

# Physical Overview And Analysis

Extracts  
for  
Moyross













## 4. Physical Overview and Analysis

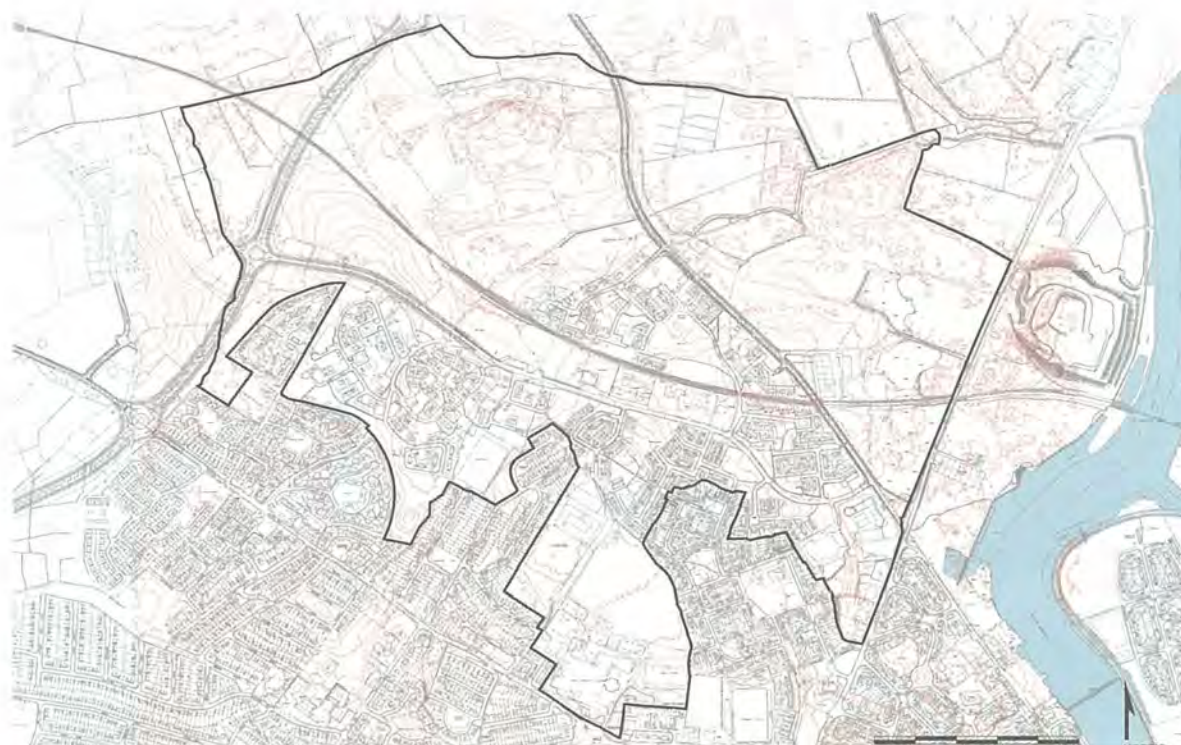


Figure 1.5: Contour Map

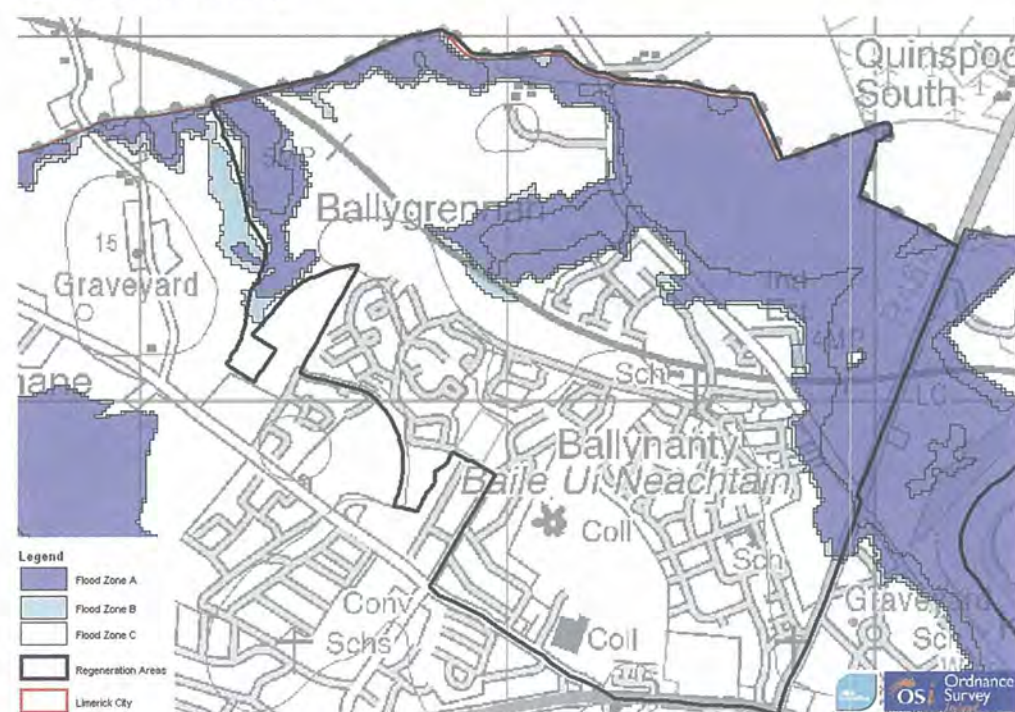


Figure 1.6: Flood Risk Map

### 4.1.2 Existing Physical Context

#### Land Use

The predominant land use in the regeneration area of Moyross is residential. As stated in the baseline analysis, the houses in this area generally consist of low density, Council developed estates dating from the 1970s. Other land-uses prevalent in the area are community focussed and consist of Watch House Cross to the south-east which is a designated District Centre as documented in the Retail Strategy for the Mid West Region 2010-2016.

The District Centre contains a food store; SuperValu, pharmacy, library, hairdressers and take-away outlets. Within the heart of the regeneration area is the existing community hub which contains the Corpus Christi Church, Corpus Christi Primary School and the Moyross Community Centre.

#### Housing Size and Conditions

Moyross was constructed from 1974 to 1987 and this makes the housing stock found here to be the newest units out of the four regeneration areas. Today, the condition of the building stock varies significantly, with a number of areas containing well maintained houses and other areas displaying high levels of dereliction. In terms of design, the majority of houses are two-storey, two-bay structures with small front gardens or paved parking areas entered via individual gates, with linear gardens to the rear. A typical house layout (approx 80m<sup>2</sup>) in Moyross consists of a ground floor layout of a kitchen/dining area, a living area. The upper floor consists of 3 bedrooms and a bathroom. These houses are typically red brick cavity wall-terraced or end-terraced houses with replacement double glazed windows, a gas boiler and open fire for heating. Further information on the works required to achieve an acceptable energy rating are described as part of the refurbishment strategies for each of the regeneration areas in Volume 2.

#### Public Realm

In terms of public realm, Moyross is characterised by the following physical features:

- Poor accessibility with adjacent neighbourhoods which has resulted in Moyross becoming physically, economically and socially isolated
- Over-provision of underutilised public open space
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites,



which currently detract from the overall appearance of the estate

- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and security of the area.

#### 4.1.3 Topography

The topographical area consists of flat to gently sloping ground with gradually increasing height as the study area moves north.

