrastructure is climate proofed, through design and construction, to function in a climate altered future and would, where possible, be multi-functional e.g. provide accessible routes for other services such as fibre optics or water, energy connections or other services and technologies that might come about during the lifetime of the infrastructure.

12 ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE



The Southern Environs' architectural and archaeological heritage is a key and distinctive asset, which can imbue local pride of place and can promote a positive image of the area. The architectural and archaeological heritage is a unique resource and represents an irreplaceable

expression of the richness and diversity of the area's past. The vernacular architecture makes a strong contribution to the character of the Environs. This plan seeks to protect, preserve and enhance the architectural and archaeological heritage for the benefit of future generations.

12.1 CONTEXT

The Southern Environs area is notably rich in historic and archaeological remains, both above and below ground, many of which are protected under planning and/ or National Monuments legislation. In this regard, the Record of Protected Structures and the Record of Monuments and Places are two of the primary

designation mechanisms for protecting the assets of our built heritage. The LAP aims to protect, enhance and promote an appreciation of this important heritage as well as safeguarding the continued and sustainable use of this historic built fabric.

12.2 ARCHAEOLOGICAL HERITAGE

The physical remains of the archaeological heritage are considerable. The evidence that can survive in and around these sites is extremely valuable, and every step to preserve it or at a minimum to recover it, must be taken.

The 1994 amendment to the National Monuments Act established the Record of Monument and Places on a statutory basis, with a set of maps and a catalogue of sites. Copies are available for public consultation in the Council's Planning Department and in all the county libraries. Under the provisions of the National Monuments Act Section 12, 1994 Amendment, a person proposing **any works** (including exempted development) 'at or in relation to such a monument' must give two months notice to the National Monuments Service. As sites continue to be discovered, **some** of those found

subsequent to the publication (1997) have been included in the Historic Environment Viewer, which is available on the website <https://webgis.archaeology.ie/historicenvironment>. There are certain sites in State ownership or guardianship, or that have been served with temporary preservation orders. These sites are included in Appendix IV. Under the 2004 Amendment to the National Monuments Act any of these sites or sites deemed National Monuments in the care or guardianship of the Local Authority will require Ministerial Consent for works in their vicinity.

Within the Southern Environs there are approximately 100 no. archaeological monuments listed in the Record of Monuments and Places. An extract of this record is set out under Appendix IV of this LAP.

The Local Authority will consult with the Development Applications Unit of the Department of Housing, Local Government and Heritage and other Statutory Consultees when considering applications for planning permission for development on, or in the vicinity of, archaeological sites and/or monuments.

A Special Control Area (SCA) at Mungret Monastic Complex aims to protect the heritage significance of this historically important site. The SCA will facilitate the preservation in situ of any potential subterranean archaeological remains associated with the monastic complex/deserted settlement. Within this area development will be limited to leisure uses and moderate extensions to existing dwellings. All other forms of development and non-conforming uses will be strictly resisted.

12.3 ARCHITECTURAL HERITAGE

The Planning and Development Act 2000 (as amended) places an obligation on Local Authorities to 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 Record of Protected Structures (RPS) contains these structures or parts thereof, and is set out under the Limerick County Development Plan 2010 – 2016 (as extended) and should be read in conjunction with this plan.

Archaeological structures may in some situations be considered as architectural heritage and therefore may be included on both the RPS and Record of Monuments and Places (RMP).

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



Figure 18: Mungret Monastic Complex

The SCA includes two Protected Views as follows:

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

to identify, record and evaluate post 1700 architectural heritage.

There are approximately 34 no. Protected Structures within the Southern Environs including a cluster of structures at Mungret College. The NIAH includes 17 no. structures which are located in the Southern Environs. Of these structures 11 no. are also included in the RPS. The Protected Structures located in the Southern Environs are outlined in Appendix IV of this LAP.

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, taking account of building lines and heights that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures. The designation is a driver for sustainable and sensitive development, the aim of which is not “*preservation*” but managed development that enhances the character and heritage of the area.

The University Hospital Limerick has been designated as an Architectural Conservation Area (ACA) as set out under the Limerick County Development Plan 2010 – 2016 (as extended) and should be read in conjunction with this plan.

Contemporary design should reinforce the historic character within the ACA, and should take its cues from the historic setting in terms of scale and design. High quality architectural design will add to the built heritage and complement the receiving historic environment.

Archaeological & Architectural Heritage: Strategic Policy:

To protect, conserve and manage the archaeological and architectural heritage of the Environs, and to encourage sensitive and sustainable development to ensure its preservation for future generations.

Objectives: It is an Objective of the Council to:

Archaeological Heritage:

AAH 01: Seek the preservation of all known sites and features of historical and archaeological interest.

This includes all the sites listed in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act 1994.

AAH 02: Protect and preserve all sites and features of historical interest discovered subsequent to the publication of the Record of Monuments and Places, this includes all sites that may be discovered during the course of excavation or construction.

AAH 03: Protect and preserve all underwater, intertidal, estuarine and riverine archaeological sites.

AAH 04: Ensure that any proposed development shall not have a negative impact on the character or setting of an archaeological monument or which is seriously injurious to its cultural or educational value.

AAH 05: Ensure archaeological assessment is carried out as required, and promote “preservation in situ” of archaeological remains and settings in developments that would impact upon archaeological sites and/or features.

AAH 06: Protect and maintain the integrity of the Special Control Area at Mungret Monastic Complex, incorporating all national monuments and protected views including:

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

Development within this area will be prohibited with the exception of leisure facilities and moderate extensions to existing dwellings, which will not adversely impact on the character or setting of the complex.

AAH 07: Facilitate and support the provision of interpretative panels and directional signage for Mungret Monastic Complex and park, in conjunction with local community groups.

AAH 08: Facilitate public access to National Monuments in State or Local Authority care.

AAH 09: In relation to sites listed in the Record of Monuments and Places and other sites and features of historical interest, to require the following within areas of proposed open space:

- a) 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
- b) 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.

Architectural Heritage:

AAH 10: Preserve, protect and enhance the character of the historic built fabric, including the Architectural Conservation Area, all Protected Structures and attendant grounds in accordance with best conservation practice and relevant heritage legislation.

AAH 11: Positively consider proposals to improve, alter, extend or change the use of protected structures so as to render them viable for modern use, subject to demonstration by a suitably qualified Conservation Architect/ or other relevant experts that the structure, character, appearance and setting will not be adversely affected and, suitable design, materials and construction methods will be utilised.

AAH 12: Ensure all development works on or at the sites of protected structures, including any site works necessary, shall be carried out using best heritage practice for the protection and preservation of those aspects or features of the structures/ site that render it worthy of protection.

AAH 13: Support the re-introduction of traditional features on protected structures where there is evidence that such features (e.g. window styles, finishes etc.) previously existed.

AAH 14: Strongly resist the demolition of protected structures, in whole or in part, the removal or modification of features of architectural importance, and the development which would adversely affect the character or setting of a protected structure, unless it can be demonstrated that exceptional circumstances exist.

AAH 15: Ensure the design of any development in the Architectural Conservation Area, including any changes of use of an existing building, should preserve and/ or enhance the character and appearance of the Architectural Conservation Area as a whole.

13 NATURAL HERITAGE



This chapter considers the natural heritage of the Southern Environs which includes the Natural Environment, Biodiversity and Green Infrastructure. Similar to Built Heritage, our Natural Heritage is a key and distinctive asset,

which can also be used to promote a positive image of the Environs. The natural heritage of the Southern Environs is a material asset, which should be protected and enhanced.

13.1 CONTEXT

The natural heritage of the Southern Environs includes a wide range of natural features including for example the River Shannon and Ballinacurra Creek/ Ballynacloough River, the Neighbourhood Park at Mungret, turloughs at Loughmore Common and Monteen and an artificial lake at Bunlicky.

The natural heritage of the Environs are essential to the environmental quality, ecological biodiversity, landscape character, visual amenity and recreation activities of the Environs.

13.2 NATURAL ENVIRONMENT

Special Areas of Conservation (SACs) are legally protected under the EU Habitats Directive (92/43/EEC) and are selected for the conservation of Annex I habitats and Annex II species.

While not legally designated, proposed Natural Heritage Areas are of significance for wildlife and habitats and are protected under the Wildlife Amendment Act 2000. The proposed Natural Heritage Areas within the Southern Environs include Loughmore Common and the Inner Shannon Estuary South Shore.

With respect to the natural environment of the Southern Environs the European designated (EU Habitats Directive 92/43/EEC) Special Areas of Conservation of the Lower River Shannon and Special Protection Area of the River Shannon and River Fergus are located within the plan area. The Ballinacurra Creek/ Ballynacloough River which flows through the Southern Environs, is a tributary of the River Shannon.

Ireland is required under the terms of the EU Birds Directive (2009/147/EC) to designate Special Protection Areas (SPAs) for the protection of endangered species of wild birds. There are no SPAs within the Southern Environs.

13.3 GREEN INFRASTRUCTURE

Green Infrastructure is the physical environment within and between Limerick City, the Environs and surrounding countryside, comprising a network of multi-functional open spaces, including formal parks, gardens, woodlands, green corridors, waterways and trees etc. Green Infrastructure includes all environmental resources such as air and water quality and provides vital amenity and recreational spaces for communities, thus contributing to the health and quality of life of residents and visitors to the Environs.

In addition to creating passive recreation, green infrastructure can help mitigate the impacts of climate change. Complementing and often replacing conventional built infrastructure, green infrastructure can provide natural solutions to carry, store, absorb and treat water, pollination, soil erosion, flooding, habitats for wildlife, ecological corridors and biodiversity. Green infrastructure also creates more attractive environments, with benefits for health and well-being.

The Shannon Estuary provides a unique amenity to the Southern Environs, which requires management having cognisance to the ecological sensitivities of the area. In addition, the Ballinacurra Creek/ Ballynacloough River provides a nature corridor extending through the Environs. There are also turloughs at Loughmore Common and Monteen and an artificial lake at Bunlicky, which has developed a diversity of wildlife species and habitat.

In addition to ecological benefits, the existing parks and amenity open spaces in the Southern Environs, such as at the Neighbourhood Park at Mungret provide a focal point for active and passive recreation. As outlined under Chapter 9 Community Infrastructure of this LAP, playgrounds are located at Mungret and The Crescent Shopping Centre. An outdoor gym is located at Mungret. There are also a number of walking routes, sports grounds and clubs located



Figure 19: Green Infrastructure at Mungret

in the Environs. The benefits of this infrastructure are wide ranging and include:

- The creation of a community and a sense of place;
- Encouraging healthy lifestyles and physical activity through the use of walkways and cycle paths;
- Access to nature and the environment;
- The creation of a pleasant environment to attract business and inward investment;
- Climate Change adaptation.

Open spaces and residential developments can be enriched by retaining and enhancing existing natural features, as well as introducing new habitats. The retention and enhancement of existing natural features, such as hedgerows and associated ditches and streams offers the potential to introduce SuDS measures, and to retain wildlife corridors through new developments. The addition of surface attenuation ponds, green roofs and living walls in these developments has the potential to transform an environment into one that offers significant opportunities for wildlife.

The Local Authority aims to ensure access to all areas of public space and institutional lands is maximised, and major spaces are linked via amenable pedestrian routes.

13.4 BIODIVERSITY

Biodiversity is the diversity of life, the diversity of all the organisms that occur on Earth. A wide diversity of species, habitats, ecosystems and landscapes make up the biodiversity of the Southern Environs. The National Biodiversity Action Plan was published in 2017.

Humans are an integral part of the Biodiversity of Earth and our actions can affect it in both a positive and negative way. Ecology deals with the inter-relations between organisms and the places in which they live. This can refer to human beings' dealings and interactions with both the habitats and species around them. A habitat is the type of area where an organism or a number of organisms are at home.

In terms of biodiversity, over the past few decades there has been loss and fragmentation in areas that have undergone significant development. However, the Southern Environs also includes and adjoins substantial areas of natural habitat. 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 value role the Shannon River plays in the County's biodiversity.

Trees and hedgerows are an important feature for biodiversity and visual amenity. There is potential to conserve and enhance this

biodiversity in the Southern Environs through the planning system. Individual planning applications can provide or retain hedgerows, landscaped areas, retention or planting of trees and preservation of natural features etc. The link between the quality of the local environment, of which trees and hedgerows are an important component, and human well-being is one that is increasingly recognised.

Planting new edge or buffer treatments will be encouraged as part of new developments, for example, particularly between contrasting land uses at established industrial areas and surrounding residential developments. These areas will emphasize enhancement of local biodiversity and local surface water management, while enhancing visual amenity.

Objectives to facilitate the management of invasive species shall be implemented in this LAP.

Natural Heritage: Strategic Policy:

To protect, enhance, create and connect natural heritage, green spaces and high quality amenity areas throughout the Southern Environs for biodiversity and recreation.

Objectives: It is the Objective of the Council to:

- NH O1:** Protect, conserve and enhance natural heritage sites, Natura 2000 designated conservation sites and non-designated habitats, species and areas of national and local importance, including aquatic habitats and species, and promote the sustainable management of ecological networks in co-operation and consultation with the relevant statutory authorities.
- NH O2:** Ensure development proposals fully comply with the Development Management Standards of the County Development Plan 2010 – 2016 (as extended) and any replacement thereof, and in particular the requirements of Article 6 of the Habitats Directive.
- NH O3:** Require integration of all elements of existing green infrastructure, including suitable mature trees, hedgerows, field boundaries and natural heritage features into new developments, prevent fragmentation and mitigate potential impacts on the existing biodiversity and green infrastructure network. In the event that mature trees are required to be felled, a comprehensive tree survey carried out by a suitably qualified individual, demonstrating that the subject trees are of no ecological or amenity value shall be submitted in conjunction with planning applications.
- NH O4:** Protect existing open space and semi-natural open space from inappropriate development and encroachment.
- NH O5:** Require the planting of native trees, hedgerows and vegetation and the creation of new habitats in all new developments and public realm projects. The Council will avail of tree planting schemes administered by the Forest Service, in ecologically suitable locations, where this is considered desirable.
- NH O6:** Identify, preserve, conserve and enhance wherever possible a network of connected wildlife habitats, stepping stones, corridors and features including trees of special amenity, conservation or landscape value, which ensure the provision of recreational amenities, biodiversity protection, flood management and adaptation to climate change. In certain situations, it may be possible to create such networks, and where an appropriate management regime is proposed these will be considered favourably.
- NH O7:** Maintain riverbank vegetation along watercourses and ensure protection of a 20m riparian buffer zone on greenfield sites and maintain free from development. Proposals shall have cognisance to the contents of the Inland Fisheries Ireland document "Planning for Watercourses in Urban Environments".
- NH O8:** Protect environmental quality and implement site appropriate mitigation measures with respect to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.
- NH O9:** Facilitate the work of agencies redressing the issue of terrestrial and aquatic invasive species.
- NH O10:** Have cognisance to the All Ireland Pollinator Plan 2015 – 2020 and any subsequent plans when assessing landscaping proposals. Any proposal that actively includes pollinator friendly measures will be considered favourably.

NH O11: Require the provision of alternative roosting or settlement facilities for species, such as bird or bat boxes, swift boxes, artificial holts, or other artificially created habitats in proposed developments, where considered appropriate.

NH O15: Require all developments where there are species of conservation concern, to submit an ecological assessment of the effects of the development on the site and nearby designated sites, suggesting appropriate mitigation measures, and establishing, in particular, the presence or absence of the following species: Otter, badger, bats, lamprey and protected plant species such as the Triangular Club Rush, Opposite Leaved Pond Weed.

NH O16: Seek the creation of new habitats by encouraging wild green areas and new water features such as pools and ponds. Encourage management plans for green areas to use the minimum of pesticides and herbicides. The creation of areas that are not subject to public access in order to promote wildlife use is strongly encouraged.

NH O17: Preserve and protect the River Shannon Special Area of Conservation (SAC) and the River Shannon and River Fergus Special Protection Area (SPA) from inappropriate development, to maintain its importance in terms of ecology, and as an amenity area both for the Southern Environs, the City and the Environs as a whole.

14 CLIMATE CHANGE & FLOOD MANAGEMENT



Climate change is one of the biggest issues facing Ireland today. 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 flow and groundwater flooding. Flooding has significant impacts on human activities as it can threaten lives, livelihoods, housing, transport, and public service

PART A: CLIMATE CHANGE

14.1 CONTEXT

The challenges arising from climate change are wide ranging and varied including longer and hotter summers, increased rainfall, flooding, rising sea levels and intensified storms in winter. The effects of such changes have been experienced more frequently in Limerick in recent years. The changes to the climate have been attributed largely to an increase in the levels of carbon dioxide (CO₂) in the atmosphere which have created climatic shifts and global impacts.

A proactive approach to preparing a resilient economy, environment and community for climate change is required. Therefore, in implementing this Plan, the Council will support relevant provisions contained in the National Climate Change Adaptation Framework (2018),

infrastructure and commercial/ industrial enterprises.

The impacts of both flooding and climate change can be significant and wide reaching and include health, social, economic and environmental effects. Developments in inappropriate locations can exacerbate the problems of flooding by accelerating and increasing surface water run-off, altering watercourses and removing floodplain storage.

the National Mitigation Plan (2017), the National Energy and Climate Plan, the Limerick City & County Council Climate Change Adaptation Strategy 2019 - 2024 and commitments included in the Regional Spatial and Economic Strategy for the Southern Region.

Implementation of the LAP will take into account relevant targets and actions arising from sectoral adaptation plans that will be prepared to comply with the requirements of the Climate Action and Low Carbon Development Act 2015. These requirements include those seeking to contribute towards the National Transition Objective, to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the year 2050.

14.2 CLIMATE ACTION & PLANNING

The Limerick City & County Council Climate Change Adaptation Strategy 2019 - 2024 outlines that Climate Action comprises 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 adaption and renewable energy sources, amongst others.

The development of urban areas, in the absence of mitigation measures against climate change has contributed to the heat island affect (the warming of the urban environment) as well as increasing the volume of pollutants in the air and increased flooding potential. The impacts of climate change are expensive and complicated to manage and will become even more so in the future.

Green infrastructure can be used as a tool to alleviate some of the negative impacts of climate change and in some ways contribute to the prevention or slowing down of this change. Mitigation measures include planting of trees, hedgerows and woodlands to clean air and assist with carbon sequestration, and the construction of surface water retention features such as ponds, lakes, or swales. The LAP 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 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.



Figure 20: Soft Landscaping

Achieving a low carbon producing economy and society requires, where practicable, everybody seeking to meet resource requirements from indigenous sources. Those indigenous resources should be harnessed, to optimum potential in order to meet or exceed local needs, having due regard for national targets and the local planning guidelines. This involves not just the use of local resources, where applicable, but the adoption of new building techniques and designs which will minimise energy intensive inputs.

The design, construction and operation of new buildings has a significant role to play in reducing energy demand and increasing energy efficiency into the future. The integration of energy efficiencies into the life cycle of all new residential and non-residential buildings, from the neighbourhood, street and individual building scale, can result in significant savings at the local level.

With regard to residential dwellings, 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 Buildings (NZEB) Regulations. An NZEB building is defined as one that has a high-energy performance. The nearly zero or low amount of energy required

should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby. NZEB requires a suite of energy efficiencies including for example a 70% reduction in primary energy use and CO₂ emissions compared to 2005 standards.

Climate Change: Strategic Policy:

To protect and enhance environmental quality and implement the climate action measures through the planning process to help tackle climate change.

Objectives: It is the Objective of the Council to:

- CC 01:** Support the National Adaptation Framework 2018 and the National Climate Change Strategy, including the transition to a low carbon future, taking account of flood risk, the promotion of sustainable transport, soil conservation, the importance of green infrastructure, improved air quality, the use of renewable resources and the re-use of existing resources. Cognisance shall be had to the Limerick Climate Change Adaptation Strategy (2019), any revised or forthcoming adaptation, mitigation or climate action strategies in the formulation of any plans or policies.
- CC 02:** Support sustainable travel, energy efficient projects, green infrastructure and sustainable residential development projects.
- CC 03:** Ensure climate proofing measures are incorporated into the design, planning and construction of all developments, including the use of green infrastructure as a mechanism for carbon offsetting and surface water management.
- CC 04:** Ensure that medium to large scale 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 cases 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.
- CC 05:** Support and promote climate smart and the NZEB standard of building or equivalent for all new developments.
- CC 06:** Promote and support development of renewable energy sources, which will achieve low carbon outputs including on-land and off-shore renewable energy production.
- CC 07:** Encourage co-operation between utility and service providers to ensure that their networks are resilient to the impacts of climate change and ensure that any infrastructure is designed to function in a climate altered future.

CC 08: Promote the Southern Environs as a low carbon area and support the development of low carbon and green technological businesses and industries.

CC 09: Promote integration and delivery of green infrastructure in new developments, public realm and community projects as a means of managing flood risk and enhancing the natural environment.

PART B: FLOOD MANAGEMENT

14.3 CONTEXT

Climate change is expected to increase flood risk, leading to more frequent flooding and an increase in the depth and extent of flooding.

Under Project Ireland 2040's National Development Plan, the Limerick City Flood Relief Scheme was announced in 2018, which is being

advanced by the OPW and Limerick City and County Council. This Flood Scheme follows the Catchment Flood Risk Assessment and Management (CFRAM) programme, which is a medium to long-term strategy for the reduction and management of flood risk in Ireland covering a single National River Basin District.

14.4 FLOOD RISK & PLANNING

In accordance with the provisions of the National Planning Framework, the Regional Spatial and Economic Strategy for the Southern Region and the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), a Strategic Flood Risk Assessment (SFRA) has informed the preparation of the Draft LAP.

Past flood events have included elements of fluvial, pluvial, coastal and groundwater flooding in the Southern Environs, including at Dock Road, Mungret, Loughmore Common, Dooradoyle, Rosbrien and Raheen. The areas at greatest risk of fluvial flooding are closest to the River Shannon. The Council will strive to ensure that proper flood risk identification, assessment and avoidance are integrated with the planning system to safeguard the future sustainable development of the Environs.

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.

The guidelines states that the core objectives 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 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.

This draft LAP has been drafted 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.

The Draft LAP avoids development in areas at risk of flooding and has substituted vulnerable land uses with less vulnerable uses where this is not possible. Where neither is possible, mitigation and management of risks must be proposed. A Stage 1 SFRA report accompanies this Plan. The SFRA has recommended that development proposals for a number of areas within the plan boundary should be subject to site specific flood risk assessment, appropriate to the nature and scale of the development being proposed.

Flood Management: Strategic Policy:

To manage flood risk in the Southern Environs.

Objectives: It is an Objective of the Council to:

- FM 01:** 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.
- FM 02:** Support and co-operate with the OPW in delivering the Limerick City Flood Relief Scheme.
- FM 03:** Support delivery of projects to reduce surface water and groundwater flood risk.
- FM 04:** Ensure development proposals within the areas outlined on the Flood Risk Map are subject to Site Specific Flood Risk Assessment as outlined in “The Planning System and Flood Risk Management Guidelines”, DECLG and OPW (2009).
- FM 05:** Incorporate the recommendations of the River Shannon CFRAM into any site specific flood risk assessment undertaken for individual sites/ areas.
- FM 06:** Ensure the integration of urban storm water drainage systems including Sustainable Urban Drainage Systems (SuDS) for new developments.
- FM 07:** Provide an appropriate set back from the edge of watercourses to proposed developments to ensure access infinity for channel clearing, and/or maintenance.

15 IMPLEMENTATION

This Draft LAP outlines specific policies and objectives for the development of the Southern Environs. The overarching policies and objectives of the Limerick County Development Plan 2010 – 2016 (as extended) and any replacement thereof also apply.

The applicable Development Management Standards are set out under Chapter 10 of the Limerick County Development Plan 2010 - 2016 (as extended), 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.

15.1 LAND USE ZONING

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 shows the land use zoning objectives for the Southern Environs. 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 & Purpose
<p>District Centre</p>	<p>Objective: <i>To provide for a mixture of retail, residential, commercial, civic and other uses.</i></p> <p>Purpose: To facilitate a district level centre consisting of a compatible mix of uses complimentary to the City Centre, having regard to the principles of compact growth, consolidation and densification. A diversity of uses for both day and evening may be considered. These areas require high levels of accessibility, including pedestrian, cyclists and public transport (where feasible).</p> <p>Retail proposals which would undermine the vitality and viability of Limerick City Centre will not be permitted. The sequential approach to retail development set out in the “Retail Planning Guidelines for Planning Authorities, 2012” will be strictly enforced. Any development shall comply with the current Joint Retail Strategy, or the new Limerick Shannon Metropolitan Retail Strategy following completion.</p>
<p>Local Centre</p>	<p>Objective: <i>To protect and provide local centre facilities to serve the needs of new/existing neighbourhoods and residential areas.</i></p> <p>Purpose: To provide a mix of community and commercial neighbourhood facilities to primarily serve the immediate needs of the local working and residential</p>

	<p>population and complement, rather than compete with the city centre. A mix of appropriate convenience retail, commercial, community, childcare and medical facilities, residential and recreational development of a local scale will be considered. Larger scale office and residential development will be considered in new developments where they are in compliance with the objectives set out in Chapter 6 of this LAP.</p> <p>The retail scale and type will be controlled to prevent negative impacts on the retail function of Limerick City Centre at the top of the hierarchy. A materially broader range of comparison goods than currently exists shall not be allowed in order to avoid further competition with the city centre. Any proposal for retail development shall comply with the current Joint Retail Strategy, or the new Limerick Shannon Metropolitan Retail Strategy following completion.</p>
<p>Existing Residential</p>	<p>Objective: <i>To provide for residential development, protect and improve existing residential amenity.</i></p> <p>Purpose: This zone is intended primarily for established housing areas. Existing residential amenity will be protected while allowing appropriate infill development. The quality of the zone will be enhanced with associated open space, community uses and where an acceptable standard of amenity can be maintained, a limited range of other uses that support the overall residential function of the area, such as schools, crèches, doctor’s surgeries, playing fields etc.</p>
<p>New Residential</p>	<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>
<p>Education & Community Infrastructure</p>	<p>Objective: <i>To protect and provide for education, training, adult learning, community, healthcare, childcare, civic, religious and social infrastructure.</i></p>

	<p>Purpose: To protect existing and allow for expansion of a wide range of educational facilities, services and related development. To facilitate sustainable development of community infrastructure and create an inclusive high quality of life. This land use will provide for community facilities, healthcare services, childcare, religious, social and civic infrastructure and other facilities.</p>
<p>High Tech / Manufacturing</p>	<p>Objective: <i>To provide for office, research and development, high technology, manufacturing and processing type employment in a high quality built and landscaped campus style environment.</i></p> <p>Purpose: To facilitate opportunities for high technology, advanced manufacturing including pharmaceutical, film and food production, major office and research and development based employment within high quality, highly accessible, campus style settings. The zoning is for high value added businesses and corporate facilities that have extensive/ specific land requirements. Retail warehousing will not be acceptable in this zone. Local scale retail may be considered to serve the working population in accordance with the zoning matrix.</p> <p>The uses in this zone are likely to generate a considerable amount of traffic by both employees and service vehicles. Sites should be highly accessible, well designed and permeable with good pedestrian, cyclist and public transport links. The implementation of mobility management plans will be required to provide important means of managing accessibility to these sites.</p>
<p>Enterprise & Employment</p>	<p>Objective: <i>To provide for and improve general enterprise, employment, business and commercial activities.</i></p> <p>Purpose: To provide for enterprise, employment and general business activities and acknowledge existing/permitted retailing uses. To accommodate compatible industry and employment activities that are incapable of being situated in the city centre, in a high quality physical environment. New enterprise and employment developments shall be provided in high quality landscaped park style environments, incorporating a range of amenities. These zones may accommodate light industry, low input and emission manufacturing, logistics and warehousing, campus style offices and commercial services with high space and parking requirements. 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.</p> <p>The uses in this zone are likely to generate a considerable amount of traffic by both employees and service vehicles. Sites should be highly accessible, well designed and permeable with good pedestrian, cyclist and public transport links. The implementation of mobility management plans will be required to provide important means of managing accessibility to these sites.</p>

Retail Warehousing	<p>Objective: <i>To provide for retail warehouse development.</i></p> <p>Purpose: To facilitate the sale of bulky household goods such as carpets, furniture, electrical goods and bulky DIY items catering mainly for car based customers, in high quality and accessible locations subject to the requirements of the Retail Planning Guidelines, the Joint Retail Strategy and the Limerick Shannon Metropolitan Retail Strategy following completion.</p>
Industry	<p>Objective: <i>To provide for specialised and heavy industrial development and associated employment creation.</i></p> <p>Purpose: To provide employment locations specifically for heavy and specialised industry associated with environmental emissions including noise, dust and odour (e.g. waste processing, aggregate processing etc.) and with intensive or hazardous processing (e.g. Seveso) which may give rise to land use conflict if located within other land use zones.</p>
Open Space & Recreation	<p>Objective: <i>To protect, provide for and improve open space, active and passive recreational amenities.</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.</p>
Semi Natural Open Space	<p>Objective: <i>To protect Natura 2000 designated sites, candidate/proposed sites and flood plains in a semi natural and open state.</i></p> <p>Purpose: This zoning recognises the importance and need for protection of these areas for wildlife, habitat, flora and fauna and floodwater storage. Within these areas development will be prohibited in order to maintain the integrity of the sites.</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 wastewater etc.</p>

<p>Agriculture</p>	<p>Objective: <i>To protect and improve rural amenity and provide for the development of agricultural uses.</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 County Development Plan 2010 – 2016 (as extended) or any replacement thereof.</p> <p>One off dwellings will only be considered on agriculturally zoned land for the permanent habitation of farmers and the sons and/or daughters of farmers only and subject to the terms and conditions of the rural housing policy as set out in the Limerick County Development Plan 2010 – 2016 (as extended).</p>
<p>Special Control Area</p>	<p>Objective: <i>To protect the heritage significance of the specified sites.</i></p> <p>Purpose: This zoning recognises the heritage importance of the area at Mungret Monastic Complex. The Special Control Area designation will facilitate the preservation in situ of the identified archaeological, including any subterranean, remains. Within this area new development will be prohibited in order to maintain the archaeological heritage of the area.</p>

APPENDIX I – LAND USE ZONING MATRIX

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, which should be read in tandem with the Zoning Map.

The Land Use Zoning Matrix outlines the types of developments which are:

1) Generally Permitted = /

A generally permitted use is one which 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.

2) Open for Consideration = 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.

3) Generally Not Permitted = X

A Generally Not Permitted use is one that would be 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.

Land Use Zone	District Centre	Local Centre	Existing Residential	New Residential	Educ. & Com. Infra.	High Tech/ Manuf.	Enterprise & Employment	Retail Warehousing	Industry	Open Space	Semi Natural Open Space	Utilities	Agriculture	Special Control Areas
Type of Use														
Abattoir	X	X	X	X	X	X	X	X	X	X	X	X	O	X
Advertising & Advertising Structures	/	/	X	X	O ²	/	/ ²	/ ²	/ ²	X	X	O	X	X
Agricultural Buildings	X	X	X	X	X	X	X	X	X	X	X	X	/	X
Agricultural Supplies/ Machinery Sales	X	X	X	X	X	X	/	/	X	X	X	X	X	X
Allotments	X	X	/	/	/	X	X	X	X	O	X	X	O	X
Amusement Arcade/ Casino	O	X	X	X	X	X	X	X	X	X	X	X	X	X
Bank	/	/	X	X	X	X	X	X	X	X	X	X	X	X
Bed & Breakfast/ Guesthouse	/	/	/	/	X	X	X	X	X	X	X	X	/ ³	X
Betting Office	/	/	X	X	X	X	X	X	X	X	X	X	X	X
Boarding Kennels	X	X	X	X	X	X	/	X	X	X	X	O	/ ³	X
Bring Bank	/	/	/	/	/	O	O	O	O	X	X	/	X	X
Builders Providers/ Yard	X	X	X	X	X	X	/	O	/	X	X	X	X	X
Burial Grounds	X	X	X	X	O	X	X	X	X	O	X	X	/	X
Campsite/ Caravan Park - Holiday Use	X	X	X	X	X	X	X	X	X	X	X	X	/ ³	X
Car Park	/	/	X	X	/ ²	/ ²	/ ²	/ ²	/ ²	/ ²	X	/	X	X
Childcare Facilities	/	/	/	/	/	O	O	O	X	X	X	X	O	X

² Ancillary to the primary use only

³ Where the use is ancillary to the use of the dwelling as a main residence

Land Use Zone	District Centre	Local Centre	Existing Residential	New Residential	Educ. & Com. Infra.	High Tech/ Manuf.	Enterprise & Employment	Retail Warehousing	Industry	Open Space	Semi Natural Open Space	Utilities	Agriculture	Special Control Areas
Type of Use														
Civic Recycling/ Waste Facility	X	X	X	X	X	X	/	X	/	X	X	/	X	X
Community/ Cultural Facility	/	/	/	/	/	X	O	X	X	/	X	X	X	X
Conference Centre	O	O	X	X	O ²	O	O	X	X	X	X	X	X	X
Education/ Training Facility	/	/	/	/	/	O	/	X	X	X	X	X	X	X
Enterprise Centre	/	X	X	X	O ²	/	/	X	X	X	X	X	X	X
Extractive Industry/ Quarry	X	X	X	X	X	X	X	X	/	X	X	X	O	X
Fast Food Outlet/ Take-Away	/	/	X	X	X	X	X	X	X	X	X	X	X	X
Film Studio	X	X	X	X	X	/	/	O	/	X	X	X	X	X
Food & Drink Processing/ Manufacturing	X	X	X	X	X	/	/	X	X	X	X	X	/ ²	X
Fuel Depot/ Storage	O	O	X	X	X	X	/	O	/	X	X	X	X	X
Funeral Home	/	/	O	O	X	X	/	X	X	X	X	X	X	X
Garden Centre	/	/	X	X	X	X	O	/	X	X	X	X	O ²	X
General Public Administration	O	O	X	X	O	O	O	X	X	X	X	X	X	X
Hair & Beauty Salons	/	/	X	X	X	X	X	X	X	X	X	X	X	X
Halting Site	X	X	O	O	X	X	X	X	X	X	X	O	X	X
Health Centre	/	/	X	X	/	X	O	X	X	X	X	X	X	X
Health Practitioner	/	/	X	X	/	X	O	X	X	X	X	X	X	X
High Technology/ Manufacturing	X	X	X	X	X	/	O	X	O	X	X	X	X	X

Land Use Zone	District Centre	Local Centre	Existing Residential	New Residential	Educ. & Com. Infra.	High Tech/ Manuf.	Enterprise & Employment	Retail Warehousing	Industry	Open Space	Semi Natural Open Space	Utilities	Agriculture	Special Control Areas
Type of Use														
Hospital	X	X	X	X	/	O	O	O	X	X	X	X	X	X
Hotel	O	O	X	X	X	X	X	X	X	X	X	X	X	X
Industry - Heavy	X	X	X	X	X	X	X	X	/	X	X	X	X	X
Industry - Light	X	X	X	X	X	/	/	X	/	X	X	X	X	X
Leisure/ Recreation Facility*	O	O	X	X	X	X	O	O	X	X	X	X	X	X
Logistics	X	X	X	X	X	O	/	O	/	X	X	X	X	X
Nursing Home/ Residential Care/ Retirement Village	/	/	O	O	O	X	X	X	X	X	X	X	X	X
Offices	/	/	X	X	X	/	/	X	O	X	X	X	X	X
Park & Ride Facilities	/	/	O	O	X	O	O	O	O	X	X	/	X	X
Petrol Station	/	/	X	X	X	X	O	X	O	X	X	X	X	X
Place of Worship	/	/	O	O	/	X	O	X	X	X	X	X	X	X
Plant Storage/ Hire	X	X	X	X	X	X	/	/	O	X	X	X	X	X
Professional Services*	/	/	X	X	X	X	/	X	X	X	X	X	X	X
Public House/ Nightclub	/	/	X	X	X	X	X	X	X	X	X	X	X	X
Renewable Energy Installation	O ²	O ²	O ²	O ²	O ²	O ²	O ²	O ²	O	X	X	/	O	X
Research & Dev./ Science & Technology	/	/	X	X	X	/	O	X	X	X	X	X	X	X
Residential	/	/	/	/	X	X	X	X	X	X	X	X	X ⁴	X
Restaurant/ Café	/	/	O ⁵	O ⁵	O ⁵	O ⁵	O ⁵	O ⁵	O ⁵	X	X	X	X	X

⁴ Subject to compliance with Objective HO15

⁵ Local Retail <100m² to serve the local working/ neighbourhood population only

Land Use Zone	District Centre	Local Centre	Existing Residential	New Residential	Educ. & Com. Infra.	High Tech/ Manuf.	Enterprise & Employment	Retail Warehousing	Industry	Open Space	Semi Natural Open Space	Utilities	Agriculture	Special Control Areas
Type of Use														
Retail - Convenience/ Comparison*	/	/	O ⁵	O ⁵	X	O ⁵	O ⁵	X	O ⁵	X	X	X	X	X
Retail - Warehouse	X	X	X	X	X	X	O	/	X	X	X	X	X	X
Scrap Yard	X	X	X	X	X	X	O	X	/	X	X	X	X	X
Sports Facility	O	O	/	/	/	O	O	X	O	/	X	X	X	X
Telecommunications Structures	/	/	X	X	/	/	/	/	/	O	X	/	/	X
Vehicle Sales Outlet	X	X	X	X	X	X	/	/	X	X	X	X	X	X
Vehicle Servicing/ Maintenance/ Repairs	X	X	X	X	X	X	/	X	O	X	X	X	X	X
Veterinary Clinic	/	/	X	X	X	X	O	X	X	X	X	X	/ ⁶	X
Warehousing	X	X	X	X	X	O	/	O	O	X	X	X	X	X
Waste Disposal & Recover Facility	X	X	X	X	X	X	/	X	/	X	X	/	X	X
Wholesale - Cash & Carry	X	X	X	X	X	X	/	/	O	X	X	X	X	X

***Comparison** - Goods including Comparison Goods: - clothing and footwear; - furniture, furnishings and household equipment (excluding non-durable household goods); - medical and pharmaceutical products, therapeutic appliances and equipment; - educational and recreation equipment and accessories; - books, newspapers and magazines; - goods for personal care; - goods not elsewhere classified; - bulky goods;

***Convenience** - Goods including -food;- alcoholic and non-alcoholic beverages;- tobacco;- non-durable household goods;

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

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

⁶ Subject to compliance with Objective HO15;

APPENDIX II – SERVICED LAND ASSESSMENT MATRIX

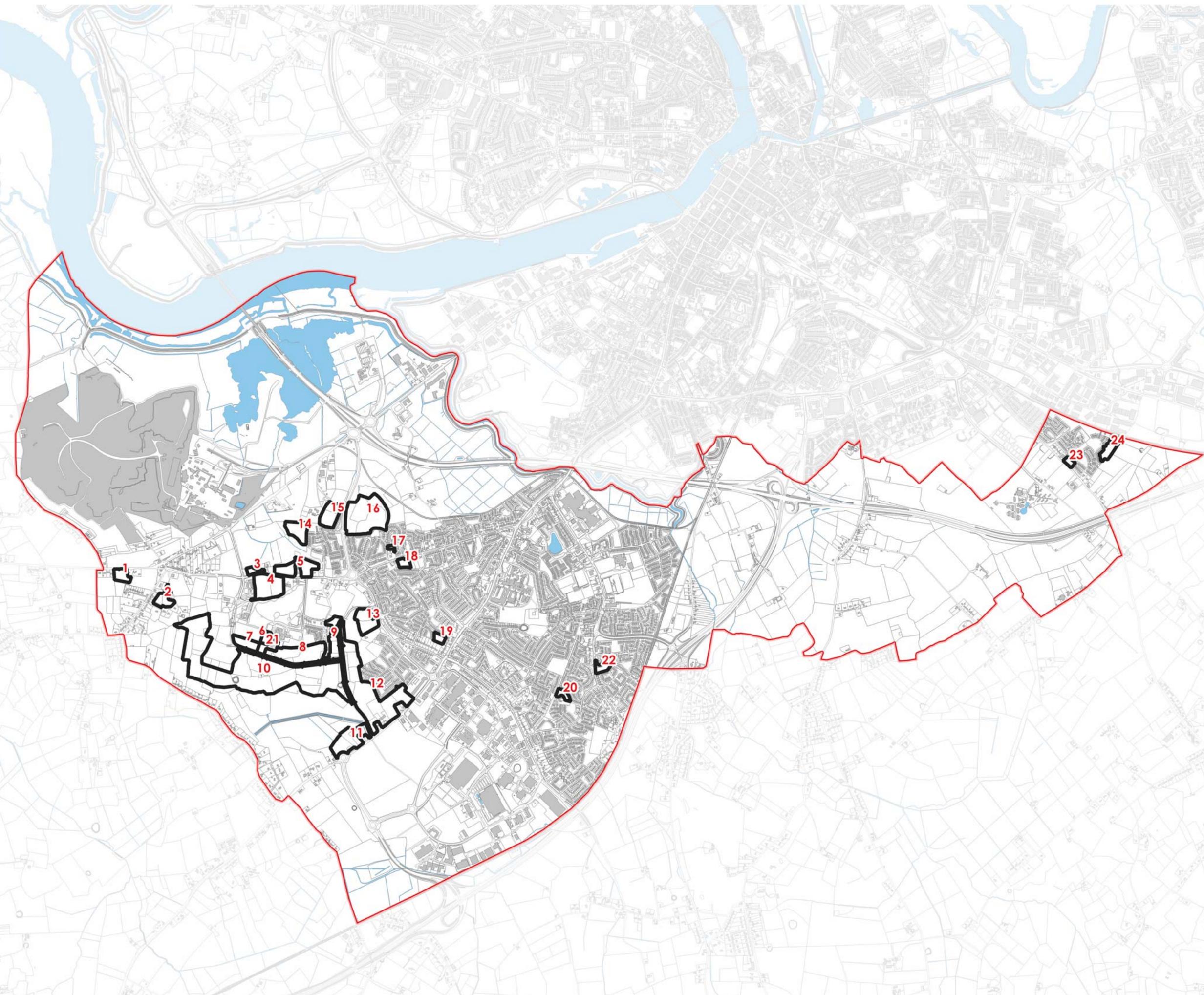
The following table sets out the individual sites identified for residential development as indicated on Map No. 7 and the availability of key infrastructure to service these sites. Where existing infrastructure is located in close proximity to a site and has the potential to be extended to service the site, these services have been indicated as available. Infrastructure directly or potentially available is indicated with a ✓, while infrastructure not available or not required has been indicated with an ✗.

