

Local Area Plan for Ashtown-Pelletstown

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Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council





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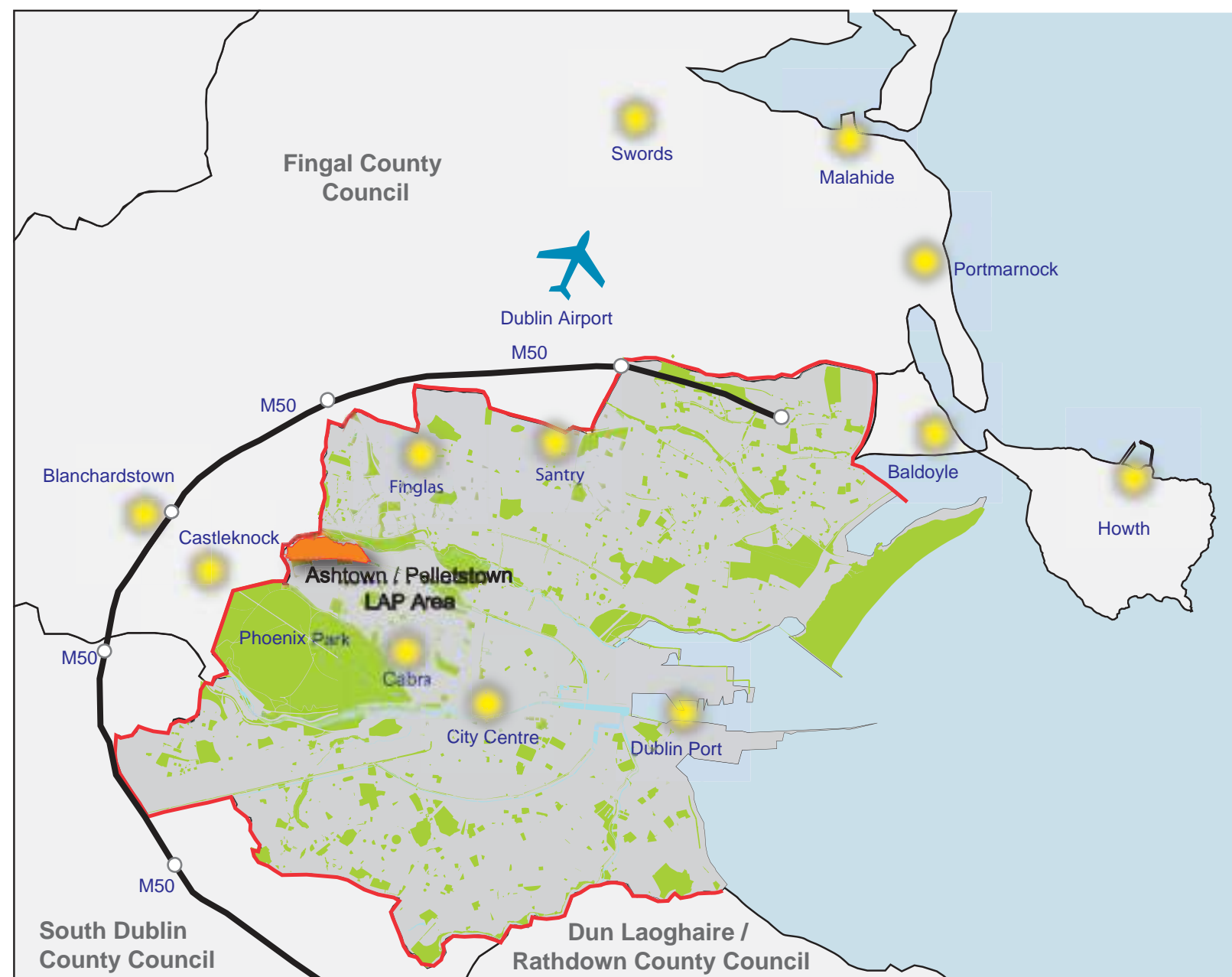
Chapter 1: Introduction & Policy Context

1.1 Introduction

The Ashtown-Pelletstown area covered by this Local Area Plan (LAP) is located only four kilometres northwest of the city centre. Positioned south of the River Tolka and north of the Royal Canal, the amenities of the Phoenix Park are within walking distance, and the area is also well connected to the city centre - having both public bus and rail connections. The nearby M50 route also provides good access to many areas of the city and outlying areas, including Dublin Airport (8km away) and suburban centres including Swords and Blanchardstown. In terms of built context, the area adjoins some longer established areas at Ashtown/Navan Road, Cabra, Finglas and Castleknock, and benefits from a range of community and commercial services in this wider area .

Within the area, much residential and commercial development has occurred to date on foot of an Action Plan prepared in the year 2000, which set various parameters to guide development. As a result, the area is now the focus of a growing community with new supporting services – yet substantial areas of land remain available for development and sustainable integration both into the Ashtown-Pelletstown area, and into the wider urban fabric of the city. Having been identified in the Dublin City Development Plan 2011 – 2017 as an area for which a Local Area Plan will be prepared, this plan for the future development of the area now takes account of best practice and sustainable development approaches. This involves focusing on a range of physical, economic, social, and environmental objectives in order to deliver a high quality environment.