#### 4.1.4 Flooding and Drainage

A desktop study was carried out to determine the flooding risks involved within the study area. The northern boundary of the study area is largely bound by a tributary of the Crompton River. Information from the Limerick City Development Plan 2010-2016 Flood Risk Mapping indicates that a significant portion to the northern boundary of the study area along the tributary is prone to flooding. To the east of the study area is a significant area of wetland, known as Knockalisheen Marsh, which is also prone to flooding. This area drains to the River Shannon, to its east. This wetland at Knockalisheen is designated as a proposed National Heritage Area (pNHA) and a Special Area of Conservation (SAC) for its wetland habitats.

#### 4.1.5 Geology

Information from the Geological Survey of Ireland shows that the Moyross area is underlain by Dinantian Pure Bedded Limestones which is defined as a dark fine limestone and calcareous shale.

#### 4.1.6 Groundwater Vulnerability

Groundwater vulnerability within the study area is mainly "High to Low." "Extreme" small pockets exist to the north and northeast of the study area where rock is near the surface.

#### 4.1.7 Soils

The GSI (Geological Survey of Ireland) Teagasc Sub- Soil database demonstrates that soil types found within the study area range from Marine/Estuarine Silts and Clays, Till derived from Limestone, Made Ground and Bedrock. Active bedrock as shown to the northeast of the site might result in subsidence or instability of the ground surface.

Made ground is also present within the study area to

variable depths and is associated with prior road construction and other development construction. There are two closed landfill sites within the Moyross area. The Long Pavement site covers an area of approximately 2.4 hectares. The site is immediately adjacent to the River Shannon just outside the boundary of the Regeneration area.

On the western side of the Long Pavement Road (R464) opposite the Long Pavement landfill is an earlier landfill site extending over 17.7 hectares (pre 1984 landfill). The site has been covered with topsoil and is predominantly covered with grassland with some small trees and bushes. An area near to the Long Pavement Road was filled and graded to form a soccer pitch. This area is now overgrown, relatively uneven and not presently in use.

A strategy for the Long Pavement Landfill Restoration was prepared in 2000 by ARUP and Partners and remedial works have been completed recently, licensed by the EPA W0076-1. Key activities included collection

and flaring of landfill gases, collection and treatment of leachate, permanent capping of the landfill and landscaping works that will see new wetlands being constructed and the area converted into a recreation and amenity area.

#### 4.1.8 Water, Sewerage and Drainage Infrastructure

All main services such as water, sewage, gas, Eircom and electricity are available in the area. An infrastructural survey was carried out by Tobin Consulting Engineers to ascertain the extent and location of existing services in Moyross and this information is contained within Appendix 7 of this document. All services are available adjacent to the site in the footpaths along the surrounding roadways. However, some services such as surface water sewers traverse sites scheduled for proposed replacement housing in the short term. The cost of redirecting these services have been accounted for at the planning and cost appraisal stage.