Site No.	Area	Zoning	Lighting	Footpaths	Public Transport	Water	Foul	Surface Water	Road/ Upgrade Required	Time Line	Comment
1	1.122	Existing Resi.	✓	✓	✗	✓	✓	✓	✗	N/A	Infill Site
2	1.475	Existing Resi.	✓	✓	✗	✓	✓	✓	✗	N/A	Infill Site
3	0.516	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
4	4.12	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site Permission Expired – 28 units
5	3.138	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Permission Expired – 50 units
6	0.632	New Resi.	✓	✓	✓	✓	✓	✓	✗	Short/ Medium	Mungret Masterplan Proposed Mungret Link Road

7	1.476	New Resi.	✓	✓	✓	✓	✓	✓	✓	Short/ Medium	
8	5.334	New Resi.	✓	✓	✓	✓	✓	✓	✓	Short/ Medium	Mungret Masterplan Proposed Mungret Link Road
9	2.502	New Resi.	✓	✓	✓	✓	✓	✓	✓	Short/ Medium	Mungret Masterplan Proposed Mungret Link Road
10	31.94	New Resi.	✓	✓	✓	✓	✓	✓	✓	Short/ Medium	Mungret Masterplan Proposed Mungret Link Road
11	3.971	New Resi.	✓	✓	✓	✓	✓	✓	✗		Infill lands Permission Granted – Nursing Home
12	14.39	New Resi.	✓	✓	✓	✓	✓	✓	✓	Short/ Medium	Mungret Masterplan Proposed Mungret Link Road
13	2.521	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Mungret Masterplan Permission Granted – 201 units

14	2.14	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Permission Expired – 97 units
15	2.42	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
16	8.558	New Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	SHD Pre-Planning 330 units
17	0.182	Existing Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
18	0.607	Existing Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
19	0.562	Existing Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
20	0.584	Existing Resi.	✓	✓	✓	✓	✓	✓	✗	N/A	Infill Site
21	1.075	Local Centre	✓	✓	✓	✓	✓	✓	✗	N/A	Mungret Masterplan
22	0.764	Local Centre	✓	✓	✓	✓	✓	✓	✗	N/A	Permission Expired
23	0.414	Local Centre	✓	✓	✗	✓	✓	✓	✗	N/A	Permission Expired
24	1.688	New Resi.	✓	✓	✗	✓	✓	✓	✗	N/A	Permission Granted – 53 units

Service Sites Matrix



Forward Planning
Economic Development Directorate

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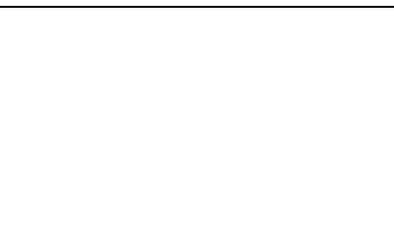
APPENDIX III - RECORD OF PROTECTED STRUCTURES

The Limerick County Development Plan 2010 – 2016 as extended (or any replacement thereof), sets out the Record of Protected Structures. A protected structure is deemed, under the provisions of Section 2 of the Planning and Development Act, 2000 (as amended), to consist of the following:

- (i) the interior of the structure,
- (ii) the land lying within the curtilage of the structure,
- (iii) any other structures lying within that curtilage and their interiors, and
- (iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii)".

The following table sets out the Record of Protected Structures for the Southern Environs:

RPS Ref. No.	NIAH/RMP Ref. No.	Structure Name Townland	Description	Picture
1637	21901301	Southhill House Rathbane South	Country House	
			A good multi-period house located on the outskirts of Limerick City. Unique features include murals in the principal reception rooms in the house and a cast and wrought iron hothouse designed by the ironsmith Richard Turner. Turner worked at the Hammond Lane Foundry in Dublin and designed and built greenhouses for the Botanic Gardens at Kew, Belfast and Dublin.	
1638	21901324	Nolan's Bohereen, Limerick South	Thatched House	
			The Nolan family farmhouse is characterised by its length. This hip-roofed thatched dwelling is aligned north-west/south-east and demonstrates the manner in which builders in the past sought to maximise solar gain for the houses that they constructed. The main front door is sheltered by a porch which is a later addition.	
1639	21901325	Hurley's House Crossagalla	Vernacular Farmhouse	
			Associated complex of outbuildings including the original farmhouse on the site.	

1640	LI-013-023	Castle Rathurd	Medieval Castle	
	Uncommon circular tower with good house construction in the late 19th Century immediately to its south-west.			
1641	21901331	Donaghmore R.C. Church Bohereen, Roxborough	Catholic Church	
	This is a simple L-shaped church set within its own grounds close to an early medieval church site of the same name which lies on the other side of the public road behind some modern housing. The roof is emphasised as a feature of the building through the use of squared Killaloe slates and scallop patterning in Blue Bangor slating.			
1642	21901332	Parochial House Bohereen, Roxborough	Country House	
	Late Victorian/ Edwardian period house which presents a symmetrical façade to the streetscape. The principal elevation is elaborated through the use of gables framing the roof, hood-mouldings in stucco, over the first floor windows and bay windows at ground floor level framing the main entrance. There is a range of good outbuildings on the rear of the plot.			
1643	N/A	Donaghmore School Bohereen, Roxborough	Institutional Building	
	This listing applies to the original school building at this site which is a T-shaped two classroom structure.			
1644	N/A	Ballinacurra Bridge Ballykeeffe/ Dooradoyle	Bridge	
	Possible medieval bridge and Victorian period marker indicating the Limerick City boundary. Single arched structure over Ballinacurra Creek. List in Record of Monuments and Places - Ref. No. Li-013-012.			

1645	N/A	Lahiff's Ballykeeffe	Thatched House	
<p>The Lahiff family farmhouse is a gabled building and is aligned north-east/south-west and demonstrates the manner which builders in the past sought to maximise solar gain for the houses that they constructed, while minimising exposure to prevailing winds.</p>				
1646	N/A	County Hall Dooradoyle	Civic Building	
<p>This is a civic building of unrepentant contemporary design. It is aligned north-west/south-east with the formal entrance and principal facades facing south-westwards. At the time of its construction it was claimed to be the largest office complex constructed in Ireland designed to be operated without the use of air-conditioning.</p>				
1647	21901310	Dunmore House Ballykeeffe	Dwelling	
<p>This is a symmetric building set forward on its plot. There is a return to the rear on the western side of the building, a lean to garage is also located on this side. The building's interior is lit by coupled sash windows with a one-over-one glazing pattern.</p>				
1648	N/A	St. Paul's Dooradoyle	Roman Catholic Parish Church	
<p>Pyramidal roof with glazed toplight, internal design reflects post Vatican II layout for liturgical practice, stained and etched glass windows.</p>				
1649	N/A	Hospital Chapel Dooradoyle	Institutional Building	
<p>This building, like the hospital itself, was designed by the architectural practice of Sheahan & Clery - Patrick J. Sheahan, M.R.I.A.I., being consultant architect to the Limerick Board of Health. Sheahan was a noted designer of churches and was the first Irish architect to be made a Chevalier of the Order of Saint Sylvester for his work as an ecclesiastic architect.</p>				

1650	N/A	O'Grady's Baunacloka	Thatched House	
	O'Grady's thatched house is a typical three bay lobby entry class building. The main entrance is sheltered by a later porch. The door gives access to a small lobby to the left of which is the "parlour", while to its right is the kitchen off which the bedrooms open.			
1651	21901310	Templemungret House Skehacreggaun	Country House	
	Six bay, two storey, detached house, built c.1880, original decorated bargeboards, timer sliding windows.			
1652	LI-013- 009006	Toberpatrick Skehacreggaun	Medieval Holy Well	
	This site carries an archaeological constraint as it is entered in the Record of Monuments and Places LI-013-009006. Toberpatrick was conserved and restored and presented as a holy well during the course of building works in the vicinity as a condition that was attached to a grant of planning permission.			
1653	21901316	School Dromdarrig	Institutional Building	
	The former boys' / girls' school, having been used as a dwelling for a period of time, has been extended and is now in use as a childcare facility.			
1656	LI-013- 009005	Mungret Abbey (in ruins) Dromdarrig	Medieval Church	
	This site carries an archaeological constraint as it is entered in the Record of Monuments and Places LI-013-009004 and 009005.			

1657	LI-013-009002	Church (in ruins) Dromdarrig	Medieval Church	
	This site is in State Ownership and is a National Monument, Ref. No. 85. It is entered in the Record of Monuments and Places Li-013-009002 and 009003.			
1658	21901312	Mungret College Dromdarrig	Institutional Building	
	Founded originally as a Model Agricultural School and endowed by Lord Emly, whose principle seat was at Tervoe to the north-west of Mungret village. Subsequently, it was acquired by the Society of Jesus (Jesuits) who ran it as a boarding school. This main block was raised in height to facilitate this use. The entrance porch was brought here from Tervoe House when it was demolished. Gate Lodge, Follies, Seismic Station and Grotto are included as elements of significance.			
1659	21901317	Mungret Gate Lodge Dromdarrig	Gate Lodge	
	An attractive gate lodge, which forms a fitting introduction to the Gothic architecture of the college beyond. The building is architecturally interesting in its own right and retains a strong character, with interesting features including tooled window and door surrounds.			
1660	21901313	Mungret College Dromdarrig	Institutional Building	
	Gothic wing of the college added by the Jesuits in the late 19th Century. Includes the Boys' Chapel. Stained glass from this structure is displayed in Bewley's, Westmoreland Street, Dublin.			
1661	N/A	Mungret College Dromdarrig	Institutional Building	
	Stables and outbuildings			

1663	21901311	Mount Mungret Moneteen	Country House	
This building served as the Rectory for the Church of Ireland parish in the past.				
1664	N/A	Eddie Shanahan's Pub Rathmale	Commercial premises	
This is a simple three bay two storey gabled building located on the southern side of the N69 road in Mungret village. Natural slate roof, metal rainwater goods, and rise and fall sash windows add to the authentic charm of a traditional public house.				
1665	N/A	Rathmale	Water Pump	
This traditional cast iron pump located at a cross roads in the village of Mungret, was added to the Record of Protected Structures at the request of members of the local community.				
1666	N/A	O'Donoghue's Castlemungret	Dwelling	
Good symmetrical building with a centrally placed door located in a breakfront. It was constructed in the 1940s by a local tradesman as a dwelling for his wife and himself.				
1667	N/A	St. Oliver Plunkett's Moneteen	Roman Catholic Parish Church	
Modern church roofing of corrugated material rising up from the walls to form a mansard before curving over to crown the worship area with a shallow pyramid.				

1668	N/A	Willowdale Gouldavoher	Dwelling	
<p>The former Roman Catholic Presbytery for the parish of Mungret/ Crecora/ Donoghmore which was purpose built in the mid-20th Century. It superseded the building now known as Loughmore House.</p>				
1669	21901306	Raheen Church Ballycummin	Roman Catholic Parish Church	
<p>Identified as "Mungret Catholic Church" on mapping of the 1920s, this is a limestone built structure which had aisles added in the 1980s.</p>				
1670	21901308	Barry's Gouldavoher	Thatched House	
<p>Dwelling with a shop to the front in a corrugated iron clad annexe. It is a gabled three bay thatched house which would appear to have been modified to allow for it to be used as a commercial premises.</p>				
1671	21901309	Roche Castle Ballycummin	Country House	
<p>This is a castellated structure dating to the Victorian period. A two-storey gabled house in cut stone is brought into the realms of fantasy by a three storey octagonal tower in cut limestone. The tower's walls are pierced by single-light, coupled, and mullioned windows of various designs. Blind gun/ arrow-loops decorate the tower's elevations. The tower carries a battlemented parapet supported on corbelled machicolations. The merlons are of single cop design but are topped by capstones with a roll motif. The tower is surmounted by a turret, which is also treated in the same fashion.</p>				

1672	N/A	Loughmore House/ Dun n'Gaedeal Baunacloka	Vernacular House & Farmhouse	
Served as the residence of the Roman Catholic Parish Priest at one time when it was leased from a Church of Ireland clergyman.				
1694	N/A	Bawnmore Church Bawnmore	Roman Catholic Church	
Modern church with elliptical floor plan, hidden roofs and wall lines rising in the shape of a ships prow or stern.				

APPENDIX IV - RECORD OF MONUMENTS AND PLACES

Archaeological sites are included in the Record of Monuments and Places 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 sets out the Recorded Monuments and Places located within the Southern Environs:

RMP Ref. No.	Townland	Classification
LI004-021	Tervoe	Enclosure
LI004-022	Tervoe	Enclosure
LI005-075	Bunlicky	Enclosure
LI005-106	Conigar	Kiln - brick
LI012-123	Conigar	Standing stone
LI012-124	Tervoe	Enclosure
LI013-001	Castlemungret	Enclosure
LI013-002	Rathmale	Enclosure
LI013-003	Moneteen	Moated site
LI013-005	Caheranardrish	Enclosure
LI013-006	Castlemungret	Castle - unclassified
LI013-007	Dromdarrig	Ringfort - rath
LI013-008	Dromdarrig	Enclosure
LI013-009	Castlemungret	Historic town
LI013-009001	Bunacloka	Church
LI013-009002	Dromdarrig	Church
LI013-009003	Dromdarrig	Graveyard
LI013-009004	Dromdarrig	Graveyard

LI013-009005	Dromdarrig	Church
LI013-009006	Skehacreggaun	Ritual site - holy well
LI013-009007	Skehacreggaun	Excavation - miscellaneous
LI013-009008	Bunacloka	Ecclesiastical site
LI013-009009	Dromdarrig	Bullaun Stone
LI013-010	Ballykeeffe	Enclosure
LI013-011	Baunacloka	Ringfort - rath
LI013-012	Ballinacurra/Dooradoyle	Bridge
LI013-013	Dooradoyle	Ringfort - rath
LI013-014	Dooradoyle	Ringfort - rath
LI013-016	Rossbrien	Souterrain
LI013-017001	Rossbrien	Church
LI013-017002	Rossbrien	Graveyard
LI013-018	Rossbrien	Ritual site - holy well
LI013-019	Rossbrien	Ringfort - rath
LI013-020	Rathbane South	Barrow - unclassified
LI013-023	Rathurd	Castle - tower house

LI013-024001	Rathurd	Ritual site - holy well
LI013-024002	Rathurd	Church
LI013-025	Crossagalla	Ringfort - rath
LI013-036	Ballycummin	Ringfort - rath
LI013-037	Sluggary	Ringfort - rath
LI013-038	Sluggary	Ringfort - rath
LI013-03900	Ballycummin	Possible enclosure
LI013-039002	Ballycummin	Ringfort - rath
LI013-040	Sluggary	Ringfort - rath
LI013-041	Sluggary	Ringfort - rath
LI013-042	Sluggary	Ringfort - rath
LI013-116	Dooradoyle	Mill - unclassified
LI013-121	Dooradoyle	Enclosure
LI013-122	Ballysheedy East	Enclosure
LI013-123	Ballysheedy East	Enclosure
LI013-124	Ballysheedy East	Enclosure
LI013-130	Ballysheedy East	Enclosure
LI013-131	Gouldavoher	Enclosure
LI013-132	Gouldavoher	Enclosure
LI013-133	Baunacloka	Enclosure
LI013-134	Loughmore Common	Possible enclosure
LI013-144	Rathurd	Enclosure
LI013-146	Ballycummin	Ringfort - rath
LI013-147	Castlemungret	Standing stone
LI013-148	Moneteen	Standing stone
LI013-149	Rossbrien	Cairn - clearance cairn
LI013-151	Ballycummin	Road/ trackway
LI013-166	Ballycummin	Excavation - miscellaneous
LI013-167	Ballycummin	House 18th/ 19th Century
LI013-168	Rossbrien	Fulacht fia

LI013-169001	Rossbrien	Fulacht fia
LI013-169002	Rossbrien	Fulacht fia
LI013-170	Rossbrien	Burnt mound
LI013-171	Rathbane South	Fulacht fia
LI013-172	Rathbane South	Fulacht fia
LI013-173	Rathbane South	Fulacht fia
LI013-174	Rathbane South	Barrow
LI013-175	Rathbane South	Fulacht fia
LI013-176	Banemore	Excavation - miscellaneous
LI013-179001	Dooradoyle	Fulacht fia
LI013-179002	Dooradoyle	Fulacht fia
LI013-180	Dooradoyle	Fulacht fia
LI013-184	Caheranard	Enclosure
LI013-185	Castlemungret	Enclosure
LI013-215	Rossbrien	Fulacht fia
LI013-216	Rathbane South	Cremation pit
LI013-217	Rathbane South	Kiln - corn-drying
LI013-218	Rathbane South	Excavation - miscellaneous
LI013-219	Caheranardrish	Cremation pit
LI013-221	Caheranardrish	Fulacht fia
LI013-222	Castlemungret	Fulacht fia
LI013-223	Castlemungret	Fulacht fia
LI013-224	Skehacregganun	House - 17th Century
LI013-225	Skehacregganun	Kiln - corn-drying
LI013-226	Skehacregganun	Excavation - miscellaneous

LI013-227	Ballinacurra/ Ballykeefe	Riverine revetment
LI013-228	Ballykeeffe	Fulacht fia
LI013-229	Ballycummin	Fulacht fia
LI013-230	Ballycummin	Fulacht fia
LI013-231	Ballycummin	Fulacht fia
LI013-232	Ballycummin	Fulacht fia
LI013-233	Ballycummin	Fulacht fia
LI013-234	Ballycummin	Fulacht fia
LI013-235	Ballycummin	Excavation - miscellaneous

LI013-237001	Rossbrien	Fulacht fia
LI013-237002	Rossbrien	Fulacht fia
LI013-238	Rossbrien	Fulacht fia
LI013-241	Skehacregga un	Excavation - miscellaneous
LI013-242001	Skehacregga un	Excavation - miscellaneous
LI013-242002	Skehacregga un	Souterrain

APPENDIX V - MAPS

Map 1: Zoning

Map 2: Flood Map

Map 3: Amenity Map

Map 4: Transport Map

Map 5: Record of Protected Structures Map

Map 6: Recorded Monuments Map

1A

1C

1B

LEGEND

- Agriculture
- Existing Residential
- New Residential
- Education & Community Infrastructure
- Enterprise & Employment
- Retail Warehousing
- Industry
- High Tech/ Manufacturing
- Local Centre
- District Centre
- Open Space & Recreation
- Special Control Area
- Semi Natural Open Space
- Proposed Natural Heritage Area
- Utilities
- Proposed Link Roads (Indicative)
- Ecological Buffer Zone
- Special Area of Conservation
- Special Protection Area

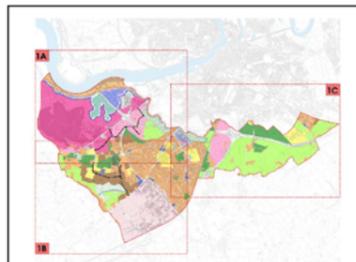
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Economic Development Directorate

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DATE		DATE	Oct. '20
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Zoning Map



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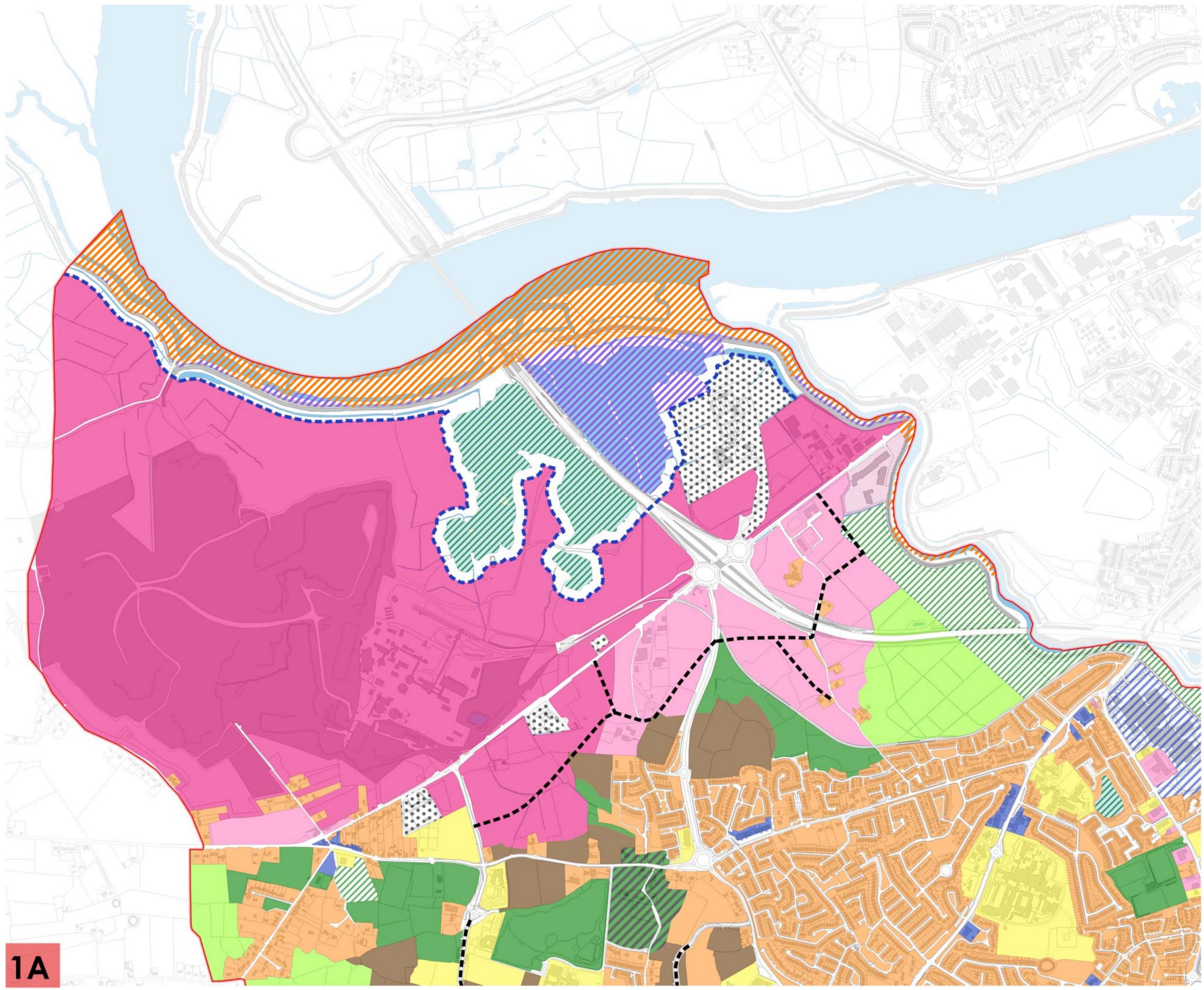
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- Enterprise & Employment
- Retail Warehousing
- Industry
- High Tech/ Manufacturing
- Local Centre
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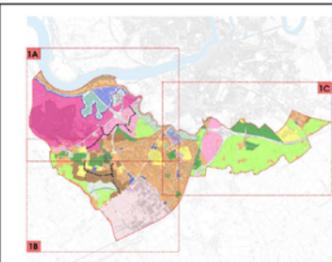
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Zoning Map



LEGEND

- Agriculture
- Existing Residential
- New Residential
- Education & Community Infrastructure
- Enterprise & Employment
- Retail Warehousing
- Industry
- High Tech/ Manufacturing
- Local Centre
- District Centre
- Open Space & Recreation
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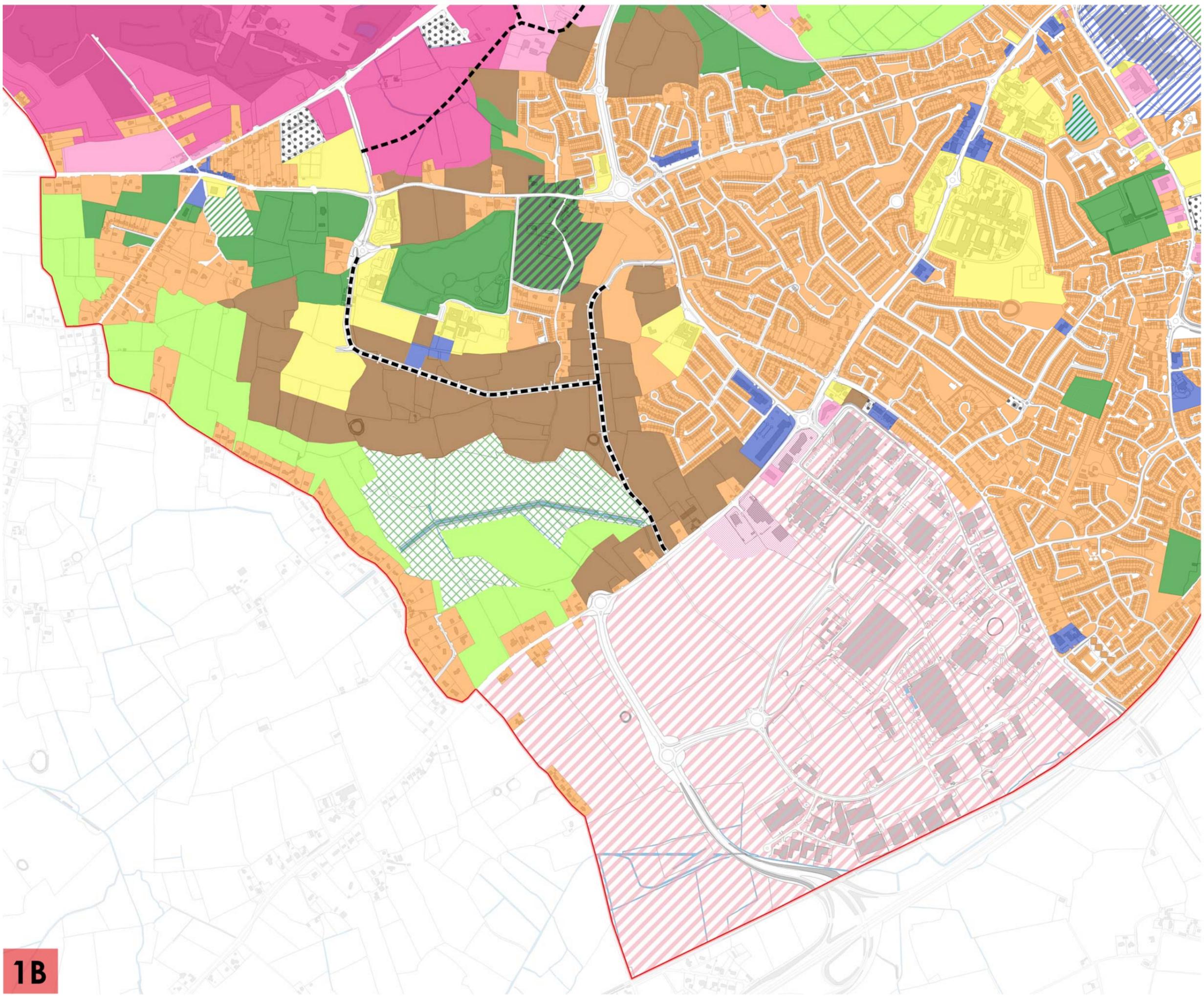
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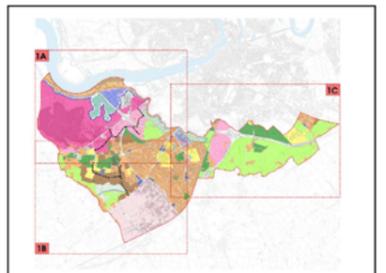
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Zoning Map



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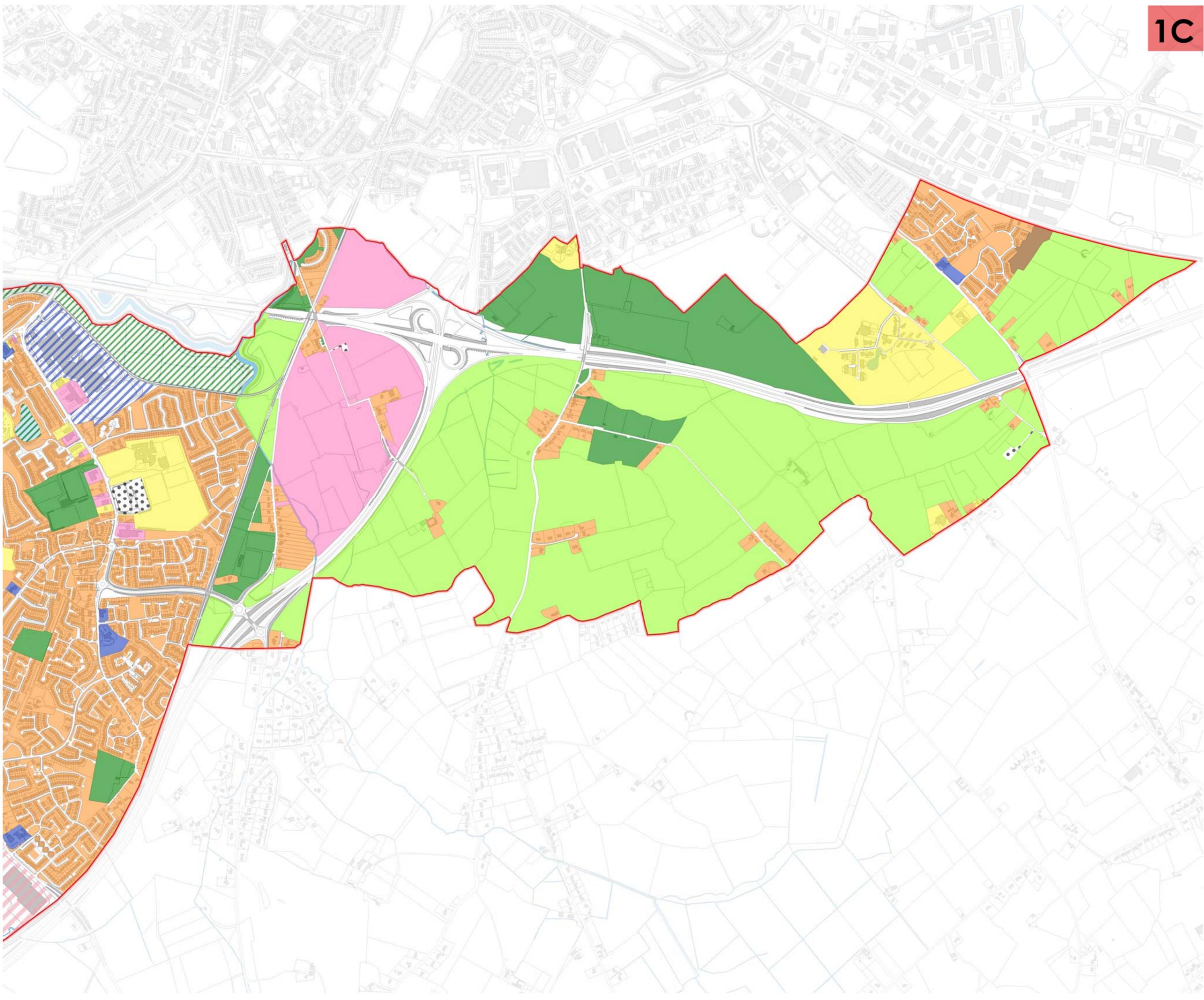
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- Existing Residential
- New Residential
- Education & Community Infrastructure
- Enterprise & Employment
- Retail Warehousing
- Industry
- High Tech/ Manufacturing
- Local Centre
- District Centre
- Open Space & Recreation
- Special Control Area
- Semi Natural Open Space
- Proposed Natural Heritage Area
- Utilities
- Proposed Link Roads (Indicative)
- Ecological Buffer Zone
- Special Area of Conservation
- Special Protection Area

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Flood Map

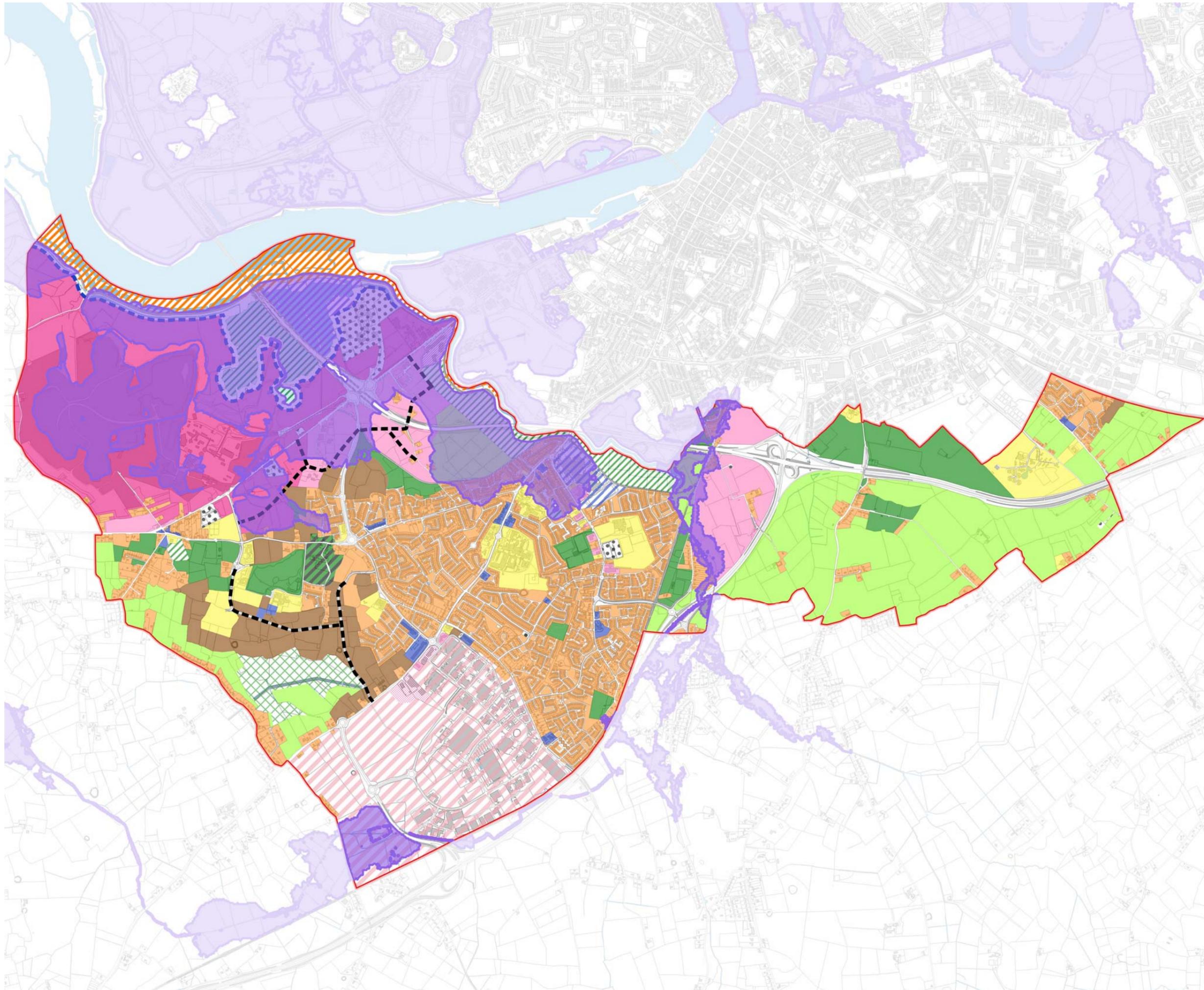
LEGEND

- Agriculture
- Existing Residential
- New Residential
- Education & Community Infrastructure
- Enterprise & Employment
- Retail, Warehousing
- Industry
- High Tech/ Manufacturing
- Local Centre
- District Centre
- Open Space & Recreation
- Special Control Area
- Semi Natural Open Space
- Proposed Natural Heritage Area
- Utilities
- Proposed Link Roads (Indicative)
- Ecological Buffer Zone
- Special Area of Conservation
- Special Protection Area
- CFRAMS Flood Data

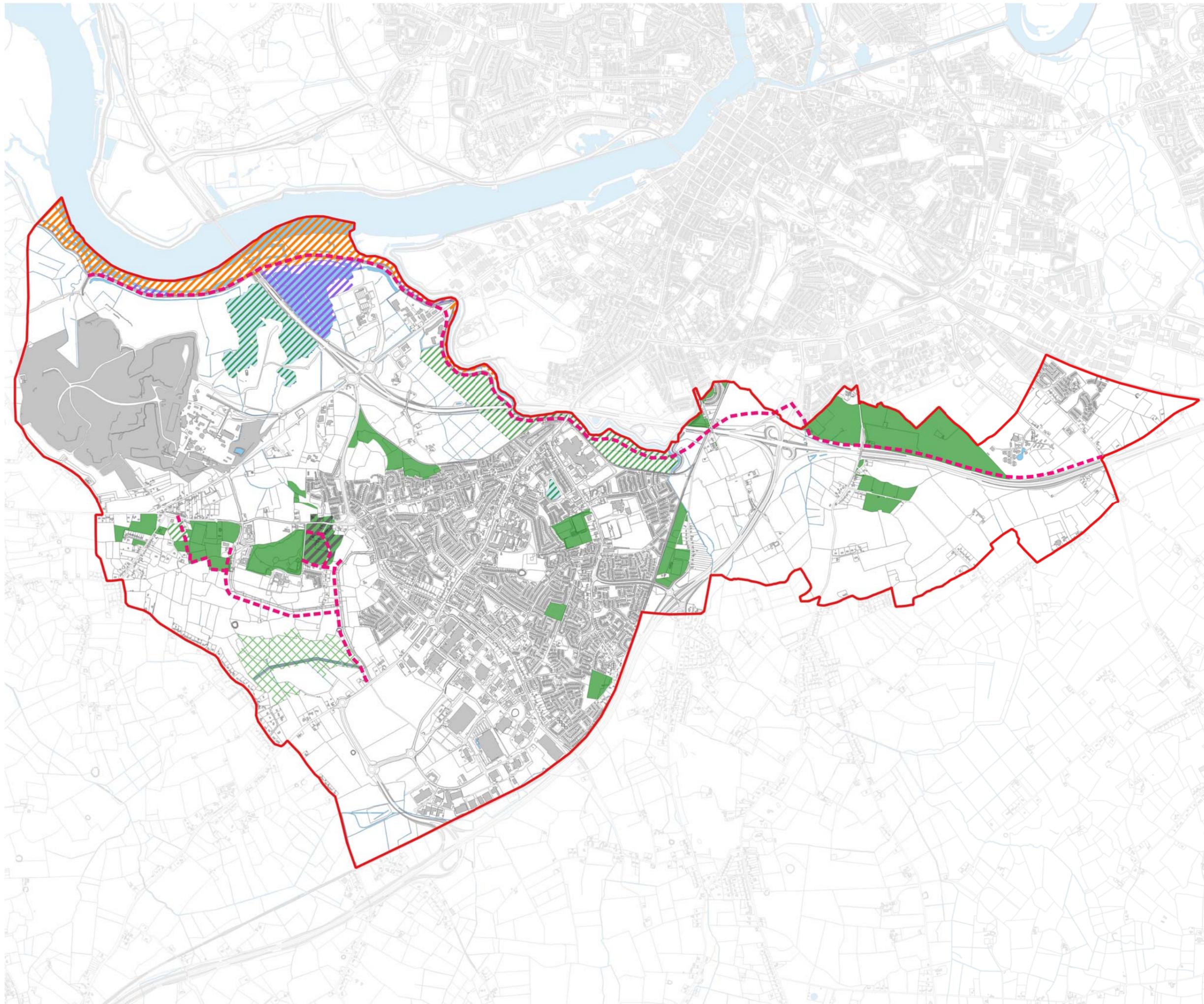
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SCALE	NA	DWG. NO.	SE-21-27-02
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Amenity Map



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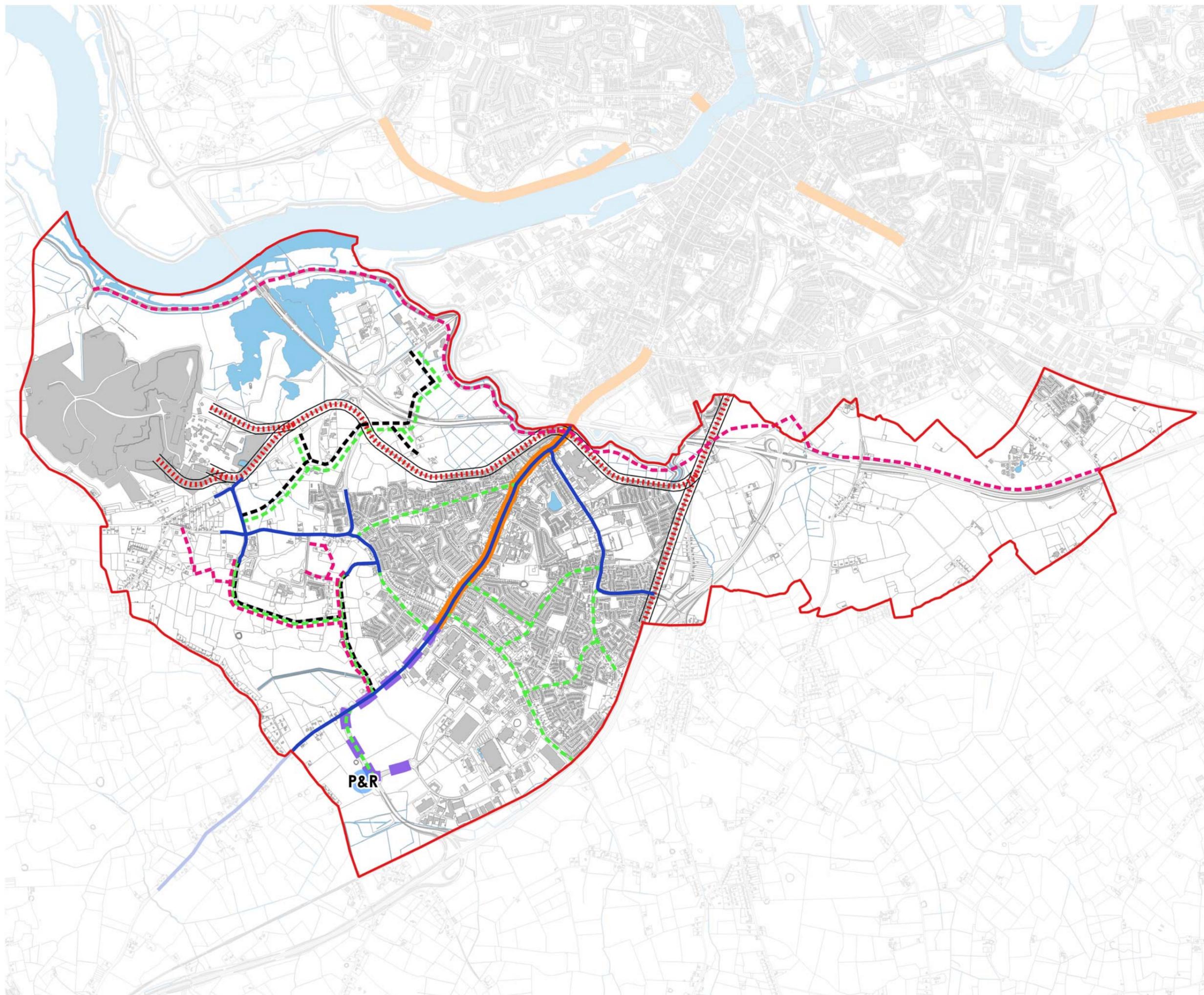
-  Open Space & Recreation
-  Special Control Area
-  Semi Natural Open Space
-  Proposed Natural Heritage Area
-  Utilities
-  Special Area of Conservation
-  Special Protection Area
-  Proposed Pedestrian Routes