Map 1.1: Strategic Context Setting of Ashtown/Pelletstown





1.2 Extent of the Plan Area

Bounded by the River Tolka to the North and the Sligo rail line to the south, the plan area is broadly rectilinear, extending from the Ashtown Road on the western side, to just east of the Ratoath Road at the eastern end. The boundary follows that of Dublin City Councils functional area for sections along the western and north-western sides, where it meets largely rural areas of Scribblestown and Dunsink, both of which are within Fingal County Councils functional area.

The northern boundary is defined by the Tolka River set in parkland, which forms part of the larger Tolka Valley Park, and further north, on more elevated lands are residential areas of Finglas South. The western boundary follows a largely developed section of Ashtown Road just north of Ashtown Train Station, and the eastern boundary marks the edge of Dublin Industrial Estate, - a long established industrial area. The Royal Canal, a recognisable feature of the area, runs parallel to the rail line close to the southern boundary, and is an attractive amenity extending both towards the city centre and into Fingal.

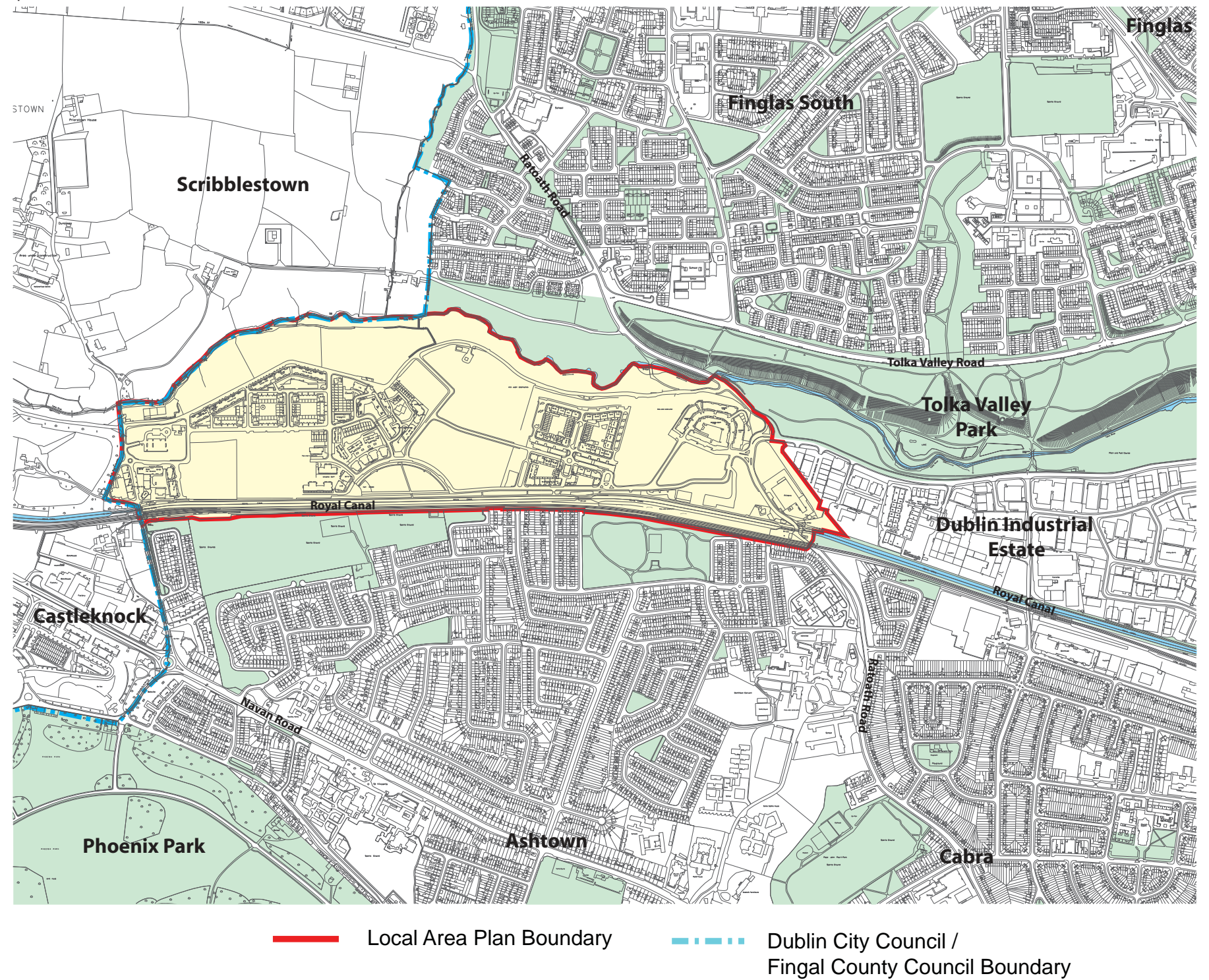
1.3 Rationale for the LAP

In the year 2000, a non statutory plan for the area titled 'Pelletstown Action Area Plan' was produced by Dublin Corporation, (now Dublin City Council), setting out a design led approach. The current development plan now contains a core strategy which sets out over-arching principles relating to development including the delivery of statutory LAPs. These LAPs, inclusive of Ashtown / Pelletstown, are crucial to the delivery of the core strategy.

The area is designated as one of nine Key Developing Areas (KDAs) under the development plan core strategy. These KDAs are identified as the main growth areas of the city over the lifetime of the plan. Pelletstown has also been designated one of 14 Strategic Development Regeneration Areas (SDRAs) dedicated to comprehensive development or regeneration. (See S1.6.2 for details).