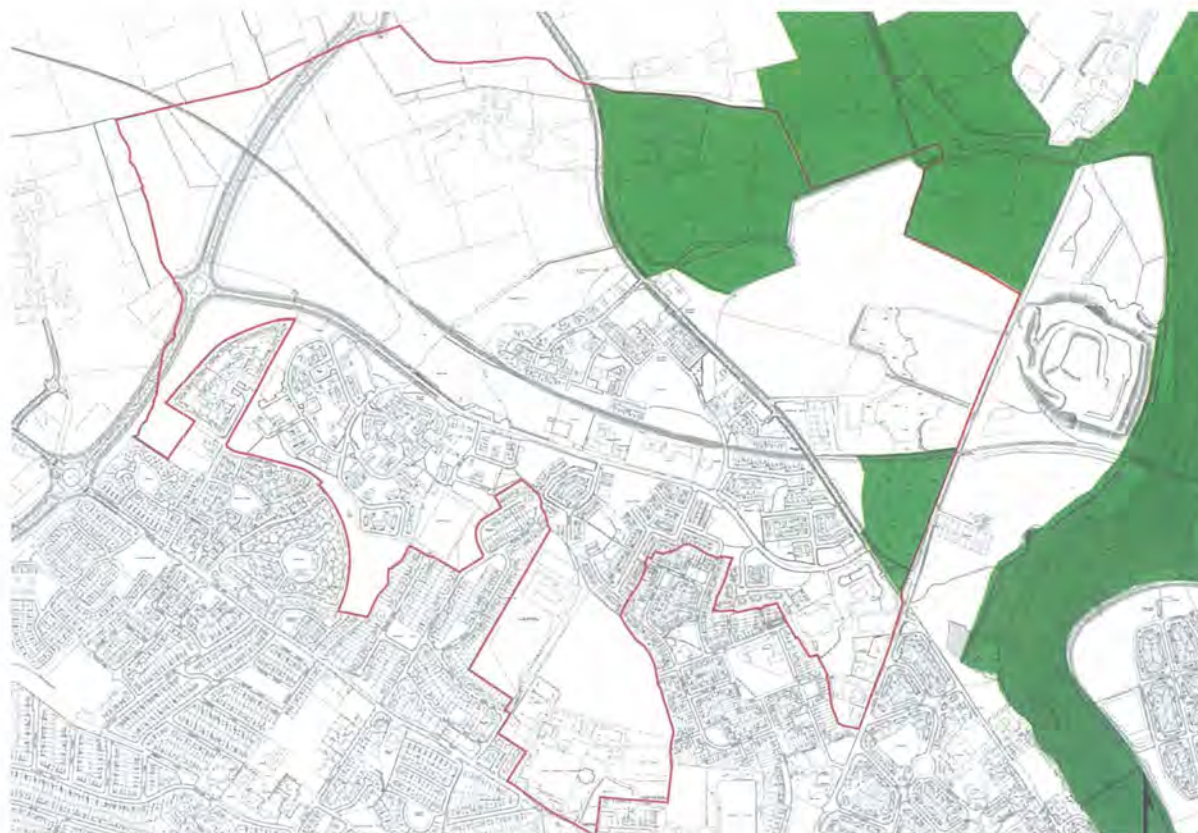


Figure 1.7: Extent of SAC



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### 4.1.9 Special Area of Conservation

The Lower River Shannon, Special Area of Conservation (SAC) (code 002165) is designated under the EU Habitats Directive. Parts of this designation skirt the study area along the Knockalisheen Road.

### 4.1.10 Natural Heritage Area

The Knockalisheen Marsh (code 002001) is designated as a proposed Natural Heritage Area (pNHA). The site is situated mostly within Co. Clare but extends to the

north of Limerick City along the Knockalisheen Road. The site consists of grassland that slopes gradually to a wetland area which then drains into the River Shannon.

The upper part of the site consists of pastures while the lower parts near the river are extremely wet and consist of wet grassland and fen communities which are considered species rich. The site is considered important as a good example of grassland/wetland,

with high plant species diversity which is an increasingly scarce habitat, especially close to a large city. In addition, the site serves as feeding ground for common wading species such as snipe. Invasion species such as the Cherry Laurel and Japanese Knotweed can have a hugely detrimental effect on habitats. In the absence of intervention, the advance of these species can destroy surrounding habitats and ecology.