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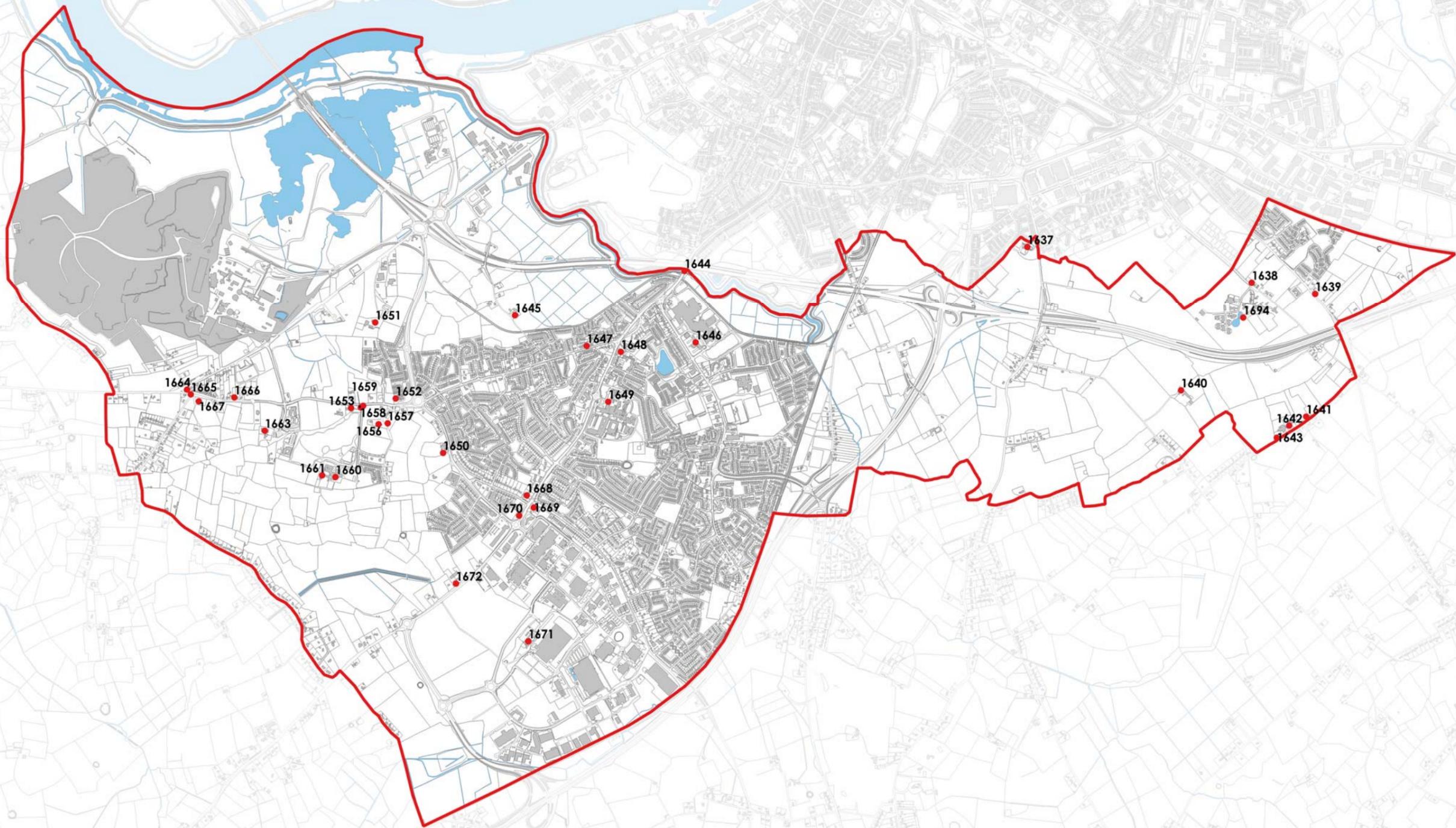
- Proposed Link Roads (Indicative)
- SE Proposed Walks
- Existing Cycleways
- Proposed Cycleways
- Existing Bus Lanes
- Indicative Bus Lanes
- P&R Indicative Location of Park & Ride Facility

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Record of Protected Structures



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- Record of Protected Structures

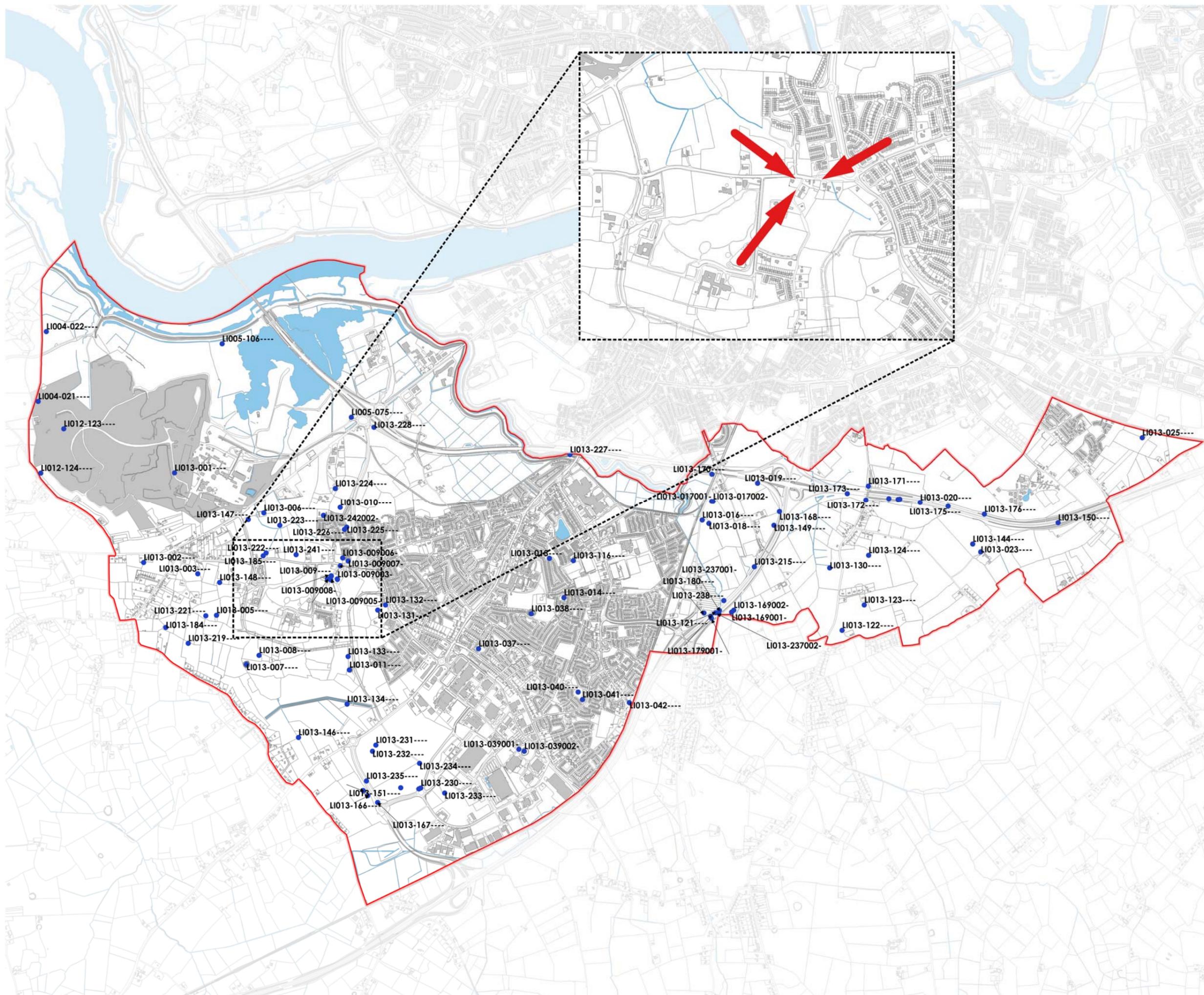
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DRAFT SOUTHERN ENVIRONS ENVIRONMENTAL ASSESSMENTS



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

Strategic Environmental Assessment of the Draft Southern Environs Local Area Plan 2021 – 2027

10th October 2020

Forward/Strategic Planning



Limerick City and County Council,
Economic Development Directorate,
Merchants Quay,
Limerick.

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1.0 Non-Technical Summary for the Current Draft

1.1 Introduction

Strategic Environmental Assessment (SEA) is a formal process that is carried out as part of the review of the existing Southern Environs Local Area Plan (SELAP) 2011 -2017 (as extended). A new Draft Local Area Plan for the Southern Environs has been prepared to replace the 2011-2027 plan under this review.

The review will update the policy content of the plan, bearing in mind the introduction of new national and regional level policy guidance. Amongst the changes during the review will be:

- 1) **Re-zoning of lands**, where it is considered necessary to accommodate changes required since the preparation of the last plan;
- 2) **Rationalisation of residential zoning** to maintain consistency with the population and housing targets as specified in the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region;
- 3) **Changes to zoning to reflect the new content of the NPF and the RSES;**
- 4) **Changes to the plan to reflect the importance of climate change** including the incorporation of the contents of the EPA guidance note Integrating Climatic Factors into the Strategic Environmental Assessment Process in Ireland (June 2019).
- 5) **Changes to both policy content in the plan and the zoning matrix** to reflect the new policy content following adoption of both NPF and RSES and changed planning requirements that have come about since the adoption of the last plan.

The SEA process informs decision making during the preparation of the plan, by improving the environmental compliance of the plan and raising awareness of the potential environmental consequences of its implementation, so that these consequences may be mitigated or avoided altogether. It also gives the public and other interested parties an opportunity to comment on, and to be kept informed of, decisions that may affect the local environment and how the review to the plan is carried out.

In accordance with the legislation, a ‘scoping’ exercise was carried out to determine the range of environmental issues and level of detail to be contained in the Environmental Report. This took place in May 2020 and involved consultation with the relevant Environmental Authorities:

- The Environmental Protection Agency;
- The Department of the Housing, Planning and Local Government;
- The Department of Culture, Heritage and the Gaeltacht;
- The Department of Communications, Climate Action and the Environment;
- The Department of Agriculture, Food and the Marine.

The main part of the SEA process is the Environmental Report, which outlines the findings of the assessment process. This is the Environmental Report for the review that has been

prepared in accordance with the Planning and Development (SEA) Regulations 2004 and SEA (Review) Regulations 2011 (SI 200 of 2011). This report should be read in tandem with the draft plan and the Natura Impact Report.

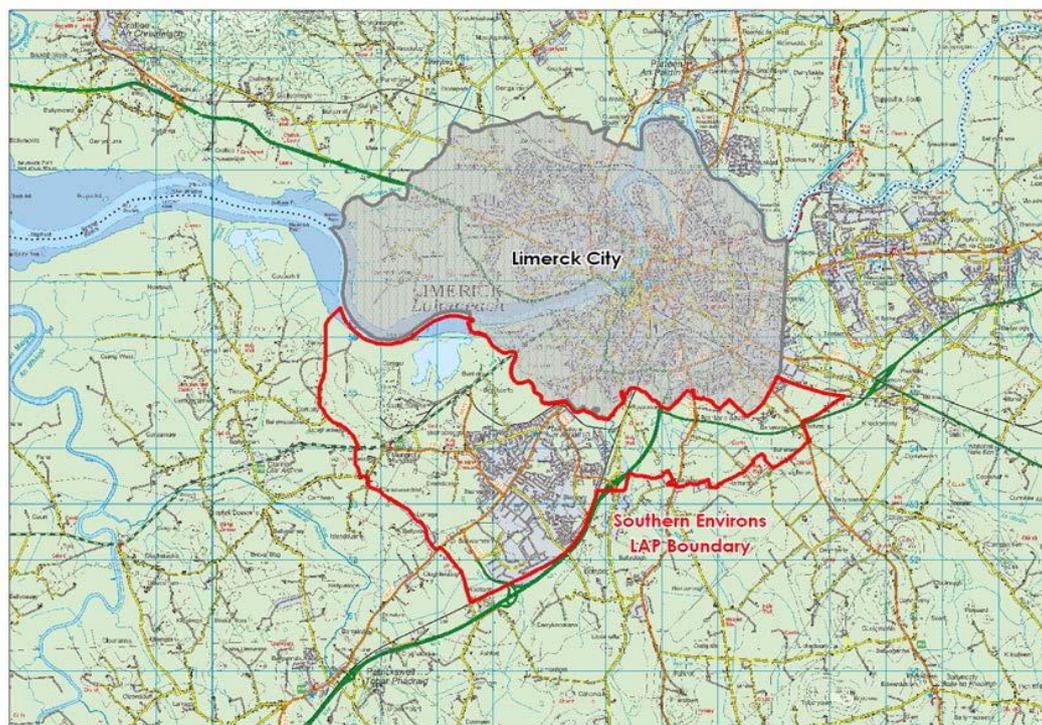


Figure 1: Boundaries of the Southern Environs Local Area Plan

1.2 Contents and Main Objectives of the Southern Environs LAP

The Local Area Plan (LAP) is a legal document consisting of a public statement of Limerick City and County Council’s planning policies for the Southern Environs area. This plan will replace the previous 2011 - 2017 Southern Environs Local Area Plan (as extended). The aim of this LAP, is to establish a framework for the planned, coordinated and sustainable development of the Southern Environs and for the conservation and enhancement of its natural and built environment for the lifetime of the plan and beyond. The LAP provides guidance as to how this development can be achieved, what new developments are needed, where public and private resource inputs are required, and guidance for development proposed in the LAP area. The plan takes into account the provisions of planning policy documents higher in the tier of plans, including the contents of National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region, which sets out the population targets for the plan area.

The chapter headings in the plan cover economic development, housing, community and key infrastructure, built and natural environment, transport and movement and climate change and flood management.

All planning applications for the Southern Environs will be considered against the contents of the 2021 – 2027 LAP, when it is adopted.

1.3 Current State of the Environment

Biodiversity, Flora and Fauna

The River Shannon and the Ballinacurra Creek waterways, in the eastern and northern part of the plan area provide the setting for a range of wildlife habitats and species and are important local amenities. Both are part of the Lower River Shannon Special Area of Conservation site. One reason for its ecological importance is the presence of Lesser Bulrush (*Typha angustifolia*) and Summer Snowflake (*Leucojum aestivum*).

The Lower River Shannon SAC site and the River Shannon and Fergus Estuaries SPA lie to the north of the LAP area.

At least two turloughs exist within the Southern Environs area. One of which is the Loughmore Common, which is a seasonal lake. The other is Monateen Turlough, which is located to the rear of St. Oliver Plunkett Church, in Mungret village.

The plant communities of the Loughmore Common are more typical of those of marsh than other turloughs and this is one of the reasons for the ecological importance of the site. This site is a small one and lies entirely within the boundaries of the Southern Environs area.

The main dangers to the site are the gradual encroachment of housing and other development with consequent changes in hydrology. The functioning of the hydrological regime is poorly understood and for this reason caution in terms of development in close proximity to the site is advised. In the current review the opportunity was taken to maintain the buffer area around the turlough. Some on site flora are dependent on salt in the water feeding the turlough, which may reach the site from the tidal movements of the River Shannon, itself a Special Area of Conservation. This emphasises the interconnected nature of the hydrology of the Southern Environs. Local sources indicate that Monteen turlough is connected with Loughmore Common. Therefore, additional disturbance to Loughmore Common and the Monteen turlough and associated hydrology should be avoided. This is achieved through the retention of the buffer zoning in the case of Loughmore Common and the retention of the zoning of Monteen turlough as Semi-Natural Open Space.

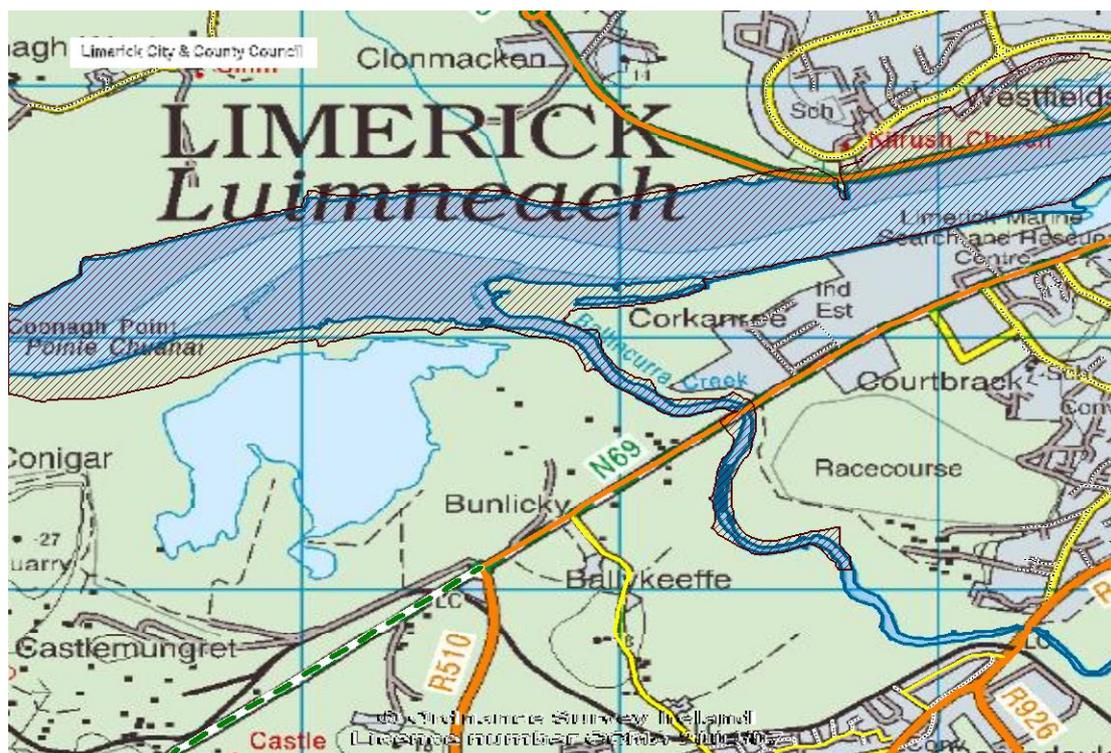


Figure 2: Ballinacura Creek is in the mid picture. The hatching indicates that it is part of the Special Area of Conservation site.

The use of buffers is also a feature of water-based sites in the plan area. One such buffer, designated as semi-natural open space along undeveloped sections of the Ballinacura Creek in the east of the plan area, is 50m from the edge of the Special Area of Conservation designation on the land-ward side of the creek.

Table 1.1: Designated sites in the SELAP Area

NPWS Code	Name
SAC 002165	Lower River Shannon
SPA 004077	River Shannon and River Fergus Estuaries
NHAs/pNHAs	
000438	Loughmore Common
002048	Fergus Estuary and Inner Shannon North Shore
000435	Inner Shannon Estuary South Shore

Source: Limerick County Development Plan 2010 – 2016 (as extended) and Southern Environs Local Area Plan 2011 – 2017 (as extended).

Trees in the plan area

Trees can be as visually prominent as buildings and are an important landscape component. They are able to integrate with building structures providing important landscape features and visual variety. From an ecological viewpoint, whatever the species, it is important to ensure that an adequate tree stock remains within the Southern Environs area.

Closely related to the question of trees in the landscape is that of hedgerows. Within the LAP area there is a presumption against the removal of these landscape features. These are part of the fabric and history of the landscape. Apart from their visual contribution they are also important habitats in their own right. In order to ensure their continued vitality and usefulness as landscape features and habitats they require continuous management, particularly, if they are to be integrated within new developments.

The link between the quality of the local environment, of which trees are an important component, and human well-being is one that is increasingly recognised. With that in mind the trees and groups of trees that were selected as being of importance in the last Plan will retain their designations following the current review. These were selected for a number of reasons including from a natural history perspective (e.g. one small group of trees is a rookery), and also from the point of view that trees and landscape features are important cultural and indeed historical landmarks. The trees around Mungret College are a case in point.

Population and Human Health

The Southern Environs contains large areas of newer residential developments as reflected by the growth patterns outlined above. The Southern Environs had a population of 19,073 persons in 2016, representing an increase of 14.5% on the 2006 population figure of 16,065 persons.

In the absence of the adoption of the proposed Limerick Development Plan, the review process for which has just begun, the Local Authority has made assumptions with respect to population projections and allocation, additional residential units and zoned land requirements. In this respect and having regard to the National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region population growth targets, the assumed Southern Environs population growth allocation is an additional 7,420 to 2027.

Public facilities

Increased population will also lead to increased demands for resources such as potable water, infrastructure and wastewater disposal and transport, while leisure needs will lead to increased demands for parks and leisure facilities, often with associated demands on landscape and habitats. In this regard, since 2015, within the plan area, Mungret has seen some development of these facilities, with the opening of a new playground in 2018 in the grounds of Mungret College. The existing plan also proposes a series of walks along the rivers of the plan area. During the time-period of the last plan there has also been the development of two schools close to Mungret College, extensions to existing pitches in the area and the development of the local road network to service the schools.

The provision of adequate services, such as waste disposal will have beneficial effects on human health. This has added emphasis during the preparation of the existing plan, as both the population of what had been referred to as the city environs (i.e. Castletroy and the Southern Environs, including Raheen), with their higher population densities as well as the former Limerick City population, will have to be considered in terms of the capacity of the receiving waste water treatment plant.

The main Waste Water Treatment Plant for the area of the local area plan review is the plant at Bunlicky. Capacity is adequate for the city's and environs needs with a population capacity

of 130,000 population equivalents. The plant came into operation in 1999. While the question of it operating close to capacity has been raised, discussions with Irish Water and Water Services Section of Limerick City and County Council have indicated that new working procedures, in addition to the construction of an anaerobic digester and other upgrades, will ensure that the plant will be able to keep pace with development within the agglomeration that it serves. Though there is no additional capacity, the overall efficiency of the plant is increased.

There are no Seveso sites in the plan area but there are two identified Seveso Sites, known as 'lower tier' sites to the east in the city area and just outside the SELAP area. These are Joint Fuel Terminal (Topaz), Courtbrack Avenue and Grassland Fertilizers, on the Dock Road. These are included in the Health and Safety Authority referral list, and are also referred to the Emergency Services for comments should any applications be received, either on those sites or close to them.

Air Quality

Air quality in Ireland is generally of a high standard across the country. There are three air quality monitors located in Limerick one of which is in Mungret. The current air quality in the **Limerick** Air Quality Index Health Region is 3 - **Good**. The index is based on information from monitoring instruments at The Peoples Park in Limerick. The index was calculated on Tuesday 1st September 2020. On occasion, particularly during holiday periods, through traffic traversing the City and Environs can create localised issues with traffic fumes, particularly with peak traffic flows along the nearby Dock Road. This road has been selected for improvement works by Limerick City and County Council, which should improve traffic flows in the longer term.

Climate change impacts may present challenges to future land use and location of development in the Southern Environs. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall and more exposure to flood risk. Leaving aside the issue of climate change for a moment, "natural variations in climate has resulted in more frequent late summer flooding". (Jacobs CFRAM, 2012, p.7). The issue of flooding in relation to the review and climate change generally will be dealt with in more detail later in this report. Flooding has been dealt with in part by avoiding encroachment on existing wetlands within the plan area and the retention of buffers that had been put in place since the previous plan. It should be remembered that one of the greatest influences on flooding in the SELAP area is that of tidal flooding (JBA, August 2020).

The implementation of buffer zones along the Ballinacurra Creek and Bunlicky Lake, and in the area which is part of the SAC site to the northwest has a number of benefits. Not only does it allow increased flood residence areas, it minimises the amount of potentially hard surfaced areas and associated run off. It also ensures that any potential development would not infringe on the Ballinacurra Creek channel with consequent impediments to flow. These will be retained during the review as not only do they allow ecological buffers but also provide for additional flood storage areas.

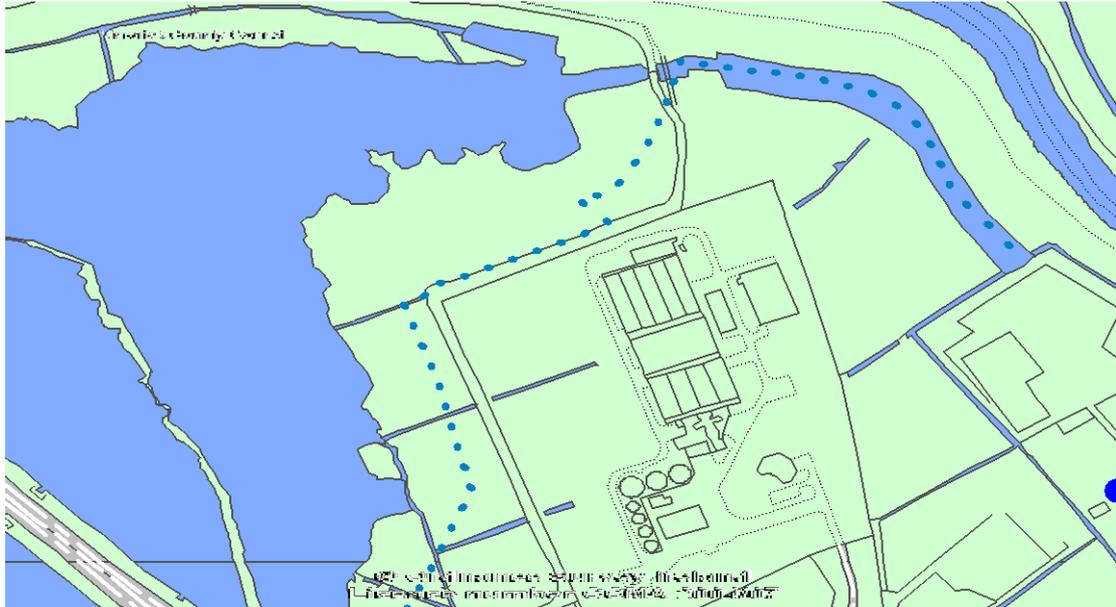


Figure 3: The blue dots show the part of the Ecological Buffer zone around Bunlicky Lake and Ballinacurra Creek

The buffer provided around Loughmore Common provides a similar service in the Mungret/Loughmore Area. It also helps to ensure that the functioning of the seasonal lake will be subject to the least amount of disturbance from nearby development.

Geology and Soils

The geology of the study area has been much modified by generations of building activity, where the original soil cover was removed or covered by the built environment. Along Ballinacurra Creek on the western boundary of the city area alluvial soils are present. These have not been built on for the most part. The underlying rock in the area in question is Lower Carboniferous Limestone. Soils in the area vary from Limestone Till, estuarine muds in undeveloped areas close to the Shannon and also “made ground”. Made ground is natural soil altered, partly with fill materials and is associated with prior construction activities.

In the Loughmore Common area, the soils are peaty in nature where cut peat has formed part of the area of the Turlough.

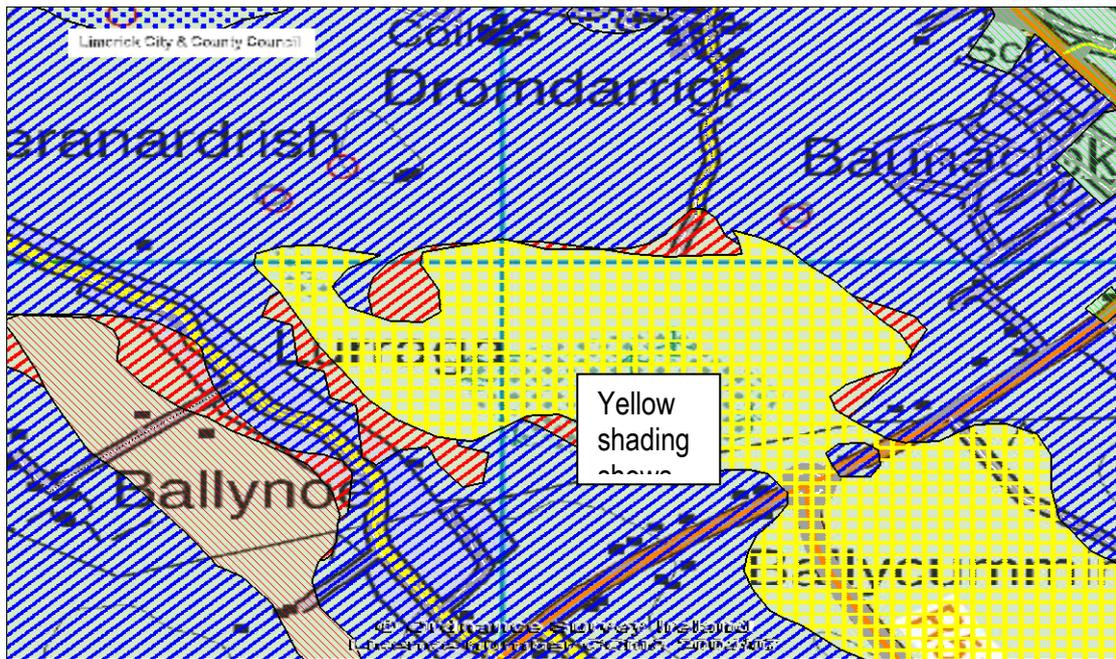


Figure 4: Peat Soils in the Loughmore Common Area

This has influenced the vegetation component of the site, where species such as Purple Moor grass *Molinia caerulea* is present in part of the Loughmore Common Area.

Cultural Heritage

Part of the Southern Environs is dominated by the history of Mungret College. Much of the built environment reflects this history with notable buildings present, which are listed as protected structures in the Limerick County Development Plan and also in the National Inventory of Architectural Heritage.

The area in question is of historical and architectural importance and this is reflected in the amount of archaeological and historical features that are present in the area.

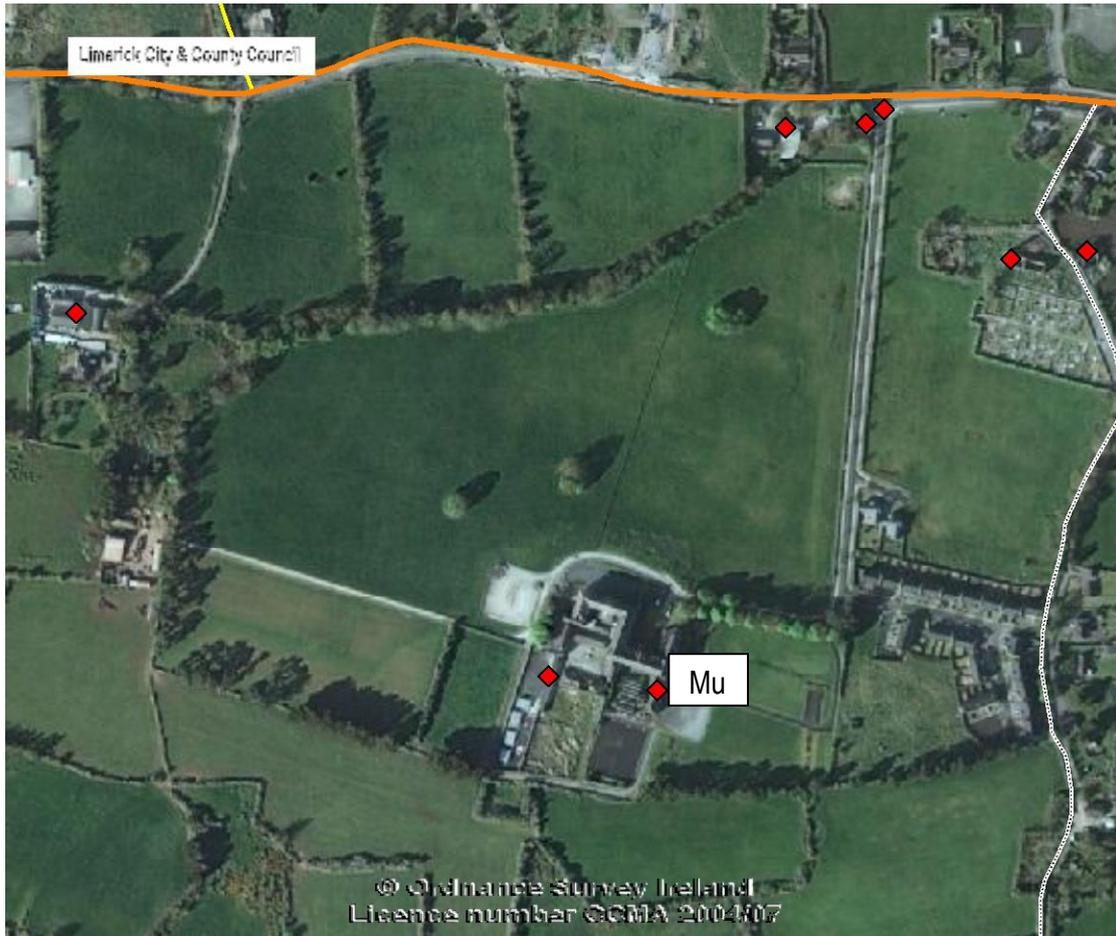


Figure 5: Seven protected structures within the Mungret College area

The college and its grounds is an important local land mark in the area, and is currently used by a number of organisations such as schools and a church, which have accommodation in the college grounds. The main building is currently unused. In the north east corner of the above picture, Mungret Church and its associated graveyard are visible. This archaeological complex is listed on the record of protected structures and also on the record of monuments and places.

The designations of the Protected Structures will be continued through the review process, while the Special Control Area which lies around the Mungret Church and graveyard complex will also be retained in order to continue to protect these areas and the environs. There is also a protected views from the college to the northeast and this will be retained in the new plan.



Figure 6: Mungret College – front view

The public park is 11ha. in extent and is located immediately to the north of the college. This has been developed as neighbourhood park to serve the wider community of the Southern Environs. Given the population profile this park will help to serve the amenity needs for children in particular in the plan area. The playground also caters for all levels of children’s activities, ensuring inclusivity of these amenities. The landscaping of the park is intended to “respect the open parkland setting of the college, the visual interconnectivity between the college and Mungret Abbey and the Special control area.”

Landscape

The objectives of the National Landscape Strategy prepared by the DECLG are to implement the European Landscape Convention by integrating landscape into Ireland’s approach to sustainable development. To have a sustainable society, environment and economy it is required to both embrace change and manage our landscape in a considered, integrated and planned way. The implementation of a National Landscape Strategy involves a number of core objectives with associated actions derived from the European Landscape Convention. These will ensure that landscape is integrated in the collective decision making processes, and that all landscapes are recognised in this regard. These factors have been taken into account in the proposals for the Park and the setting of the college. It should also be noted that the Shannon to the north is also one of the defining features of the plan area. There has been no expansion of development zonings into this area in the current draft plan, due to its landscape and ecological sensitivities.

In general terms the plan calls for high quality design and the sustainable reuse of the existing built environment which would help retain the character of the area. Future developments will be required to be sympathetic to their settings in terms of design and building height.

Material assets

Material assets are taken to include infrastructure and utilities such as rail, road, water supply and wastewater treatment facilities. It also includes economic assets such as buildings and lands and water resources which support tourism and amenities. Material assets are the critical infrastructure essential for the functioning of society, such as electricity generation and distribution, water supply, wastewater treatment, transportation and public facilities such as parks and green space.

Other infrastructure

Recent investment in city infrastructure has resulted in a new reservoir and water tower for potable water, in addition to the refurbishment of an old reservoir. This has created a total storage capacity of 18 million gallons (75,000m³) of water. A major extension to the water treatment plant at Clareville to the east of the city has started, which will double output to nearly 8 billion gallons per annum.

Wastewater is treated at Bunlicky treatment plant in Limerick and this new plant eliminated 50 sewer outfalls that had previously discharged to the Shannon and Abbey Rivers. In short, there is sufficient infrastructure to support the intended uses suggested by the review of SELAP.

1.4 Existing Environmental Issues

Key environmental pressures in the environs relate to:

- The need to ensure that Waste Water infrastructure keeps pace with development. As outlined elsewhere improvement works in Bunlicky WWTP has ensured that its work practices and capacity will remain abreast of pending developments in the city and wider areas. An appropriate assessment screening for these works was prepared and forwarded to the NPWS in July of 2014.
- Biodiversity including the avoidance of damage to the SAC, SPA and pNHA sites in the plan area and enhancement of ecological corridors, for both amenity and nature conservation purposes.
- Cultural Heritage involving the need to maintain the character of the historical areas such as Mungret College and Abbey, requires consideration of the amenity needs of the public and educational users, such as access and parking for local residents, businesses and visitors to the Mungret/Loughmore area. Proposals for new infrastructure will need to be carefully balanced with the requirement to maintain access to the sites, facilitating their continued development and maintaining their cultural heritage value. A key challenge for the architectural heritage of the area is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of the area.
- Human Health benefits through the maintenance and enhancement of the quality of the urban surroundings and of ensuring continuing access to amenities and services is essential. With the provision of the park at Mungret, it is considered that this will be of significant benefit to the local population, as it will serve a longstanding need for the provision of amenities for the local population.

1.5 Consideration of Alternative Strategies

Alternative Strategy Option 1 - Continue with the existing Southern Environs Local Area Plan without the review:

Legally this would not be possible as the plan has been extended previously, is nearing the end of the statutory life span, and as indicated later in this report would not be considered an acceptable alternative.

The growing population of the plan area also provides its own challenges. One of the greatest needs for the population of the Southern Environs area is the provision of facilities for the local population with young families. This placed a premium on amenity and educational facilities. The purchase of the college complex afforded the opportunity to realise these objectives and the development of the park allowed some of these needs to be met. However, these needs remain and the plan will require to be updated to take these issues into account. The same needs that drove the review to the plan in 2015, such as the requirement for leisure facilities, schools and housing for example remain applicable. The plan content requires updating to reflect this, which meant that continuation of the existing plan polices, would not have been a suitable plan led option.

Alternative Strategy Option 2 - Reliance on the Limerick Economic and Spatial Plan 2030 to help develop the Southern Environs area:

The outcome of earlier plans such as the Limerick Economic and Spatial Plan 2030 indicated the potential of actions in selected parts of the city. While this has clearly articulated aims, it was considered that it's focus on the older city area would not have sufficiently contributed to the development of the Southern Environs area.

This is the advantage of the review in conjunction with the 2030 Plan, in that with its range of targeted measures, it will be a better vehicle for guidance of resources to the SELAP area.

The provision of community facilities and improved infrastructure such as road improvements, coupled with altered zoning for residential and landscape protection is expected to benefit the entire metropolitan area, adding as it does to the range of amenities and infrastructure that is located within the new metropolitan area as a whole. For this reason, it was considered that reliance on the Limerick 2030 Plan would not have been sufficient to ensure the adequate development of community facilities in particular and this option was therefore not selected.

Alternative Strategy Option 3 - Reliance on non-planning led initiatives to secure the development of the Southern Environs area:

While the initiatives of parts of the Council such as the Roads Section are welcomed, this would address only part of the issue of infrastructure and service provision in the area. It would also mean that any efforts to address such provision would be on a piecemeal basis and would not be plan led.

While organisations such as Educate Together have provided essential services in the Mungret/Loughmore area for example, it is the Planning Authority's function to ensure that adequate zoned land and policy support are available to cater for the growing school going population and infrastructure provision generally.

To ensure balanced provision of services with appropriate policy support, it was considered best to proceed with the review. Following the review, the LAP will, as noted in the draft LAP, be included in the Limerick Development Plan covering all of Limerick City and County.

Alternative Strategy Option 4 - The review as outlined in the current Draft Local Area Plan:

As noted above, the examination of the policy background indicated that the provision of amenity and educational facilities and the zoning required would be best served by updating the SELAP. The plan also needs to be updated following adoption of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region. It also needs to be updated in order to take into account climate change issues.

1.6 Environmental Protection Objectives (EPOs)

The Environmental Protection Objectives provide a standard against which the goals, policies and objectives of the SELAP Plan as reviewed can be measured, in order to highlight those with the potential for environmental impact. These have been used as a guide for the preparation of the final objectives in the draft plan, which are listed in the appendix together with relevant comments. These EPOs are as follows:

Biodiversity, Flora and Fauna/Built and Architectural Heritage

B1: Protect, conserve and enhance habitats, species and areas of regional and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks. See also W3 below.

B2: Ensure that the continued conservation of the Natura 2000 sites, the Lower River Shannon SAC sites, The River Shannon and Fergus estuary SPA and the Loughmore Common pNHA remain a priority for the review of the SELAP. These sites are important, both as an amenity and natural history resource.

B3: Preservation of the character of the historic built fabric.

B4: Preservation of the archaeological heritage.

Population and Human Health

P1: Facilitate a good standard of quality of life for the population of the Southern Environs area, through ensuring high quality residential, recreational, educational and working environments.

P2: Provide policy support for the provision of suitable infrastructure and facilities for the local population.

Water

W1: Ensure that wastewater infrastructure keeps pace with development proposals.

W2: Ensure that the requirements of the Water Framework Directive are incorporated into the plan.

W3: Ensure that Wetland sites are preserved in particular Loughmore Common and Monteen Turlough.

Air Quality and Climate

AQC1: To increase energy efficiency and the proportion of energy generated from renewable sources and where necessary to ensure the sensitive application of energy saving measures to the historic built fabric of the Southern Environs area.

AQC2: To avoid deterioration of air quality in the plan area.

AQC3: To include climate action concerns into the plan policies.

Geology and Soils

GS1: Promote development of brownfield sites as a priority, while also considering the development of greenfield sites in the Southern Environs. By reducing the possible development of greenfield sites this makes a positive contribution to soil conservation. This can also be achieved through the sensitive reuse of existing buildings, reducing the need for new build - See C2 below.

GS2: Protect geological sites within the plan area.

Cultural Heritage

C1: Protect and conserve features of archaeological heritage and their setting.

C2: Protect conserve and promote the sustainable reuse of architectural heritage.

Landscape

L1: Protect and conserve the quality, character and distinctiveness of the Southern Environs landscape in particular the Mungret/Loughmore Area.

L.2: Retain the protected view to the front of Mungret College.

Material Assets

MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.

MA2: Ensure that there is adequate policy support for infrastructural provision in the plan area.

1.7 Likely Significant Effects on the Environment of Implementing the Sothern Environs Local Area Plan as reviewed

Assessment of the policies and development objectives in the reviewed SELAP, showed that overall these policies and development objectives will not pose a significant adverse impact on the environment. Many of the policies and objectives are considered positive, setting out to manage and protect aspects of the environment such as water quality, landscape, heritage resources and management of flood risk. The overwhelming thrust of the review is hugely positive in that it will update the plan to take into account the policy content of both the National Planning Framework and the Regional Spatial and Economic Strategy.

The findings of the Appropriate Assessment screening process were carried through the Environmental Report and were addressed through the incorporation of its findings during the course of plan preparation e.g. the continuation of protective buffers around habitats and inclusion of content from the Limerick Climate Change Adaptation Strategy.

1.8 Monitoring Proposals

Measures were proposed as part of the SEA process to monitor the effects on the environment of implementing the reviewed plan. These are presented in the Environmental Report in terms of the achievement of the environmental protection objectives and the impact on the environmental factors that the SEA legislation requires to be considered. Monitoring for SEA will be carried out as part of the overall monitoring of implementation of the SELAP as reviewed and using existing assessment frameworks such as individual planning assessments and reports for works such as roads and infrastructure repair.

2.0 Introduction to SEA

2.1 Background

The vision of the Southern Environs Local Area Plan is outlined below.