The local area plan process presents a fresh opportunity to assess and evaluate development to date with a view to setting out a development framework for the medium to long term, focusing on a range of important areas relating to both physical development and community aspects. Community and stakeholder inputs have informed the plan preparation process.

Map 1.2 Location Context of Ashtown / Pelletstown





1.4 Local Area Plan Preparation Process

The process of preparing an LAP can be summarised in a number of key stages:

- (1) Pre-draft stage of research and consultation;
- (2) Draft LAP Preparation Phase
- (3) Public Notice and LAP Public Display
- (4) Preparation of Manager's Report on Submissions/ Observations and public display of any alterations.
- (5) Making the Adopted Plan.

An overview of these stages for this LAP is outlined below.

Stage 1 : Pre-Draft Research and Public Consultation Phase.

Preparing the LAP began with initial research and discussion with elected City Councillors. A workshop was held on 18th September 2012 with Councillors representing the Central Area Committee in advance of the publication of the pre-draft consultation issues paper. The Pre Draft Local Area Plan public consultation was launched on Friday the 28th of June 2012 with the publication of a public notice and the Issues Paper document. The pre-draft issues paper was put on public display for a six-week period from the 29th June to 10th August 2012 with public notification by way of a newspaper notice.

The paper was available for viewing at a number of locations throughout the city including the Civic Offices on Wood Quay, the Central Area Offices in Cabra and Finglas and the public libraries in Finglas and Cabra. In addition, members of staff were available locally in Pelletstown Community Centre (3rd July & 7th July 2012) and in Cabra Parkside Community Centre (10th July 2012), to assist with any queries in relation to the plan. In total 20 submissions were received.

Stage 2: Draft LAP Preparation Phase. The pre-draft submissions, consultation with landowners, local representatives and resident groups combined with national, regional and Council policy all have inputted into the content of the draft LAP. The content is also informed by other key requirements, such as Flood Risk Assessment, Strategic Environmental Assessment and Appropriate Assessment.

Stage 3: The draft plan was placed on public display for a period of 6½ weeks from 3rd May 2013 to 18th June 2013 inclusive during which time submissions and observations were invited. Public displays were erected where the draft plan was available for viewing in Dublin City Council's Civic Offices on Wood Quay and in the Finglas Area Office, Mellowes Road Finglas. The draft Plan was also available for viewing in Finglas and Cabra Libraries and also in the Cabra Area Office.

An advertisement was placed in a national newspaper announcing the preparation of a Local Area Plan and detailed where it could be viewed as well as advising on how a submission could be made.

A series of consultation seminars were organised and held (see Table 1.1)

Table 1.1 Public Consultation Seminars

Day	date	time	Venue
Thursday	16th May	4.15-7.00 pm	Community Room, River Centre at Rathborne Dublin 15
Monday	20th May	4.00-7.00 pm	Laurence O'Toole Room (Rear of Church) Parish Church, Our Lady Help of Christians, Navan Road, Dublin 15
Thursday	23rd May	4.15-7.00 pm	Community Room, River Centre at Rathborne Dublin 15

A copy of the draft LAP was sent to bodies prescribed under the Planning and Development Act such as the Department of Education and Skills (DES) and the Department of Environment, Community and Local Government (DECLG).

Stage 4: A Manager's Report was prepared on the submissions received during the public display period. In total 18 submissions were received. A workshop for Local Area Councillors was held on the 11th July 2013 in Civic Offices.

The Managers Report was then circulated to City Councillors on Tuesday 23rd July, for their consideration and a deadline of the 31st July set for the receipt of motions. The managers report on councillors motions and also the managers report on submissions received (during the public consultation period) were considered at the monthly Council meeting on September 2nd. The Council resolved to alter the Draft LAP in accordance with the recommendations of the two reports, and to place the proposed material alterations on display for a four week period in accordance with relevant legislation. The alterations were accompanied by both SEA and AA assessments of the alterations.

The consultation period took place from 23rd September to 21st October 2013. Nine Submissions and observations received during this period were considered and a subsequent managers report was submitted to elected members for their consideration during November.

Stage 5: Making the Adopted Plan. Following the City Councillors consideration of the draft plan and the managers report on submissions received during the public display of materials alterations, the LAP was officially made at a meeting of the full council on December 2nd 2013.

An LAP is a six year document, which can be extended to 10 years by the City Council. During its life the LAP may be amended or revoked following statutory public consultation processes.

Public Consultation

Consultation is a critical part of the process of preparing an LAP. The plan is prepared with input from many people and organisations including:

1. Elected Members of the City Council
2. Members of the public
3. Departments within the City Council
4. Residents' associations, community groups, non-governmental agencies, etc.
5. Prescribed bodies, e.g. the Department of Environment, Community and Local Government (DoECLG), Department of Education and Skills (DES) etc.





1.5 Statutory Context for the LAP

The overarching theme of national planning policy which informs this LAP is the consolidation and sustainable use of land in urban areas, particularly urban environments well served by public transport. Urban consolidation is a key component in the achievement of sustainable development economic competitiveness, community well being, environmental protection and also to achieve full economic value from investment in public infrastructure. This LAP is informed and in keeping with the hierarchy of national, regional and city planning policy, the key provisions of which are detailed below. The purpose of this LAP is to translate national and regional policy to the local level, in accordance with the provisions of the Dublin City Development Plan 2011-2017.