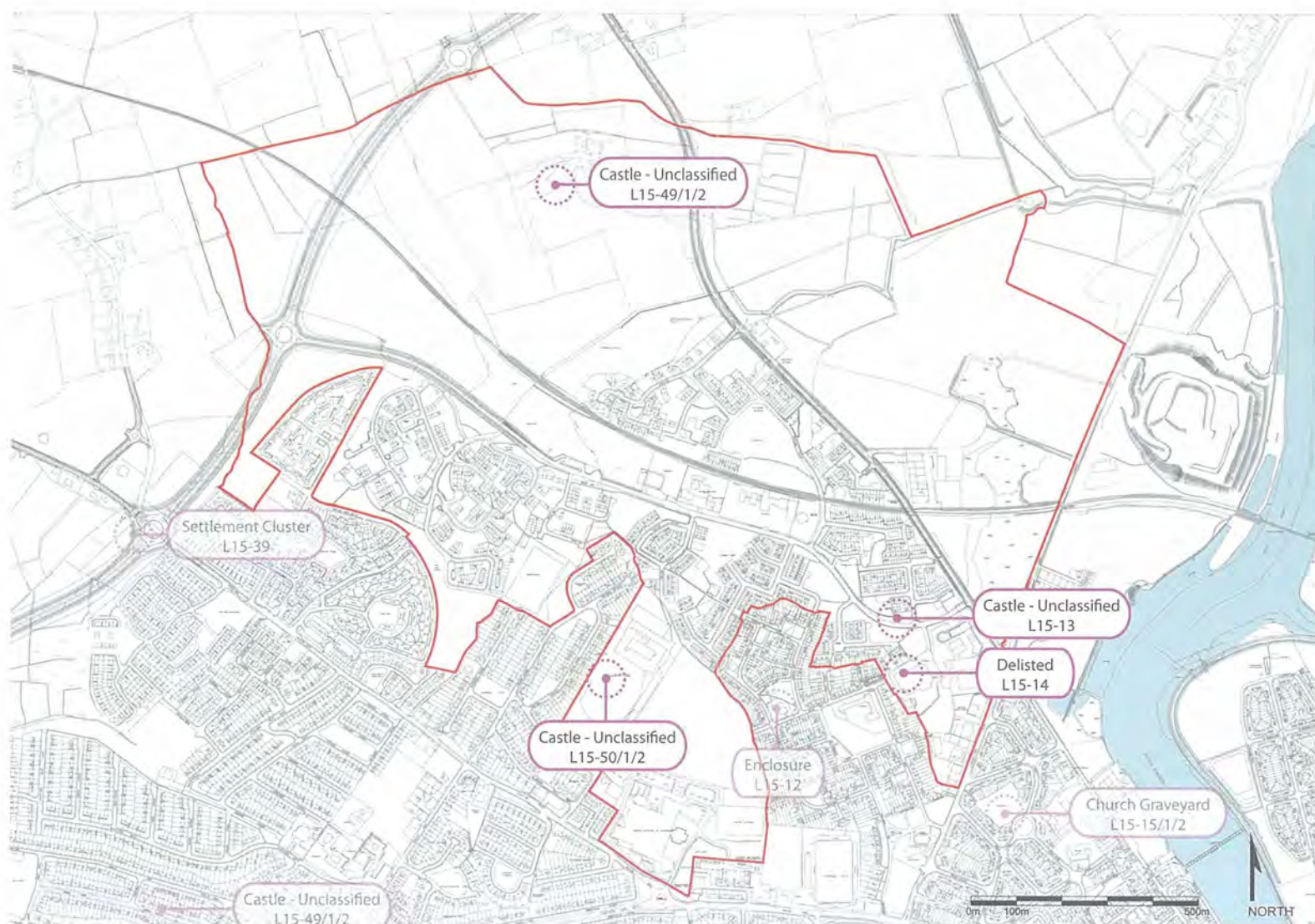


Figure 1.8: Extent of RMP Locations



4.1.11 Record of Monuments and Places

The Archaeological Assessment shows a small number of known archaeological sites distributed across the regeneration area.

The study identified three Recorded Monuments and one delisted site within the regeneration area, consisting mainly of mid to late medieval habitation or castle sites. All the Recorded Monuments have

statutory protection and should be regarded as constraints. Consultation with the Department of Arts, Heritage and the Gaeltacht (DAHG) is required from the outset to determine suitable buffer zones. However, it should be noted that none of the RMP sites within the Assessment Area have been designated as being of National Importance and thus of National Monument status.

The majority of RMP sites within the study area appear to date from the mid to late medieval periods and represent castle or fortified buildings and associated settlements. The locations of the records identified in Figure 1.8 may represent an estimation and as such there is potential for encountering these features anywhere in the general vicinity.