The Strategic Vision for the Southern Environs is consistent with the Tier 1 Settlement designation under the Limerick County Development Plan 2010 – 2016 (as extended) and is supported by the NPF and RSES. The vision stresses the following:

- **Compact Growth:** Strategic location within the Limerick Shannon Metropolitan Area and proximity to Limerick City Centre, with opportunities for consolidation, regeneration and development of infill and brownfield sites.
- **Enhanced Regional Accessibility:** Location on the Regional Road and National Motorway network in close proximity to Limerick City Centre, Limerick Colbert Railway Station and Shannon Airport.
- **Enhanced Amenities:** Ability to enhance existing and provide new community, sports and recreation facilities such as at Mungret Park.
- **Climate Action:** To include climate action content in both plan policy and zoning patterns and the land use zoning matrix. Provision will be made in the plan for climate adaptation (e.g. flood responses) and mitigation (e.g. suitable tree planting, land usage and renewable energy) and encouragement of public transport. Provision will also be made to facilitate remote working as this too can help with achieving carbon reduction targets, though the potential for this may be limited due to the Southern Environs location within the urban area.
- **Sustainable Mobility:** Ability to promote the use of sustainable transport modes including walking, cycling and BusConnects to the city centre, railway station, employment zones and third level education campuses. For larger scale planning applications a mobility plan may be required.
- **Strong Economy:** Ability to build on the existing presence of multinational companies in Strategic Employment Zones, such as Raheen Business Park and University Hospital Limerick and the proximity to third level education providers including University of Limerick, Limerick Institute of Technology and Mary Immaculate College.
- **Sustainable Infrastructure:** Ability to deliver a strategy for the growth of the area to cater for sustainable employment and residential growth in tandem with the provision of hard and soft infrastructure. This will include policy support for the provision of adequate amenities and open green space and policy support for infrastructure provision and maintenance in a climate altered future.
- **Natural and Built Heritage:** To integrate the protection and sustainable use of both natural built and archaeological heritage into plan policies and to ensure the continued protection of both designated sites and buildings and important landscapes and habitat features. The issue of invasive species has been addressed through updated policy content (Policy NHO13).

Given these broad themes it is the purpose of this environmental report to identify and evaluate the likely significant impacts on the environment of implementing the revised plan.

2.1 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is defined as ‘the formal, systematic and comprehensive process of evaluating the effects of a proposed policy, plan or programme or its alternatives, including the written report on the findings of that evaluation, and using the findings in publicly accountable decision making’.

SEA is a process for evaluating at the earliest appropriate stage, the environmental quality, and potential consequences, of policies, plans or programmes and to ensure that any potential consequences are assessed during their preparation and the findings taken into account before they are adopted. Its overall purpose is to contribute to sustainable development. SEA is intended to provide a framework for influencing decision-making at an early stage, to improve the environmental sustainability of the Plan and to raise awareness of the potential environmental consequences of its implementation, so that these consequences may be mitigated or avoided altogether. It also gives the public and other interested parties an opportunity to comment and to be kept informed on decisions that may impact on the environment and how those decisions were made.

This SEA process includes the following stages:

- Scoping Report – stating how the scoping responses of the environmental authorities were taken account of in preparing the Environmental Report;
- An Environmental Report updated as the plan is prepared (a report containing the findings of the SEA) on the likely significant effects of implementing the review;
- An SEA Statement (identifying how environmental considerations and consultation have been integrated into the reviewed SELAP).

This is the Environmental Report for the proposed review to the SELAP and has been carried out in accordance with Schedule 2B of S.I. 436 of 2004 and SI 201 of 2011, which sets out the information that is required to be included in SEA and Environmental Reports. This report should be read in tandem with the draft plan and the Natura Impact Assessment.

2.2 The Contents and Main Objectives of the Draft Southern Environs Local Area Plan

The strategic objectives of the draft plan are as follows:

It shall be the objective of the Plan to:

1. Ensure the Southern Environs Local Area Plan is consistent with the hierarchy of statutory plans – The National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region and the Limerick County Development Plan 2010 – 2016 (as extended), or any replacement thereof. The area covered by this LAP will be incorporated into the proposed Limerick Development Plan 2022 and this LAP will then be revoked.
2. Facilitate and promote the Southern Environs’ role as part of the Limerick – Shannon Metropolitan Area in accordance with the Limerick – Shannon Metropolitan Area Strategic Plan and the Regional Spatial and Economic Strategy for the Southern Region.

3. Ensure that all development proposals comply with the Development Management Standards of the Limerick County Development Plan 2010 - 2016 (as extended), and any replacement thereof or any relevant Section 28 Guidance.
4. Support and facilitate sustainable intensification and consolidation of the existing built environment including permitting development on zoned land in an orderly manner in accordance with the objectives for Compact Growth in the National Planning Framework and Regional Spatial and Economic Strategy.
5. Deliver population growth targets in line with national, regional and county level policy objectives, by focusing new residential development into appropriate infill, brownfield, regeneration sites and residentially zoned land through the development strategy and development management process, in tandem with physical, community, recreation and amenity infrastructure.
6. Promote, support and enable sustainable and economic development, enterprise and employment generation in strategic locations, including Raheen Business Park and University Hospital Limerick, which are accessible by public and sustainable modes of transport.
7. Promote and facilitate sustainable modes of transport that prioritise walking, cycling and public transport, while providing an appropriate level of road infrastructure, road capacity and traffic management to support existing and future development.
8. Protect, conserve and enhance the built environment, through promoting awareness, utilising relevant heritage legislation and ensuring good quality urban design principles are applied to all new developments, based on the principle that well planned and integrated development enhances the sustainability, attractiveness and quality of an area.
9. Protect, enhance and connect areas of natural heritage, green infrastructure and open space for the benefits of quality of life and biodiversity, while having the potential to facilitate climate change adaptation and flood risk measures.
10. Ensure the highest quality of public realm and urban design principles are applied to all new developments including the construction of landmark buildings in appropriate locations.
11. Have cognizance to the Limerick Climate Change Adaptation Strategy 2019 - 2025, and any forthcoming climate adaptation and mitigation strategies and actions that emerge during the lifetime of this plan.
12. Cooperate with the Southern Regional Assembly as part of the monitoring and review procedure.

2.3 Relationship of the revised plans with other Plans

International Conventions and Agreements

Ireland has ratified a range of international agreements in relation to the environment. Such agreements place legal obligations on the State with respect to the conservation and management of our environment and heritage. Appendix 1.0 includes details on the International Conventions and Agreements ratified by Ireland.

National, Regional and Local Planning Policy Context

The Southern Environs Local Area Plan was adopted in 2011 and was extended in 2016 for a five-year period. The LAP remains in effect until May 2021.

The review of the SELAP has been prepared in accordance with the requirements of Section 10 (2) of the Planning and Development Act 2000 (as amended), and provides for the proper planning and sustainable development of the Southern Environs for the plan period and beyond. Through its policy content and zoning template the review provides detailed guidance for development activity in the Southern Environs with a particular emphasis on updating the plan content in light of the adoption of both the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy for the Southern Region.

The National Planning Framework and its Implementation Roadmap will play a major part in shaping the draft plan. It is from this document that the population figures for the City and Environs will be drawn and the NPF envisages a population increase of between 50 and 60%, bringing the city population as a whole to 141,000 persons. In the current Limerick County Development Plan, the Southern Environs area is part of the City and Environs as a Tier 1 settlement. The residential zoning allocation of the Southern Environs Plan will be directly influenced by the NPF. The NPF considers that much of this development should take place on brownfield sites. This will have implications for Local Area Plan policies in relation to the re-use of buildings and the re-development of brownfield sites. This will also have implications for infrastructure provision for the plan area.

The Southern Environs shares infrastructure with the rest of Limerick City and environs. This infrastructure includes the Waste Water Treatment plant at Bunlicky and the water supply system, which draws its water from Clareville.

The Regional Spatial and Economic Strategy for the Southern Region is next in the hierarchy of plans and brings a regional emphasis to the national level policies and objectives of the NPF. Next in the hierarchy is the proposed Limerick County Development Plan and it is worth noting that the review process of the Development Plan will be progressed at the same time as that for the Southern Environs. Given the statutory period for both, the SELAP will be complete about a year before the Development Plan. The new Development Plan will cover both City and County for the first time.

3.0 SEA Methodology

3.1 Steps in the SEA Process

The Environmental Report is an important element of the SEA process. The report is prepared in a series of distinct steps taken in the assessment of the likely potential impacts of the preparation and implementation of the new plan. The steps taken in preparation of the ER are as follows and are set out in this document.

1. Introduction to and familiarisation with the SEA process.
2. Setting out the background to the review to the SELAP.
3. Consultation with the Environmental Authorities, the public and officials with a range of expertise within the Local Authority: Scoping was carried out with the environmental authorities prescribed in the legislation:- the Environmental Protection Agency (EPA), Department of Housing, Planning and Local Government, Department of Culture, Heritage and the Gaeltacht, Department of Agriculture, Food and the Marine and the Department for Communications, Climate Action and the Environment and adjoining Local Authorities. These were all consulted in order to determine the scope and the level of detail to be included in the environmental report.
4. Establishment of Environmental Baseline and Trends for the SELAP area: Baseline data was collected on the basis of the information included in the scoping report, as well as having regard to the requirements of the SEA Directive. The various factors used to describe the current state of the environment include biodiversity, population and human health, water, air quality, landscape, soils and geology, archaeology and built heritage and the inter-relationships between these factors. Much of the data was extracted from existing data sources. There is no requirement for generating new data under the SEA process.
5. Identifying significant existing Environmental Issues in the environs: This was facilitated by the various forms of consultation that took place as part of the SEA process and along with the plan preparation and ensuing public consultation processes. Information gathered for the preparation of the draft SELAP also proved useful. One very useful document in the drafting of Environmental Protection Objectives (EPOs) and report content generally was the Integration of Climatic factors into the SEA process in Ireland (EPA 2019). Content from regional, national and international environmental policy and consideration of the significant environmental issues facing Limerick specifically was also useful. The preparation of the EPOs was an important step as they serve as a guide for the planning team preparing the review and reflect the contents and the aims of the review.
6. The outcome of the Chief Executive's Report will be shown when this stage in the process is reached.
7. Reasonable and realistic alternative strategies were considered regarding options for the review. Zoning patterns are altered from those set out by the 2011 SELAP. These were altered to reflect the content of new national and regional guidance and to

respond to housing need. Monitoring measures were identified in order to quantitatively assess the consequences of the identified impacts.

8. Consultation: The Environmental Report and the draft SELAP is made available for public consultation as per the statutory process provided for under the Planning and Development Acts 2000 (as amended). Along with prescribed bodies the documents are made available to neighbouring Local Authorities.

3.2 Difficulties Encountered in Compiling the Required Information

The SEA Guidelines produced by the DoEHLG in November 2004 state that the SEA process “does not require major new research”. As such, the Environmental Report was prepared and informed by many already available data sources, including planning reports, interviews with key personnel such as local engineers and members of differing agencies. The 2011 SELAP was subject to SEA, as was the 2015 amendment, so the previous Environmental Report was available and proved a valuable information source. Information was also drawn from the preparation of Environmental Reports for the Regeneration Areas of the City in 2013 and from the incorporation of the 2030 Limerick Economic and Spatial plan into the City Development Plan in 2014.

Difficulties encountered in compiling data include the lack of availability of information in relation to discharge licences.

Table 3.1 below details data sources used in the preparation of to the Environmental Protection Objectives.

Table 3.1: Environmental Protection Objectives and Data Sources

Biodiversity, Flora and Fauna/Built and Archaeological Heritage	Data Sources
B1: Protect, conserve and enhance habitats, species and areas of regional and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks. See also W3 below.	Three designated sites are located in the area. Much information was drawn from NPWS reports and individual planning applications, in addition to site inspections.
B2: Ensure that the continued conservation of the Natura 2000 sites, the Lower River Shannon SAC sites and The River Shannon and Fergus estuary SPA and the Loughmore Common pNHA remains as a priority for the reviewed SELAP. These sites are important, both as an amenity and natural history resource.	See above.
B3: Preservation of the character of the historic built fabric.	Much has been published on Mungret College in particular. More detailed site specific material is available in planning files

	and Protected Structures Records in addition to the NIAH.
B4: Preservation of the archaeological heritage.	Council Archaeologist
Population and Human Health	
P1: Facilitate a good standard of quality of life for the population of the Southern Environs through ensuring high quality residential, recreational, educational and working environments.	CSO Council Monitoring and EPA discharge licence. Regeneration sources.
P2: Provide policy support for the provision of suitable infrastructure and facilities for the local population.	Irish water, Physical Development Section of Limerick City and County Council.
Water Resources	
W1: Ensure that wastewater infrastructure keeps pace with development proposals.	Good data available - EPA water quality Data, Inland Fisheries Ireland. Council monitoring.
W2: Ensure that the requirements of the Water Framework Directive are incorporated into the plan.	See Above.
W3: Ensure that Wetland sites are preserved, in particular Loughmore Common and Monteen Turlough	NPWS site synopsis.
Soils and Geology	
GS1: Place an emphasis on the development of brownfield sites rather than greenfield sites in the Southern Environs. By reducing the possible development of greenfield sites this makes a positive contribution to soil conservation. This can also be achieved through the sensitive reuse of existing buildings, reducing the need for new build (see C2 below).	Data available - GSI, EPA. Planning Reports and Council Plan Map also used.
GS2: Protect geological sites within the plan area.	See above

Air and Climatic Factors	
AQC1: To increase energy efficiency and the proportion of energy generated from renewable sources and where necessary to ensure the sensitive application of energy saving measures to the historic built fabric of the Southern Environs.	Limerick Clare Energy Agency Audit. Published UL sources.
AQC2: To avoid deterioration of air quality in the plan area.	See above.
AQC3: To include climate action concerns into the plan policies.	Data from Limerick Climate Change Adaptation Strategy.
Cultural Heritage	
C1: Protect and conserve features of archaeological heritage and their setting.	Good Data available through Record of Monuments and Places, also Council Archaeologist. Text was included in the plan in order to emphasise the importance of archaeological heritage in the area. This was carried forward in the current review.
C2: Protect and conserve and promote the sustainable re-use of architectural heritage.	Good Data available through Record of Protected Structures and the local Conservation Officer. NIAH reports.
Landscape	
L1: Protect and conserve the quality, character and distinctiveness of the Southern Environs landscape in particular the Mungret/Loughmore Area.	Planning reports. SELAP 2011 Appendix 7. NIAH reports. This will involve detailed consultation with the architectural heritage unit of the DAHG.
L2: Retain protected view to the front of Mungret College.	Archaeology
Material Assets	
MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.	Planning and local engineer reports, particularly in relation to amenity provision. Environmental Section reports used - they are responsible for discharge licences.

MA2: Ensure that there is adequate policy support for infrastructural provision in the plan area.	See above
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4.0 Current State of the Environment

4.1 Introduction

Ireland's Environment 2016 - An Assessment, the Environmental Protection Agency's fifth state of the environment report provides an overall assessment of Ireland's environment. The overall conclusion of the report is that the quality of Ireland's environment is generally high but there are some key environmental challenges facing Ireland including:

1. Limiting and adapting to Climate Change;
2. Reversing Environmental Degradation;
 - Preventing eutrophication and other water pollution;
 - Protecting natural habitats and species populations;
 - Remediation of contaminated land;
3. Complying with Environmental Legislation and Agreements;
4. Mainstreaming Environmental Considerations;
5. At a level specific to this plan the challenge of retaining the character of the Southern Environs landscape and historic built fabric while providing much needed amenity and educational facilities. The need to protect ecological sites in the SELAP area is another issue to be faced in this review.

The Assessment states that Ireland faces formidable challenges in meeting international obligations on water quality, air quality, Green House Gas emissions and waste management.

Remediation of unsatisfactory quality in groundwater, rivers, lakes and estuaries is one of the main environmental challenges. In the context of this plan the importance of council monitoring in relation to discharge licences is mentioned. The Water Framework Directive marked a new approach for the protection and improvement of water resources. Commenced in 2009, a six year cycle of river basin management plans is being implemented for the purpose of protecting and enhancing all waters - groundwater, rivers, lakes, transitional waters (estuaries) and coastal waters including protection for related terrestrial ecosystems and wetlands. In this report improvement works to the wastewater treatment plant to the City and environs are described. These are designed to ensure that plant capacity keeps pace with development and to ensure that the chances of water pollution are kept to a minimum (see below).

Biodiversity loss is a serious threat to the quality of Ireland's environment as habitat degradation and species loss are often irreversible. Many of Ireland's most important habitats afforded protection under the EU Habitats Directive were assessed in 2008 as having bad conservation status. There are two important Natura 2000 sites in the plan area (Lower River Shannon SAC and River Shannon and Fergus SPA). Loughmore Common, a turlough site is a Proposed Natural Heritage area which is reflected in the review. While activities in the plan area such as amenity and residential development and the potential overloading of sewage infrastructure could have effects on these sites, communication with both the Water Services Section of the Council and Irish Water have shown that there is existing capacity in the Bunlicky plant to cater for existing and future demand. Irish Water has indicated that there is a programme of works in place to ensure that this is the case. The works are as follows:

- Construction of Chemically Enhanced Primary Treatment dosing system to allow for Alum Dosage of the influent to combat against high levels of Phosphorus discharge and to assist in sludge management.

- The installation of an Anaerobic Digester to reduce the sludge throughput to the existing centrifuge and existing sludge dryer to ensure that the existing centrifuge and dryer has capacity to cater for the load.
- The upgrade of the current odour control unit to ensure that the current plant and upgraded facility meets its statutory obligations.
- The installation of a pasteurisation unit to ensure that a Class A sludge is produced.
- The installation of a Combined Heat and Power recovery unit to assist in the operation of the anaerobic digester, which will help to increase its efficiency.

The existing WWTP had originally been upgraded in 1999. The additional works are to cater for the waste from the new development, which have been recently granted permission. The works will be completed prior to the additional loadings being received by the plant.

The provision of additional treatment facilities and storage coupled with the application of newer technologies (e.g. Anaerobic Digestion) will ensure that the plant is able to keep pace with additional loadings.

The provision and maintenance of sufficient infrastructure in the areas of wastewater treatment, water supply, flood prevention and control, renewable energy, sustainable transport and waste management is critical to ensure maintenance of a good quality environment. The following section outlines the baseline details of the current status of the environment in Limerick in relation to these issues.

The retention of buffer zones along the Ballinacurra Creek and along part of the main river channel will also help protect the Natura sites in the area.

The continued protection of the Loughmore Common site has been a factor in the revised zoning where the buffer area has been retained around the pNHA.

4.2 Baseline and Relevant Environmental Problems

Biodiversity, Flora and Fauna

The need to conserve biodiversity is underlined in the National Biodiversity Plan and Convention on Biological Diversity, which Ireland signed and ratified in 1996. Conservation of biodiversity in Ireland is in part, directed by the EU Birds Directive, EU Habitats Directive (transposed into Irish law by the Natural Habitat Regulations reviewed by SI 233/1998, SI 378/2005, SI 477 Birds and Habitats Regulations 2011 and the 1976 and 2000 (Review) Wildlife Acts.

As outlined above, a buffer area will be retained around the Loughmore Common area, which will help protect the site from the encroachment of development. The area also has previously had its zoning designation changed from agricultural to semi-natural open space to reflect its ecological importance. As outlined earlier in this report, the buffers around Bunlicky Lake and the River Shannon has been retained in this review.

Sites of local biodiversity interest

As indicated above, the site closest to area of the review is Loughmore Common which has a buffer around it. It should also be remembered that the 11 ha. park, with its stock of mature trees is also of local bio-diversity and landscape interest. The policies of the plan as reviewed, together with the background work carried out for the park layout will protect the stock of mature trees. As green spaces in urban areas are often of value to bird species (Ni Lamhna, Nairn, Benson and Kelly 2012) this urban open space will be of importance particularly in the future when the city expands.

Policies in the draft plan dealing with bio-diversity have been revised in the review. This includes policies which call for the integration of natural features in developments. The policies require the creation of habitat and are designed to integrate habitats and development activities in sites.

It is considered that the policies in section 13.4 confer sufficient protection. The buffers put in place for the SAC and SPA sites to the north and west of the Mungret Loughmore areas are retained. These buffer areas have been further extended along the Shannon into the city area during the review to the city plan which took place in the spring of 2015. Cumulatively taking into account the buffers around Loughmore Common and the buffer around Bunlicky Lake and its extension further along the Shannon, it is considered that this policy has resulted in an increase in the protection of ecological sites in both the Southern Environs and the western part of the city, over the last two plan periods.

Population and Human Health

The Southern Environs contains large areas of newer residential developments as reflected by the growth patterns outlined above. The age profile of the former Ballycummin ED further demonstrates the characteristics of the area with the largest percentage of the population in the 0-4 age group and the 20-39 age group.

The proposed plan has updated policies in relation to employment generation, and facility provision which reflects the needs of this demographic.

Waste Water Treatment System

The main Waste Water Treatment Plant for the area of the review and the Limerick City Development plan area is the plant at Bunlicky. Capacity is adequate for the city's need with a population capacity of 130,000. The plant came into operation in 1999. While the question of it operating close to capacity has been raised, recent discussions with Irish Water and the Water services section of Limerick City and County Council, have indicated that new working procedures, in addition to the construction of an anaerobic digester and other upgrades, will ensure that the plant will be able to keep pace with development within the agglomeration that it serves. This is dealt with in more detail elsewhere in this Environmental Report.

Discharge licences from industry in the area are regulated by discharge licences granted by Limerick City and County Councils or on occasion by the EPA.

Air quality in Ireland is generally of a high standard across the country. The current air quality in the Limerick Air Quality Index Health Region is 3 - Good. The index is based on information from monitoring instruments at The Shannon Estuary (Rural West AQIH). The index was

calculated on the 1st September 2020. As outlined earlier, another station is located in the Peoples Park. On occasion, particularly during holiday periods through traffic traversing the City and Environs can create localised issues with traffic fumes, particularly with peak traffic flows along the nearby Dock Road and N69. This road has been selected for improvement works by LCCC, which should improve traffic flows in the longer term.

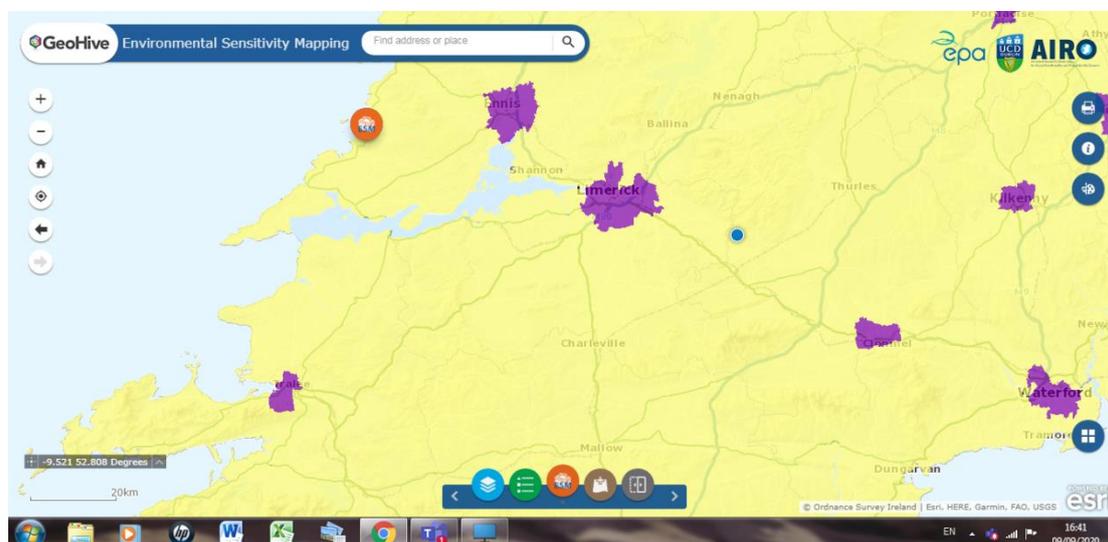


Figure 8: Shows the differing air zones in rural and urban Limerick. Air quality in both is currently good. This is taken from the Environmental Sensitivity Mapping website.

Existing Environmental Pressures/Problems: Population and Human Health

Key environmental pressures in the Southern Environs relate to:

- The need to ensure that Waste Water infrastructure keeps pace with development. As outlined elsewhere in this document, improvement works were carried out on the Bunlicky WWTP during the last plan period.
- Biodiversity including the avoidance of damage to the SAC, SPA and pNHA sites and undesignated habitats in the plan area and enhancement of ecological corridors, for both amenity and nature conservation purposes.
- Cultural Heritage involving the need to maintain the character of the historical areas such as that of Mungret College and the Abbey. Proposals for new development close to archaeological sites will need to be carefully balanced with the need to maintain their heritage value. A key challenge for the architectural heritage of the area is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting their distinctive character.
- Human Health: Maintenance and enhancement of the quality of the urban surroundings and ensuring continued access to amenities and services is essential for health and wellbeing. With the provision of the park at Mungret it is considered that this will be of significant benefit to the local population, as it will serve a longstanding need for amenity areas for a largely youthful population. The provision of primary schools for the local area is also beneficial, in that it will provide these badly needed facilities in the Southern Environs and wider area.

Water

Water Supply

Drinking water, is produced by Irish Water/Limerick City and County Council at the Clareville treatment plant and is delivered to Limerick City and its environs including the Southern Environs. The treatment plant has undergone significant refurbishment and upgrade works in recent years at a cost of over €26 million. In addition to the treatment of water, there is also an ongoing programme of leakage detection and repair in an effort to promote water conservation.

The remedial works in the Clareville water treatment plant were completed to the satisfaction of the EPA in 2010. The Clareville plant has sufficient capacity to deal with the proposed development that might take place as a result of the review to the LAP.

The EU Directive on Urban Waste Water Treatment requires that urban areas exceeding 15,000 population equivalents, and located on estuaries, be provided with a treatment plant to at least secondary treatment standard. It also requires a collection system, designed to prevent untreated discharges into receiving waters, and that the discharge of the treated effluent meets all relevant directives and national standards. The Limerick Main Drainage Scheme was a significant piece of environmental infrastructure, which ensures that the EU requirements for the provision of wastewater treatment facilities are now being achieved in the city and environs.

The city drainage infrastructure covers some 30km², with each household generating on average 150-250 gallons of wastewater per day. The current population equivalent (p.e.) of the agglomeration serviced by the WWTP is given as 110,000, and with a design capacity of 130,000 p.e., adequate capacity is available to absorb future development. With the recent construction of c.45km of large diameter interceptor sewers and the associated WWTP, untreated discharges to the Shannon and Abbey Rivers from Limerick city has been eliminated. Though largely upstream from the Southern Environs, this will have benefits for the water quality in the River Shannon, which forms the northern boundary of the plan area. The WWTP comprises preliminary (screening and grit removal), primary (settlement and biological aeration tanks) and secondary treatment (settlement clarifiers).

The sludge from the WWTP and other imported sludges from WWTPs are dried on the Bunlicky site with a small volume of liquid recirculated to the front end of the WWTP. Under the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. 684 of 2007) wastewater discharges above a certain threshold will have to be licensed by the EPA.

The licence which was issued to Limerick City Council by the EPA sets out in detail the conditions under which the now Limerick City and County Council will control and manage the wastewater discharges from the city and surrounding area including the area that is the subject of this review.

Groundwater

In terms of groundwater, the buffer areas around Loughmore Common should help address any potential contamination from the encroachment of development. The review will also ensure that the 11ha. of open ground in front of Mungret College will remain, which will

ensure that the intensity of development in this area will be reduced. The area around Monteen Turlough will remain zoned as semi-natural open space, which will ensure that no intensification of use will take place in the area of this seasonally flooded area, which should also help to reduce possible effects on groundwater.

The works outlined above that took place in Bunlicky WWTP in relation to the processing of waste and the improvement in piped infrastructure, also has resulted in less discharge to surface water, which would eventually drain to groundwater as these are often connected.

Air Quality and Climate

Air quality in Ireland is generally of a high standard across the country. Limerick lies in Zone D i.e. rural areas outside large conurbations and is in compliance with Air Quality standards - see Figure 8 above. As outlined earlier in this report, air quality is generally satisfactory in Limerick.

Global climate change is now recognized as the primary environmental challenge of this century. The European Union is taking the lead in this regard with the adoption of climate change strategies, including the Kyoto Protocol, aimed at reducing the level of greenhouse gas (GHG) emissions. Under the Kyoto Protocol, the EU has agreed to reduce its GHG emissions by an overall 8%. Ireland's target in the EU "burden sharing" agreement is to limit increases to 13% above 1990 levels by 2008-2012. For the period beyond 2012, the EU Council of Ministers has committed to achieving at least a 20% reduction of greenhouse gas emissions by 2020 compared to 1990 levels.

The adoption of the Limerick Climate Change Adaptation Strategy (LCCAS) in 2019 is major step in climate action at a local level. The contents of this strategy will inform climate adaptation at a local level.

Taking this into account in the review, the section on climate change in the draft plan has taken into account the contents of the LCCAS (2019), and has proposed policy to take into account future adaptation and mitigation strategies and climate actions as they arise.

Existing environmental pressures air and climate

Currently there are no significant concerns with regard to air quality in the City as was indicated earlier in this report. It is hoped that the gradual transition to electric vehicles will play a part in reducing traffic emissions and have a positive long-term effect on air quality in the environs and the metropolitan area as a whole.

Climate change impacts may present challenges to future land use and location of development in the City. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall and more exposure to flood risk. As indicated earlier in this report, tidal flooding is a huge part of the flood risk in the Southern Environs. None of the zoned areas that are being altered in the plan area lie within Flood Zones A or B. It is not anticipated that the contents of the review will have flood risk implications. A comprehensive Strategic Flood Risk Assessment will inform the plan and the zoning pattern will be guided by this.

Geology and Soils

The geology of the study area has been much modified by generations of building activity, where the original soil cover was removed or covered by the built environment. Along the Ballinacurra Creek on the western boundary of the City area alluvium soils are present. These have not been built on for the most part. The underlying rock in the area in question is Lower Carboniferous Limestone. Soils in the area vary from Limestone Till, estuarine muds in undeveloped areas close to the Shannon and also “made ground”. Made ground is natural soil altered, partly with fill materials and is associated with prior construction activities.

The review, together with the NPF and RSES with its emphasis on brownfield development is expected to have beneficial effects for soil conservation, as it means that development of brownfield rather than greenfield sites will be encouraged. It should be noted that there is no proposed extension of the development boundary proposed in the current proposed plan.

Cultural Heritage

Archaeological Heritage

Part of Southern Environs is dominated by the history of Mungret College. Much of the built environment reflects this history with notable buildings present, which are listed as protected structures in the County Development Plan and are included in the National Inventory of Architectural Heritage.

The area in question is of historical and architectural importance and this is reflected in the amount of archaeological and historical features that are present in the area.

Given the location of the Southern Environs with the River Shannon close by to the north and Bunlicky to the east, the question of underwater and riparian archaeology is one that will have to be emphasised. The estuary is particularly rich in archaeological heritage.

The designations of the Protected Structures will be continued through the review process, while the Special Control Area which lies around the Mungret Church and graveyard complex, will also be retained in order to continue to protect these areas and the environs. The SCA includes Protected Views: (1) From Mungret College northeast to the Monastic Complex and; (2) Views northwest across the Monastic complex.

Architectural Heritage

The Record of Protected Structures for the Southern Environs is particularly varied, ranging over a wide spectrum of building types. This includes thatched farmhouses, Roche Castle, examples of 20th century architecture, such as the Roman Catholic Church in the Brothers of Charity complex at Banemore and elements of the University Hospital. As outlined earlier, the Record of Protected Structures will be updated to reflect the importance of the built heritage of this part of Limerick in the Proposed Limerick Development Plan.

Existing Environmental Pressures/Cultural Heritage

The maintenance and conservation of the area's Cultural Heritage is key in order to maintain an irreplaceable resource, sense of identity for this part of the Environs and as an important part of the local landscape.

Landscape

The objectives of the draft National Landscape Strategy prepared by the DECLG are to implement the European Landscape Convention by integrating landscape into Ireland's approach to sustainable development. To have a sustainable society, environment and economy, it is required to both embrace change and manage our landscape in a considered, integrated and planned way. The implementation of a National Landscape Strategy involves a number of core objectives with associated actions derived from the European Landscape Convention. These will ensure that the landscape is integrated in the collective decision-making processes and that all landscapes are recognised in this regard. One of the important landscape considerations in the plan area is the Mungret College complex, the nearby archaeological complex and the views between them.

Protected Views

One of the most important views to be protected in the area of the review is that from Mungret College north to the Ecclesiastical Complex, which is located within the development control area. The new plan takes particular cognisance of this and the Special Control Area is carried forward to ensure that this view is protected.

Material Assets

Material assets are taken to include infrastructure and utilities including rail, road, and water supply and wastewater treatment facilities. It also includes economic assets such as buildings and lands and water resources which support tourism and amenities. It also includes the road network of the area and its ability to deal with the traffic loads that will arise in the lifetime of the plan.

There is a further potential to boost rail infrastructure in re-opening the Limerick to Foynes rail line. It is likely that this will occur in the future as the transport needs of Foynes port grow, which will make it financially worthwhile to modify and re-open the line. While this is part of the transport infrastructure of the plan area this will not have any bearing on the review. It is important to ensure that the rail line is protected from encroachment.

Existing Environmental Pressures/Material Assets

Protection of the carrying capacity and the strategic transport function of the transport network is an objective of the SELAP. It will be important to ensure that the provision of WWTP capacity keeps pace with development. The Bunlicky Plant discharges to the Shannon so the implications of any reduction in discharge quality is obvious.

4.3 Interrelationships between the above environmental factors

The interrelationships between the range of environmental topics is an important consideration in the environmental assessment. Table 4.1 below indicates the interrelationships identified between the environmental topics in this assessment.

The relationship between adequate wastewater treatment and water quality and Ireland's obligations under the Water Framework was indicated above.

Open space and green infrastructure is now recognised as an important concept in land-use planning and environmental protection. It relates to the network of open spaces, parks, gardens, green corridors, woodlands, waterways and urban tree lines. Green space and biodiversity provide environmental, social, economic and physical benefits and give added value for quality of life, with consequent benefits for human health. It can also influence the layout of the urban landscape with its emphasis on adequate open space, amenity provision and landscaping.

Table 4.1: Inter-Relationships between Environmental Topics

Biodiversity Flora, Fauna	√								
Population/ Human Health	√	√							
Soil/ Geology	√	√	√						
Water	√	√	√	√					
Air	√	√	√	X	√				
Climate	√	√	√	√	√	√			
Material Assets	√	√	√	√	X	√	√		
Cultural Heritage	X	√	√	√	X	√	√	√	
Landscape	√	√	√	√	X	√	√	√	√
	Biodiversity, Flora, Fauna	Population/ Human Health	Soil	Water	Air	Climate	Material Assets	Cultural Heritage	Landscape

Mungret Park can also play a part in preserving important items of the history of the Mungret/Loughmore area of the plan and provide a setting for both archaeological and built heritage. This is an example of where the inter-relationship between differing environmental factors can be clearly seen.

There are many issues at play in the relationship between different factors. Up until recently not much thought would have been given to linking climate factors and cultural heritage but the recent publication of The Built and Archaeological Heritage Climate Change Sectoral Adaptation Plan in 2019 has drawn our attention to these factors. It points out that climate change can be expected to give rise to structural damage to monuments and historic

properties, the undermining of structures, loss of ground adjacent to structures, exposure and erosion of archaeological sites, and collapse of unstable masonry elements.

It also identifies slow onset risks such as the loss of historic landscape features, decay of building fabric caused by increased saturation, microbiological growth to interiors and contents and increased corrosion of metal elements. Another threat is maladaptation – the inadvertent loss or damage to heritage structures and sites during adaptation works by others, or the carrying out of poorly informed or reactive works. This is an issue of course that applies to all sectors undertaking climate adaptation works and not just the heritage sector.

4.4 Evolution of the Environment in the absence of the review to incorporate updated policy content

As outlined earlier in this report, the Southern Environs with its growing population has a particular requirement for facilities which are tailored for a younger population. This includes, revised zoning for residential uses, the provision of community facilities such as the park and the provision of adequately zoned land for educational uses for the expansion of educational facilities.

From an ecological perspective the opportunity has been taken to improve the protection of ecological sites in the area by retaining buffers around Loughmore Common Proposed Natural Heritage Area, Ballinacurra Creek and by including specific mention of maintaining river bank vegetation and a 20m buffer. Reference has also been made to the Inland Fisheries Ireland publication *Planning for Water Courses in Built Up Areas*, which contain valuable advice on how to preserve and maintain riparian habitats.

Not proceeding with the review would mean that the opportunity to update the policy contents of the plan to reflect the changed policy backdrop in the decade since the adoption of the last plan would have been lost. Leaving aside for the moment the new NPF and the RSES, the adoption last year of the Limerick Climate Change Adaptation Strategy marks a new emphasis on climate action. The SELAP is the first of Limerick's Local Area plans to be reviewed following the CCAS adoption and the opportunity has been taken to incorporate much of its content. This, perhaps, is the clearest indication of the implications of inaction.

It should also be remembered of course that inaction or the "do nothing" scenario is not considered to be one of the reasonable alternatives which should be considered under the SEA directive (SEA guidance 2004, p. 28).

4.5 Conclusion – Significant Environmental Issues

In summary, key environmental pressures in the review relate to:

Population and related facilities: Ensuring that the provisions of the NPF and RSES are included in the plan and the provision of Community facilities keeps pace with development and population growth.

Biodiversity: Including maintenance of the Natura 2000 sites, conservation of sites of local and international biodiversity interest, enhancement of ecological corridors and retention of urban open space. Buffer zones have been retained to protect the proposed NHA site which is within the area subject to the plan variation. Policies in relation to invasive species have been updated.

Cultural Heritage: Involving the need to maintain the diverse range of protected structures and to conserve the historic Mungret College complex and the Special Development Control Area without affecting the setting of key sites of archaeological and architectural interest e.g. the ecclesiastical site and the college itself. A key challenge for the management of the architectural heritage of the area is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of Protected Structures and their settings. This is to be achieved by the balanced use in terms of community and other facility provision in the Mungret College Complex. It is also considered that the mixed use zoning in and around the college will enable a suitable mix of uses to be developed which will ensure the future of the college as working buildings.

Human Health: Continued protection of the open space and promotion of smarter travel and access to recreation and amenity areas are all continuing pressures.

Climate Action: Following on from the adoption of the Limerick Climate Change Adaptation Strategy last year its content has been used to update the policies in the plan as they relate to climate adaptation.

4.6 Consideration of Alternative Strategies

Alternative Strategy Option 1 - Continue with the existing Southern Environs Local Area Plan without the review:

Legally this would not have been possible as the plan has been extended previously, is nearing the end of its statutory time life and as indicated elsewhere in this report, would not be considered an acceptable alternative.

The growing population of the plan area also provided its own challenges. One of the greatest needs for the population of the Southern Environs area was the provision of facilities for a youthful population with young families. This placed a premium on amenity and educational facilities. The purchase of the college complex afforded the opportunity to realise these objectives and the development of the park allowed some of these needs to be met. However, these needs remain and the plan will require to be updated to take these issues into account. The same needs that drove the review to the plan in 2015, such as the requirement for leisure facilities, schools and housing for example remain. The plan content required updating to reflect this, which meant that continuation of the existing plan policies would not have been a suitable plan led option.

Alternative Strategy Option 2 - Reliance on the Limerick Economic and Spatial Plan 2030 to help develop the SELAP area:

The outcome of earlier plans such as the Limerick Economic and Spatial Plan 2030 had indicated the potential of actions in selected parts of the city. While this plan has clearly articulated aims, it was considered that its focus on the older city area would not have contributed to the development of the Southern Environs.

This is the advantage of the review in conjunction with the 2030 Plan, in that with its range of targeted measures, it will be a better vehicle for guidance of resources to the Mungret/Loughmore area.

The provision of community facilities and improved infrastructure such as road improvements coupled with altered zoning for residential and landscape protection is expected to benefit the entire metropolitan area adding as it does to the range of amenities and infrastructure that is located within the new metropolitan area as a whole. For this reason it was considered that reliance on the 2030 plan would not have been sufficient to ensure the adequate development of community facilities in particular and this option was not selected.

Alternative Strategy Option 3 - Reliance on non-planning led initiatives to secure the development of the Southern Environs area:

While the initiatives of parts of the Local Authority such as the Physical Development Section are welcomed, this would address only part of the issue of infrastructure and service provision in the area. It would also mean that any efforts to address such provision would be on a piecemeal basis and would not be plan led.

While organisations such as Educate Together have provided essential services in the area, to ensure that adequate zoned land and resources were made available for the growing school going population it was decided to include this in the SELAP.

To ensure balanced provision of services with appropriate policy support it was considered best to proceed with the review.

Alternative Strategy Option 4 - the review as outlined in the current draft:

As noted above the examination of the policy background indicated that the provision of amenity and educational facilities and the zoning required would be best served by updating the SELAP. The plan also needs to be updated following adoption of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region. It also needs to be updated in order to take into account climate change issues.

5.0 Environmental Protection Objectives Relevant to the review of the SELAP 2011 – 2017 (as extended)

5.1 Introduction

The use of environmental protection objectives fulfils obligations set out in Section F, Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The environmental protection objectives are distinct from SELAP objectives and provide a standard against which the policies of the reviewed plan can be measured in order to highlight those with the potential for environmental impact. They are used as a tool to cross check the policies of the Plan in order to maximise the environmental sustainability of the Plan as reviewed. The cross checking process will help identify policies that will be likely to result in significant adverse impacts, so that alternatives may be considered or mitigation measures may be put in place.

The environmental protection objectives for the review were generated from European, National and Regional Policy and Guidance. Sample objectives are given in Table 4B of the SEA Guidelines produced by the DoELG in 2004 and these were reviewed to reflect the specific issues that were considered relevant to the review and the range of issues that are significant within the Southern Environs. The scoping process also informed the generation of appropriate objectives. The objectives are set out below, under a range of headings, which were taken from the SEA Regulations and the DoELG guidelines.

5.2 Environmental Protection Objectives

The Environmental Protection Objectives provide a standard against which the goals, policies and objectives of the SELAP Plan as reviewed can be measured in order to highlight those with the potential for environmental impact. These have been used as a guide for the preparation of the final objectives in the draft plan, which are listed in the appendix together with relevant comments. These EPOs are as follows:

Biodiversity, Flora and Fauna/ Built and Archaeological Heritage

B1: Protect, conserve and enhance habitats, species and areas of regional and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks (See also W3 below).

B2: Ensure that the continued conservation of the Natura 2000 sites, the Lower River Shannon SAC, The River Shannon and Fergus Estuary SPA and the Loughmore Common pNHA remain as a priority for the reviewed SELAP. These sites are important, both as an amenity and natural history resource.

B3: Preservation of the character of the historic built fabric.

B4: Preservation of the archaeological heritage.

Population and Human Health

P1: Facilitate a good standard of quality of life for the population of the Southern Environs through ensuring high quality residential, recreational, educational and working environments.

P2: Provide policy support for the provision of suitable infrastructure and facilities for the local population.

Water

W1: Ensure that wastewater infrastructure keeps pace with development proposals.

W2: Ensure that the requirements of the Water Framework Directive are incorporated into the plan.

W3: Ensure that Wetland sites are preserved in particular Loughmore Common and Monteen turlough.

Air Quality and Climate

AQC1: To increase energy efficiency and the proportion of energy generated from renewable sources and where necessary to ensure the sensitive application of energy saving measures to the historic built fabric of the Southern Environs.

AQC2: To avoid deterioration of air quality in the plan area.

AQC3: To include climate action concerns into the plan policies.