The Ashtown/Pelletstown LAP aims to be consistent with the guidance, strategies and policies at national and regional level, as well as the development plan core strategy and its policies and objectives. This approach ensures that the LAP takes cognisance of and represents an appropriate fit with the higher level plans. It will also result in a hierarchy of plans from national to the local level relevant to the Ashtown/Pelletstown area. The plans and policy documents which have informed the preparation of this LAP include the National Spatial Strategy 2002-2020 (NSS), the Regional Planning Guidelines for the Greater Dublin Area 2010-2022, (RPGs), the Government's Smarter Travel - A Sustainable Transport Future 2009-2020, the National Development Plan 2007 - 2013, the National Climate Change Strategy 2007-2012 and the Dublin City Development Plan 2011-2017. The national and regional level policies have all been integrated into the City Development Plan which in turn directs and guides the strategy for the LAP. The LAP also takes account of the statutory retail Guidelines published by the DOEHLG (Guidelines for Planning Authorities – Retail Planning' published in April 2012).

National Spatial Strategy 2002 – 2020

The National Spatial Strategy (NSS) recognises that Dublin, as the capital city, plays a vital national role and that the performance of its economy is essential to the success and competitiveness of the national economy.

In order to sustain this role as the engine of the economy, it advocates the physical consolidation of Dublin, supported by effective land-use and transportation policies, as an essential requirement for a competitive Dublin.

The NSS places particular emphasis on the physical consolidation of the metropolitan area, which incorporates the entire functional area of Dublin City Council. There is also an emphasis on achieving intensification without compromising amenity or environmental quality. This emphasis is particularly relevant in the context of this local area plan, having regard to substantial areas of undeveloped and lands.



National Development Plan 2007-2013

The National Development Plan 2007-2013 (NDP) sets out a regionalised development strategy supported by a multi-annual investment commitment in the key areas of education and training, infrastructural development, the productive sector and the promotion of social inclusion. The NDP supports a strong and competitive Greater Dublin Area so that it continues to drive its own development and that of the state through improved and greater public transport mobility, development of more compact and sustainable communities and high quality international transportation connections.



Regional Planning Guidelines, Greater Dublin Area 2010 – 2022

The Regional Planning Guidelines for the Greater Dublin Area 2010 - 2022 (RPGs) translate the national strategy to regional level with an emphasis on Dublin as the driver of national development and the need to physically consolidate the growth of the metropolitan area, with clear direction for greater integration of land-use and transport planning.

The RPG settlement hierarchy seeks to prioritise and focus investment and growth to achieve integration in services, infrastructure, transport, economic activity and new housing. This approach reflects the prioritisation of public transport infrastructure, reducing the need to travel and a reduction in greenhouse gas emissions as set out in a number of government policy documents such as Transport 21, Smarter Travel, and the National Climate Change Strategy.



Retail Strategy for the Greater Dublin Area 2008-2016

The purpose of the retail strategy is to guide the activities and policies for retail planning across the seven Councils of the Dublin and Mid East Region and to set out a coordinated, sustainable approach to the assessment and provision of retail within the GDA. This is to ensure retail is provided in tandem with population growth on suitable sites, and in areas of proven need. This is to safeguard existing town centres from potential detrimental impacts.



Smarter Travel – A Sustainable Transport Future 2009 – 2020

The overarching aim of the document is that by 2020 future population and economic growth will occur predominantly in sustainable compact locations. It sets out how the government's vision of sustainable travel and transport in Ireland by year 2020 can be achieved. A target of reducing car based commuting from 65% to 45% nationally by 2020 is set.

Five key goals of 'Smarter Travel – A Sustainable Transport Future' are to:

1. Reduce dependency on car travel and long distance commuting
2. Increase public transport modal share and encourage cycling and walking
3. Improve quality of life and accessibility for all
4. Improve economic competitiveness through increased efficiency of the transport system, and
5. Reduce green house gas emissions and dependency on fossil fuels.



Greater Dublin Area Draft Transport Strategy 2011 - 2030: 2030 Vision

The goal of the Strategy is to support the GDA in meeting its potential as a competitive, sustainable city region with a good quality of life for all. The strategy represents the top level of transport plans within the regional hierarchy that will include an implementation plan and a strategic traffic management plan.

The strategy identifies key transport principles important to quality of life, including:

- a strong focus on pedestrian and cycling movement for local trips,
- exploring the ability of public transport to cater for the mass movement of people while using a fraction of the fuel and street space required for cars,
- intensification and consolidation of towns and cities by building on brownfield and vacant land or reusing underutilised lands





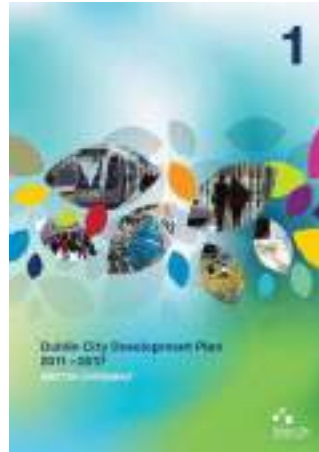
1.6 Dublin City Development Plan 2011-2017

The Dublin City Development Plan 2011 – 2017 provides a clear spatial framework to guide the future growth and development of the city in a coherent, orderly and sustainable way, framed on a vision of sustainable city living and a core strategy seeking –

- a compact, quality, green, connected city
- real economic recovery, creative networks and a smart innovative city;
- the creation of sustainable neighbourhoods and communities

The development plan strategy for the city has a strong policy emphasis on the need to gain maximum benefit from existing assets such as public transport and social infrastructure, through the continuation of consolidation and increasing densities within the existing built footprint of the city.