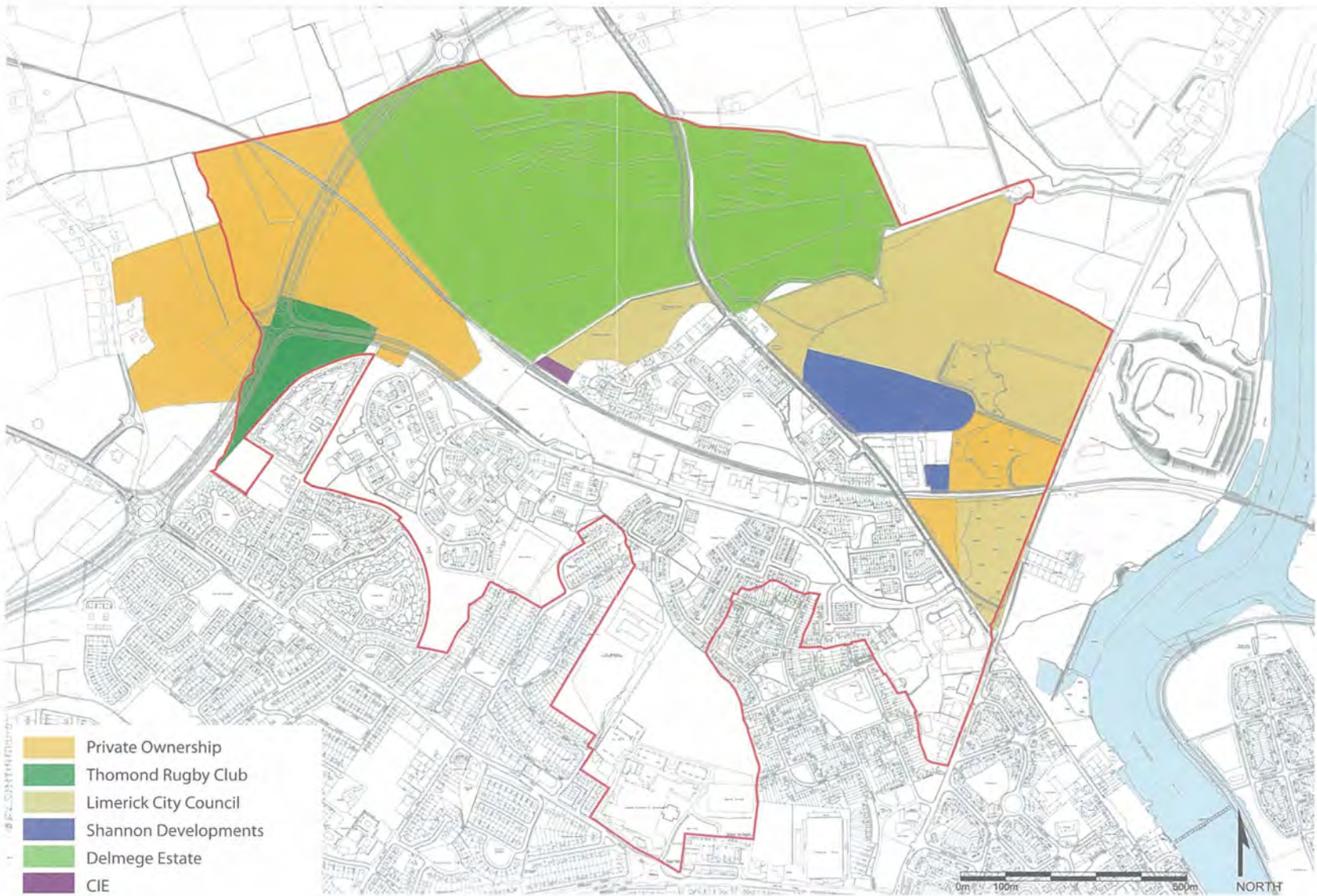


Figure 1.9: Land Ownership



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### 4.1.12 Existing Movement

Perhaps the biggest single movement issue for Moyross is the lack of connectivity between it and the surrounding neighbourhoods. Even within the study area, it is difficult to get about given the illegible block layout with each sub estate consisting of large cul-de-sacs. This situation is at the heart of most of the major movement problems of the area. Given this lack of permeability into and across the study area, access to employment and services is poor contributing to its social-economic problems.

### 4.1.13 Public Transport

Section 3.1.7 Transport of Section 3.0 Baseline Conditions and Analysis highlights that in common with other regeneration areas, Moyross exhibits low levels of car usage with a high percentage of private households having no car (50%) and a high use of public transport (11%), above the city average (7%).

Therefore, the continued provision of a good quality public transport system will be essential for the regeneration of the area. There are two Bus Éireann routes which provide a frequent public transport system to and from Limerick City Centre – including



Figure 1.10: Extent of Open Space

Delmege Estate in Moyross





the 302 with approximately 15 services daily (Ennis Road/Thomond Park, LIT, Caherdavin) and the 303 (Pineview/Craeval - City Centre) with approximately 8 services daily.

4.1.14 Open Space Provision

The 2008 Masterplan identified the River Shannon and its rich riparian and wetland habitats as a key strength of the Moyross area. There are significant areas along the River Shannon corridor, in close proximity to Moyross, which are designated as a proposed Natural Heritage Areas (pNHA) and Special Area of Conservation (SAC), including some of the

wetlands that lie between Long Pavement Road and the Knockalisheen Road. There are also two landfill sites in the area, as previously discussed on either side of Long Pavement Road and much of this area is susceptible to flooding.

Figure 1.10 shows the existing open space provision within Moyross. The regeneration areas contain large amounts of passive open space, much of which is underutilised and also open space that is not readily distinguishable as either public or private. There is also an under-provision of active play facilities for those under the age of 15.