Geology and Soils

GS1: Place an emphasis on the development of brownfield sites rather than greenfield sites in the Southern Environs. By reducing the possible development of greenfield sites this makes a positive contribution to soil conservation. This can also be achieved through the sensitive reuse of existing buildings, reducing the need for new build (see C2 below).

GS2: Protect geological sites within the plan area.

Cultural Heritage

C1: Protect and conserve features of archaeological heritage and their setting.

C2: Protect conserve and promote the sustainable reuse of architectural heritage.

Landscape

L1: Protect and conserve the quality, character and distinctiveness of the Southern Environs landscape in particular the Mungret/Loughmore Area.

L2: Retain protected view to the front of Mungret College.

Material Assets

MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.

MA2: Ensure that there is adequate policy support for infrastructural provision in the plan area.

Compliance with higher tier plans

HTP 1: Compliance with higher tier plans and guidance in particular Section 28 guidance to ensure conformity with the policies of the NPF, RSES and planning guidance. This will help to achieve planned development with appropriate environmental safeguards.

5.3 Use of Environmental Protection Objectives

The above Environmental Protection Objectives have been used to carry out the SEA in accordance with relevant legislation. They provide a standard against which the policies of the review to the SELAP were measured for their environmental sustainability. A cross-checking process was used whereby the reviewed SELAP policies and development objectives were proofed against the Environmental Protection Objectives so that any policies/ development objectives with the potential for significant adverse environmental impacts were highlighted in addition to significant positive impacts. Alternative options, outlined previously, were considered and measured against the EPOs. Any adverse environmental effects identified, thereby maximising the environmental sustainability of the reviewed Plan.

6.0 SEA of Proposed Draft Southern Environs Local Area Plan 2021 - 2027

6.1 Content of the proposed Draft Local Area Plan

Each strategic policy and objective proposed for the review of the SELAP was assessed against the EPOs. The Draft Local Area Plan is based on a number of general objectives. These are listed below with a commentary based on the contents of the Environmental Protection Objectives presented above. The policy content in the plan is presented in term of an overarching strategic policy, followed by the objectives which relate to more specific areas. These are reproduced in the text below for ease of reference. The only exception to this is Section 3 which relates to spatial planning policy and has a main spatial planning objective, and then a series of strategic planning objectives. In any event, the approach of the ER will be the same. The strategic policies will be assessed followed by the more specific objectives. The commentary that follows the objectives will outline how it fits with the EPOs of the report and sets out the wider environmental context. The policies and objectives are listed in full for ease of reference.

Draft LAP: Chapter 3 Spatial Planning Policy Spatial Planning Objective

Spatial Planning Objective:

It is an objective of Limerick City and County Council to ensure that the Southern Environs Local Area Plan 2021 – 2027 is consistent with the hierarchy of statutory plans and to review the Southern Environs Local Area Plan 2021 - 2027 in the context of consistency with the forthcoming Limerick Development Plan 2022 (or any variation thereof).

1. Ensure the Southern Environs Local Area Plan is consistent with the hierarchy of statutory plans – The National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region and the Limerick County Development Plan 2010 – 2016 (as extended), or any replacement thereof. The area covered by this LAP will be incorporated into the proposed Limerick Development Plan 2022 and this LAP will then be revoked.
2. Facilitate and promote the Southern Environs’ role as part of the Limerick – Shannon Metropolitan Area in accordance with the Limerick – Shannon Metropolitan Area Strategic Plan and the Regional Spatial and Economic Strategy for the Southern Region.
3. Ensure that all development proposals comply with the Development Management Standards of the Limerick County Development Plan 2010 - 2016 (as extended), and any replacement thereof or any relevant Section 28 Guidance.
4. Support and facilitate sustainable intensification and consolidation of the existing built environment including permitting development on zoned land in an orderly manner in accordance with the objectives for Compact Growth in the National Planning Framework and Regional Spatial and Economic Strategy.
5. Deliver population growth targets in line with national, regional and county level policy objectives, by focusing new residential development into appropriate infill, brownfield, regeneration sites and residentially zoned land through the development strategy and development management process, in tandem with physical, community, recreation and amenity infrastructure.

6. Promote, support and enable sustainable and economic development, enterprise and employment generation in strategic locations including Raheen Business Park and University Hospital Limerick, which are accessible by public and sustainable modes of transport.
7. Promote and facilitate sustainable modes of transport that prioritise walking, cycling and public transport, while providing an appropriate level of road infrastructure, road capacity and traffic management to support existing and future development.
8. Protect, conserve and enhance the built environment, through promoting awareness, utilising relevant heritage legislation and ensuring good quality urban design principles are applied to all new developments, based on the principle that well planned and integrated development enhances the sustainability, attractiveness and quality of an area.
9. Protect, enhance and connect areas of natural heritage, green infrastructure and open space for the benefits of quality of life and biodiversity, while having the potential to facilitate climate change adaptation and flood risk measures.
10. Ensure the highest quality of public realm and urban design principles are applied to all new developments including the construction of landmark buildings in appropriate locations.
11. Have cognizance to the Limerick Climate Change Adaptation Strategy 2019 - 2025, and any forthcoming climate adaptation and mitigation strategies and actions that emerge during the lifetime of this plan.
12. Cooperate with the Southern Regional Assembly as part of the monitoring and review procedure.

Comment: This is consistent with the planning philosophy of adherence with higher tier plans and from the outset provides for compliance with the content of both the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy for the Southern Region (RSES). This is important because these new higher-level plans have updated environmental and planning policy content, and will through tier allocation of population figures directly affect the population targets of the plan. It should be noted that both the NPF and the RSES place a very strong emphasis on development of existing brownfield areas. Both also have a strong climate action content. The content of the Limerick Climate Change Adaptation Strategy 2019 - 2024 has informed much of the content of the SELAP. The utility of natural features in combating climate change is outlined in the plan, as is the need for concentrated development and sustainable transport, to mention but some of the responses.

Environmental Effects: Overall these are positive given the updated environmental content of the higher tier plans and their emphasis on concentrated development and climate action. It is consistent with EPO HTP1 compliance with higher tier plans.

Relevant Environmental Protection Objectives: AQC3, B1, W3, C2 P1, P2, HTP1.

Draft LAP: Section 5.6 Core Strategy Policy:

CS P1: To ensure compliance with the Core Strategy (or any revision thereof) the Planning Authority shall monitor the type of developments permitted, including the number of residential units constructed on an annual basis.

Comments: The review of both the City and County Development Plans has commenced. This is a 99-week process, whereas the Local Area Plan will be completed within a 35 week period. This will mean that the Southern Environs plan, which will be part of the metropolitan area, will exist alongside the merged City and County Development Plan. It is envisaged that the SELAP will be absorbed into the proposed Limerick Development Plan, along with the Castletroy LAP, so the new city area will have one plan rather than a number of separate plans. This will ensure consistency throughout the urban area and also ensure that the plan content will adequately reflect both the NPF and the RSES.

Environmental Effects: These are expected to be positive in that there will be increased consistency in the final plan for the metropolitan area as a whole which will more closely reflect the content of the NPF and the RSES. It will also reflect Climate action concerns and the content of the Limerick Climate Adaptation Strategy and other climate action policies.

Relevant Environmental Protection Objective: HTP1.

Draft LAP: Chapter 6 Economic Development:

Economic Development: Strategic Policy:

To promote, facilitate and enable economic development and employment generation activities in Strategic Employment Locations and other appropriate locations in a sustainable and plan led manner.

It is an objective of the Council to:

ED 01: Facilitate the future sustainable development of the Southern Environs to optimise the benefits of its strategic location in the Limerick Shannon Metropolitan Area, in accordance with the National Planning Framework and the Regional Spatial and Economic Strategy.

ED 02: Facilitate and support University Hospital Limerick and Raheen Business Park as Strategic Employment Locations, in accordance with the Limerick Shannon Metropolitan Area Strategic Plan.

ED 03: Promote a diverse range of employment opportunities by facilitating appropriate development, improvement and expansion of enterprise and industry on appropriately zoned lands, subject to compliance with all relevant Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) and any replacement thereof.

ED 04: Ensure development on the “High Tech/ Manufacturing” zoned lands to the west of Raheen Business Park shall be subject to the following:

- a) Cognisance to the residential amenities of the properties to the north and western side of the site and the adjacent agricultural land;
- b) Access to the “High Tech/ Manufacturing” zoned land to the west of the R510 will be limited to the existing roundabout to the east of the site;

c) Applications for development in the low-lying area in the southern section of this zone shall have regard to the attenuation infrastructure and shall include a site specific flood risk assessment, including proposals to mitigate and control the level of run off and attenuation.

ED 05: Encourage the redevelopment of vacant commercial units, brownfield, derelict, and infill sites for enterprise and industry creation.

ED 06: Work with IDA Ireland, Enterprise Ireland, the Local Enterprise Office and other agencies, organisations and individuals in promoting enterprise and industry in the Southern Environs.

ED 07: Support and promote start-up enterprises, small to medium scale industries and services in co-operation with the Local Enterprise Office.

ED 08: Facilitate and promote the provision of incubator units for start-up businesses and Small and Medium Enterprises (SMEs).

ED 09: Facilitate the provision and expansion of all services and infrastructure, which would contribute positively to the attraction of the Environs to economic development.

ED 010: 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. This objective can facilitate the achievement of climate targets by reducing the need to travel.

ED 011: Support the continued operation and reasonable expansion of non-conforming uses, subject to maintenance and protection of existing environmental, visual and residential amenity.

ED 012: Ensure large-scale employment development proposals incorporate opportunities for the active and passive recreation of employees.

Comments EDO1-EDO-12: The emphasis on infill and brownfield development and the provision of high quality development are all consistent with the content of the NPF and the RSES. The emphasis on SUDS also reflects concern with runoff and flooding patterns consistent with the 2009 Flood Risk Management Guidelines. The emphasis on employment generation is consistent with Limerick's important role in the region and also with the age profile of the Southern Environs.

Environmental Effects: There will be habitat losses pending the development of zoned land, but this will have to be weighed against the importance of sustainable urban development and compact growth.

Relevant Environmental Protection Objective: P1, AQC3, MA1, MA2, HTP1, AQC3.

Draft LAP: Section 6.6 Supporting the City Centre

Given the emphasis on the new Limerick/Shannon Metropolitan Area as a whole, the inclusion of this section in the Local Area Plan is of huge importance. It identifies that the Crescent Shopping Centre is the only Tier 2 level 1 Retail centre in the Metropolitan area. It also indicates that within the complex are public buildings which further emphasize the

importance of this area in both the environs and the city as a whole. What emerges is the need for balanced development, which would ensure that the city centre would not be disadvantaged by out of centre development, which might occur in this part of the Southern Environs. What is also evident in this section is the need to ensure that the Local Centres in the SELAP area continue to function as such without compromising the retail patterns outside the plan area i.e. in the City Centre.

The Strategic Policy seeks to:

To support the sustainable long-term growth of the Southern Environs, in accordance with the Core and Retail Strategies of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof, including the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.

It is the objective of the Council to:

R O1: Support and enhance the role of Limerick City Centre as the primary retail centre in the Limerick Shannon Metropolitan Area and Mid-West Region in accordance with the objectives of the National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region.

R O2: Ensure proposals which would undermine the vitality and viability of Limerick City Centre will not be permitted. The sequential approach to retail development set out in the *“Retail Planning – Guidelines for Planning Authorities, 2012”* will be strictly enforced, in the interests of supporting the City Centre at the top of the retail hierarchy. Any retail development in the District or Local Centres or Retail Warehousing zone shall comply with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy when completed.

R O3: Protect and enhance the mix of services and facilities in existing District and Local Centres, which provide for the day-to-day needs of local communities, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.

R O4: a) Ensure the role of Local Centres is not allowed to expand to encompass a materially broader range of comparison goods than currently exists in such areas, as this could lead to further competition with the City Centre;

b) In order to enable the sustainable development of the substantial greenfield area of Mungret, support and facilitate residential, office, education, tourism, cultural, arts, civic, community uses and retail development at the Mungret College Local Centre. Retail development intended to serve the needs of new/existing neighbourhoods and residential areas will be considered, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed;

c) The significant opportunities associated with the undeveloped nature of a large area of the Dooradoyle Road Local Centre is recognised. The site is therefore identified as having capacity to support and facilitate office and residential development. Retail development intended to serve the needs of new/ existing neighbourhoods and residential areas will be considered, subject to compliance with the existing Joint Retail Strategy and its proposed replacement, the Limerick Shannon Metropolitan Retail Strategy, when completed.

R O5: Prohibit the proliferation of uses in the centres which would detract from the amenities of the area or the vitality and viability of the area such as fast food outlets, amusement arcades, off-licences, bookmakers and other non-retail uses.

R O6: 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, discourage the use of external roller shutters, internally illuminated signs or inappropriate projecting signs.

Comments R01 to R06: The main emphasis of all of the policies in relation to retail call for balanced growth and safeguarding of the city centre, and compliance with higher level retail policy and guidance. All of the objectives indicate the importance of complying with the approach of the RSES, with its emphasis on centrally focused compact development. What is obvious is the importance of safeguarding the city centre in this respect. The importance of higher level retail guidelines is also emphasised which is timely as a new Limerick Shannon Metropolitan Retail Strategy will be prepared over the next 12 months to guide retail in Limerick and Clare. The question of the reuse of existing units is an important one in preventing dereliction and ensuring that brownfield patterns of development are encouraged.

Environmental effects: Emphasis on city centre development for retail complies with national and regional level planning policy, takes into account the issue of the decline of the city centre, and proposals for the long term revitalization of the vitality of the city.

Relevant Environmental Protection Objective: HTP 1.

Draft LAP: Chapter 7 Housing:

Presented below is the policy content from the housing part of the Draft LAP.

Housing: Strategic Policy:

To deliver new residential development in accordance with the Core Strategy allocation, to ensure that every household has access to a choice of good quality housing and that all new residential development includes a sustainable mix of universally designed housing types and tenures catering for all members of society.

H O1: Ensure the sequential development of serviced residential lands identified to cater for the envisaged population growth, in accordance with the Core Strategy of the Limerick County Development Plan 2010 – 2016 (as amended) and any replacement thereof.

H O2: Promote and facilitate the development of the strategic residential lands at Mungret in a planned and sustainable manner in accordance with the Mungret Masterplan.

H O3: Encourage and ensure that at least 40% of all new housing development is delivered within existing built up areas on infill, brownfield and backland sites, subject to preservation of existing residential amenity, the provision of a high quality design respecting the established character, density and layout, and compliance with all traffic safety, quantitative, qualitative and Development Management standards of the Limerick County Development Plan 2010 – 2016 (as amended).

H O4: a) Seek a higher density of a minimum net density of 45 dwelling units per hectare at appropriate intermediate urban locations, particularly on lands within 800m of University Hospital Limerick and Raheen Business Park, and within 500m of existing or proposed quality public transport route stops and public transport nodes;

b) Require a minimum net density of 35 dwelling units per hectare on all other lands.

H O5: Require the creation of sustainable communities and high quality universally designed residential area, with a mix of unit types, sizes, tenures, heights, amenities and facilities to create and maintain a sense of place and local distinctiveness. All new developments shall meet the standards, guidance and specific planning policy requirements of:

- The development management standards of the Limerick County Development Plan 2010 -2016 (as extended) and any replacement thereof;
- Sustainable Residential Development In Urban Areas, Guidelines for Planning Authorities, DEHG (2009);
- Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2018);
- Urban Development and Building Heights, Guidelines for Planning Authorities (2018);
- The Design Manual for Urban Roads and Streets, DTTS and DECLG (2013);
- Technical Guidance Document L – Conservation of Fuel and Energy – Dwellings;
- Building for Everyone: A Universal Design Approach.

H O6: 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.

H O7: Ensure an appropriate and sustainable mix of lifetime adaptable dwelling types, sizes, heights and tenures to cater for all members of society, including homeless persons, the elderly, disabled and members of the travelling community.

H O8: Facilitate the provision of independent and or assisted living for older people and people with disabilities, by supporting the provision of purpose built accommodation including Nursing Homes in accordance with the “National Standards for Residential Care Settings for Older People in Ireland”, or the adaption of existing premises, particularly vacant units.

H O9: Ensure new residential developments comply with the open space hierarchy set out under Table 3: Open Space Hierarchy. Every dwelling unit shall be positioned within 100m of a pocket park/ play lot, small park, or local park. Open space shall be provided proportional to the scale of the number of residential units proposed, with consideration of access to existing open space and the principles of permeability, accessibility, linkages, safety and place making.

H O10: Ensure compliance with the provisions of Part V of the Act (as amended) and to integrate such housing so as to prevent social segregation within residential developments. Social housing shall be provided on all lands zoned for residential use in accordance with the “Joint Housing Strategy for the Administrative Areas of Limerick City & County and Clare County Council” and any replacement thereof.

H O11: Utilise the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy) to facilitate the appropriate development of vacant sites (residential zoned lands) that are in need of renewal or regeneration.

H O12: Support any regeneration initiatives proposed and or implemented in the designated regeneration areas.

H O13: Integrate Limerick City Regeneration Areas and their communities into the mainstream social economic & community life of the city through a long-term commitment to support social and economic regeneration of the most deprived areas.

H O14: Identify and provide suitable sites, accommodation and facilities for the housing and re-settlement of travelling families in accordance with the provisions of the Traveller Accommodation Programme 2019 and any replacement thereof.

H O15: Permit housing on agriculturally zoned land for the permanent habitation of farmers and the sons and/or daughters of farmers only and subject to the terms and conditions of the rural housing policy as set out in the Limerick County Development Plan 2010 – 2016 (as extended).

H O16: Require residential developments in close proximity to heavily trafficked roads to be designed and constructed to minimize noise disturbance, follow a good acoustic design process and clearly demonstrate that significant adverse noise impacts will be avoided, in accordance with “Professional Practice Guidance on Planning and Noise” (2017) and predicted noise levels shall be in accordance with WHO recommendations.

H O17: Ensure proposed developments have cognizance to climate change mitigation as part of the design process, including use of sustainable building materials, micro-renewables or other design elements to reduce the carbon footprint of the proposed development.

Comments: This section presents a range of policies on housing, which covers allocations from the core strategy, housing, tenure and location. Of particular note is the emphasis on housing quality, both in terms of design and layout, open space provision and also the need to take climate change into account in terms of housing design. The inclusion of this policy came about as a result of the document “Integrating Climatic Factors into Strategic Environmental Assessment Process in Ireland” (EPA, 2019). Also of note is the direct reference to the issue of noise in policies, which marks an updating of policy content over the previous plan.

Environmental effects: Anticipated that the effects would be beneficial in that adequate housing in suitable locations would be preferable to dispersed development and would also contribute to quality of life. The fact that noise is taken into account from the outset is also a step forward in policy terms.

Relevant Environmental Protection Objective: AQC3, P1, P2, L1

Draft LAP: Chapter 8 Development Opportunities:

In draft chapter 8 a series of development opportunity sites are mentioned. The most important of these is Mungret, which was the subject of the 2015 amendment to the LAP. Presented below are the policies which relate to development opportunity sites.

Development Opportunities: Strategic Policy:

To ensure that development is the highest of qualitative and design standards and promotes the creation of safe, desirable and characteristic places in which to live, work and do business.

DO 1: Ensure the highest quality of public realm and urban design principles are applied to all new developments.

DO 2: Ensure development proposals have given proper consideration to the urban design criteria of site context, connectivity, inclusivity, variety, efficiency, distinctiveness, layout, public realm, adaptability, privacy and amenity, parking and detailed design.

DO 3: Ensure the construction of the highest quality and innovative designed landmark buildings in appropriate locations, including on the approaches to Limerick City, important street corners or junctions, corner sites, the end of vistas and gateways, local centres and the edges of public squares or open space.

Mungret Opportunity Site: Strategic Policy:

To deliver the key future growth enablers for Limerick identified in the National Planning Framework, including progressing the sustainable development of Mungret for housing and the development of supporting public transport and infrastructure.

Objectives: It is an objective of the Council to:

MM01: To promote and facilitate the development of the Strategic Residential Area of Mungret in a planned and sustainable manner in accordance with the Mungret Masterplan and applicable objectives throughout this LAP.

Comments: The policies are a logical step forward from those introduced in the variation to the plan in 2015, which called for the re-development of the Mungret/Loughmore area. Since then, there has been much work done on ensuring the delivery of the masterplan, including the delivery of the neighbourhood park, schools and local road infrastructure. With the delivery of over 200 residential units in the offing, this part of the plan area assumes particular importance. To date great detail has gone into planning these developments with sensitive areas such as Loughmore Common avoided, and consideration given to the College and its setting as outlined in the original masterplan.

Environmental effects: It is anticipated that the effects would be largely beneficial, in that additions to the urban housing stock would take place. It has to be pointed out that there will be the loss of non-improved grassland habitat, but this is a common habitat in this location.

Relevant Environmental Protection Objective: P1, P2, W3, C1

Draft LAP: Chapter 9 Community Infrastructure:

Community Infrastructure: Strategic Policy:

To deliver, facilitate and support the provision of a broad range of high quality educational, healthcare and community facilities and infrastructure to meet the needs of the existing and projected population.

CI 01: Ensure provision of sufficient zoned lands to allow for expansion of existing and provision of new education, healthcare facilities and community infrastructure in appropriate and accessible locations.

CI 02: Ensure all developments in relation to community infrastructure, education, childcare, healthcare, open space and recreation facilities comply with the requirements and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof.

CI 03: Continue to work with schools and the Department of Education and Skills to ensure the timely delivery of new and extended primary and secondary schools in the Southern Environs.

CI 04: Ensure that there are sufficient educational places to meet the needs generated by proposed developments, by requiring the completion of a Sustainability Statement and Social Infrastructure Assessment for residential developments of 5 or more dwellings.

CI 05: Ensure that childcare, primary and secondary education facilities are provided in tandem with new residential areas, at accessible locations which maximise opportunities for walking, cycling and use of public transport.

CI 06: Facilitate the development of third-level outreach, vocational and lifelong learning facilities and digital capacity for distance learning including fourth level education, lifelong learning and up-skilling generally.

CI 07: Require all large residential developments to include provision of one childcare facility (equivalent to a minimum of 20 child places) for every 75 dwelling units, unless it can be satisfactorily demonstrated that there is already adequate childcare provision in the area. The provision of the childcare facilities shall be in accordance with the “Childcare Facilities Guidelines for Planning Authorities” (2001) and the Development Management Standards of the County Development Plan 2010 – 2016 (as extended), or any replacement thereof.

CI 08: Support and facilitate the delivery of projects for improvement of the public realm.

CI 09: Seek delivery of the actions and stakeholder initiatives of the Local Economic Community Plan to strengthen community infrastructure and promote social inclusion for all members of society.

CI 010: 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 and children’s play facilities including playgrounds at appropriate locations to cater for all members of society.

CI 011: Promote optimum use of community and social infrastructure facilities and encourage the co-location of existing and future facilities including community centres, schools, childcare facilities, healthcare services, playgrounds and amenity spaces.

CI 012: Develop in partnership with other agencies 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.

CI 013: Facilitate the development of walkways in co-operation with local interested parties including the private, voluntary and public sector. Any proposed development adjacent to such walkways must incorporate connecting pathways into the designated walkway in their design. Developments shall be designed to ensure that properties overlook proposed walkways.

CI 014: Develop greenway/ blueway walking and cycling routes and examine the feasibility of a riverside walk between Tervoe Creek and Ballinacurra Creek, subject to adequate ecological assessment including Strategic Environmental Assessment and Appropriate Assessment (SEA / AA).

CI 015: Protect existing open space by not permitting development which encroaches on such open space, and protect semi-natural open space from inappropriate development.

CI 016: 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 the Open Space Hierarchy requirements set out under Table 3 of Chapter 7 Housing of this LAP.

CI 017: Facilitate and support the provision of allotments or community gardens at appropriate locations.

CI 018: Support and facilitate development and expansion of health service infrastructure by the Health Services Executive, statutory and voluntary agencies and private healthcare providers at appropriate locations, including at but not limited to, the University Hospital Limerick, District and Local Centres.

CI 019: Support the Healthy Limerick initiatives to deliver recreation, environmental improvements, active travel and health services infrastructure.

CI 020: Support and facilitate implementation of the *Age Friendly Limerick 2015-2020* strategy.

CI 021: Facilitate a good standard of health for the local population through ensuring high quality residential, recreational and working environments.

Comments: This section includes wide-ranging policies that emphasize high quality community infrastructure provision, together with the need for appropriate health facilities and open space. The policies draw attention to the need for age friendly facilities making sure that the chapter takes into account a whole of population approach and their requirement for adequate facilities.

Environmental effects: These are expected to be positive from the point of view of human health, but with adequate provision of open space there is also ecological benefits. Urban open space areas can play an important role in habitat creation and retention in urban areas.

Relevant Environmental Protection Objective: P1, P2, W3, C1.

Draft LAP: Chapter 10 Infrastructure:

Key Infrastructure: Strategic Policy:

To enable development in line with the capacity of supporting infrastructure and to require the timely provision of infrastructure needed for the phased development of lands.

Objectives: It is an Objective of the Council to:

KI 01: Ensure that all proposed developments comply with the policies, objectives and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) or any replacement thereof.

KI 02: Support and facilitate the implementation of the Irish Water Investment Plans in accordance with the settlement strategy of the RSES and MASP.

KI 03: Ensure compliance with the Core Strategy's programme for infrastructure led growth in accordance with the DHPLG Water Services Guidelines for Planning Authorities.

KI 04: Facilitate Irish Water in the maintenance, expansion and upgrading of wastewater disposal and water supply infrastructure.

KI 05: Ensure adequate and appropriate wastewater infrastructure is available to cater for existing and proposed development, in collaboration with Irish Water, to avoid any deterioration in the quality of receiving waters and to ensure that discharge meets the requirements of the Water Framework Directive.

KI 06: 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 National River Basin Management Plan for Ireland 2018-2021 (DHPLG) and associated Programme of Measures.

KI 07: Address the issue of disposal of surface water generated by existing development in the area, through improvements to surface water infrastructure, including for example attenuation ponds, the application of sustainable urban drainage techniques or by minimising the amount of hard surfaced areas as the opportunity arises.

KI 08: a) Require all planning applications to include surface water design calculations to establish the suitability of drainage between the site and the outfall point;

b) Require all new developments to include Sustainable Urban Drainage Systems (SUDS) to control surface water outfall and protect water quality.

KI O9: Support the statutory providers of national grid infrastructure by safeguarding existing infrastructure and strategic corridors from encroachment by development that might compromise the operation, maintenance and provision of energy networks.

KI O10: 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.

KI O11: Facilitate, promote and encourage the expansion and improvement of telecommunications, broadband, electricity (including renewables) and gas networks infrastructure on an open access basis subject to safety requirements, proper planning and sustainable development.

KI O12: Work with and 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.

KI O13: Seek the undergrounding of all electricity, telephone and television cables.

KI O14: Facilitate delivery of E-Charge Points for electric vehicles at suitable locations and in new developments.

KI O15: 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.

KI O16: Protect environmental quality in the Southern Environs through the implementation of European, National and Regional policy and legislation relating to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.

KI O17: 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.

KI O18: Maintain recycling facilities and secure additional facilities in tandem with new development.

Comments: There are a wide range of policies with direct environmental implications. Many of them stress environmental good practice such as recycling and supporting the Regional Waste Management office in delivering implementation of actions to support the circular economy. This in itself has positive resource implications by reducing material use, but also has climate action potential by reducing demand for extraction and processing of new materials. By including policy provision for renewable energies and for electric vehicle charging, it acknowledges the need for infrastructure to support the move away from fossil fuel based transport, which is an essential step for de-carbonisation.

There are also ecologically positive policies in the plan. Indirectly the emphasis on wastewater infrastructure and surface water run off management helps with reducing the amount of pathways through which contaminants can find their way into local water courses and the Lower River Shannon SAC site.

The issue of climate action is also included in particular in policy terms where cooperation between service providers, including the Council itself is encouraged in order to ensure the climate resilience of service networks. This issue had been raised by service providers in the preparation of the Limerick Climate Change Adaptation Strategy 2019-2024 and as a result of this is now included in the Draft Local Area Plan policies.

Environmental effects: These are expected to be positive. What is of particular importance is their range, as it ensures that issues such as surface water and infrastructure maintenance in the face of changing climate are all included.

Relevant Environmental Protection Objective: P1, P2, W3. C1, LI, AQC3.

Draft LAP: Chapter 11 Transport and Movement.

Transport and Movement: Strategic Policy:

To promote and facilitate a sustainable transport system that prioritises and provides for walking, cycling and public transport facilities while ensuring sufficient traffic management.

Objectives: It is an Objective of the Council to:

TM 01: Facilitate implementation and delivery of the proposals set out in the Draft Limerick Shannon Metropolitan Area Strategic Transport Strategy or any replacement thereof.

TM 02: Ensure all proposed developments comply with the policies, objectives and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof.

TM 03: Support and facilitate implementation of an integrated, multi modal and accessible public transport network catering for all members of society across the Metropolitan Area, in particular the proposed BusConnects program linking strategic residential and employment growth locations with the City Centre.

TM 04: Encourage, promote and facilitate a modal shift towards more sustainable forms of transport in all developments.

TM 05: Improve and provide clear, safe and direct pedestrian linkages and cycle networks as identified in the Draft Limerick Shannon Metropolitan Area Strategic Transport Strategy, including the greenways between the employment zones, shopping areas and residential areas throughout the Environs.

TM 06: Improve and create additional facilities for pedestrians and cyclists as opportunities arise as part of new developments.

TM 07: Investigate the feasibility of the provision of “*park and ride*”, carpooling, car sharing and bike sharing facilities to incorporate car parking and a bus stop/terminus at appropriate locations, including in the area of Raheen Business Park as indicated under the Draft L-SMATS.

TM O8: Ensure car parking is provided in accordance with the Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended) or any replacement thereof.

TM O9: Concentrate people intensive development in areas easily accessible to public transport.

TM O10: Require the submission of Mobility Management Plans and Traffic and Transport Assessments for large scale employment related developments, including at the Strategic Employment Locations of Raheen Business Park and University Hospital Limerick.

TM O11: Protect the capacity of the national road network, having regard to all relevant Government guidance including DoECLG “Spatial Planning and National Roads Guidelines” (DoECLG, 2012) in the carrying out of Local Authority functions and ensure development does not prejudice the future development or impair the capacity of the planned core network under TEN-T Regulations, which includes the Foynes to Limerick Road (including Adare Bypass) project.

TM O12: Prevent inappropriate development on lands adjacent to the existing national road network, which would adversely affect the safety, current and future capacity and function of national roads and having regard to reservation corridors to cater for possible future upgrades of the national roads and junctions. Support delivery of strategic road infrastructure identified in the RSES including:

- Foynes to Limerick Road Scheme (including Adare Bypass);
- Upgrade of arterial roads from the motorway network to increase capacity, including the provision of public transport infrastructure and Park and Ride facilities, including at the R527 Dock Road.

TM O13: a) Support and complete delivery of new and improved link roads and junctions accommodating public transport, cycle and pedestrian connections, such as the Mungret Loughmore Area Link Road/ Mungret Link Streets project and indicative proposals outlined on Map No. 4. The layout and design of such works shall have cognisance to the context and interface with surrounding land uses in compliance with the Design Manual for Urban Roads and Streets (DoECLG 2019);

b) Ensure proposals make provision for the accommodation of bus services along the most significant link routes, which shall include identification of bus stopping and turning areas, as well as carriageway capacity and through routes.

It should be noted that the alignment of the new roads in the plan is indicative only. These roads shall definitely be aligned as part of the detailed design and development process. Similarly, the location of junctions is indicative and the exact position for construction purposes will be dependent on detailed design.

TM O14: Implement Supplementary Contribution Schemes to facilitate delivery of link roads, including the link road which will connect the Local Infrastructure Housing Delivery Activation Fund Road to the R526.

TM O15: Close vehicular access from Blackberry lane onto the Dock road once an alternative link is available. Development of lands zoned “Enterprise & Employment” south of the Dock

road and east of the R510, which exceeds capacity on the existing Blackberry Lane / Dock Road junction, shall provide for and utilise the new proposed link onto the Dock Road in place of the existing Blackberry Lane – Dock Road junction as shown on Map No.4.

TM O16: Improve the efficiency of junctions to enhance the free flow of traffic through the Environs.

TM O17: Facilitate and implement appropriate measures to reduce or manage traffic associated with schools to regularise vehicular movements and alleviate congestion.

TM O18: Prohibit advertising signage adjacent to the motorway, the national road networks and other major transport routes.

TM O19: Require noise sensitive developments in close proximity to heavily trafficked roads to be designed and constructed to minimise noise disturbance, follow a good acoustic design process and clearly demonstrate that significant adverse noise impacts will be avoided in accordance with “Professional Practice Guidance on Planning and Noise” (2017).

TM O20: Retain the Limerick to Foynes rail line and avoid encroachment of inappropriate development which may compromise the line’s potential future use.

TM O21: Ensure that all future transport infrastructure is climate proofed, through design and construction, to function in a climate altered future and would, where possible, be multi-functional e.g. provide accessible routes for other services such as fibre optics or water, energy connections or other services and technologies that might come about during the lifetime of the infrastructure.

Comments: There is a very strong focus on sustainable transport policies in this section, together with an explicit mention of the need to climate proof any future infrastructure provision. This echoes the concerns of the Key Infrastructure section of Chapter 10 of the Draft Local Area Plan and the integration of these policies is welcomed. The inclusion of the Limerick to Foynes rail line is also welcomed as a recent planning application in 2018, was for bridge improvement works close to Foynes port to facilitate any future opening of the line. It makes sense then to ensure the continued viability of the line within the SELAP area.

Environmental effects: While the construction of new transport infrastructure will have an impact on the receiving environment, the emphasis on increased permeability and sustainable modes of transport including BusConnects, walking and cycling should help reduce transport emissions, which are a large proportion of national emissions.

Relevant Environmental Protection Objectives: MA1 MA2, HTP1, P2

Chapter 12 Archaeological and Architectural Heritage

Archaeological and Architectural Heritage Strategic Policy

To protect, conserve and manage the built and archaeological heritage of the Environs, and to encourage sensitive and sustainable development to ensure its preservation for future generations.

Objectives: It is an Objective of the Council to:

Archaeological Heritage

AAH 01: Seek the preservation of all known sites and features of historical and archaeological interest. This includes all the sites listed in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act 1994.

AAH 02: Protect and preserve all sites and features of historical interest discovered subsequent to the publication of the Record of Monuments and Places, this includes all sites that may be discovered during the course of excavation or construction.

AAH 03: Protect and preserve all underwater, intertidal, estuarine and riverine archaeological sites.

AAH 04: Ensure that any proposed development shall not have a negative impact on the character or setting of an archaeological monument or which is seriously injurious to its cultural or educational value.

AAH 05: Ensure archaeological assessment is carried out as required and promote “preservation in situ” of archaeological remains and settings in developments that would impact upon archaeological sites and/or features.

AAH 06: Protect and maintain the integrity of the Special Control Area at Mungret Monastic Complex, incorporating all national monuments and protected views including:

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

Development within this area will be prohibited with the exception of leisure facilities and moderate extensions to existing dwellings, which will not adversely impact on the character or setting of the complex.

AAH 07: Facilitate and support the provision of interpretative panels and directional signage for Mungret Monastic Complex and park, in conjunction with local community groups.

AAH 08: Facilitate public access to National Monuments in State or Local Authority care.

AAH 09: In relation to sites listed in the Record of Monuments and Places and other sites and features of historical interest, to require the following within areas of proposed open space:

- a) 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
- b) 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.

Architectural Heritage

AAH 10: Preserve, protect and enhance the character of the historic built fabric, including the Architectural Conservation Area, all Protected Structures and attendant grounds in accordance with best conservation practice and relevant heritage legislation.

AAH 11: Positively consider proposals to improve, alter, extend or change the use of protected structures so as to render them viable for modern use, subject to demonstration by a suitably qualified Conservation Architect/ or other relevant experts that the structure, character, appearance and setting will not be adversely affected and, suitable design, materials and construction methods will be utilised.

AAH 12: Ensure all development works on or at the sites of protected structures, including any site works necessary, shall be carried out using best heritage practice for the protection and preservation of those aspects or features of the structures/ site that render it worthy of protection.

AAH 13: Support the re-introduction of traditional features on protected structures where there is evidence that such features (e.g. window styles, finishes etc.) previously existed.

AAH 14: Strongly resist the demolition of protected structures, in whole or in part, the removal or modification of features of architectural importance, and the development which would adversely affect the character or setting of a protected structure, unless it can be demonstrated that exceptional circumstances exist.

AAH 15: Ensure the design of any development in the Architectural Conservation Area, including any changes of use of an existing building, should preserve and/ or enhance the character and appearance of the Architectural Conservation Area as a whole.

Comments: This section includes a wide range of policies relating to the conservation of built and archaeological heritage and takes into account its reuse. Sympathetic reuse of these structures plays an important role in retaining the character of the area and is also good practice in terms of sustainability. The policy relating to the integration of archaeological monuments in developments is also very helpful in this regard.

Environmental effects: These are generally expected to be positive - see above. Underwater and riparian archaeology has been specifically mentioned in line with concerns from the Department in relation to effects of projects on archaeology in and around the Shannon River specifically.

Relevant Environmental Protection Objectives: P1, C1 and C2.

Draft LAP: Chapter 13 Natural Heritage

Natural heritage: Strategic Policy

To protect, enhance, create and connect natural heritage, green spaces and high quality amenity areas throughout the Southern Environs for biodiversity and recreation.

Objectives: It is an Objective of the Council to:

NH 01: Protect, conserve and enhance natural heritage sites, Natura 2000 designated conservation sites and non-designated habitats, species and areas of national and local importance, including aquatic habitats and species, and promote the sustainable management of ecological networks in co-operation and consultation with the relevant statutory authorities.

NH 02: Ensure development proposals fully comply with the Development Management Standards of the County Development Plan 2010 – 2016 (as extended) and any replacement thereof, and in particular the requirements of Article 6 of the Habitats Directive.

NH 03: Require integration of all elements of existing green infrastructure, including suitable mature trees, hedgerows, field boundaries and natural heritage features into new developments, prevent fragmentation and mitigate potential impacts on the existing biodiversity and green infrastructure network. In the event that mature trees are required to be felled, a comprehensive tree survey carried out by a suitably qualified individual, demonstrating that the subject trees are of no ecological or amenity value shall be submitted in conjunction with planning applications.

NH 04: Protect existing open space and semi-natural open space from inappropriate development and encroachment.

NH 05: Require the planting of native trees, hedgerows and vegetation and the creation of new habitats in all new developments and public realm projects. The Council will avail of tree planting schemes administered by the Forest Service, in ecologically suitable locations, where this is considered desirable.

NH 06: Identify, preserve, conserve and enhance wherever possible a network of connected wildlife habitats, stepping stones, corridors and features including trees of special amenity, conservation or landscape value, which ensure the provision of recreational amenities, biodiversity protection, flood management and adaptation to climate change. In certain situations, it may be possible to create such networks, and where an appropriate management regime is proposed these will be considered favourably.

NH 07: Maintain riverbank vegetation along watercourses and ensure protection of a 20m riparian buffer zone on greenfield sites and maintain free from development. Proposals shall have cognisance to the contents of the Inland Fisheries Ireland document "Planning for Watercourses in Urban Environments".

NH 08: Protect environmental quality and implement site appropriate mitigation measures with respect to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.

NH 09: Facilitate the work of agencies redressing the issue of terrestrial and aquatic invasive species.

NH 010: Have cognisance to the All Ireland Pollinator Plan 2015 – 2020 and any subsequent plans when assessing landscaping proposals. Any proposal that actively includes pollinator friendly measures will be considered favourably.

NH 011: Require the provision of alternative roosting or settlement facilities for species, such as bird or bat boxes, swift boxes, artificial holts, or other artificially created habitats in proposed developments, where considered appropriate.

NH 015: Require all developments where there are species of conservation concern, to submit an ecological assessment of the effects of the development on the site and

nearby designated sites, suggesting appropriate mitigation measures, and establishing, in particular, the presence or absence of the following species: Otter, badger, bats, lamprey and protected plant species such as the Triangular Club Rush, Opposite Leaved Pond Weed.

NH O16: Seek the creation of new habitats by encouraging wild green areas and new water features such as pools and ponds. Encourage management plans for green areas to use the minimum of pesticides and herbicides. The creation of areas that are not subject to public access in order to promote wildlife use is strongly encouraged.

NH O17: Preserve and protect the River Shannon Special Area of Conservation (SAC) and the River Shannon and River Fergus Special Protection Area (SPA) from inappropriate development, to maintain its importance in terms of ecology, and as an amenity area both for the Southern Environs, the City and the Environs as a whole.

Comments: While the above includes an extensive range of objectives to protect ecology in the area, there is also a recognition of the possibilities that development can afford to create new habitats, such as by way of the provision of nesting sites for swifts in new buildings for example. With the River Shannon forming the northern boundary of the plan area and the Ballinacurra creek the eastern, both designated sites, the importance of riparian ecology is recognised in the plan objectives. However, non-designated ecological sites get equal emphasis as the Monteen Turlough and Bunlicky Lake are also included in the plan content and have protective objectives.

One of the most important points to note is that there has been no expansion of the development boundaries of the plan over the previous one. This helps to ensure that no further encroachment would take place on designated sites and that no environmental standards would be breached.

Environmental Effects: These are expected to be positive in that they have been updated to take into account issues such as the pollinator plan, climate change and green infrastructure.

Relevant Environmental Protection Objectives: P1, GS2 (in the case of wetlands, the Monteen turlough and Loughmore Common), L1, B1 and B2

Draft LAP: Chapter 14 Climate Change and Flood Management

This Chapter is in two parts, the first (a) deals with Climate Change, the second (b) deals with Flood Management.

(a) Climate Change: Strategic Policy:

To protect and enhance environmental quality and implement the climate action measures through the planning process to help tackle climate change.

Objectives: It is the Objective of the Council to:

CC O1: Support the National Adaptation Framework 2018 and the National Climate Change Strategy including the transition to a low carbon future, taking account of flood risk, the promotion of sustainable transport, soil conservation, the importance of green infrastructure, improved air quality, the use of renewable resources and the re-use of existing resources. The contents of the Limerick Climate Change Adaptation Strategy (2019) will be taken into account

as will any revised or forthcoming adaptation or mitigation or climate action strategies, plans or policies.

CC 02: Support sustainable travel, energy efficient projects, green infrastructure and sustainable residential development projects.

CC 03: Ensure climate proofing measures are incorporated into the design, planning and construction of all developments including the use of green infrastructure as a mechanism for carbon offsetting and surface water management.

CC 04: Ensure that medium to large scale 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 cases of large industrial or commercial or public buildings in new builds the incorporation of renewable technologies such as solar into the design will be encouraged, subject to fulfilling planning criteria.

CC 05: Support and promote climate smart and the NZEB standard of building or equivalent for all new developments.

CC 06: Promote and support development of renewable energy sources which will achieve low carbon outputs including on-land and off-shore renewable energy production.

CC 07: Encourage co-operation between utility and service providers to ensure that their networks are resilient to the impacts of climate change. Ensure that any infrastructure is designed to function in a climate altered future. This policy is a reflection of that in the Limerick Climate Change Adaptation Plan

CC 08: Promote the Southern Environs as a low carbon area and support the development of low carbon and green technological businesses and industries.