This is in line with the regional planning guidelines policy of consolidation of the metropolitan core. A further key aspect is that future expansion whether housing or mixed-uses, occurs in tandem with high-quality rail based public transport and on a phased basis within the context of local area plans.



1.6.1 City Development Plan & Land Use Zoning

The vast majority of the lands are zoned Z14 'to seek the social, economic and physical development and/or rejuvenation of an areas with mixed use, of which residential and 'Z6' would be the predominant uses'. Z6 which aims 'to provide for the creation and protection of enterprise and facilitate opportunities for employment creation' applies to a former industrial site on the eastern side of the plan area.

1.6.2 Development Plan Strategic Guidance

a. Key Developing Area (KDA)

KDAs are areas in the city with substantial development capacity and the potential to deliver the residential, employment and recreational needs of the city. All the KDA locations are served or proposed to be served by high quality rail-based public transport and relate to a zoning objective which seeks the social, economic, physical development or rejuvenation of an area with residential, employment and mixed-uses.

The development plan core strategy sets out the relative share of housing growth and identifies the employment / commercial capacity of each KDA. For the Pelletstown KDA, the residential capacity is estimated at 1,800 housing units on a site of 41 Ha (Table 3.3 Development Plan). Given that the area is zoned for mixed uses, significant housing development will take place in association with other uses such as retail, office, or community uses.

b. Pelletstown Strategic Development and Regeneration Area (SDRA)

The development plan seeks to realise the full potential of the SDRAs. These are areas with the potential to deliver a significant quantum of residential development and ancillary commercial and service development. To this end, guiding principles have been set out in the development plan specifically for the Pelletstown lands, as set out in the table below:

Map 1.3 - Extract from Dublin City Development Plan

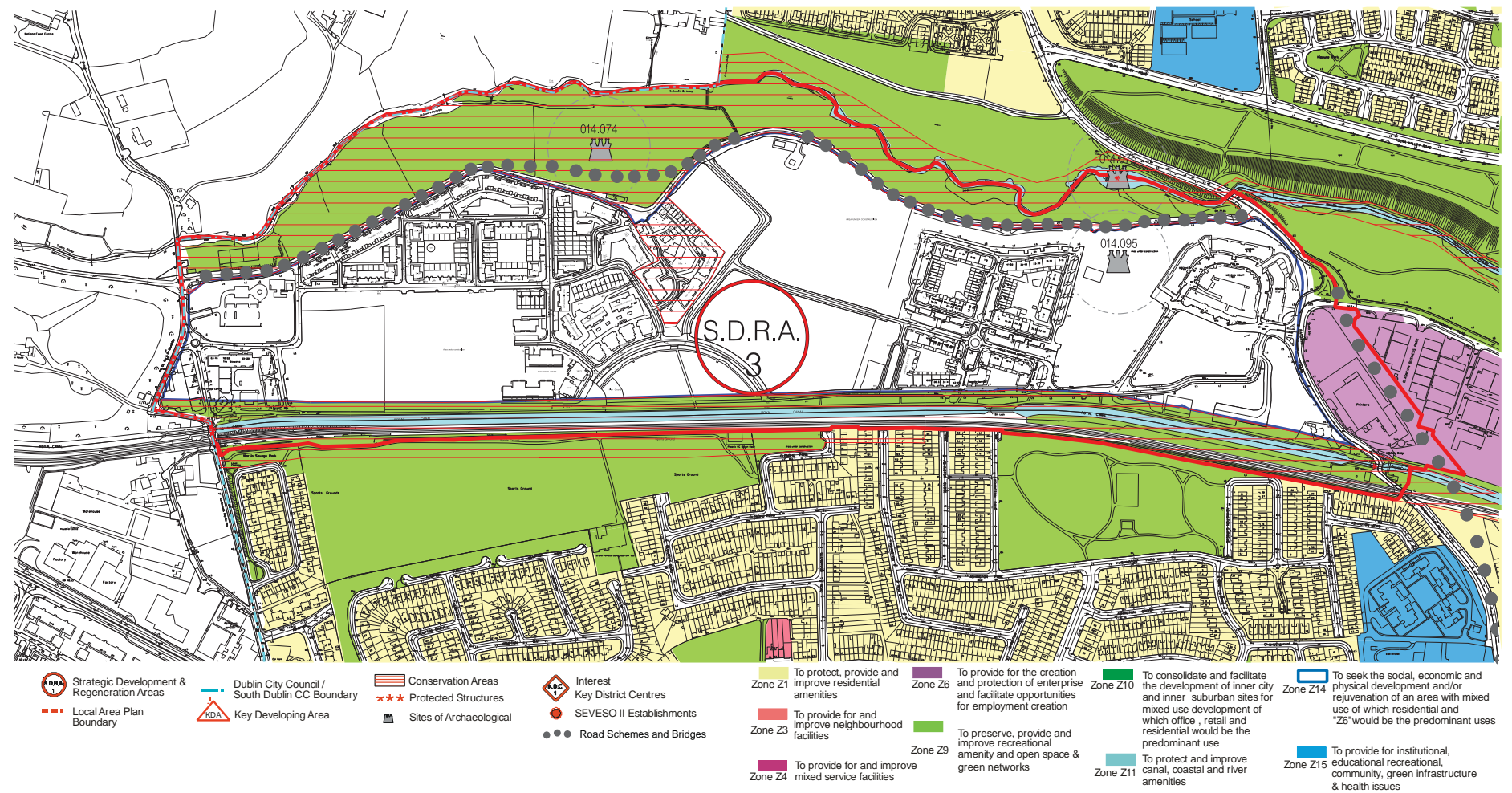




Table 1.2 SDRA Guiding Principles

Pelletstown Strategic Development and Regeneration Area (SDRA): Guiding Principles	
1	To provide for a sustainable living environment, prioritising public transport and mixed use.
2	To achieve a density of development that can be met by the public transport, social, educational, recreational and community infrastructure available in the immediate area.
3	To ensure that buildings in the area are such that they do not facilitate social isolation, detachment or militate against opportunities for regular engagement with neighbours.
4	To ensure social and public amenities and spaces do not facilitate anti-social behaviour.
5	To ensure that development is provided in a context that does not overwhelm the surrounding areas and residents.
6	To develop a coherent spatial structure, based on a hierarchy of linked streets, public spaces, and design in keeping with the natural and other adjacent amenity areas of the Phoenix Park, the Royal Canal and Tolka Valley. The main components of this spatial structure are; <ul style="list-style-type: none"> • Two high quality village centres, one to the east and west respectively, as the focus for mixed use development and community activities. • A tree lined canal-side boulevard linking the two village centres and providing the potential for developing a range of different experiences, including recreation uses. • A central park to provide the setting for leisure uses and community activities. • North/south linkages facilitating good access to public transport and to the amenity of the Tolka Valley.
7	To promote the creation of a high quality public domain by establishing a high standard of design in architecture and landscape architecture.

c. *The Strategic Green Network*

The Ashtown / Pelletstown area is positioned on the Dublin Strategic Green Network, having immediate links to the Tolka Valley and Royal Canal. The LAP will facilitate the long term enhancement of amenities and bio-diversity as set out in Chapter 6, of the development plan, 'Greening the City', and will have a strong focus on green infrastructure.

d. *Height Strategy*

The Development Plan, in providing guiding principles on building height, defines the area as 'low rise' pending the adoption of an LAP. This limits proposals to 6 storeys for residential and 7 for office. Through the LAP process however, the Development Plan recognises scope for the delivery of a limited number of mid-rise buildings (up to 16 storeys for residential and 12 storeys for office and an upper limit of 50m), particularly in proximity to public transport hubs. (please refer to height section 4.5.4)

1.6.3 Implementing the Core Strategy

The Regional Planning Guidelines for the Greater Dublin Area prescribe housing unit allocations that inform the Core Strategy of the City Development Plan. In shaping the Core Strategy the Development Plan identified Key Developing Areas as being of significant importance in delivering housing needs for the City, of which this area is one. This LAP provides for the complete build out of the LAP area to accommodate a population between 6300 and 7200 and approx.3040-3,400 housing units. These figures are shown as a range because the implementation of the LAP requires the taking into account a number of specific standards and objectives regarding the quality of the housing types, mix of unit types, the provision of adequate community and recreation spaces and the accommodation of infrastructure needs, including water attenuation and Suds within each housing area. This area will, over the lifetime of the Development Plan and beyond, provide a sustainable location for new housing development at appropriate densities within the catchment of high quality public transport service, thus meeting the core policy requirement of the RPGs and the Core Strategy of the Development Plan.

In relation to figures provided in Table 3.3 of the City Development Plan, which gives a breakdown of planned core strategy housing figures for all Key Developing Areas in the city, the targets now set within the Ashtown-Pelletstown Plan and also planned figures in recent LAPs and SDZs, are considered consistent with the said core strategy.

1.7 Other Relevant Plans

Pelletstown Action Area Plan (2000)

The action area plan set out a strategy for the lands at Ashtown/Pelletstown, and included an urban design framework. The plan detailed a diverse mix of land uses and indicative block layouts along with proposals for improvements to the public realm such as new open spaces. Indicative residential densities were also set out. Full development of the plan lands was expected to generate a population of 10,000 people housed in mixed residential typologies, within walking distance of good rail and bus transport links and serviced by shops, small offices, workspaces and community facilities. The objectives of the action plan were:

- To encourage the creation of a sustainable living environment.
- To optimise the use of public transport.
- To achieve a sufficient density of development to sustain public transport and create urban vitality.
- To provide an urban design framework to generate imaginative responses in the development of a viable and vibrant living environment.
- To promote the creation of high quality urban spaces where art, architecture and landscape architecture are dynamic components.

Waterways Ireland - Environment and Heritage Policy

Waterways Ireland are preparing an Environment and Heritage Policy. The purpose of this document is to guide the development and management of the waterways in a sustainable manner whilst ensuring the protection of the environmental and heritage resource. Policies adopted may impact at a further date upon development within the LAP area given its proximity to the Royal Canal.

Fingal County Council County Development Plan 2011-2017.