4.1.15 Planning Context

Limerick City Development Plan, 2010 - 2016

The Limerick City Development Plan sets out Limerick City Council’s policies for the development of Limerick City to 2016 and beyond. The following policies specifically deal with regeneration and the Moyross area:

- To protect the integrity of all Natura 2000 sites in the vicinity. In this regard the development proposals developed shall be subject to HDAA and SEA.

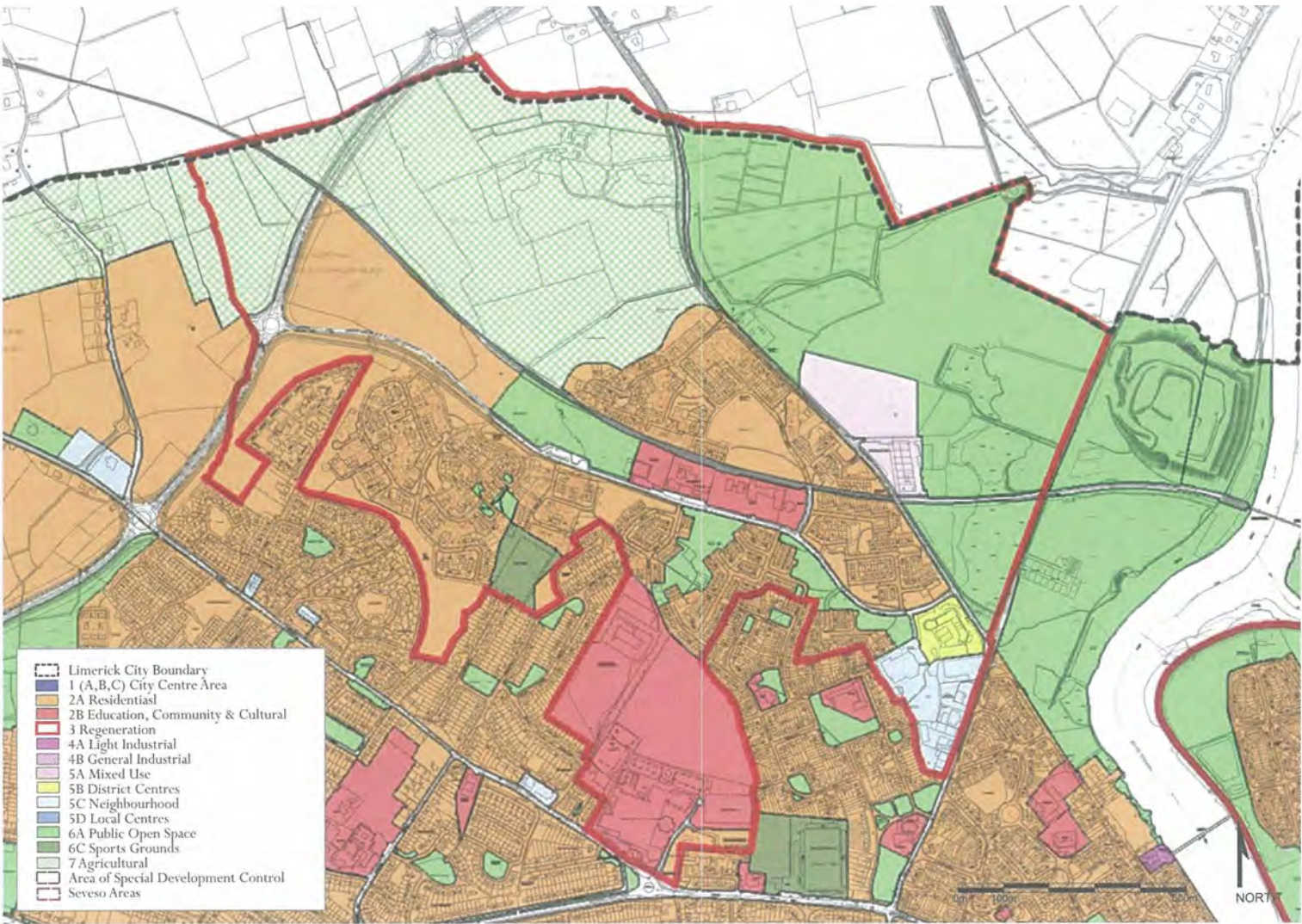


Figure 1.11: Land Use Zoning map extracted from the Limerick City Development Plan 2010-2016



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- To protect the existing biodiversity of the area and to provide interpretation for the public.
- To develop a large public park that connects the river Shannon, Moyross and Caherdavin for a range of active and passive recreational uses.
- To create a civic area of suitable scale in Moyross that can act as a focal point for community, civic and educational facilities including a rail station.
- To promote Watchhouse Cross as the District Centre for the area of Moyross, Kileely, Ballynanty and Parteen in accordance with the Mid West Retail Strategy.
- To complete the northern distributor road and to provide access from it to Moyross.
- To provide for greater linkages between Moyross and the adjacent areas to the west including the educational institutions.
- To protect the existing alignment of the Limerick/Galway rail line.