CC 09: Promote integration and delivery of green infrastructure in infrastructure, new developments, public realm and community projects as a means of managing flood risk and enhancing the natural environment.

Comments: The importance of addressing climate change is reflected in the range of policies presented here. Policies include those to encourage the adoption of green technologies in the plan area. Importantly, there are linkages to the Limerick Climate Change Adaptation Plan 2019-2024, which is the first such document produced by Limerick City and County Council.

Environmental effects: These are generally expected to be positive in that this is the first plan that has direct integration of policies that are also in the Limerick Climate Change Adaptation Plan.

Relevant Environmental Protection Objectives: B1, W3, AQC3, MA1.

(b) Flood management

Strategic Policy: To manage flood risk in the Southern Environs.

FM 01: 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.

FM 02: Support and co-operate with the OPW in delivering the Limerick City Flood Relief Scheme.

FM 03: Support delivery of projects to reduce surface water and groundwater flood risk.

FM 04: Ensure development proposals within the areas outlined on the Flood Risk Map are subject to Site Specific Flood Risk Assessment as outlined in The Planning System and Flood Risk Management Guidelines 2009.

FM 05: Ensure all development on lands identified as being at risk of flooding demonstrates through the carrying out of a Site Specific Flood Risk Assessment and the use of Sustainable Urban Drainage Systems that any flood risk can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

FM 06: Incorporate the recommendations of the River Shannon CFRAM into any site specific flood risk assessment undertaken for individual sites/areas.

FM 07: Ensure the integration of urban storm water drainage systems including SuDS for new developments.

FM 08: Provide an appropriate set back from the edge of the watercourse and proposed developments to allow access for channel clearing/maintenance.

FM 09: Adhere to the requirements of Inland Fisheries and National Parks and Wildlife Service in the construction of any flood alleviation measures.

Comments: Similar to the section on climate change, which preceded it, this section integrates well in policy terms with the Limerick Climate Change Adaptation Strategy (LCCAS) 2019-2024, and with reference to working with the OPW to deliver on the Limerick city flood defence scheme. It is important to note that the final policy does stress the need to adhere to the requirements of the NPWS and IFI in relation to the provision of these schemes.

Environmental effects: The flood defences will have undoubted effects on riparian habitats and the requirement of both the NPWS and the IFI will have to be taken into account in the design and construction of these defences.

Relevant Environmental Protection Objectives: AQC3, MA1, P2

6.2 Methodology for Assessment and Determination of Significance of Effects

The policies in the Draft Local Area Plan were shown in the previous chapter together with comments from an environmental perspective, in particular comments relating them to the Environmental Protection Objectives.

Evaluation of significant effects requires consideration of four questions, which will establish the importance, or “significance”, of the predicted impact:

1. Will the policies and objectives in the Draft Local Area Plan lead to a risk of environmental standards being breached?
2. Could it lead to a failure to achieve environmental policies or targets?
3. Will it affect environmental resources, which are protected by laws or policies, e.g. Natura 2000 habitats, species, landscapes, water resources, agricultural resources and cultural heritage sites, etc.?
4. Could it lead to impacts on environmental resources, which, although not legally protected, are important or valuable?
5. Are policies and objectives consistent with planning legislation?

As a follow on from the preparation and evaluation of the previous sections of the report, i.e. baseline data and trends, existing significant issues, and environmental vulnerabilities, the above questions were considered in determining the significance of the environmental effects identified. Suggested alternatives, mitigation, and offsetting, to any potential adverse significant effects were identified and reviews recommended to the SELAP where required. This process led to inclusions of updated policy content e.g. those based on the Limerick Climate Change Adaptation Plan 2019-2025 and those in relation to flood management and green infrastructure.

6.3 Summary of Likely Significant Effects of Implementing the proposed review on the Environment and Measures Proposed to Prevent, Reduce or Offset such effects

6.3.1 Introduction

In accordance with the legislation, the likely significant effects on the environment of implementing the review are summarised under headings that include the issues required to be assessed further below.

The existing SELAP was subject to SEA. Preparation of an environmental report for the review is required as it is within the revised thresholds for triggering SEA, i.e. a population threshold of 5,000 persons. The requirement for Appropriate Assessment screening at a minimum was also noted. Thus, it is to be expected in accordance with best practice that the policies and objectives of the Plan would comply with environmental standards and incorporate environmental considerations at the earliest stage. This is also true of the preparation of the last SELAP.

The finding of mainly positive or at least insignificant/neutral impacts from the draft policies and objectives demonstrates integration of environmental considerations into the Plan at an early stage which fulfils the requirements of the SEA Directive.

6.3.2 Biodiversity, Flora and Fauna

In fulfilment of the requirements of Article 6 (3) of the Habitats Directive an Appropriate Assessment Screening was carried out to assess the impacts of the review of the plan on Natura 2000 habitats. Two Natura 2000 sites are located within the plan area and it was important to carry out the process in order to establish if any of the plan contents might have effects on the Natura 2000 sites, such as the Lower River Shannon SAC site or the River Shannon and Fergus SPA. The assessment indicates that there would not be any significant

effects. The protective buffer around Loughmore Common, a turlough in the plan area and also a Proposed Natural Heritage Area, was retained.

6.3.3 Population and Human Health

Generally, impacts on population and human health arising from the review are considered positive as the contents of the review provides for additional community and educational facilities in the plan area.

6.3.4 Water/Wastewater

The main Wastewater Treatment plant for the area of the SELAP and the City Development Plan is the plant at Bunlicky. Capacity is adequate to cater for the city's needs with a population equivalent of 130,000. The plant came into operation in 1999 and has been updated a number of times since. There is sufficient capacity in the plant to cater for the growth proposed in the draft SELAP.

6.3.5 Air Quality & Climate

Air quality in Limerick is considered to be of a very high standard and there are no issues arising from the Plan that would adversely impact on air quality. While there are negative localised impacts from traffic in the centre of the City, during busy periods such as summer traffic heading westwards, this is not regarded as significant in overall terms.

Perhaps the biggest change in relation to dealing with climate issues has been the inclusion of a new chapter on both Climate and Flood Management, which deals with these issues. The preparation of the Limerick Climate Change adaptation plan last year meant that there was a range of policies that could serve as the basis for updated policies in the SELAP.

6.3.6 Geology and Soil

The review is expected to have beneficial effects for soil conservation as it means that the policies in both the NPF and the RSES in relation to brownfield development can be reflected at plan level. The retention of the buffer area around Loughmore Common and Bunlicky Lake also means that this sensitive area will continue to enjoy a level of protection. It must be remembered however, that the SELAP is located within the environs of Limerick city. In this regard, new development and hence loss of both greenfield and brownfield sites is far more likely than elsewhere in the county. The emphasis on brownfield development in both the NPF and the RSES does mean that the re-development of these sites has the firm backing of both national and local policy.

6.3.7 Cultural Heritage

Architectural and Archaeological Heritage

The Southern Environs is dominated by the history of Mungret College. Much of the built environment reflects this history with notable buildings present which are listed as Protected Structures in the County Development Plan and in the National Inventory of Architectural Heritage.

The area in question is of historical and architectural importance and this is reflected in the amount of archaeological and historical features present in the area.

Mungret College and its grounds are an important local landmark. The College is currently used by a number of organisations such as Educate Together, which has accommodation in the college grounds. The main building is currently unused. Mungret Church and its associated graveyard are listed on the Record of Protected Structures and on the Record of Monuments and Places.

The designations of the Protected Structures will be continued through the review process. The Special Control Area which lies around the Mungret Church and graveyard complex, will also be retained in order to continue to protect these areas and the environs.

The maintenance and conservation of the area's cultural heritage is key in order to maintain an irreplaceable resource, sense of identity for this part of the Environs and as an important part of the local landscape. While the area will be the focus of additional development, it is considered that there are sufficient safeguards in the plan. This is achieved by a detailed set of principles for development as expressed in chapter 12 in particular.

6.3.8 Landscape

Future developments will be required to be sympathetic to their settings. This is the case with respect to Mungret College in terms of the design and building heights of new developments. Other policies in the plan such as the strategic objectives in section 8.2 stress the need for *"the highest of qualitative and design standards"* to be applied to all new developments.

The River Shannon is the main natural feature in the area and in the proposed draft plan. There is no further expansion of development zoning towards the river itself, which helps to retain the character of the plan area.

6.3.9 Material Assets

Material assets are taken to include infrastructure and utilities including rail, road, water supply and wastewater treatment facilities. It also includes economic assets such as buildings and lands and water resources which support tourism and amenities. Material assets are the critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment, transportation, etc.

From the point of view of the review, amongst the most important pieces of infrastructure are wastewater and the transport network. In July 2015, the Part VIII applications for the Mungret Road Improvement scheme went before the Council. The work consisted of the improvement and widening of the existing roadways and junctions allowing access to the schools sites to the north-west of Mungret College. Permanent lighting is a feature of the road improvements.

The presence of the Limerick to Foynes rail line which is currently disused should also be noted. This has the potential to serve as a transport link to Foynes port. While this might be feasible, no development proposals should compromise its use as a transport link to the port and to West Limerick as a whole. The retention of the rail link as a potential route to the west is hugely important for the port as part of the European TEN-T initiative and for future sustainable transport links generally.

6.4 In-combination Effects

The SELAP review has to be considered with changes to the city area, of which the Southern Environs and Castletroy will now form part. Due to Limerick's status as the major city in the Midwest, it is necessary to consider the plan review and its effects at a larger scale. Table 6.1 below shows the main plans and projects ongoing in the City and SELAP area and it is these that provide the most immediate back drop to the review. These are the plans and projects that are assessed with in-combination effects in mind.

Projects and Plans	Comments
Regeneration areas	The closest area is that of the Southside Regeneration area (Prospect B). No appreciable effect on the area which is the subject of the review is anticipated.
Shannon Integrated Framework Plan	It must be remembered that the SIFP operates throughout the estuary, which means that docklands which are to the east of the SELAP area, will have to be viewed in the context of other development locations in the estuary.
City Development Plan 2010 – 2016 (as extended)	Since the amalgamation the implementation of the city plan takes into account the issues in the wider metropolitan area. The draft Lap notes that the SELAP will eventually be incorporated into the city plan as does the Environmental Report, which should ensure greater planning policy consistency throughout the new metropolitan area.
Smarter Travel (which was a demonstration project until 2018)	Designed to promote sustainable travel patterns which will promote cycling and pedestrian access throughout the city and environs.
Draft Limerick Shannon Metropolitan Area Transport Strategy.	Outlines a coherent transport strategy for the region. This will mean an emphasis on more efficient transport and an expansion of cycle routes.
Limerick Northern Distributor Road (LNDR)	This project to create a by-pass of the city with a route running to the north and the east would reduce the volumes of city traffic with consequent improvements in both traffic flows and the city environment. This would also assist in dealing with traffic flows on a citywide basis and complement the southern ring road, which goes through the SELAP area.
Upgrade of Bunlicky Wastewater Treatment Plant	Communications from Water Services and Irish Water indicate that a programme of works will be ongoing to ensure that capacity keeps pace with demand. This is

	essential for the future development of the City and environs.
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Regeneration areas: The Limerick Regeneration Framework Implementation Plan includes measures for Kings Island, Moyross, Ballinacurra Weston and Southill. These master plans provide the strategic basis for the implementation of work programmes over a 10 year period. The master plans are built on three key pillars: Social regeneration, Physical regeneration and Economic regeneration.

Shannon Integrated Framework Plan: This plan is intended to promote the sustainable development of the estuary as a whole and operates in the functional area of Limerick City and County Council, Clare County Council and Kerry County Council. With respect to the Limerick City Development Plan it called for the zoning of the dockland area for development purposes. This area is outside the SELAP boundary but may have an effect in creating employment for its residents. However, the underlying tenet of the SIFP is to promote development of the estuary as a whole. Any increased economic activity is bound to benefit the docks area and complement the City plan. The Docklands for instance had been designated as a Strategic Employment Location (p.17 City development plan) in the existing 2010 City Development Plan and is described as an “under-utilised asset”.

Limerick Economic and Spatial Plan 2030: This plan identifies seven key locations in Limerick for re-development, which will complement the SIFP in that the aims of both as they relate to Limerick are similar. Both offer detailed area based suggestions of redevelopment of selected areas. The Marine Energy park proposal in the 2041 SFPC Vision document is reflected in this document (p. xiii) where it mentions the need for an urban science park.

City Development Plan: It is likely that the revised SELAP will be integrated into the Limerick Development plan addressing the larger metropolitan area of Limerick City and Environs including the Southern Environs and Castletroy. The need to protect the vitality of the city centre in the policy content of the SELAP should be noted (see section 6.6 of the draft plan entitled supporting the City Centre).

Smarter Travel: This initiative was designed to promote networks of cycle and pedestrian ways throughout the City and environs and was also designed to maximise the use of public transport. In this regard, it fits well with the Colbert station project (see above). This initiative is updating traffic, pedestrian and cycle movement to suit a new era in Limerick traffic management and this has helped update plan policy in this regard.

Upgrades of Bunlicky Waste Water Treatment Plant:

Current and future upgrades are planned for Bunlicky. The works undertaken are as follows:

- Construction of a Chemically Enhanced Primary Treatment dosing system to allow for Alum Dosage of the influent to combat against high levels of Phosphorus discharge and to assist in sludge management.
- The installation of an Anaerobic Digester.
- The upgrade of the current odour control unit.

- The installation of a pasteurisation unit.
- The installation of a Combined Heat and Power recovery unit operate with the anaerobic digester.

These works were completed in March 2016 and will increase capacity to keep pace with industrial and residential development in the agglomeration area. Further works are planned following to ensure that both technologies, work practices and capacity in the plant are maintained at a standard that can adequately deal with increased loadings from future development (Irish Water Personal Communication, July 2014). These are not anticipated to have any effects on the nearby Special Area of Conservation or Special Protection Area.

7.0 Conclusion

SEA assessment of the SELAP and proposed Draft Local Area Plan has determined that no significant adverse impacts are predicted from the proposed review while negative impacts will be minimised through policies and objectives for biodiversity, population, water, and cultural heritage.

For certain activities that will complement the plan e.g. improvements to Bunlicky WWTP and transport projects, impacts will be determined by way of environmental assessment largely through EIA and AA at the project level. These assessments will involve application of Appropriate Assessment, landscape appraisal, archaeological and architectural heritage appraisal and flood risk assessment to accurately determine the impacts under the range of environmental headings detailed above.

Compilation of the background information, including through discussions with Council staff such as area engineers and the public consultation process have all informed the Environmental Report to address key environmental issues in the SELAP.

Table 7.1 – Key environmental Issues and Policy Response

Key Environmental Issue		Relevant draft SELAP content and policies
Water Quality	-Protection of Water Quality -Water Framework Directive, incorporation of relevant objectives and measures -Surface and ground water protection --Drinking water -Wastewater treatment -Water conservation	Section 10.2 and Chapter 13 Also in Development Management Section of the CDP which offers guidance at planning application stage.
	-Integration of flood risk assessment into the Plan to ensure appropriateness of land use and inclusion of SUDS technology -Increased risk of flooding due to Climate Change	New mapping is being prepared which will be incorporated into the plan when completed. Chapter 14(b).
	Increased risk of flooding due to Climate Change	See Chapter 14 and strategic objective 9 (S5.2 of the Plan.)
Biodiversity	Protection of Biodiversity - Natura 2000 sites, pNHAs, non-designated habitats, riparian buffer zones, green infrastructure	Chapter 13 of the Plan.
	Conservation of the open spaces and Parklands in the SELAP area	See objectives C1015 and NH04 of the plan

	Consideration of potential impacts of climate change	Chapter 14
Air and Climate	Development of traffic management measures	Chapter 11 (S 11.2)
	Sustainable modes of transport	See Chapter 11 (section 11.2 and 11.4)
	Protection of air quality	See objective KI06 AND Section 10.5 of the plan
	Consideration of potential impacts of climate change	Chapter 14 and KI012
	Promotion of use of energy conservation	See sections 10.3 and 10.4
Cultural Heritage	Architectural Heritage Protection	See BAH 01 to BAH 06
	Protection of archaeological heritage of the area	BAH 07 – BAH 09

7.1 Summary of how environmental considerations were factored into the proposed review to date

During the preparation of the Draft Local Area Plan, consideration was given to the sensitivities of the environs, which is reflected throughout the proposed draft plan. The issue of ex-situ effects on Natura 2000 sites and the issue of the need for appropriate assessment screening had been raised in internal discussions during the preparation of the review. Appropriate Assessment was deemed necessary despite the fact buffer zones were retained in the plan along the undeveloped sections of the river banks in the plan area. The addition of a 20m wide buffer along water courses in the policy content of the plan is a welcome development. The ex-situ effects from treatment plants were not regarded as significant due to the updating of the Bunlicky Wastewater treatment Plant. An objective within the plan is present to ensure that infrastructure kept pace with development. Objective KI 05 is important in this regard.

The need to ensure that the settings of Mungret College and the archaeological complex to the north is both protected and enhanced is reflected in the zoning patterns of the reviewed plan. The zoning as presented in the plan seeks to protect these aspects of the built heritage, ensuring that future development in terms of location and scale contributes to this setting. While the designation of a Neighbourhood/Local Centre zoning in the college area allows for the development of a wide variety of uses with an emphasis on community usage. Commercial usage is limited in terms of areas ensuring that community usage is not overshadowed.

7.2 Summary of how the Environmental Report and submissions received from Statutory Authorities following scoping were taken into account

Table 7.2 Possible environmental effects of the variation

Alterations	Environmental effects	Comments
20m buffer along water courses	Beneficial in that it will confer additional protection to the water courses	IFI publication "Planning for water courses in Urban areas" has also been included in policy.
Text changes stressing commitment to monitoring and to zoning definitions	None	Commitment to monitoring ties in with plan review policies by LCCC
Alteration of zoning from residential to other uses.	Ensures that additional open space will be provided and that sufficient area is zoned for service provision	Allows zoning with community and environmental benefits

Adequate monitoring is important to keep track of possible environmental changes. It is a policy of the council to support monitoring initiatives associated with the implementation of the SELAP

7.3 Reasons for choosing the proposed review in the light of other reasonable alternatives considered.

This is indicated through the options that were considered below:

Alternative Strategy Option 1 - Continue with the existing Southern Environs Local Area Plan without the review:

Legally this would not have been possible as the plan had been extended previously, is nearing the end of the statutory lifetime and is indicated elsewhere in this report would not be considered an acceptable alternative.

Alternative Strategy Option 2 - Reliance on the Limerick Economic and Spatial Plan 2030 to help develop the SELAP area:

The outcome of earlier plans such as the Limerick Economic and Spatial Plan 2030 indicated the potential of actions in selected parts of the city. While this has clearly articulated aims, it was considered that the plan's focus on the older city area would not have contributed to the overall development of the Southern Environs.

Alternative Strategy Option 3 - Reliance on non-planning led initiatives to secure the development of the Southern Environs area:

While the initiatives of parts of the Council such as the Roads Section are welcomed, this would address only part of the issue of infrastructure and service provision in the area. It would also mean that any efforts to address such provision would be on a piecemeal basis and would not be plan led.

Alternative Strategy Option 4 - The review as outlined in the current Draft Local Area Plan:

As noted above the examination of the policy background indicated that the provision of amenity and educational facilities and the zoning required would be best served by updating the SELAP. The plan also needs to be updated following adoption of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region. It also needs to be updated in order to take into account climate change issues.

8.0 Monitoring

8.1 Introduction

As part of the SEA process, measures envisaged for monitoring the likely significant effects of implementing the review of the Plan must be included in the Environmental Report. Monitoring is often based on indicators, which measure changes in the environment, especially changes which are critical in terms of environmental quality. The Department of Environment, Heritage and Local Government's SEA Guidelines state that indicators easily and realistically measured should be used. *"Environmental indicators are key statistics, which describe an environmental issue. Their purpose is to communicate information on environmental issues in a simplified manner and over time to create a benchmark against which future progress towards sustainable development can be measured. To be effective they should be representative of the issue and be based on scientifically valid information. In this manner they can support policy development and reflect the interrelationship between society, the economy and the environment."*

Several kinds of indicators may be used to fulfil particular functions and measure the quality/quantity of environmental resources:

- 1 State of the environment indicators reflect environmental quality, or quantity of physical and biological or chemical phenomenon;
- 2 Stress indicators reflect development effects;
- 3 Performance indicators may be used to evaluate long-term achievements in environmental management and protection;
- 4 Sustainable development indicators introduce a new dimension to the provision of information, in that they seek to describe and measure key relationships between economic, social and environmental factors.

In all cases, indicators should both quantify and simplify information, thereby making it more accessible to policy makers and the public.

Where new or improved monitoring measures come to light during the course of the updating or addition of Section 28 guidelines, they will inform monitoring for SEA, to ensure that monitoring of effects during the course of implementing the guidelines can be meaningful and effective.

As the current plan was subject to SEA there is a previous Environmental Report to inform the current SEA process.

The following measures are proposed as part of this SEA process, to monitor the effects on the environment of implementing the review, presented in terms of the achievement of the environmental protection objectives and the impact on the environmental factors that the SEA legislation requires to be considered. Measures include targets and thresholds that determine where remedial action may be required in order to achieve that target and fulfil the environmental protection objective.

Biodiversity, Flora, Fauna					
Environmental Objectives and Objectives in the Plan	Indicators	Responsible Authority	Frequency of Monitoring	Targets	Remedial Action
<p>B1: Protect, conserve and enhance habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks.</p> <p>Policies in the plan:</p> <p>Objectives NH01-NH017</p>	<p>Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive.</p>	<p>NPWS</p> <p>LCCC through planning applications and LAPs</p> <p>IFI</p>	<p>Development Plan Review following preparation of new Regional Spatial and Economic Strategy.</p>	<p>Maintenance of favourable conservation status for all habitats and species protected under national and international legislation.</p> <p>Identification of sites of local biodiversity and ecological corridors.</p>	<p>Loss of favourable conservation status of protected habitats and species. Altered zoning putting buffers in place for the Natura 2000 site has taken place in this variation.</p> <p>Enforcement action may also be required.</p>
<p>B2:</p> <p>Preservation of the character of the historic built fabric</p> <p>Policies in the plan:</p> <p>Objectives BAH01-07</p>	<p>Piecemeal decline in quality</p>	<p>Area Offices</p> <p>City and County Council Planning Section</p>	<p>Development Plan Review following preparation of new Regional Spatial and Economic Strategy.</p>	<p>Preservation of current Protected Structures in the area.</p>	<p>Monitoring of planning applications to ensure that none run counter to this aim. Review of objectives if they need to be strengthened.</p>

Population and Human Health

Environmental Objectives	Indicators	Responsible Authority	Frequency of Monitoring	Targets	Remedial action
<p>P1: Facilitate a good standard of quality of life for the population through ensuring high quality residential, recreational and working environments.</p> <p>Policies in Plan: CI01-CI017</p>	<p>Increase in educational opportunities, services within the area.</p> <p>Increase in the population.</p>	LCCC	Review of plan.	Increase in employment opportunities, services and public services in the environs.	Consultation with SFPC and interested parties in order to progress suitable development opportunities for the area.

Water

Environmental Objectives	Indicators	Responsible Authority	Frequency	Targets	Remedial Action
<p>W1: Ensure that Wastewater Infrastructure keeps pace with development.</p> <p>Policies in the plan: KI05 and KI06</p>	<p>Water quality monitoring results by the EPA and by LCCC</p> <p>EPA data under <i>Urban Waste Water Discharges in Ireland Population Equivalents Greater than 500 persons - Reports for the Years 2008 and 2009 and 2010-2011.</i></p> <p>Performance of WWTP in relation to conditions of licence of discharge licence.</p>	LCCC	Annual	Protect and Restore areas identified in the River Basin District Management Plan required to achieve “good” status, i.e. 4+ for water quality by 2021 in line with the Water Framework Directive objectives.	<p>Upgrade of the WWTP completed.</p> <p>Ongoing monitoring of discharge licences by staff from the Environment sections.</p>

				No deterioration in levels of compliance with drinking water quality standards and maintenance of national average compliance rate.	
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Soils

Environmental Objectives	Indicators	Responsible Authority	Frequency	Targets	Remedial action
<p>HTP1: Compliance with higher tier plans and guidance.</p> <p>Objectives in Plan:</p> <p>Strategic Objective 1 and throughout.</p>	<p>Amount of greenfield development.</p> <p>Promote reuse of structures, which is the most basic tenet of soil conservation in urban areas.</p>	LCCC	Annual	Concentrate development in the selected zoned areas and encourage re-use of existing sites.	Enforcement, where necessary.

Air and Climate

Environmental Objectives	Indicators	Responsible Body	Frequency	Targets	Remedial Action
AQC1: To increase energy efficiency and the proportion of energy from renewable resources.	Numbers of buildings being upgraded and insulated.	LCCC	Ongoing	Increase in upgraded sources of energy production from	Non-attainment of targets set out in LCEA energy audit.

Policies in Plan: HO17	Adoption of renewable technologies.			renewable sources	
Cultural Heritage					
<p>C1: Protect and conserve features of archaeological heritage and their settings.</p> <p>Objectives In Plan:</p> <p>See BAH 08 to BAH 13.</p>	<p>Number of Monuments in the RMP and areas of archaeological potential which have been recorded or subject to exploration as a result of development.</p> <p>Number of archaeological monuments and their settings damaged due to development.</p>	<p>LCCC</p> <p>National Monuments Service</p>	Ongoing	<p>To maintain and increase the number of archaeological features recorded and protected.</p> <p>No damage occurring to structures or monuments and their settings due to development.</p>	<p>Damage to or loss of area of recorded monuments or their setting would result in enforcement actions being taken.</p>
<p>C2: Protect and conserve and promote the sustainable reuse of architectural heritage.</p> <p>Policies in the Plan:</p> <p>Objective EH6</p>	<p>Number and conservation status of structures in RPS</p> <p>Number of buildings conserved and re-used for new development</p> <p>Number of protected structures damaged due to development.</p>	<p>LCCC</p> <p>DAHG</p> <p>NIAH</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	<p>To increase the number and maintain the conservation status of Protected Structures</p>	<p>Damage to or loss of Protected Structures, to be dealt with by enforcement.</p>

Landscape

Environmental Objectives	Indicators	Responsible Body	Frequency	Targets	Remedial Action
<p>L1: Protect and conserve the quality, character and distinctiveness of the landscape and minimise negative visual impacts.</p> <p>Policies in Plan: See master plan content in Chapter 10.</p>	<p>Quality of urban environment and halt in dereliction.</p> <p>Building height and design.</p>	LCCC	Ongoing	Increase in quality of individual applications.	Enforcement through planning legislation and Derelict Sites Act.

Material Assets

<p>MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.</p> <p>Polices in the plan: NH08 and NH09</p>	<p>Access to public amenities and facilities.</p>	LCCC area office	Ongoing	<p>Increase in area of amenity space within the plan area.</p> <p>Increased usage of open space as a public amenity.</p> <p>Increased visitor numbers to cultural heritage sites.</p>	Enforcement where necessary and modification of objectives if they are not judged strong enough.
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Appendix I International Conventions and Agreements

Topic	Policy, Plan or Programme	Objectives
Biodiversity	UN Convention of Biological Diversity (1992)	Maintain and enhance biodiversity.
	The Ramsar Convention The Convention on Wetlands of International Importance (1971 and reviews)	Objectives include protection and conservation of wetlands, particularly those of importance to waterfowl as Waterfowl Habitat.
	European Union Directive (92/432/EEC) on the conservation of natural habitats and of wild flora and fauna	Lists certain habitats and species that must be given protection.
	European Communities (Natural Habitats) Regulations, SI 94/1997, as reviewed SI 233/1998 and SI 378/2005 SI 584/2011	These Regulations give effect to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and the Minister to designate special areas of conservation (endangered species and habitats of endangered species) as a contribution to an EU Community network to be known as NATURA 2000.
	EU Directive (EU/79/409) on the Conservation of Wild Birds	Designation of Special Protection Areas for birds.
	Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (2009)	Guidance on carrying out AA on plans and Projects as required under Article 6 of the Habitats Directive.
	National Biodiversity Plan 2011	To secure the conservation, including where possible the enhancement and sustainable use, of biological diversity in Ireland.
	European Communities Environmental Objectives (Freshwater Pearl Mussel) 2009	Measures to protect the conservation status of Freshwater Pearl Mussel.
	Irish National Forest Standards (2000)	Aims to ensure sustainable forest management.
	Ospar Convention (1992) The Convention for the Protection of the Marine	Protection of the Marine Environment.

	Environment of the North East Atlantic	
	EU Marine Strategy Framework Regulations 2011	Aims to achieve good environmental status of the EU's marine waters by 2021 and to protect the resource base upon which marine-related economic and social activities depend.
	EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those freshwater bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters.
Water	EU Water Framework Directive (2000/60/EC) 2000	Establishes a framework for community action in the field of water policy. Aims to prevent any deterioration in the status of any waters and to achieve at least "good status" in all waters by 2015.
	The Groundwater Directive (1980/68/EC) 1980	Seeks to maintain and enhance the quality of all ground waters in the EU.
	EU Urban Waste Water treatment directive (91/271/EEC) 1991	Sets target dates for the provision of specified waste water treatment infrastructure and services.
	EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding and provides for the prevention and management of flood risk and preparation of Flood Risk Management Plans.
	DoEHLG Guidelines on Flood Risk Management and the Planning System (2009)	Seeks to prevent development that is sensitive to the effects of flooding in flood prone or marginal areas. Must not reduce the flood plain or restrict flow across floodplains.
	The Nitrates Directive (91/676/EEC)	This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution.
	Drinking Water Directive (80/778/EEC) as reviewed by Directive 98/83/EC	The primary objective is to protect the health of consumers in the European Union and to

		make sure drinking water is wholesome and clean.
	The Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorous) Regulations, 1998	Rivers of good quality to be retained as such, rivers of poor quality to be improved.
	European Communities Environmental Objectives (Surface Waters) Regulations, 2009	Transposes into Irish law the measures needed to give effect to Article 4 of the Water Framework Directive relating to the protection of surface waters including the requirements of Directive 2008/105/EC on environmental quality standards.
	Managing Ireland's Rivers and Lakes: Catchment based Strategy Against Pollution (1997)	This document details a strategy to protect water quality against pollution by phosphorus from all sources.
	River Basin Management Plans for River Basin Districts (RBDs)	Seeks to establish an integrated monitoring and management system for all waters within an RBD, to develop a dynamic programme of management measures and to produce a River Basin Management Plan, which will be continually updated.
	Bathing Water Directive EC Directive 2006/7 EC Repeals existing Directive (71/160/EEC) with effect from 31 December 2014	Sets out standards for bathing water quality to protect health and the environment.
Human Health	WHO Air Quality Guidelines (1999) and Guidelines for Europe (1987) Non Statutory	Seeks to eliminate or minimise certain airborne pollutants for the protection of human health.
	The Stockholm Convention (2001)	Objectives seek to protect human health and the environment from Persistent organic pollutants (POPs).
	The EU CAFÉ Programme Commission communication of 4 May 2001 "The Clean Air for Europe (CAFE) Programme: Towards a Thematic Strategy for Air Quality".	Seeks to prevent and reduce air pollution and impacts on human health from air pollution.

	EU Shellfish Directive (79/923/EEC)	Objectives seek to maintain those coastal and brackish waters, which need protection or improvement, in order to allow shellfish to develop and to contribute to the high quality of shellfish products intended for human consumption.
	The EU Environment and Health Strategy 2004 -2010	Seeks to prevent and reduce the impacts pollution on human health.
	Environmental Noise Directive (2002/49/EC) Environmental Noise Regulations 2006	Establishes a framework for environmental noise planning including environmental noise maps for designated areas and appropriate noise action plans.
Climate/Air	Kyoto Protocol (1997)	Aim of the UN Protocol is to combat climate change. Industrialized countries will have to reduce their combined greenhouse gas emissions by a minimum of 8% by 2012.
	Second European Climate Change Programme (ECCP II) 2005	Seeks to develop the necessary elements of a strategy to implement the Kyoto protocol.
	White Paper on 'European transport policy for 2010', COM (2001) 370	Seeks to develop a modern sustainable transport system.
	"The IPPC Directive" Directive 96/61/EC concerning integrated pollution, prevention and control	Seeks to minimise pollution and maximize resource efficiency in industry through licensing and guidance.
	Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004).	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	"Air Framework Directive" Directive on Air Quality Assessment and Management (Framework Directive) (1996/62/EC)	Seeks the prevention and/or reduction of airborne pollutants for the protection of human health and the environment.
	Directive on national emission ceilings for certain atmospheric pollutants (2001/81/EC)	Seeks to limit the national emissions of certain airborne pollutants for the protection of human health and the environment.
	EC Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Replaces the air framework directive and the first three daughter directives. Sets standards and target dates for

		reducing concentrations of fine particles, which are among the most dangerous pollutants for human health.
	Adopting to climate change in Europe – options to EU action {SEC(2007) 849}	Seeks to initiate a Europe-wide public debate and consultation on developing responses to climate change at EU level.
	National Climate Change Strategy 2007-2012	Established measures by which Ireland can meet its 2008-2012 targets in respect to greenhouse gas emissions.
	Delivering A Sustainable Energy Future for Ireland	Government Energy Policy Framework 2007-2020 to deliver a sustainable energy future for Ireland.
Cultural Heritage (Landscape Architecture Archaeology)	European Landscape Convention 2000	Encourages public authorities to adopt policies at local, national and international level to protect and manage landscapes.
	Policy Paper on Ireland's Landscape and the National Heritage, The Heritage Council, (2002)	Policy paper sets out a vision for the Irish landscape to allow people to harness the landscape for economic benefit whilst acknowledging that in the long run such benefits can only be sustained through an appreciation and awareness of the contribution of that landscape to our quality of life.
	Landscape and landscape and Assessment, Guidelines for Planning Authorities - 2000	Sets out how a landscape character assessment should be conducted.
	Granada Convention for protection of the Architectural Heritage of Europe 1985	Established common principles and strategy, informed Part IV of the 2000 Planning and Development Act 2000-2004.
	European Convention on protection of the Archaeological Heritage 1992	Requires that appropriate consideration be given to archaeological issues at all stages of the planning and development process.
	Architectural Heritage Protection- Guidelines for Planning Authorities 2004	The protection of structures, or parts of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest, and the preservation of the character of architectural conservation areas.

	National Heritage Plan 2002	Plan forms the basis of a strategic approach to the protection and management of heritage up to 2007.
	National Inventory of Architectural Heritage	To establish inventory of buildings of value.
	Framework and Principles for the Protection of the Archaeological Heritage (1999)	This document sets out the archaeological policies and principles which should be applied by all public bodies when undertaking or authorising development.
Soil	2006 Proposal for an EC Directive establishing a framework for the protection of soil	This has been abandoned.
	Sewage Sludge Directive (86/278/EEC)	To encourage the use of sewage sludge in agriculture and to regulate its use in such a way as to prevent harmful effects on soil, vegetation, animals and man.
	Directive 2004/35/EC on Environmental Liability with regard to the prevention and remedying environmental damage	Prevention and remediation of environmental damage.
Sustainable Development	Agenda 21 (1992). Action for Sustainable Development	Aims to promote sustainable development at a local and regional level by taking into account environmental protection in the development process.
	“The Gothenburg Strategy” Communication from the Commission on Sustainable Europe for a Better World” 2001	Seeks to make the future development of the EU more sustainable.
	The Sixth Environmental Action Programme (EAP) of the European Community 2002 - 2012 Statutory	Seeks to make the future development of the EU more sustainable.
	The SEA Directive (2001/42/EC)	Objective is to provide for a high level of protection of the environment, and to contribute to the integration of environmental considerations into the preparation and adoption of plans and

		programmes, with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.
	Guidelines for Planning Authorities on Sustainable Rural Housing 2005	To address the issue of sustainable rural housing.
	Sustainable Residential Development in Urban Areas 2008	Addressing sustainable design and services in urban areas.
	Wind Energy Guidelines 2006	To ensure a consistency of approach in the identification of suitable locations for wind farm development and the treatment of planning applications for wind farm developments.
	Draft Framework for Sustainable Development for Ireland 2012	The Framework will form a central element of Ireland's contribution to the UN Conference on Sustainable Development (Rio+20) which takes place in Rio de Janeiro, Brazil in June 2012.
	Transport 21 (2005)	Seeks to develop an integrated transport system across Ireland.
	Traffic Management Guidelines (2003)	Provides guidance on a number of traffic management issues including public transport.
	Smarter Travel- A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020	Promotion of sustainable transport. Limerick is a demonstration City in this regard.
	Delivering A Sustainable Energy Future For Ireland The Energy Policy Framework 2007 – 2020	Seeks to reduce energy demand and energy related emissions.
	Directive 2004/35/EC on Environmental Liability with regard to the prevention and remedying environmental damage	Seeks to establish a common framework for the prevention and remediation of environmental damage.
Waste	The Waste Framework Directive" Council Directive 75/442/EEC of 15 July 1975 on waste "the Waste	Seeks to minimise the quantities of waste production in the EU, reduce the environmental impacts from the management

	Framework Directive” and amending acts.	of these wastes and defines what constitutes a waste or hazardous waste.
	<p>“The Landfill Directive” Council Directive 99/31/EC of 26 April 1999 on the landfill of waste</p> <p>Also measures in relation to historic waste including 2007 and 2008 regulations</p>	Seeks to reduce the environmental impact from the landfilling of waste & divert certain quantities and types of waste from European landfills.
	“The WEE Directive” Directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment	See more environmentally sensitive management of waste electric and electronic equipment.
	National Waste Prevention Programme	Seeks to decouple waste generation from economic activity in Ireland.
Major Accidents	EU Major Accident (Seveso) Directive (96/82/EC) 1996	Seeks to avoid and minimize the effects of major accidents.

Natura Impact Report for the Draft Southern Environs Local Area Plan 2021 – 2027

10th October 2020

Forward/Strategic Planning



Limerick City and County Council,
Economic Development Directorate,
Merchant's Quay,
Limerick

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1.0 Introduction

The Local Area Plan for the Southern Environs 2021 – 2027 includes the areas of Raheen, Dooradoyle, Mungret, and extends as far as the Tipperary Road. These are part of the suburbs of Limerick City and the area is located to the south and east of the City Centre.

The River Shannon forms part of the northern boundary of the LAP area. The Ballynacrough River/Ballinacurra Creek provide a barrier between the City and Southern Environs to the northeast. Both the River Shannon and the Ballynacrough River are part of the Lower River Shannon Special Area of Conservation (SAC) site.

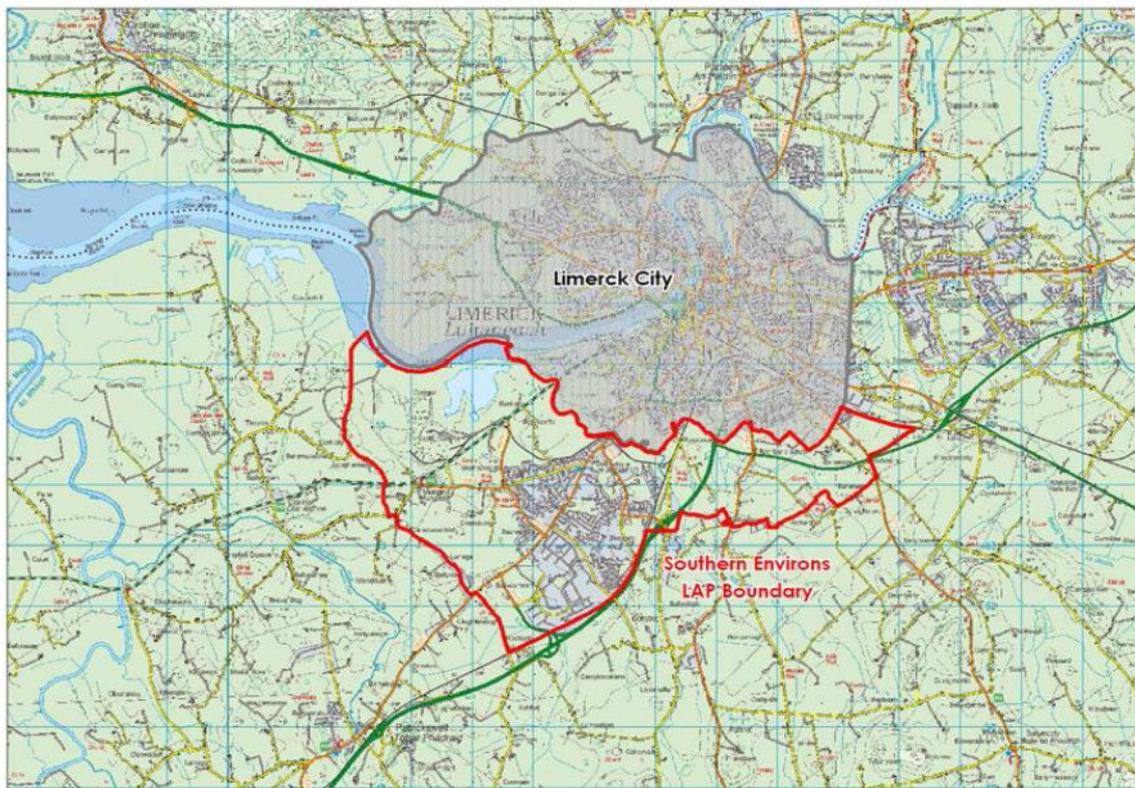


Figure 1: Boundaries of the Southern Environs Local Area Plan

The geology of the study area has been much modified by generations of building activity, where the original soil cover was removed or covered by the built environment. Along the Ballinacurra Creek on the western boundary of the city area marine sediments are present (see Strategic Flood Risk Assessment, Stage 1). These have not been built on for the most part. The underlying rock in the area in question is Lower Carboniferous Limestone. Soils in the area vary from Limestone Till, estuarine muds in undeveloped areas close to the Shannon and “made ground”. Made ground is natural soil altered, partly with fill materials and is associated with construction activities.

As much of the underlying geology in the plan area is limestone based, and because of its features and permeability, this is a potential pathway for pollutants to reach groundwater and hence the River Shannon. This is discussed later in this report.



Figure 2: Taken from the AIRO SEA mapping tool this shows the light blue area as being limestone based. The pink areas around it are also derived from Limestone.

2.0 Designated sites in the plan area

The River Shannon and the Ballinacurra Creek waterways provide the setting for a range of wildlife habitats and species and are important local amenities. Both are part of the Lower River Shannon SAC site. Ballinacurra Creek is part of the Lower River Shannon SAC site, is in the east of the plan area. One reason for its ecological importance is the presence of Lesser Bulrush (*Typha angustifolia*) and Summer Snowflake (*Leucojum aestivum*). Two other species, the Opposite Leaved Pondweed and the Triangular Club rush, both Flora Protection Order species, are also in this area.

The River Shannon and Fergus Estuaries Special Protection Area lies to the north of the Plan area and follows the main river channel. The eastern most part of Bunlicky Lake, a manmade lake resulting from excavations over the years, is also part of the River Fergus and Shannon Estuary SPA. It is home to a colony of cormorants, a species that is one of the qualifying interests of the Special Protection Area (see Table 3 below).



Figure 3: Looking at Bunlicky Lake from the north. The location of the Cormorant nesting site is indicated by the red arrow. Source: Roadbridge.