The area that borders the LAP area, to the west and north-west is within the Fingal County Council administrative area and under their 2011-2017 development plan is zoned 'Objective HA' 'to protect and enhance high amenity areas', and covers the lands of the Tolka Valley and those between the Tolka and the Canal. Adjoining these lands, the bulk of the lands within the M50 to the immediate north of the LAP are zoned 'OS'- to preserve and provide for open space and recreational amenities'. This includes most of Scribblestown Lane, Dunsink Observatory and the former Dunsink civic amenity site. Two local objectives seek to protect views and to undertake a study of the lands bounded by Cappagh Road, the M50, N3 and the City boundary. Various policies and objectives within the Development Plan relate to these lands, including a current project to develop a Greenway strategic regional cycling route along the Royal Canal towpath between Ashford Bridge and Granard Bridge. This, along with the zoning policies and other objectives of the County Development Plan have been taken into account in the drafting of this LAP.

Fingal Sludge Management Plan

The current Sludge Management Plan (SMP) for Fingal County Council was published in 2002 and considered all types of non-hazardous sludge arising and predicted to arise in Fingal over the 20 year period to 2020 and proposed sustainable management strategies for them. This SMP needs to be reviewed in the context of the proposal for a new Regional Wastewater Treatment Plan as part of the Greater Dublin Drainage project. The 2002 SMP was completed prior to any plans for the Greater Dublin Drainage project being envisaged. The objective of the GDD is to identify a location in the northern part of the Greater Dublin Area for a regional Wastewater Treatment Plant (WwTP) associated marine outfall location and an Orbital Drainage System linking the plant to the existing regional sewer network. The GDD project proposes to divert wastewater flows from the northern and western parts of the Ringsend WwTP drainage catchment to the proposed Regional WwTp for treatment. Therefore sludge currently generated at Ringsend WwTP from the treatment of these wastewaters flows will in the future be generated at the Regional WwTP instead. The Draft review was produced in March 2013 by Jacobs. As part of this review a Strategic Environmental Assessment was required. An Appropriate Assessment is required to be carried out also on this project as it may affect a Natura 2000 site (either alone or in combination with other plans or projects). An NIS was produced for the Fingal Management Plan. The NIS has determined that the components of the Fingal SMP which may affect the Natura 2000 network can be readily mitigated and would not result in any likely significant effects. The AA process was completed for Stage 1 and 2 and was not required to be progressed to Stage 3 and 4.

Chapter 2: Site Context and Analysis

2.1. Description of the Area and Adjoining Lands

The lands at Ashtown/Pelletstown, located at the north-western boundary of Dublin City Councils administrative area are positioned immediately to the north of the suburb of Ashtown, east of Castleknock, and south of Finglas. The southern boundary is formed by the Maynooth rail line, which separates it from the Ashtown/Cabra residential areas. The eastern and western boundaries are delineated by the route of the proposed realignment of Ratoath (eastern side) and the Ashtown Road (western side). The northern boundary is the River Tolka, positioned within Tolka Valley Park.

The area benefits from access to the Royal Canal on the southern side and the Phoenix Park to the southwest. Road access to the subject lands is generally from the N3 Dublin-Cavan National Primary route, as well as from the more local road network comprising the Ratoath Road, Ballyboggan Road, Ashtown Road and River Road. The existing Ashtown rail station is located at the south-west corner of the plan area. Playing fields and other areas of open space lie immediately to the south of the railway line. To the east of the plan area is Dublin Industrial Estate and a range of industrial lands in active use and extending to Broombridge rail stop and beyond (see map 2.2).

Whilst within distinct areas, development is generally dispersed within the LAP area and comprises mainly residential with some mixed uses, the latter located mainly around the eastern and western nodes.