### 4.1.17 Key Challenges and Opportunities for Moyross

#### Challenges

##### Movement

A key challenge for the LRFIP will be addressing the severance experienced by residents of Moyross, as well as the lack of permeability and legibility within it. The low density and dispersed character of Moyross impacts on the viability of the existing public transport provision.

##### Open Space

The regeneration areas contain large expanses of passive open space, much of which is underutilised and also open space that is not readily distinguishable as either public or private. This presents a key challenge to Moyross. Much of the open space is poorly overlooked with a lack of active frontage (eyes on the street) which exacerbates anti-social behaviour. There is also an under-provision of active play facilities for those under the age of 15.

##### Topography

The topography of some sites, within Moyross, is challenging and will need to be approached through thoughtful design.

##### Flooding and Drainage

The following challenges exist within Moyross in relation to flooding and drainage:

- To the east of Moyross is a significant area of wetland, known as Knocknalisheen Marsh, which is prone to flooding.
- Proposed bridges or culverts crossing the Crompaun River or its tributaries, as part of the physical framework plan for Moyross, will be subject to the approval by the Office of Public Works.
- Surface water run-off from any proposed development will be subject to pollution control and attenuation before it is discharged to the receiving water. Regard should be given to Sustainable Urban Drainage Systems Principles (SUDS).
- All future developments shall have regard to the Flood Risk Management Guidelines (DEHLG/OPW), Shannon Catchment Flood Risk Assessment and Management (forthcoming) and SEA.

##### Special Area of Conservation

A key challenge in Moyross is to ensure that any development, proposed as part of the LRFIP, does not have a negative impact on the water quality and habitats within Moyross or downstream of the area.

##### Records of Monuments and Places

Although there are no identified sites of cultural heritage within Moyross, there is always the possibility of subterranean archaeological remains. This presents a challenge for future development within the area. Therefore consultation with the Department of Arts, Heritage & the Gaeltacht (DAHG) is required at project level and, if required, an on-site archaeologist will monitor excavation works at project level stage.

##### Physical Character

The following key challenges exist in Moyross in relation to the physical realm:

- Poor accessibility with adjacent neighbourhoods which has resulted in Moyross becoming physically, economically and socially isolated
- Over-provision of underutilised public open space
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites, which currently detract from the overall appearance of the estate
- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and

security of the area

#### Opportunities

##### Movement

Efforts to open up adjoining residential areas is key and will require consultation with stakeholders and residents within the area. The extension of Moyross Avenue westwards to Coonagh, to link to the strategic northern distributor road is a strategic opportunity which will increase connectivity as well as open up the potential for inward private investment which in turn will facilitate tenure diversification.

##### Open Space

Much of the existing amenity land, north of the railway line, is in public ownership and provides an opportunity to create an integrated linear park with active play facilities for all age groups which would be of regional significance. Furthermore, the delivery of this would contribute greatly to the identity of Moyross.

##### Topography

There is an opportunity to design sensitively within areas that have challenging topography to maximise sightlines and views within and from outside the area.

##### Flooding and Drainage

A key opportunity exists to preserve the wetlands Knocknalisheen Marsh in its present location for passive amenity. It will be necessary to avoid impacting on the existing ground water levels at this location.

##### Special Area of Conservation

There is an opportunity to sensitively incorporate sites with statutory environmental designations as part of the an integrated linear park. An Environmental Impact Assessment (EIA) was carried out in relation to the Coonagh-Knocknalisheen bypass and the Environmental Impact Statement (EIS) was assessed by An Bord Pleanála (ABP). The planning application has been approved and there is an opportunity to incorporate key conditions, mitigation measures into the physical framework plan for Moyross.

##### Physical Character

There is an opportunity to:

- Restructure the existing layout to address gap sites
- Develop existing poor quality frontage sites and vacant land to improve visual quality











- Consider intensive interventions to remove units to improve legibility and permeability
- Address existing poor housing conditions
- Address the lack of integration between areas of new and existing housing
- Remove environmental black spots to the rear of blocks
- Develop streetscape improvements to enhance the public realm and create pedestrian friendly environments
- Provide additional soft landscaping to soften the existing hardness of the public realm
- Introduce new frontage development to non-overlooked routes

## 4.2 St. Mary's Park

### 4.2.1 Study Area

King's Island extends over an area of 170 acres and is bounded on the east by the River Abbey and on the west by the River Shannon.

The study area occupies an attractive island site to the north-east of Limerick City centre. Historically, King's Island would have been an important location at the divergent point of the Shannon and the Abbey Rivers. Today, it represents an important asset to the city, particularly in terms of its ecological importance, archaeological significance, and tourism potential. However, it also functions as an important residential and community environment, containing the large housing estate of St. Mary's Park to the north and numerous terraces of houses to the south. There are a number of modern apartment blocks to the south of the island, in proximity to the riverfront.

### 4.2.2 Existing Physical Context

#### Land Use

King's Island is an area which contains a variety of land uses including residential, administrative, ecclesiastical, educational, retail, business and tourism. While the southern part of the island is a lively area with a mix of land uses, the area to the north is predominantly residential and due to its poor transport connections, is disconnected from the rest of the city. This has resulted in the isolation of St. Mary's Park.