At least two turloughs exist within the Southern Environs area. One is the Loughmore Common, which is a turlough or seasonal lake. Closely associated with the turlough itself are species, which depend on the shallow flooding patterns that are a feature of this site. Recent surveys have indicated that the wintering birds, which had been feature of the site in the past, are now much diminished. Such a site is of course also of interest to the Common Frog, while in the drier portions of the site migrants such as fieldfares also frequent its hedgerows in the winter months.

The plant communities of the turlough are more typical of those of marsh than other turloughs, and this is one of the reasons for the ecological importance of the site. This site is a relatively small and lies entirely within the boundaries of the Southern Environs area.

The main danger to ecological sites in the plan area is the gradual encroachment of housing and other development. For turloughs this can bring changes in hydrology. The functioning of their hydrological regime is poorly understood and for this reason caution in terms of development in close proximity to these sites is advised. Loughmore Common status as a Proposed Natural Heritage area is reflected in the zoning. Some on site flora in this location are dependent on salt in the water feeding the turlough, which reaches the site from the tidal movements of the River Shannon, itself a Special Area of Conservation. This emphasises the interconnected nature of the hydrology of the Southern Environs. The second Turlough in the area is located to the rear of St Oliver Plunkett Church in Mungret Village, local sources indicate that that Monteen turlough is connected with Loughmore Common. Therefore, additional disturbance to Loughmore Common and the Monteen Turlough and associated hydrology should be avoided.

Table 1: Designated sites in the Southern Environs Local Area Plan Area:

NPWS Code	Name
SAC	
002165	Lower River Shannon
SPA	
004077	River Shannon and River Fergus Estuaries
pNHAs	
000438	Loughmore Common
002048	Fergus Estuary and Inner Shannon North Shore
000435	Inner Shannon Estuary South Shore (these have been included in the SPA designation)

Source: Limerick City Development Plan 2010 – 2016 (as extended) - Chapter 11 and SELAP 2011 – 2017 (as extended)



Figure 3: Location of Lower River Shannon SAC site

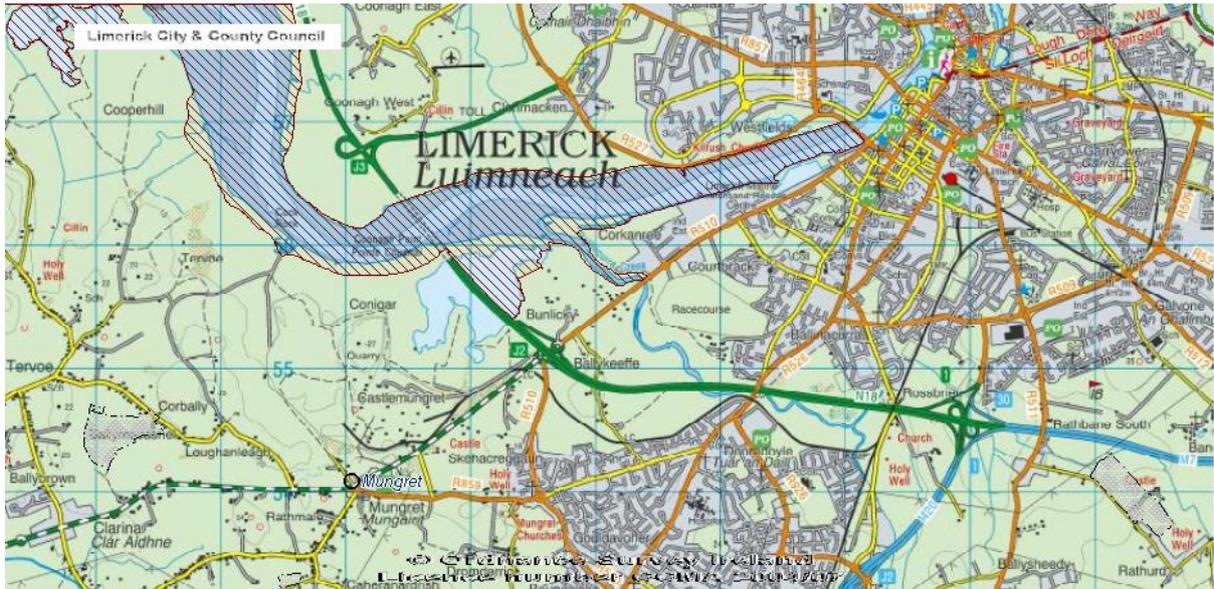


Figure 4: Location of River Shannon and Fergus Estuaries SPA

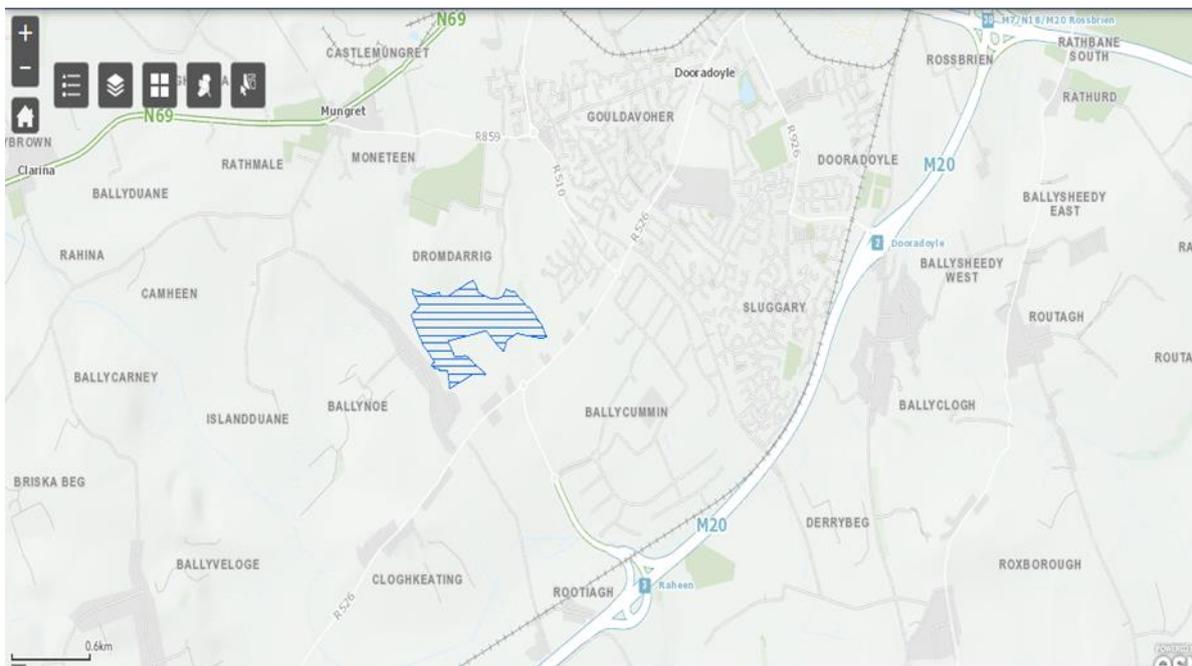


Figure 5: Location of Loughmore Common pNHA

While the main focus of the appropriate assessment process as a whole is on the Natura 2000 site network, consideration needs to be given to species mobility. Many of the birds of conservation interest in the SPA will of course not be bound by the site boundaries but will be found in suitable locations throughout the plan area. The same is true of plant and animal species of conservation interest in the SAC, which will range outside of that site.

3.0 Need for Natura Impact Report

Articles 6(3) and 6(4) of the Habitats Directive require an Appropriate Assessment be undertaken on proposed plans, or projects which are not necessary for the management of designated sites, but which are likely to have a significant effect on a Natura 2000 site, either individually or accumulatively with other plans or projects. It is considered that given the proximity of both the Lower River Shannon Special Area of Conservation Site (2165) and River Shannon and Fergus Special Protection Area (4077), that a Natura Impact Report should be prepared. This should be read in conjunction with the draft LAP and the associated Environmental Report, in particular the Environment and Heritage sections and zoning maps.

Though not Natura 2000 sites, areas such Loughmore Common and other non-designated turlough sites also lie within the LAP area. The eastern part of Bunlicky Lake has also been notified as part of the proposed River Shannon and River Fergus Estuaries Special Protection Area (4077). Given the limestone base of much of the area, and the interconnected nature of hydrology, environmental effects associated with the LAP, could be transmitted to the designated sites as aforementioned. This adds to the sensitivity of this plan area from an ecological perspective. The possibility of ex-situ effects is another factor in helping to determine that an NIR is necessary. Indirect and cumulative effects can affect the ecology of water based habitats. The Department of the Environment Heritage and Local Government has raised this as an issue in correspondence in relation to the County Development Plan 2010 - 2016 (17th February 2010) mentioning the “need to protect aquifers, Natura 2000 sites etc.”

4.0 Assessing the Impacts

The Lower Shannon SAC site depends on good water quality and is important for bird life. Disturbance and direct habitat loss is a major concern. Thus, the issue of encroachment on the sites, with consequent disturbance is an important one. Listed below are the main factors that would threaten the sites:

- (a) Encroachment on the sites, either directly onto the site areas through themselves being zoned, or unsympathetic neighbouring zoning.
- (b) Alterations in local hydrology, altering flooding patterns having upstream or downstream effects on water levels. This would be caused by development in flood plains or perhaps in flood benefiting areas. Development proposals might also contribute to this by not incorporating adequate Sustainable Urban Drainage Measures (SUDS).
- (c) For listed species in the plan area outside designated sites, there is a risk that development proposals would be unaware of their existence.
- (d) Removal of non-designated habitats such as trees of interest or hedgerows.

Much debate centres on the issue of wildlife corridors between habitats and their utility. However, regardless of their utility they can provide sheltered conditions for bat species to forage and can provide seeds and berries for birds and smaller

mammals. The EPA has noted in some of its recommendations the need to take Article 10 of the Habitats directive into account. The purpose of Article 10 is to “improve the ecological coherence of Natura 2000 network by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora”. Closely connected with Article 10 is Article 3, of which Paragraph 3 mentions the need to “endeavour, where they consider it necessary, in their land-use planning and development policies, and in particular, with a view to improving the ecological coherence of the Natura 2000 Network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora” as referred to in Article 10, namely “Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.

(e) Decline in water quality due to the inadequacy of wastewater infrastructure.

The Lower River Shannon SAC site is the most extensive of the sites in the LAP area and is most likely to be affected. While the estuary itself has been described as being a robust ecosystem and its trophic status generally satisfactory, the status of some of its tributaries is not as good. The assimilative capacity of rivers has been a source of concern to the DEHLG and this has been reflected in a series of submissions to planning documents since 2005. In this regard, the capacity of the wastewater treatment plant (WWTP), operated by Limerick City and County Council, at Bunlicky is of crucial importance. Over the last ten years, the plant has been substantially upgraded. Large diameter interceptor sewers have been installed. The WWTP comprises preliminary (screening and grit removal), primary (settlement and biological aeration tanks), and secondary treatment (settlements and clarifiers). The WWTP has a storm water capacity of 7,500m³ that allows it, during periods of heavy rainfall, to retain the excess effluent and pump it back for treatment when conditions allow. The Plant has a design capacity of 130,000 population equivalent and is currently serving the needs of an area with a population of 110,000 people. Based on the above and the population increase envisaged by the draft LAP it is considered that sufficient spare capacity remains in the plant to cater for population increases in the Southern Environs and the other areas served by the plant.

5.0 Qualifying interests

One of the best ways of assessing effects on any Natura 2000 sites, whether SAC or SPA is examining the possible effects of the plan on their qualifying interests. They are either habitat types listed in Annex I or species listed in Annex II of the Habitats Directive. The qualifying interests for the Lower River Shannon SAC site are shown in Table 2 below.

Table 2: Qualifying interests of the Lower River Shannon SAC site:

Qualifying Interests	Present in plan area	Comments	Policy Response
Mudflats and sandflats not covered by seawater at low tide [1140]	Present	Outside the flood defence embankments. There is no encroachment on these areas.	NH02 and Section 2.2
Reefs [1170]	Not present	None	NH02
Salicornia and other annuals colonising mud and sand [1310]	Further downstream, Foynes, and Glin being locations (Reynolds, 2012 pp.289-90)	There are some mud flats at low tide but no sign of these species observed in the plan area.	NH02
Estuaries[1130]	Present	Effects on water quality would be the most likely effects in that the plan shows no expansion of boundaries and hence no direct encroachment onto the SAC site.	NH02, KI05
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]	Present	Floating river vegetation of this type observed in the Ballinacurra Creek, this would be vulnerable to changes in water quality.	NH02, KI05
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	In the upper reaches of the Cloon River Co. Clare, no hydrological linkage.	See comment above re water quality. KI05 with its emphasis on ensuring adequate capacity of wastewater infrastructure is relevant here, but as the species is in the upper reaches of the Cloon River, which drains to the River Shannon, a link is not possible.	NH02, KI05, Section 2.2
Lampetra fluviatilis (River Lamprey) [1099]	Present	Likely in all the rivers of the plan area. The buffer provided for in NH09 is relevant here.	NH02 NH09 (provides a buffer)
Salmo salar (Salmon) [1106]	Present, particularly in main river Channel.	Water quality and temperature is critical.	NH02 KI05
Lutra lutra (Otter) [1355]	Present- traces found on main river channel but would also be present in	Found on the River Shannon and in Ballinacurra Creek.	NH09, NH02, NH06.

	Ballinacurra Creek and the Barnakyle River- all in the plan area.		
Petromyzon marinus (Sea Lamprey) [1095]	Present, migrates through main river channel.	No encroachment on the main channel, which is used as a migration route and for spawning.	NH02, KI05, KI011
Coastal lagoons [1150]	Not present	See comment above re water quality. KI05 with its emphasis on ensuring adequate capacity of wastewater infrastructure is relevant here.	NH02 KI05 these would inform any proposals that would affect water quality and downstream species and habitats
Perennial vegetation of stony banks [1220]	Not present	None	NH02 KI05 these would inform any proposals that would affect water quality
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	Not present		NH02 KI05 these would inform any proposals that would affect water quality
Large shallow inlets and bays [1160]	Smaller inlets present but not larger ones	See comment above re water quality. KI05 with its emphasis on ensuring adequate capacity of wastewater infrastructure is relevant here.	NH02 KI05 these would inform any proposals that would affect water quality and downstream species
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Not present	None	NH02 KI05 these would inform any proposals that would affect water quality and downstream species and habitats
Mediterranean salt meadows (Juncetalia maritimi) [1410]	Not present	None	NH02 NH09 (provides a buffer)
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Some isolated stands of riparian woodland at scrub stage is present amongst reed beds outside flood defence embankments	The plan does not contain any measures to encroach on the River Shannon Channel	NH02 NH09 (provides a buffer)
Lampetra planeri (Brook Lamprey) [1096]	Present	Buffers to prevent encroachment or deterioration of water quality would be useful in this case.	NH02 NH09 (provides a buffer)

Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Not present, further downstream in the lower estuary.	KI05 with its emphasis on ensuring adequate capacity of wastewater infrastructure is relevant here.	NH02 KI05 these would inform any proposals that would affect water quality and downstream species and habitats
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Source: Adapted from NPWS 2012

The qualifying habitats include estuaries, tidal mudflats and sandflats and vegetation of flowing waters. The other habitats are located at a significant distance downstream of the project site within the middle to outer Shannon estuary or are terrestrial in nature and are thus not considered to occur within the zone of influence of the project. As indicated in Table 2, these downstream habitats could be affected by declines of water quality. The Plan is, of course a policy document, and has specific policies to ensure that that infrastructure provision keeps pace with development - see objective KI05 in Chapter 10 of the plan.

Otter habitat occurs along the River Shannon. Juvenile lamprey habitat is likely to occur along the non-tidal sections of the Ballinacurra Creek and stretches of the Barnakyle River. Bottlenosed dolphin habitat is located in the middle to outer Shannon Estuary at a significant distance downstream and because of this is not likely to be affected. Atlantic salmon are likely to occur in the Shannon Estuary during the summer-autumn return migration to spawning grounds upstream. Freshwater pearl mussel are restricted to the Cloon River sub-catchment of the SAC and are not hydrologically connected to the plan area, this has been noted in Table 2 above.

Of the qualifying interests of the SAC those that occur close to the plan areas include estuaries; tidal mudflats and sandflats; vegetation of flowing waters; lamprey species; Atlantic salmon; and otters.

These qualifying interests of the SAC are described below:

Otters

These mammals are known to range widely throughout the River Shannon catchment and it is likely that they use all of the rivers within the plan area. They can frequently use manmade structures as resting areas. One anecdotal report from the Fire Service of Limerick City and County Council indicates that otters use the mooring pontoon for one of their rescue boats at Shannon Bridge, which is approximately 1.8km east and upstream of the plan area. In past submissions the Development Applications Unit have indicated concerns with otters and development plans. Otter territories are linear (Fairley, 2001) and as such can be expected along any of the water courses of the plan area. The territories can cover considerable lengths of river. They can often use a number of resting locations (holts) along a stretch of river so for this reason an undisturbed river bank area is important. As noted above NHO7 which seeks to maintain “river bank vegetation along water courses and ensure the protection of a 20m riparian buffer zone on green field sites” would be useful in maintaining otter habitat.

Estuaries

This qualifying habitat supports up to 7 different community types within the Lower River Shannon SAC. The nearest estuarine community of this qualifying habitat is located on the northern plan boundary and is representative of the community “Estuarine subtidal muddy

sand to mixed sediment with gammarids community complex". This community complex occurs in water depths between approximately 2.5 and 7m. The sediment of this community complex is that of varying elements of muddy sand and gravel. In an estuarine environment, there is considerable mixing of salt and fresh water and this leads to a complex series of biological processes (Fossitt 2000). In terms of threats in the plan area apart from direct encroachment, the maintenance of good water quality is important in retaining habitat quality.

Lamprey Species

There are three species of Lamprey to consider Sea Lamprey, River Lamprey and Brook Lamprey. Of the three species brook lamprey spend all of their lives in freshwater and because of this would not use the stretch of the River Shannon which forms the northern boundary of the plan area. Unlike the other two species, they do not feed as adults. This is tidal and as such is subject to the influences of salt water - see comments on estuaries above.

Sea Lamprey enter estuaries from the sea and migrate upstream generally between late March and June to spawn in the freshwater reaches of the River Shannon catchment. Water temperature is a factor in this migration. The Mulkear River 10km upstream from the plan area is an important site, with known spawning sites in stretches of that river bordering the National Technology Park in Castletroy and further upstream in Annacotty village. The ammocoetes (lamprey larvae) live in marginal silty areas, often in riverbanks, where they gradually develop over several years (Kunz and Costello, 1999). They then begin to metamorphose to adults, starting in late July. This takes about 3 months after which they migrate to the lower estuary in about October.

The upstream migration of River Lamprey is less well defined than Sea Lamprey and is thought to commence in late summer and continue through the winter months. The spawning season occurs in spring with two peaks in migration occurring, first in the August-November period and then a second in spring (March-April). Following metamorphosis, young adults begin their downstream migration over an extended period from late winter to early summer. Downstream migration by both Sea Lamprey and River Lamprey is mostly nocturnal.

In summary, the River Shannon is an important migration route for both river and sea lamprey, and the upper freshwater reaches are important spawning sites. The freshwater reaches of the River Shannon and freshwater rivers in the plan area are home to the River Lamprey. Again the maintenance of water quality and avoidance of direct encroachment on the rivers are important factors in the conservation of this species.

European Eel

The European eel, once common in all-Irish freshwaters, to which it could gain access, has undergone a dramatic decline. Though not listed amongst the qualifying interests it's conservation status merits inclusion. It spawns in the Gulf of Mexico and returns to freshwaters. It is this recruitment from the spawning grounds that has declined dramatically with numbers running at less than 7% of those that made the journey prior to the 1980s. Some suggested causes of this decline include climate change and shift in ocean currents, overfishing, habitat loss in the freshwater range, mortality in hydropower plants, disease and parasites, and chemical contamination affecting reproductive ability (King et al 2011, pp. 39-

40). Though long-lived, the lack of returning eels from the spawning grounds will have long term implications for the eel population as a whole. Many of the issues that affect the lamprey species, mentioned previously, also affect the eel. It is important that no obstacles to migration, or declines in water quality result from the policies in the plan.

Salmon

Similar to Lamprey, the Atlantic salmon uses the River Shannon as a migratory route to spawning areas upstream. No suitable salmon spawning habitat occurs in the stretch of the River Shannon in the plan area. This species does not spawn or feed in the section of the channel at or downstream of the Shannon's confluence with the River Groody, which itself supports a small salmon population. The nearest spawning sites to the plan area is upstream at Castleconnell, Doonass, Plassey and Corbally.

Given the main river channels importance as a route to spawning for salmon, it is important to ensure that any of the plan policies do not permit encroachment into the channel itself or to allow any obstruction to fish passage to take place.

Floating River Vegetation

The Lower River Shannon site synopsis (NPWS, 2012) mentions the following floating vegetation species: "floating river vegetation characterised by species of water-crowfoot (*Ranunculus spp.*), pondweeds (*Potamogeton spp.*) and the moss Fontinalius antipyretica are present throughout the major river systems within the site". In the area of the Southern Environs, one of the most important of these species is the Opposite Leaved Pond Weed. (*Groenlandia densa*). Reynolds (2012, pp.409-410) describes it as "locally abundant around Limerick City", but specifically mentions its presence in Loughmore Common and in the Door Doyle area and the tidal stretches of the Ballynaclough River and "adjacent ditches". This species is the subject of a Flora Protection Order. The Opposite Leaved Pond Weed is considered to be sensitive to elevated nutrient levels so the maintenance of water quality is of great importance.



Figure 6: Triangular Club Rush (Source: BEC consultants)

Though not part of the floating river vegetation species assemblage, the Triangular Club Rush (*Scirpus triqueter*), another species which is the subject of Flora Protection Order (1999) is present in the plan area. Reynolds (2012 p.441) mentions that it is “in the Ballinacurra Creek, with many plants in channels near the Creek Mouth” Both Reynolds (2012) and Parnell and Curtis (2012, p.77) acknowledge the limited Irish distribution of this plant with it being present along the “banks of the River Shannon in Limerick City and for some distance downstream”. Relocation of this plant was one of the mitigation measures associated with the construction of the Shannon Tunnel.

The other Natura 2000 site to consider in the plan area is the River Shannon and Fergus Estuaries Special Protection Area. The NPWS site synopsis notes the following, “the site has vast expanses of intertidal flats which contain a diverse macroinvertebrate community, e.g. *Macoma-Scrobicularia-Nereis*, which provides a rich food resource for the wintering birds. Salt marsh vegetation frequently fringes the mudflats and this provides important high tide roost areas for the wintering birds. Elsewhere in the site the shoreline comprises stony or shingle beaches. The site is a Special Protection Area (SPA) under the E.U. Birds Directive. It is also of special conservation interest for holding an assemblage of over 20,000 wintering water-birds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated water-birds are of special conservation interest for Wetland & Water-birds. The site is the most important coastal wetland site in the country and regularly supports in excess of 50,000 wintering waterfowl (57,133 - five year mean for the period 1995/96 to 1999/2000), a concentration easily of international importance”.

Below are listed the qualifying interests of the River Shannon and Fergus Estuaries Special Protection Area (004077).

Table 3: Qualifying interests (Species) of River Shannon and Fergus Estuaries SPA:

Cormorant (<i>Phalacrocorax carbo</i>) [A017] (Roosting in Bunlickey Lake)	Shoveler (<i>Anas clypeata</i>) [A056]	Dunlin (<i>Calidris alpina</i>) [A149]
Whooper Swan (<i>Cygnus cygnus</i>) [A038]	Scaup (<i>Aythya marila</i>) [A062]	Black-tailed Godwit (<i>Limosa limosa</i>) [A156]
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Ringed Plover (<i>Charadrius hiaticula</i>) [A137]	Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]
Shelduck (<i>Tadorna tadorna</i>) [A048]	Golden Plover (<i>Pluvialis apricaria</i>) [A140]	Curlew (<i>Numenius arquata</i>) [A160]
Wigeon (<i>Anas penelope</i>) [A050]	Grey Plover (<i>Pluvialis squatarola</i>) [A141]	Redshank (<i>Tringa totanus</i>) [A162]
Teal (<i>Anas crecca</i>) [A052]	Lapwing (<i>Vanellus vanellus</i>) [A142]	Greenshank (<i>Tringa nebularia</i>) [A164]
Pintail (<i>Anas acuta</i>) [A054]	Knot (<i>Calidris canutus</i>) [A143]	Dunlin (<i>Calidris alpina</i>) [A149]
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	Wetland and Waterbirds [A999]	Comments: Open space areas and wetlands within the plan area are important resting and feeding areas away from the main river channel

Source: Adapted from Doherty 2020 and NPWS 2012

Many of these species depend on wetlands for foraging and roosting. Of the species listed, the nearest roosting site for a qualifying species is Cormorant colony in the eastern part of Bunlicky Lake. There are other wetlands sites outside, but close to the plan area, such as the Coonagh wetlands to the northeast and the Westfields wetland complex close to the city centre. The Coonagh wetlands resulted from the excavations associated from the construction of the Shannon tunnel. These provide a network of urban wetlands, which wildfowl species can use.



Figure 7: Cormorant Source: Bird Watch Ireland

It is not just the obvious wetlands that are important in the plan area. During the construction of the park and playground in Mungret one wet area with *Juncus* dominated vegetation was retained. This was retained, because during a bat survey in July 2015, waders were heard flying into it, as the tide covered feeding areas in the estuary. From this, it will be seen that open areas generally can be important for many of the species listed in Table 3 above. Ní Lamhna *et al* in Nairn and O Halloran (2012, p.205) has mentioned species such as Teal and Tufted Duck being associated with water bodies in Dublin. Based on personal observations in Limerick city and environs, the importance of urban open spaces and green areas can be confirmed for species such as Lapwing, Snipe and various gull species including the Black headed Gull. In this regard, the policies in relation to open space such as CI015 which aims to protect existing open space by not permitting development which encroaches on such open space and protect semi-natural open space from such development is useful (Chapter 9 of the draft SELAP). Objective CC09 which promotes the delivery of green infrastructure “as a means of managing flood risk and enhancing the natural environment” is also useful. It should be remembered that any form of open space with its ability to absorb and regulate rainfall and with its potential for bird life is valuable.

Another issue which comes to mind in relation to birds and ecology generally is light and noise. In this regard, objective KI018 (Chapter 10 of the draft plan) mentions the need to protect environmental quality through the implementation of policy and legislation relating to amongst others, light pollution and noise pollution. Light has implications not just for

nocturnal wildlife such as bats but when water courses are illuminated, often unintentionally, with any bank-side lighting there are implications for marine and freshwater life, ranging from barrier effects to risk of increased predation.

6.0 Potential for Likely Significant Effects

The Plan area abuts the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. With the zoning map as presented in the current draft it will not cause direct encroachment, which would result in habitat loss or additional disturbance to these European Sites. This report examines the potential for the project to result in likely significant effects to these European Sites by looking at possible linkages and pathways and whether these pathways have the potential to act as pollution conduits to the Natura 2000 sites. This will follow the source pathway receptor, model, with the plan area being regarded as the source, while the European sites are the receptors.

One of the most direct pathways for pollutants to reach the River Shannon is through water courses and wetland features that have hydrological connections to the river either directly or through groundwater. These are the pathways. Hydrocarbons are particularly damaging so it is important in such areas to ensure that any potential inflows would have appropriately designed interceptors. This is a topic for the development management standards of the development plan. In terms of the existing plan, the most effective means of avoiding pollutants reaching the River Shannon would be through buffers. This is achieved in the case of the Ballinacurra Creek by zoning the undeveloped areas along the river as semi-natural open space. This was the approach taken in Bunlicky Lake. Both the Monteen Turlough and the seasonally flooded Loughmore Common have been zoned as semi-natural open space and as a proposed natural heritage area respectively. Where possible, nearby areas to the buffer were zoned for agriculture or open space purposes, see figure 8 below. This further reduces the intensity of land uses near these features.

While one policy does mention the creation of riverside walks, it does mention that these should be subject to adequate ecological assessment, which would include Article 6 assessment in the case of the SPA and SAC. This was a point raised on meeting with the NPWS on the 25th September 2020 in relation to greenways and blueways generally and the need for adequate ecological assessment of their possible effects.

7.0 Potential for in-combination effects

As the LAP is a policy document, it makes sense to consider cumulative effects of policy documents whose functional areas border that of the SELAP. These are the Limerick City Development Plan 2010 – 2016 (as extended), the County Development Plan 2010 – 2016 (as extended) and the Castletroy LAP 2019 - 2025 amongst others. The first step in assessing cumulative effects would be to consider the zoning template of these plans, particularly those zoning designations that border the SELAP.

The SELAP review has to be considered with changes to the city area, of which the Southern Environs and Castletroy will now form part. Due to Limerick's status as the regional city in the Midwest, it is necessary to consider the plan review and its effects at a larger scale. Table 4

below shows the main plans and projects ongoing in the City and SELAP area and it is these that provide the most immediate back drop to the review. These are the plans and projects that are assessed with in-combination effects in mind.

Table 4: Cumulative effects of Plans in areas adjoining SELAP

Projects and Plans	Comments
Regeneration areas	The closest area is that of the Southside Regeneration area. No appreciable effect on the area which is the subject of the review is anticipated as it takes place in appropriately zoned areas and does not encroach into green space or semi-natural open space areas –see Figure 7 below.
Shannon Integrated Framework Plan	It must be remembered that the SIFP operates throughout the estuary, which means that docklands which are to the east of the SELAP area, will have to be viewed in the context of other development locations in the estuary. The SIFP had its own detailed AA and SEA process carried out. Similarly when it was incorporated into the city and County development plan in 2015, a further AA/SEA process took place.
City Development Plan 2010 – 2016 (as extended)	Since the amalgamation the implementation of the city plan takes into account the issues in the wider metropolitan area. The draft LAP notes that the SELAP will eventually be incorporated into the Limerick City Development Plan, as does the Environmental Report, which should ensure greater planning policy consistency throughout the City and suburbs area. It should also be noted that the city area adjoins the SELAP and has semi-natural open space and open space areas in it, which would complement similar areas in the SELAP.
Castletroy LAP 2019 – 2025	The area of the Castletroy LAP, which adjoins the SELAP, contains the Groody River green wedge, which is an important green space for the city and environs.

Limerick City Bio-diversity Plan 2012	The plan identifies open space and green space areas which are adjacent to the SELAP and which would add to the network of open space in the plan with obvious benefits for wildfowl movement. The effects of this plan would be considered positive.
Smarter Travel (which was a demonstration project until 2018)	Designed to promote sustainable travel patterns which will promote cycling and pedestrian access throughout the city and environs.
Draft Limerick Shannon Metropolitan Area Transport Strategy	The Limerick Shannon Metropolitan Area Transport Strategy, which is currently on display, outlines a coherent transport strategy for the region. This will mean an emphasis on more efficient transport and an expansion of cycle routes.
Limerick Northern Distributor Road (LNDR)	This project to create a by-pass of the city with a route running to the north and the east would reduce the volumes of city traffic with consequent improvements in both traffic flows and the city environment. This would also assist in dealing with traffic flows on a citywide basis and complement the southern ring road, which goes through the SELAP area. The LNDR would not have direct effects on the SELAP area.
Upgrade of Bunlicky Wastewater Treatment Plant	Communications from Water Services and Irish Water indicate that a programme of works will be ongoing to ensure that capacity keeps pace with demand. This is essential for the future development of the City and environs.

Regeneration areas

The Limerick Regeneration Framework Implementation Plan includes measures for Kings Island, Moyross, Ballinacurra Weston and Southill. The framework is built around three key pillars: Social regeneration, Physical regeneration and Economic regeneration. They operate within previously zoned areas and do not encroach into any Natura 2000 site. They were subjected to both the SEA and AA processes.

Shannon Integrated Framework Plan

This plan is intended to promote the sustainable development of the estuary as a whole and operates in the functional area of Limerick City and County Council, Clare County Council and Kerry County Council. With respect to the Limerick City Development Plan it called for the zoning of the dockland area for development purposes. This area is outside the SELAP boundary but may have an effect in creating employment for its residents. However, the underlying tenet of the SIFP is to promote development of the estuary as a whole. Any increased economic activity is confined to the docks area and is not anticipated to have additional effects on the River Shannon. The Docklands for instance had been designated as a Strategic Employment Location (p.17 City development plan) in the existing 2010 – 2016 City Development Plan) and is described as an “under-utilised asset”.

Limerick Economic and Spatial Plan 2030

This plan identifies seven key locations in Limerick for re-development, which will complement the SIFP in that the aims of both as they relate to Limerick are similar. Both offer detailed area based suggestions of redevelopment of selected areas. The Marine Energy park proposal in the 2041 SFPC Vision document is reflected in this document (p. xiii) where it mentions the need for an urban science park.

Limerick City Development Plan 2010 – 2016 (as Extended)

It is likely that the revised SELAP will be integrated into the Limerick Development Plan addressing the larger metropolitan area of Limerick City and Environs including the Southern Environs and Castletroy. The city plan has green areas adjacent to the SELAP area which would help reinforce the greenspace network in the area as a whole.

Smarter Travel

This initiative was designed to promote networks of cycle and pedestrian ways throughout the City and environs and was also designed to maximise the use of public transport. In this regard, it fits well with the Colbert station project (see above). This initiative is updating traffic, pedestrian and cycle movement to suit a new era in Limerick traffic management and this has helped update plan policy in this regard.

Upgrades of Bunlicky Waste Water Treatment Plant

Current and future upgrades are planned for Bunlicky. The works undertaken are as follows:

- Construction of a Chemically Enhanced Primary Treatment dosing system to allow for Alum Dosage of the influent to combat against high levels of Phosphorus discharge and to assist in sludge management.

- The installation of an Anaerobic Digester;

- The upgrade of the current odour control unit;

- The installation of a pasteurisation unit;

- The installation of a Combined Heat and Power recovery unit operating with the anaerobic digester;

These works were completed in March 2016 and will increase capacity to keep pace with industrial and residential development in the agglomeration area. Further works are planned to ensure that both technologies, work practices and capacity in the plant are maintained at a standard that can adequately deal with increased loadings from future development (Irish Water Personal Communication, July 2014). This would include measures to deal with hydraulic loadings that would have been an issue in the past. What this meant by this, is that with storm and water and foul water drains mixed, in periods of heavy rainfall large volumes of water entered the plant, which meant that it was not able to cope with the additional loadings, which lead to untreated discharges. The improvements to the plant and the pipe network leading to it, has meant that the plant now deals with contaminated waste only, while storm water is diverted elsewhere. These are not anticipated to have any effects on the nearby Special Area of Conservation or Special Protection Area.

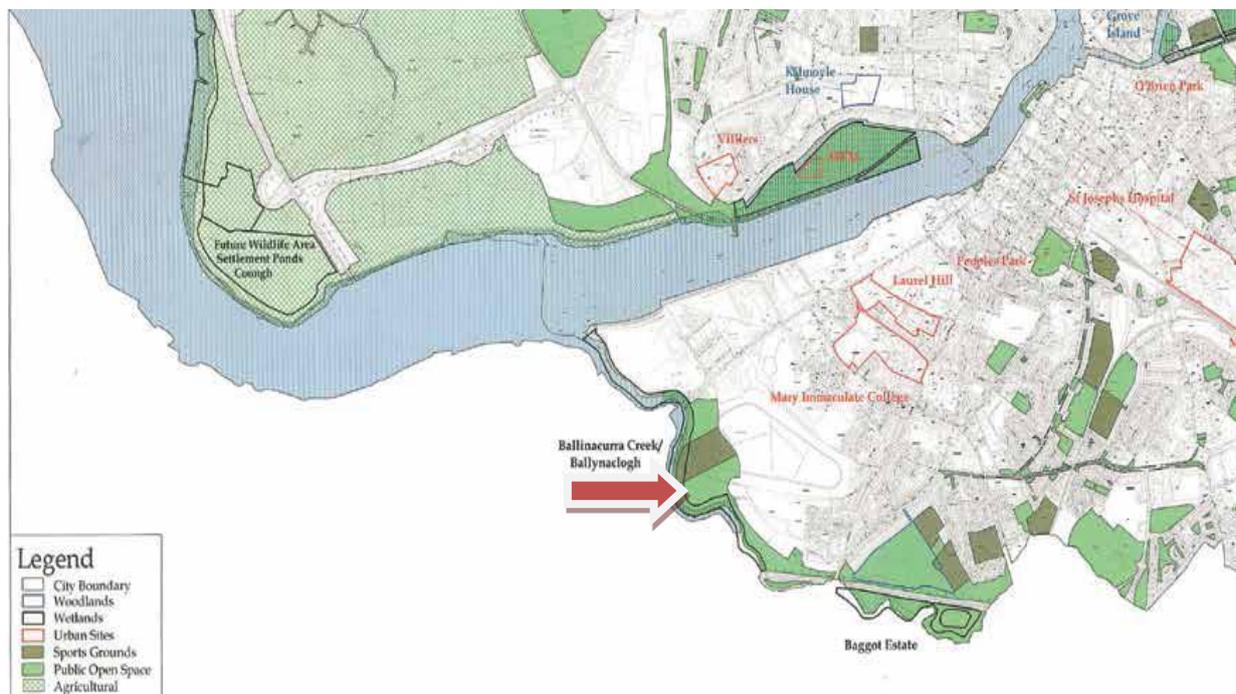


Figure 7: This extract from the Limerick city Bio-diversity plan shows green space adjacent to the SELAP boundary. This complements green space on the SELAP area to the west which as the effect of creating a partial green space corridor. This map should be viewed with the map in Figure 8 below which shows semi-natural open space zonings highlighted in the SELAP area.

8.0 Conclusions and Recommendations

The proximity of two riverine Natura 2000 sites i.e. the Lower River Shannon and River Fergus means that within the LAP area, policies and zoning patterns must reflect the sensitivity of the site. This has been implemented through zoning and the putting in place of buffer zones. The Appropriate Assessment Guidelines issued by the DEHLG (2010 p. 33) indicate that a “precautionary approach is fundamental and in cases of uncertainty it should be assumed that the effects could be significant”. In the case of the Southern Environs, with low-lying areas subject to flooding, the presence of limestone drainage features such as turloughs, it is considered that the designation of areas as semi-natural open space or open space was a suitable approach to take, minimising the amount of land that might generate runoff and

providing a buffer for designated sites. Additional lands have been zoned as semi-natural open space to address these sensitivities.

NPWS concerns with individual species such as the otter, badger, bats, lamprey and protected plant species such as the Triangular Club rush, Opposite Leaved Pond Weed are reflected in the policies that now exist in the plan. The presence or absence of these species and the possible effects of the development on their conservation status should form part of the assessments which accompany any application. This is dealt with in NHO 15 Ecological Assessment which states “All residential developments over 5 housing units, industrial/commercial developments over 1000sqm, or developments below this threshold where there are species of conservation concern, will be required to submit an ecological assessment of the effects of the development on the site and nearby designated sites, suggesting appropriate mitigation measures, and establishing, in particular, the presence or absence of the following species; the otter, badger, bats, lamprey and protected plant species such as the Triangular Club Rush, Opposite Leaved Pond Weed”.

The otter in particular can range outside the designated sites. Article 10 of the Habitats Directive has as its intent to “improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora”. In this situation the zoning of appropriate semi-natural open spaces helps with this aim. It should be noted that agricultural zonings and open space zonings can also help in this regard. These should be retained.

What would be of further use for the purposes of Article 10 is Objective NHO 16 “Creation of New Habitats which states it is an objective of the Council to seek the creation of new habitats by encouraging wild green areas and new water features such as pools and ponds. Management plans for green areas are encouraged to use the minimum of pesticides and herbicides, while the creation of areas that are not subject to public access in order to promote wildlife use is strongly encouraged”.

While the NPF and the RSES places great emphasis on reuse of existing structures and brownfield development, this can place great pressure on species that use these locations and the policy content of the draft plan has been adapted to suit this. NHO 11 is outlined below:

NHO11 Roosting or Settlement Facilities for Species It is an objective of the Council to require the provision of alternate roosting or settlement facilities for species, such as bird or bat boxes, artificial holts, or other artificially created habitats in developments, where considered appropriate. Swift boxes are one example of this in suitable locations.

This policy has been inserted in order to avoid the possible displacement of species that can co-exist with development and to help with those in endangered status such as the Swift. The creation of artificial ponds or artificial holts could help with dispersal of species from the SAC and SPA sites.



Figure 8(a): This shows an artificial otter holt under construction. Two PVC pipes serve as the entrances, while the main holt is timber framed, with an outer and inner chamber.



Figure 8(b): The finished holt, with earth and brush covering. The two PVC entry pipes can be seen leading into the water in the top right portion of the picture. **Source:** Econorth UK.

The plan-zoning template protects wetland sites of varying types, which are particularly important in an urban and peri-urban area. Both sides of Bunlicky Lake (the eastern and the undesignated western) are included. The western portion is designated as semi-natural open space and this complements areas such as the semi-natural open space along the Ballinacurra creek, which is prone to flooding. Bunlicky Lake does not have to contend with public access

and the issue of feeding of wildfowl and distorting foraging patterns. The creation of pollution, from feeding of wildfowl, does not arise in this location (Sutherland and Hill, 1995, pp 376-8), but may do in locations in the city centre, outside the plan area.

NPWS (2012) states the following “the wetland habitats contained within the River Shannon and River Fergus Estuaries SPA are identified to be of conservation importance for non-breeding (wintering) migratory waterbirds. Therefore, the wetland habitats are considered to be an additional Special Conservation Interest”. This would confer an additional importance to wetland and other open space elements within the plan area that would be used by wildfowl. Reference has been made above to wildfowl dispersing from the River Shannon to wet grassland in the Mungret area as the tide covered mudflats and other feeding areas along the main river channel.

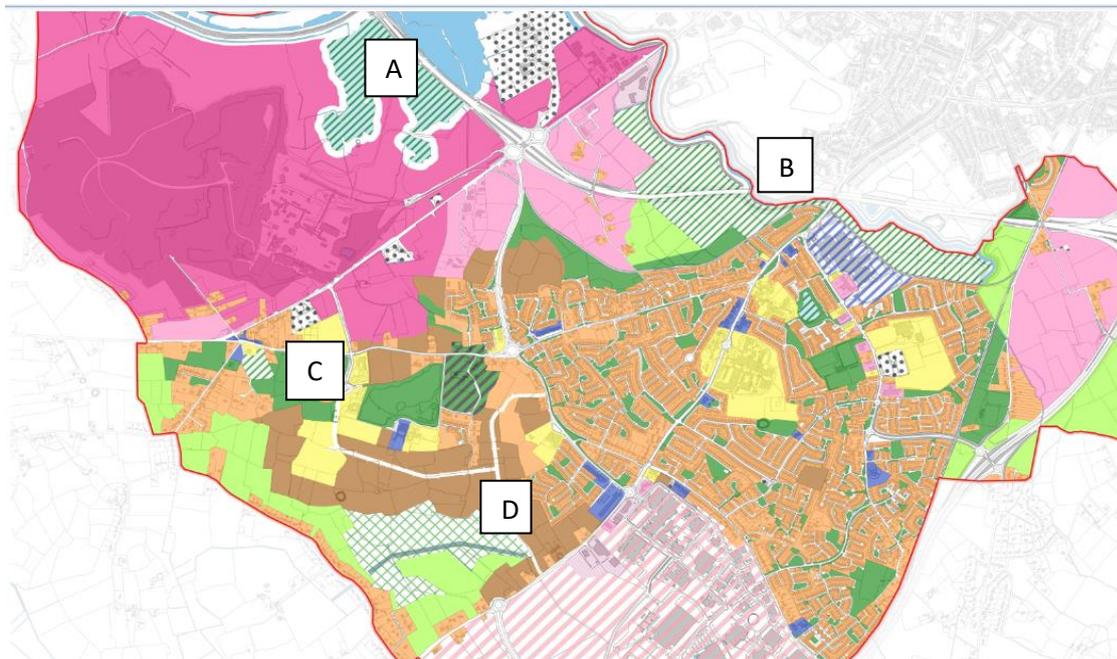


Figure 8: A to D indicate wetland, or seasonally flooded areas within the Southern Environs. A is the eastern part of Bunlicky Lake, B is the semi-natural open space running along the banks of the Ballinacurra Creek and behind the Crescent Shopping Centre. C is the Monteen Turlough behind Mungret Church, while D is the Loughmore Common pNHA.