Nicholas Street is the core town centre street with retail opportunities, connecting the southern part of King's Island to the Castle. It is an important thoroughfare in the regeneration of the area. However,

at present, there are numerous vacant and under-utilised sites and buildings along this street. In terms of community facilities and amenities in the area, there is an upgraded community centre in to the south-west of the island and two playing pitches (Star Rovers) to the east (on short term lease from Limerick City Council).

Although there are extensive areas of open space to the south, it is generally low-lying and liable to flooding. There is, however, a river-side walkway on three sides of the island which has been upgraded from Verdant Place, along the western, northern and eastern shores of King's Island. The recent opening of a new community crèche (2011) adjacent to the Military Cemetery has improved the level of childcare educational facilities in the area. Existing educational facilities include a boys and girls primary school, and two Gael Scoileanna located to the south of the island.

There is a Garda station in Mary Street that has restricted opening hours and is in poor physical condition. The County Courthouse and District Court are located to the west of the island, in proximity to City Hall which houses the offices of Limerick City Council. King's Island features a delicate ecological environment which has been designated as a Special Area of Conservation.

In addition, the island has a significant architectural and archaeological heritage, containing the remains of the Limerick City Walls and a number of surviving buildings from the 12th and 13th Centuries including King John's Castle and St. Mary's Cathedral. The southern portion of King's Island is regarded as the historic core of Limerick City and consequently has strong tourism potential.

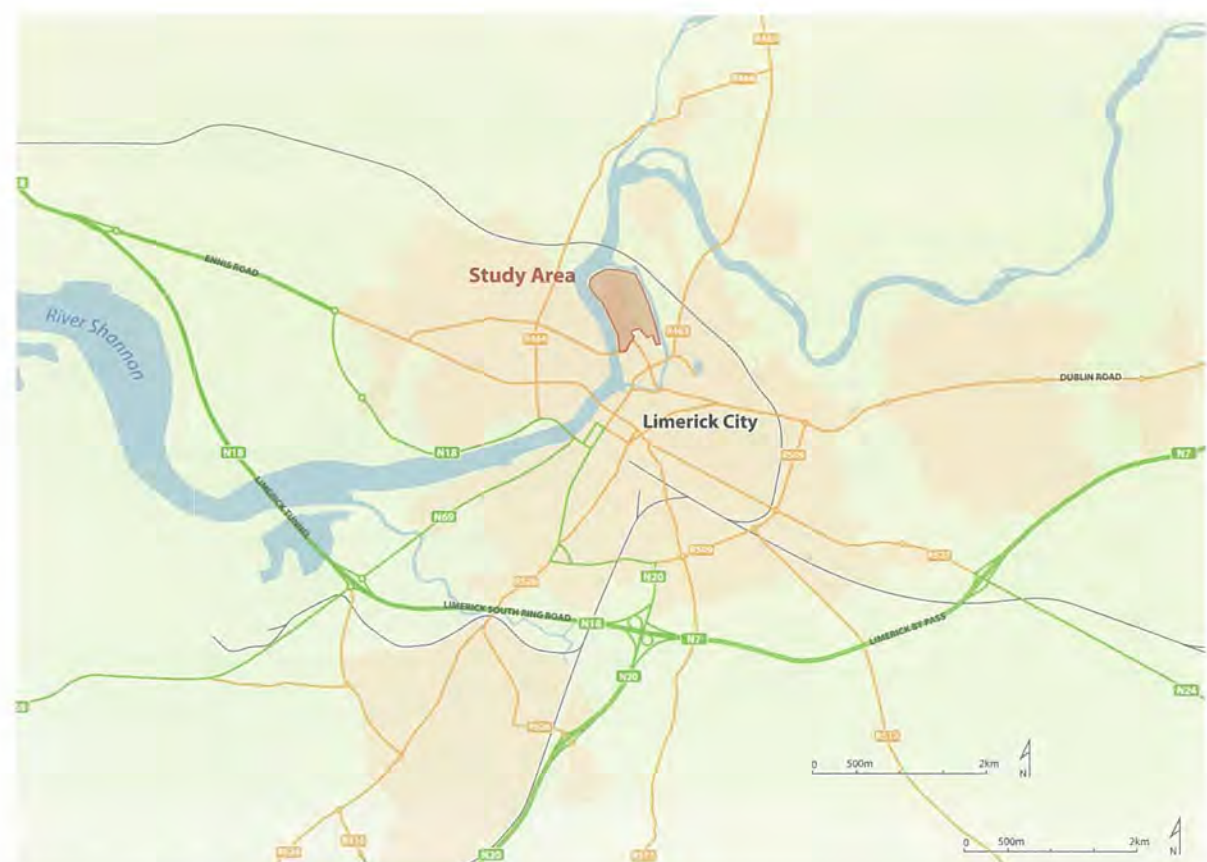


Figure 1.12: St Mary's Park in Context