The conclusions of the report are that, based on the policy content of the plan as presented together with its zoning template is that significant effects on the Natura 2000 sites which are beside and within the plan area is unlikely. This is based on the fact that ecological buffers have been incorporated into the plan and the sensitivities of the Natura 2000 sites have been respected by appropriate zoning.

In the proposed draft plan, there is an extensive range of objectives to protect ecology in the area, both within and outside the Natura 2000 site network. With the River Shannon forming the northern boundary of the plan area and the Ballinacurra Creek, the eastern, both designated sites, their importance is recognised in the plan objectives. However, non-designated ecological sites get equal emphasis as the Monteen Turlough and Bunlicky Lake are also included in the plan content and have protective objectives. This is important as they have hydrological links to the River Shannon and play a role in supporting species of conservation interest.

The most important points to note is that there has been no expansion of the development boundaries of the plan over the previous one. This helps to ensure that no further encroachment would take place on designated sites and lessens the chances of ecological damage.

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Stage 1 Strategic Flood Risk Assessment of the Draft Southern Environs Local Area Plan 2021 – 2027

10th October 2020

Forward/Strategic Planning



Limerick City and County Council,
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1.0 Introduction - Flood Risk and the LAP Process

This is the Stage 1 Flood Risk Assessment for the review of the Southern Environs Local Area Plan 2011 – 2016 (as extended), and should be read in conjunction with the Draft Southern Environs Local Area Plan 2021 - 2027 and the Strategic Environmental Assessment (SEA) Environmental Report.

The Southern Environs is at particular risk from tidal flooding. The proximity of the estuary to the north bears witness to this. Another factor which complicates the flooding picture is the underlying limestone geology of much of the area. This results in the presence of natural drainage features including turloughs, which also have to be considered in the possible flood regime of the area. With the issue of tidal flooding, which may cause tributaries of the River Shannon to back up when they cannot drain to the main channel, and the underlying geology, the issue of potential flood risk in the Southern Environs is a complex one.

This process is designed to identify areas at risk of tidal or fluvial flooding, or where surface water might need to be managed.

2.0 Flood Risk Identification

The Technical Appendices of the Planning System and Flood Risk Management Guidelines (November 2009 p.9) identify the following sources of information:

- 1.** OPW Preliminary Flood Risk Assessment indicative fluvial flood maps;
- 2.** National Coastal Protection Strategy Study flood and coastal erosion risk maps;
- 3.** Predictive and historic flood maps and benefiting land maps;
- 4.** Predictive flood maps produced under CFRAM studies;
- 5.** River Basin Management Plan and reports;
- 6.** Indicative assessment of existing flood risk under Preliminary Flood Risk Assessment;
- 7.** Previous flood risk assessments and predictive flood maps;
- 8.** Advice from Office of Public Works;
- 9.** Internal consultation with Local Authority personnel, in particular Water Services engineers;
- 10.** Topographical maps - in particular LIDAR;
- 11.** Information on flood defence condition and performance;
- 12.** Alluvial deposition maps;
- 13.** Liable to flood markings on old 6-inch maps. In addition, these maps particularly the first edition, contain information on landscape features and infrastructure such as mills and weirs that can indicate hydrological features;

14. Local Libraries and newspaper reports;
15. Local consultation e.g. local groups;
16. Walkover surveys to assess potential sources of flooding and likely routes of flood waters and flood defences;
17. National, regional and local spatial plans and previous planning applications;
18. Previous planning applications during the lifetime of the Southern Environs Local Area Plan 2011-2017 (as extended).

Sources used:

1. OPW Preliminary Flood Risk Assessment indicative fluvial flood maps

These maps have been produced under the CFRAMS programme. These indicate that it is not fluvial, but coastal flooding which is the main issue to consider in the SELAP area. However, it does have localised implications, particularly in the area of the Barnakyle River - see Figure 1 below.

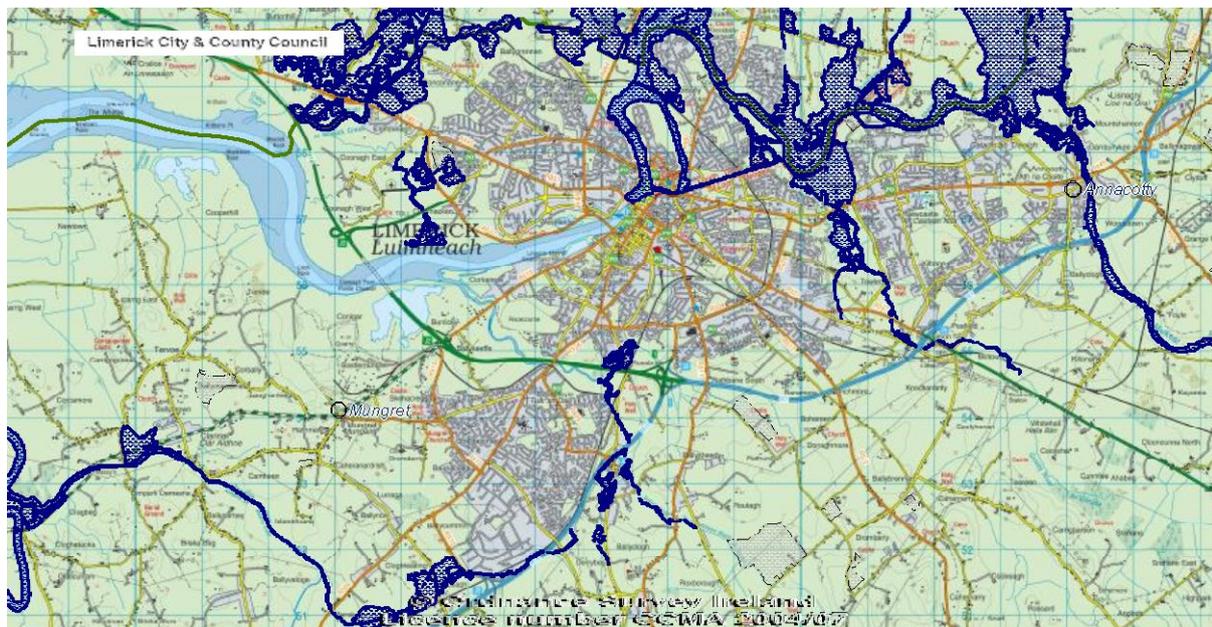


Figure 1: Taken from the LCCC planmap, this shows the extent of CFRAMS fluvial risk in the Southern Environs area.

2. National Coastal Protection Strategy Study flood and coastal maps

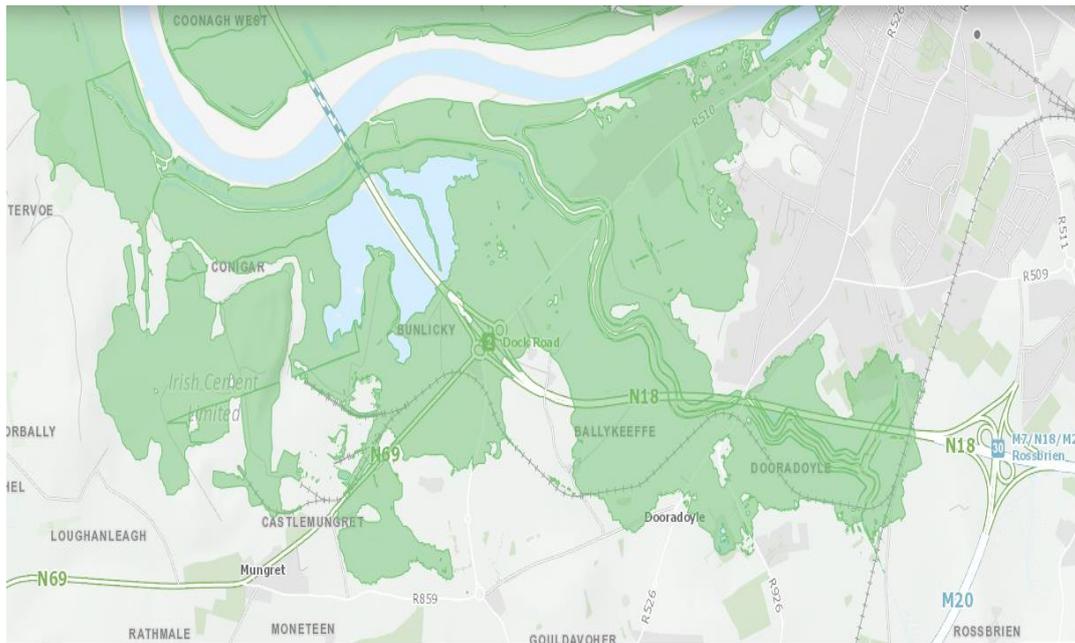


Figure 2: Taken from the National Coastal Protection Strategy Study website, this shows the possible extent of coastal flooding in the Southern Environs area.

The map shows the area along the Ballinacurra Creek as being vulnerable to coastal flooding as is the area around the cement factory and Bunlicky Lake. Much of this area is zoned for industrial uses to reflect both the existing activities and because this use is regarded as “a less vulnerable” use (The Planning System and Flood Risk Management Guidelines, 2009, p.25).

3. Predictive and historic flood maps and benefiting land maps (flood maps.ie)

These maps were consulted, and together with discussions with the local OPW engineering staff, areas that are more likely to flood were identified. Benefiting lands i.e. lands that would benefit from drainage works for agricultural purposes, can be related to river flood plains. It has to be emphasised that this means the drainage and flood defence works are to facilitate agricultural development, and not other more vulnerable land uses. The benefitting lands occur along Ballinacurra Creek running northwards to the River Shannon and are also to the south, in the western portion of the land zoned for High Tech/Manufacturing use at the Raheen Business Park. In the case of the Ballinacurra Creek, additional open space has been included in this area of the zoning map. While in the case of the Raheen Business Park, a specific policy has been included for Site Specific Flood Risk Assessments and the use of the flood benefitting area for attenuation of development in the business park. It also shows the land to the northeast of the Crescent Shopping Centre as being within the flood benefitting area.

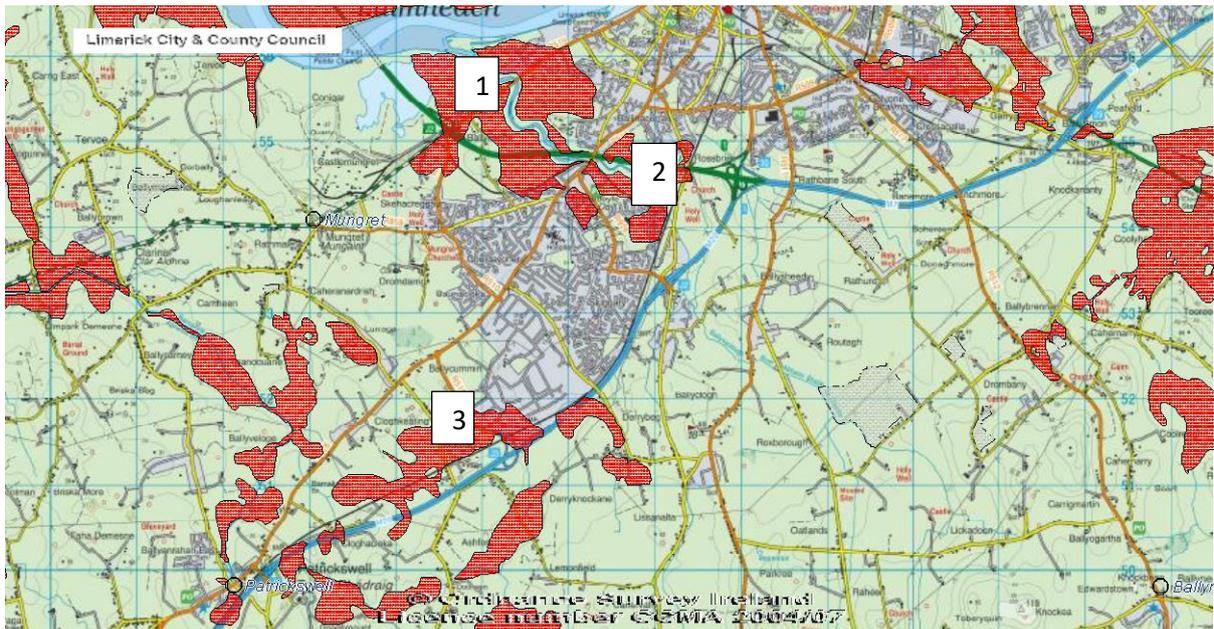


Figure 3: The red areas on the map are flood benefiting areas. 1 is the area close to Ballinacurra Creek, 2 is the land bank close to the Crescent Shopping Centre and 3 is the Raheen Business Park.

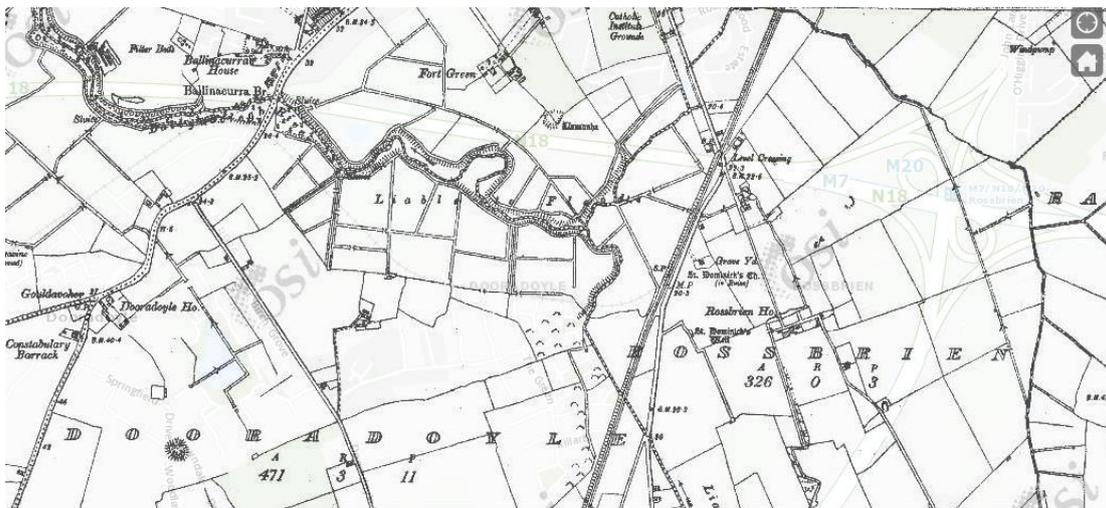


Figure 4: This map is taken from the OSI map viewer and shows the area to the rear of the Crescent Shopping Centre as being prone to flooding. Also of note are the regular drainage patterns which indicate lands which are subject to inundation and for which the drainage system was installed to shed water quickly.

Though the flood embankments were constructed after the map was prepared, the drainage pattern, the flood benefiting map and the vegetation all help to indicate the possible extent of flood waters should a breach occur.

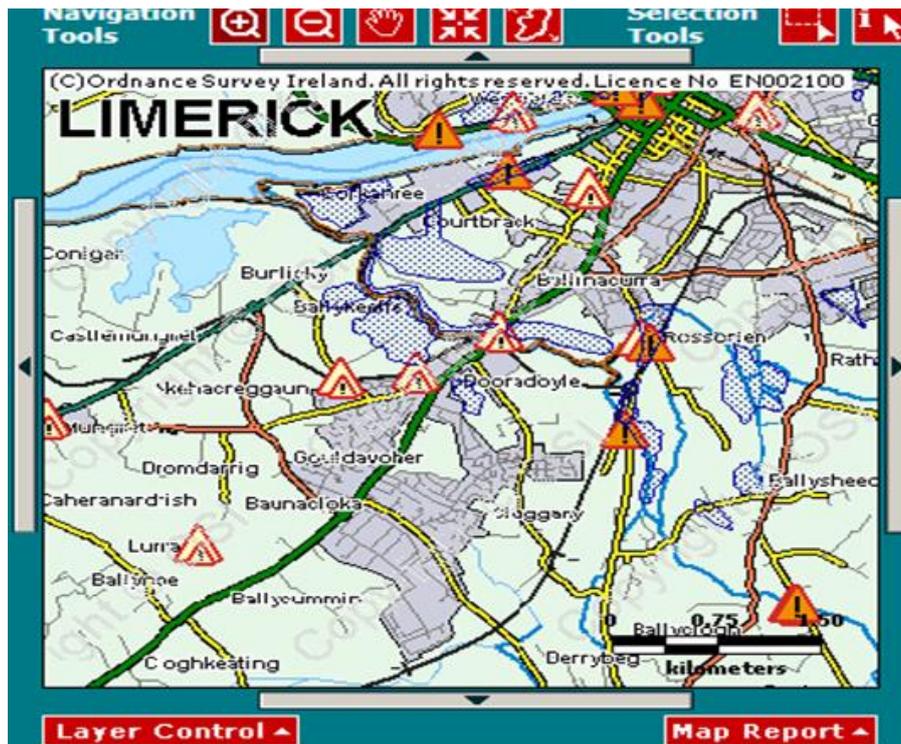


Figure 5: This screenshot is taken from the floodmaps.ie website and shows a series of flood events within the SELAP area.

4. Predictive flood maps produced under CFRAM studies

The CFRAM maps were used as part of the assessment process. The 1:1,000 year flood interval and the defended area maps were examined. The flood defence embankments are a feature of the Southern Environs. An extract from the combined map is shown below. The 1:1,000 zone is “where the probability of flooding from the rivers and sea is moderate (between 0.1% or 1 in 1,000 and 1% or 1:100 for river flooding and between 0.1% or 1 in 1,000 year and 0.5% or 1:200 for coastal flooding)... (DEHLG, 2009 p. 15). The picture in the Southern Environs is complicated by the fact that while coastal flooding is the main threat, the underlying geology of the area and the presence of two rivers, the Ballynacloough River and the Barnakyle River have also to be considered.

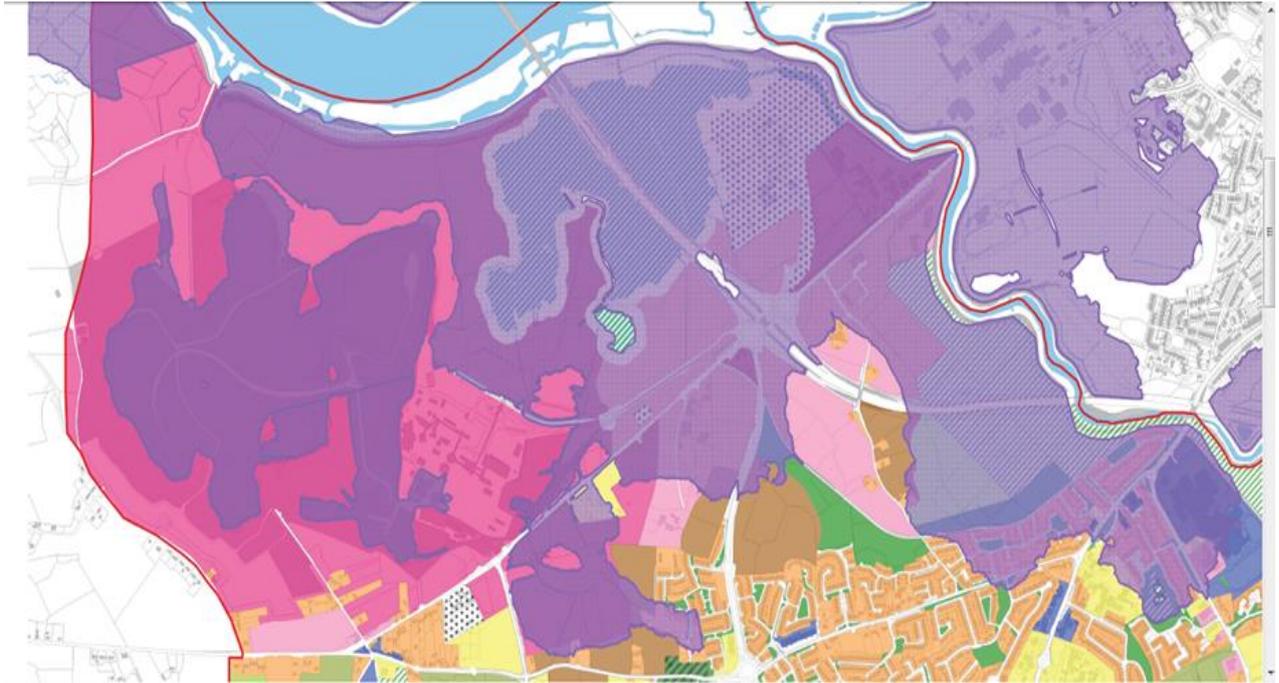


Figure 6: This is an extract from the maps based on the 1:1,000 and defended areas information taken from the CFRAM Mapping. The shaded areas indicate the 1:1,000 flooding patterns and the defended areas combined.

The Planning System and Flood Risk Management Guidance (2009, p. 16) state that “the presence of flood protection structures should be ignored in determining flood zones. This is because areas protected by flood defences still carry a residual risk of flooding from overtopping or breach of defences and the fact that there may be no guarantee that the defences will be maintained in perpetuity”. It is for this reason that areas protected by flood defences (the “defended areas”) are included in determining the zoning pattern.

5. River Basin Management Plan and reports

Insufficient information is available in the River Basin Management Plan 2018 – 2021 to inform plan contents in relation to flooding issues.

6. Indicative assessment of existing flood risk under Preliminary Flood Risk Assessment

Existing areas of flood risk are identified at the Dock Road, Ballynaclogh Bridge and the Rosbrien and Dooradoyle. These maps have been supplemented by the “predictive maps” from Floodinfo.ie, a website launched in 2018. In addition, the National Preliminary Flood Risk Overview Report, issued in 2012 and updated in 2019, identifies storm water issues in Fr. Russell Road and in Mungret as an annual event (PFRA Overview Report Appendix C), which indicates the complexity of flooding issues in the plan area.

7. Previous flood risk assessments

The flood reports for the nearby area of Limerick City provides insights into the wider flood regime of the area. It identifies five major historical flood events that included effects on the Southern Environs:

- December 1954: A fluvial flood event;
- September 1961: Coastal surge event which reached 4.2m AOD;

- December 1999: Coastal surge and high fluvial event which reached 4.1 m AOD;
- February 2002: High fluvial event measuring 4.27m AOD.
- February 2014: Highest event in Limerick caused by tidal surge.

8. OPW advice

The OPW have indicated that combined fluvial and tidal flooding will have to be taken into account in the plan area. The vulnerability of sluices will also have to be considered. The flood defences, which are earthen embankments, are intended to protect agricultural land and have no rock armouring or internal reinforcement. The existing earth embankments are complemented by the land drainage systems. Some of this drainage system has residual storage capacity but this is limited. This storage capacity is dependent on the tide. These drains require the tide to be out in order to empty, via sluices, to water courses such as the Shannon and Ballinacloough Rivers. The earthen embankments in some places have settled by up to 1m over the years. This is a reduction from the maximum design height which is 5.6m AOD. In some locations, due to reinforcement work, the embankments exceed this height. Some of the flood defences are in private and not OPW ownership, which is the case in the Irish Cement lands. Ballinacloough Bridge has been described as a possible weak point in the flood defences, as it is at a lower level than the embankments and could provide access for floodwaters.

A recent meeting with the OPW (2nd October 2020) in relation to the wider city and county flood risk issues, indicated the need for adequate SUDs and attenuation measures to ensure gradual runoff of surface water which might otherwise overload existing watercourses, and result in flooding downstream. The increasing intensity of rainfall events has made this more important than ever. This was an issue that was also raised in the preparation of the Limerick Climate Change Adaptation Strategy in 2019. As a response to this, a policy has been put in place in the Draft LAP in relation to the western most part of the land zoned as High Tech/ Manufacturing, requiring both a Site Specific Flood Risk Assessment and suitable attenuation. This would help to facilitate further development of the Raheen Business Park.

9. Internal consultations with Council personnel

Discussions regarding drainage and flooding issues took place with engineers regarding the Southern Environs Draft Local Area Plan 2021 - 2027. They acted as intermediaries with the flooding consultants (JBA) who were appointed to carry out a flood risk assessment of the city area as a whole for the proposed Limerick Development Plan, which will follow the SELAP in 2022. They were also able to offer advice on specific areas within the SELAP.

10. Topographical maps LiDAR

A LiDAR survey had been carried out which indicates the limit of the maximum high tide level. This data has informed a predictive mapping tool previously used by the Local Authority. This has since been superseded by the CFRAMs, but is still useful in that it is still present on the Limerick City and County Council Plan Map system and is an additional source of information.

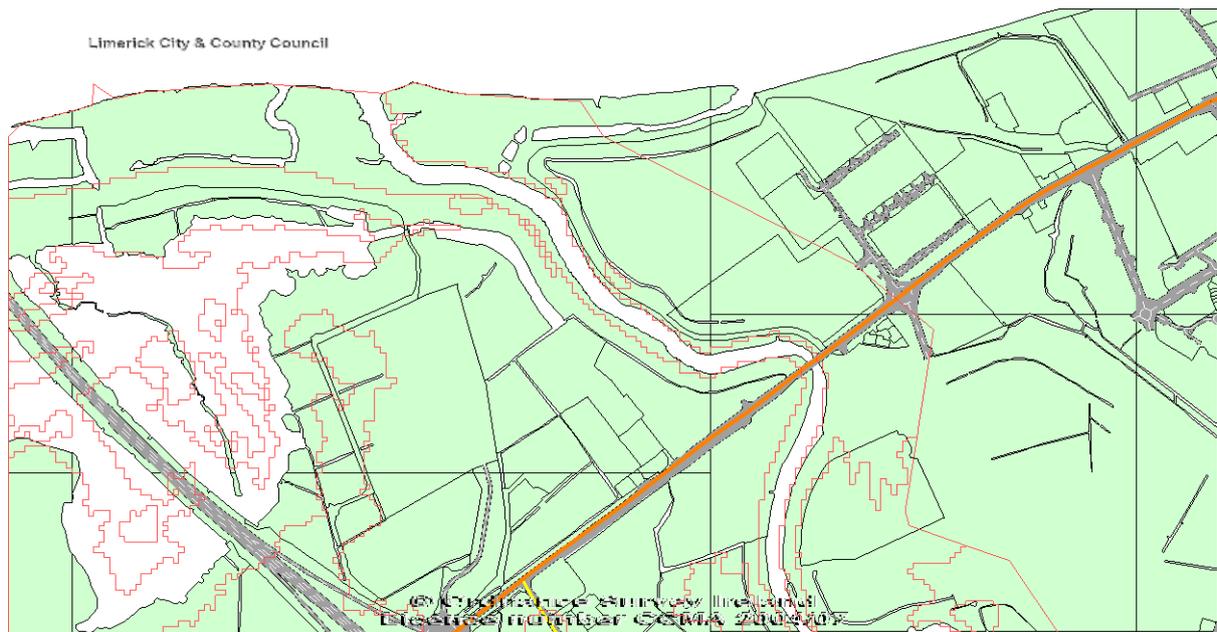


Figure 7: The red lines show the extent of LiDAR Flood Zone A mapping from the JBA predictive mapping tool.

11. Information on flood defences and condition

Part of the CFRAM mapping series indicates the presence of flood defences in the plan area. As indicated above these are earth banks and being under different ownerships have undergone different management and maintenance regimes. The quality of the embankments is variable as they have been subjected to widely differing maintenance regimes, and were intended to defend lands solely for agricultural purposes. This is a factor that has been raised in some of the Flood Risk Assessments which have accompanied planning applications – see 18 below. It is also worth noting that the Flood Risk Management Guidelines state that defences are to be disregarded when determining flood zones.

12. Alluvial deposition maps

Alluvial soils are those deposited by rivers. Their extent helps to indicate the extent of historic flood events. These maps have been allied to benefiting areas and historic maps (first and later editions of the six inch maps) showing areas prone to flooding indicate areas with higher risk of flooding. When these maps were consulted they were only minor indications of alluvial soils chiefly along the Barnakyle River and outside the plan area. Instead, what was found particularly along the Ballynaclough River, especially as it neared the River Shannon, were marine sediments which indicates an estuarine influence.

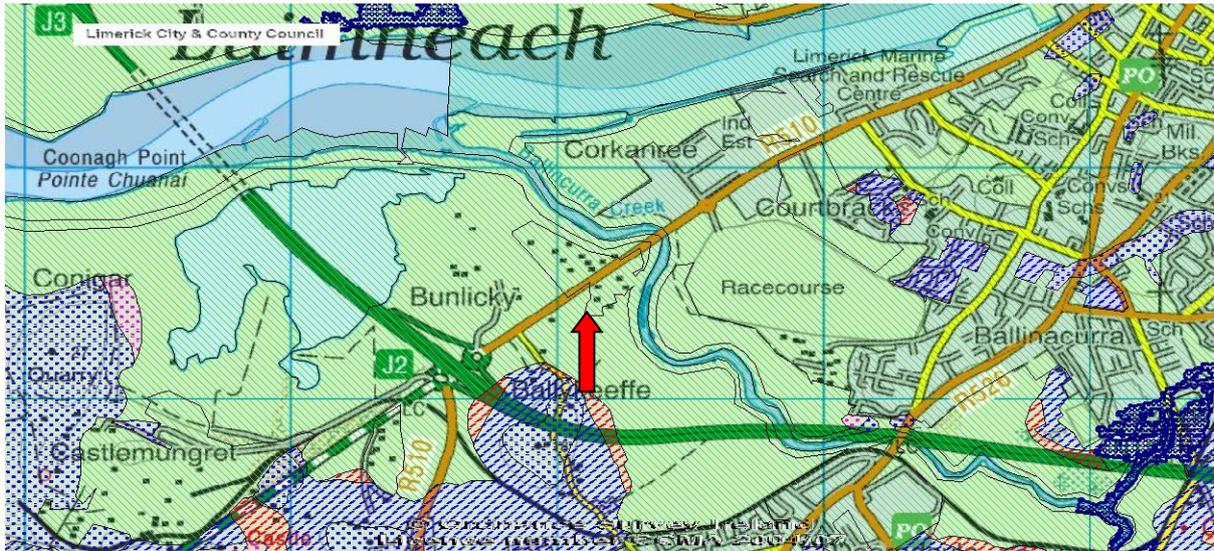


Figure 8: The red arrow indicates what is termed marine sediments and miscellaneous soils in this part of the plan area. It is likely, particularly in areas where there has been industrial activity over a long period of time that the underlying soils have been heavily modified.

13. Liable to flood markings on old 6-inch maps

Areas liable to flood are shown on the older first edition 6-inch maps and the editions dating from 1938. This area is immediately to the north east of the Crescent Shopping Centre. These maps are also useful in indicating historic drainage patterns which would have indicated potential for flooding or water logging or also past infrastructure which would have been used to manage water levels such as sluices.



Figure 9: This shows the historic drainage patterns in Gouldavoher and Dooradoyle. The red arrows indicate the presence of sluices.



Figure 10: The same area today, the undeveloped areas are zoned as semi-natural open space.

14. Local libraries and reports

Flooding reports from the OPW website were consulted in the preparation of this assessment. These gave further details on the flood incidents outlined above.

15. Local consultation

Discussions with local groups indicated that flooding takes place in the Monteen Turlough to the rear of Mungret Church. This was further supported with photographs which indicate the extent and timings of some of the flood events, in particular in 2002 and 2009. These discussions indicate that both Monteen Turlough and Loughmore Common Turlough, may be linked as they both flood at the same time.

16. Walkover surveys

Walkover surveys were an important part of the groundwork associated with the draft plan. These informed the decisions taken in relation to the draft SELAP. Such surveys helped to indicate the extent of vegetation associated with wetter ground conditions such as yellow flag iris, *Juncus* spp. and creeping buttercup. Surveys also gave indications of surface ponding of water.

17. National, regional and local spatial plans

The Regional Flood Risk Assessment (RFRA) which accompanied the Regional Spatial and Economic Strategy for the Southern Region was, by its nature, a high level document. However, it did indicate that the main source “of flooding is mostly coastal”. It also indicated that the Dock Road was vulnerable to flooding. The OPW mentioned, in a submission, that the draft RFRA had not mentioned the earthen flood defence embankments. While not constructed to modern specifications these embankments are part of the flood control infrastructure.

18. Previous planning applications

In relation to previous planning permissions one application in the area for housing, commercial units, crèche and associated site works (planning reference 99/1301) in Ballykeefe, was refused by An Bord Pleanála in June 2007 because of “the potential of the development being affected by flooding in the

future". The reason for refusal further cited location on the floodplain and inadequate consideration of climate change.

A later application in the Ballykeefe area (08/68) was refused by the Council. Reports from water services were concerned about proposals to deal with runoff water storage. Further concerns were raised about the nature of the flood defence embankments which were intended for the protection of agricultural lands and not urban development.

An application (13/487) for an above ground gas installation by An Bord Gais at Bunlicky, Mungret, stated that the design level of their installation was 4.7m OD which was above what was considered the 200 year flood level. However, this was based on an assessment of the flood embankment walls, which were deemed to be 5.05m high. A report from water services indicated that this is not the case throughout its entire length, and mentioned the fact that the defences were intended for agricultural lands only.

An application for a ten-year permission was received from Valcroft Limited (16/642) for a waste transfer facility on the Dock Road. The Flood Risk Assessment which accompanied this application found that the risk to the development from flooding was mostly tidal.

An application (16/678) was received for construction of a storage shed and retention of eight office porta-cabins. The development was located in Skehacreggaun, Mungret. Permission for this development was granted. In terms of flooding, the flood risk assessment concluded "the main risk to this development would be a storm surge in the estuary coinciding with high spring tides and high levels in the Shannon".

3.0 Justification Test in determining the zoning pattern to be employed

Limerick is one of the cities that has been identified in the National Planning Framework as being the subject of a Metropolitan Area Strategic Plan, which emphasises the Metropolitan area's national importance. This is echoed in the Regional Spatial and Economic Strategy for the Southern Region, which mentions that the Limerick Shannon Metropolitan Area is "a key economic driver for the region and Ireland". This is the backdrop to the zoning pattern presented in the draft SELAP.

The zoning pattern is designed to facilitate development and in the case of the Bunlicky WWTP comprises "significant previously developed" lands (Flooding Guidelines p. 37 Justification Test for Development Plans). This area has been zoned "utility" to reflect current usage. The WWTP is also "essential in achieving sustainable urban growth" in that it provides the treatment capacity for sewage for the City and its environs. In terms of suitable alternative lands for the location of the WWTP choice is constrained by: a) its existence in this location; b) the need to ensure that it is separated from residential developments and; c) the need to ensure adequate outflow for treated emissions – in this case the Shannon River.

In the case of "existing undeveloped zoned areas at risk of flooding" (Flood Risk Management Guidelines p. 40) such as the lands to the rear of the Crescent Shopping Centre, it was decided to retain the zoning as semi-natural open space. This area was identified as benefiting lands and because they were indicated as liable to flood, both on first and later editions of six inch maps (see Figures 2 and 3), this indicated that flood risk was a factor. This was borne out by the CFRAMS maps. Here too, the nature of the flood defences are intended to protect agricultural land and not more sensitive development proposals. In addition to being a buffer in the event of flooding, it makes a contribution to the area of semi-natural open space in the plan area. Large areas of the undeveloped lands lay within Flood Zones A and B. The main risk would be from tidal flooding and it was noted that parts of the defending embankment had degraded. The conclusion was that development would be premature pending the construction of the Limerick Flood Relief Scheme.

A similar approach was taken with lands currently in agricultural use in the Ballykeefe area. Rezoning to residential and employment uses was requested. However, the site lay behind flood defences and is at risk of flooding. A proposal to provide flood defences was discounted as it would protect only the subject lands and not what the likely flooded area or flood cell would be. In addition, being an outlying location and being undeveloped, it is considered that the justification test would not apply. A full list of zoning responses to flooding is included in Table 1 in section 4 below.

The Dock Road - The zoning pattern on the Dock Road in the draft plan consists of Industrial, Enterprise and Employment or Utilities zonings in areas that are subject to flood risk. The Justification Test for Development Plans (Guidelines p. 37) considers that the uses must be "essential to facilitate regeneration and or expansion of the centre of the urban settlement". In this case, much of the activity along the Dock Road is long established and is a source of employment and comprises a continuation of employment related uses extending from the city. In the case of the Irish Cement factory, the use has been established over a period of almost 100 years. This is the second aspect of the justification

test which considers if an area “comprises significant previously developed...lands”. With respect to the Dock Road and Irish Cement this is the case with decades of use to support the zoning.

The next factor to consider is whether or not the area is “within or adjoining the core” ...of a designated urban settlement. The designation of the Limerick and Shannon MASP in the NPF has been noted and in the proposed Limerick Development Plan, both the city and environs plans will combine. Already the SELAP abuts the city plan and the Dock Road leads from the city through the plan area to Mungret. With the proposed Limerick Development Plan, this relationship will be reinforced. The further development of this area will help consolidate this long established area of economic activity which will ensure adequate redevelopment of brownfield sites and compact growth as the justification test demands.

In terms of other suitable lands as mentioned in the justification test, it should be noted that the uses here reflect existing land uses and it is not the development of greenfield sites that are in question. It should also be noted that buildings used for “retail, leisure, commercial, industrial and non-residential institutions” are regarded as “less vulnerable development” in terms of the justification test” (Guidelines, p. 25). These are the uses that the building stock in the Dock Road is put to and the uses that the zoning matrix allows.

4.0 Zoning Responses to Flood Risk

A number of sites were re-zoned as a result of flooding considerations. These are listed below. In some situations additional factors other than flooding, such as excessive noise arising from road traffic for example, were also a factor in the decision.

Table 1 Zoning Responses to Flood Risk

Submission No.	Former Zoning	Proposed Zoning	Comments
1	Enterprise/Employment	Utilities	This is a less vulnerable land use than enterprise and employment and reflects the existing use of the site.
C8	Enterprise/ Employment and Residential	Enterprise/ Employment and open space	Less vulnerable land use than residential with open space element on Flood Zone A
6	Residential	Enterprise and Employment	Less vulnerable uses and in the case of agriculture reflects existing land use.
C1	Agriculture and Semi Natural Open Space	Agriculture and Semi Natural Open Space. Increase in agricultural area	Reflects existing land usage and is less vulnerable.
13	Enterprise/ Employment	High Tech/ Manufacturing.	The zoning in this location includes a policy for site specific

			FRA for proposals in the low-lying area, with requirements for SUDS and suitable attenuation.
17	Residential	Agriculture	Agriculture is the least vulnerable zoning
19	Existing residential	Open Space/ Recreation	Open space is an acceptable land use in flood vulnerable areas

Note: See Figure 11 below for locations of the above submissions.

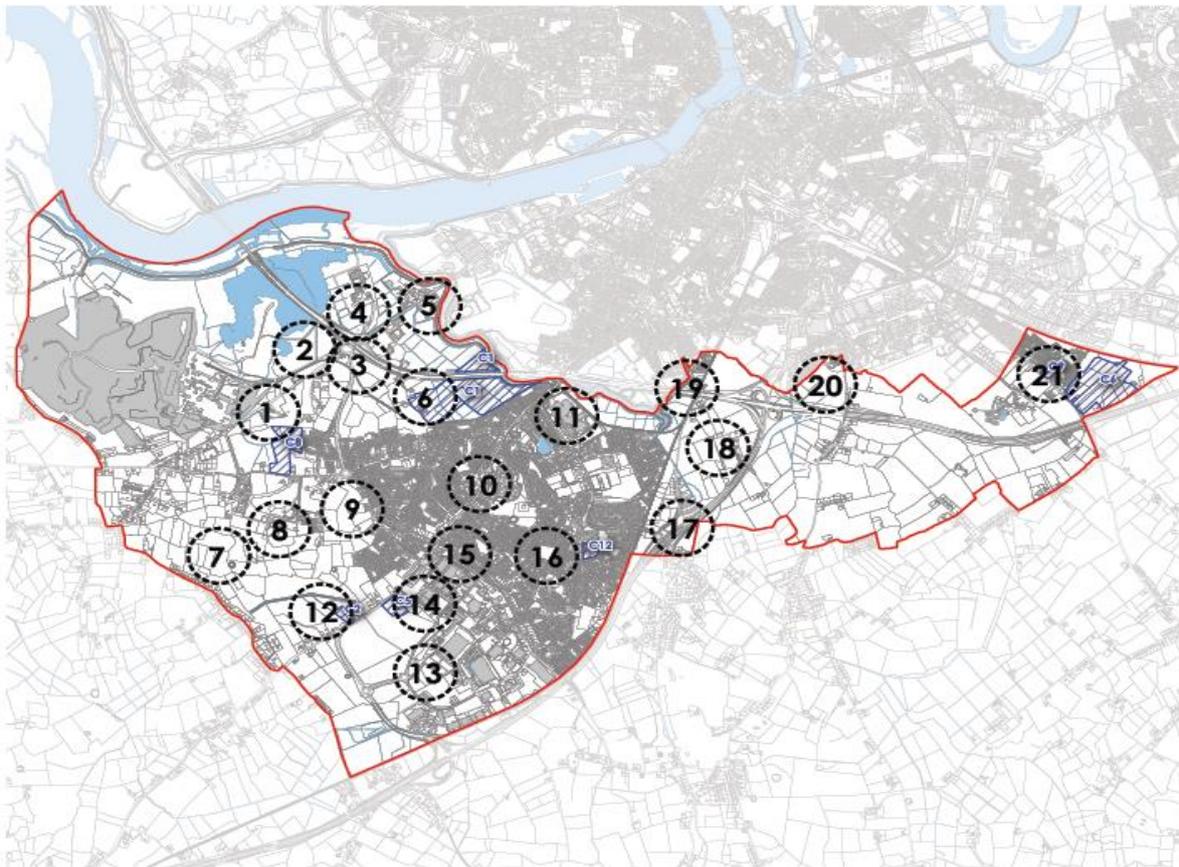


Figure 11: Showing all of the submissions numbered including the locations of submissions 6, 17, 18 and 19, which have flood related constraints.

4.0 Conclusions

Based on the Planning System and Flood Risk Management Guidelines, field work and the receipt of site specific reports, it has been decided to alter zoning on the sites identified in Table 1 above. At this point in the plan making process and based on current information, it was considered the best course of action in order to avoid flood risk, particularly to vulnerable forms of development. This was

based on considerations of flooding vulnerability, existing land uses and the nature of the flood defences in the Southern Environs area.