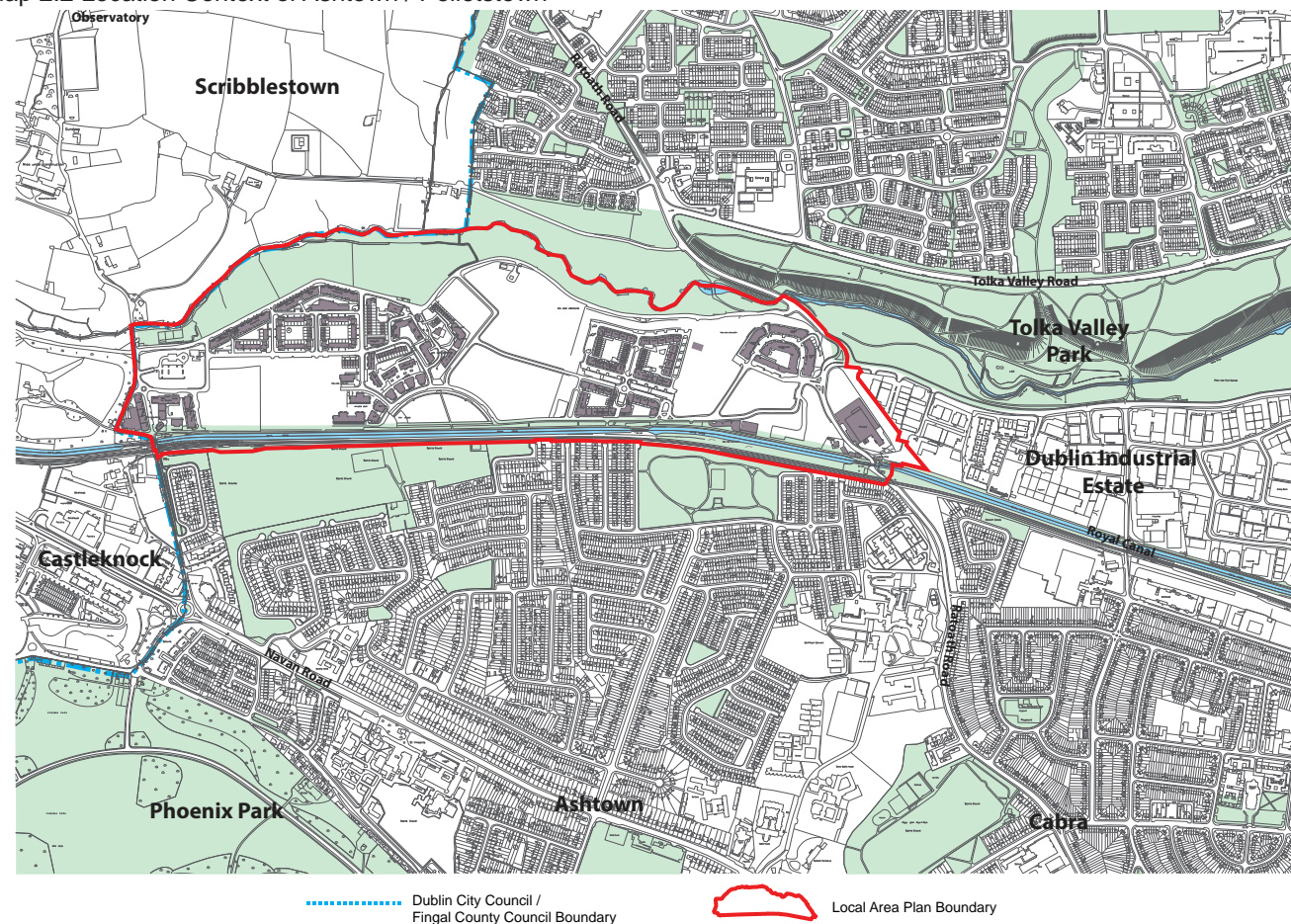
Land Use Zoning

The predominant land use zoning of LAP lands is Z14 ; 'To seek the social, economic and physical development and/or rejuvenation of an area with mixed use of which residential and "Z6" would be the predominant uses'. The only exceptions to the above are Tolka Valley Park, which is zoned Z9 'To preserve, provide and improve recreational amenity and open space and green networks', and the former industrial site in the south-east corner, which is zoned Z6 ; 'To provide for the creation and protection of enterprise and facilitate opportunities for employment creation'. The surrounding areas are predominantly residential with Finglas to the northeast, Ashtown and Cabra to the south, and the Phoenix Park 'Racecourse' residential development to the west. To the east are light industrial uses (Z6) in Broombridge industrial estate and to the northwest, at Scribblestown, are undeveloped lands in Fingal County Council. The lands at Scribblestown are zoned with Objective 'HA' in the Fingal County Council Development and this states 'to protect and enhance high amenity areas'. To the southwest of the LAP area and at the boundary between development and amenity areas, (south of the rail line) is an area zoned 'HT' to 'Provide for office, research and development and high technology manufacturing type employment in a high quality built and landscaped environment'.

Map 2.1: Ashtown / Pelletstown LAP Area



Map 2.2 Location Context of Ashtown / Pelletstown





2.2 Historical Development of the Area

The earliest indication that the area was inhabited is the presence of a number of archaeological remains in the form of burial sites dating from the early Christian era, 200 - 700 AD, and these sites contain adult and juvenile remains in stone-lined structures. There are also rubble remains and embankment works indicative of a castle (1654 civil survey) which date to the early medieval period. Of medieval provenance also is the bridge in Cardiffsbridge spanning the Tolka, a four arch design, with three round arches close together and one on the south bank. This bridge is now designated as both a protected structure and recorded monument.

During the 18th century and with the expansion of trade, the Royal Canal was routed through the area and created a link from the city to the midlands. The Royal Canal is an excellent example of 18th century industrial heritage. A former tow path is located along its northern bank, while the southern bank has been artificially raised in order to provide a level area for the railway track. Both the canal and towpath are recorded in the current Industrial Heritage Record. A development plan conservation area designation covers the Royal Canal itself and extends over some of its immediate environs. The canal is also a proposed Natural Heritage Area (pNHA)

Rail Line, Royal Canal & Linear Park /Former Tow Path (looking west)



The development of the Royal Canal also included the related canal locks (8th & 9th), lock keepers houses and two bridges (Longford & HS Reilly). Both the bridges are protected structures and still in use. Longford bridge was built in 1792 and has a single arch and is of stone construction. Similarly HS Reilly bridge was built in the same year and is of a single arch, ashlar stonework construction. Both bridges are indicative of the canal bridges of the era and indeed the craftsmanship of the period. These structures, as well as having conservation and protected structure designations are recognised as prime examples of industrial heritage and are included in the Dublin City Industrial Heritage Record (DCIHR). Some remains of the lock-keeper's house at the 8th lock survive, while no remains are to be found of the lock-keeper's house at the 9th lock.

A cast-iron statue commemorating lock-keepers is located along the former tow path close to Ashtown Road.



Pelletstown House is located in the north of the plan lands and close to River Road. It is not a protected structure although it is considered to be of historic significance, and has undergone major renovations since the turn of the 20th century. It is a two-storey detached dwelling and remains in residential use. The wider setting of the house and garden has changed significantly due to recent residential development.

Table 2.1 summarises conservation designations for the various structures/features in the LAP lands and immediate surroundings ;

Map 2.3 Heritage

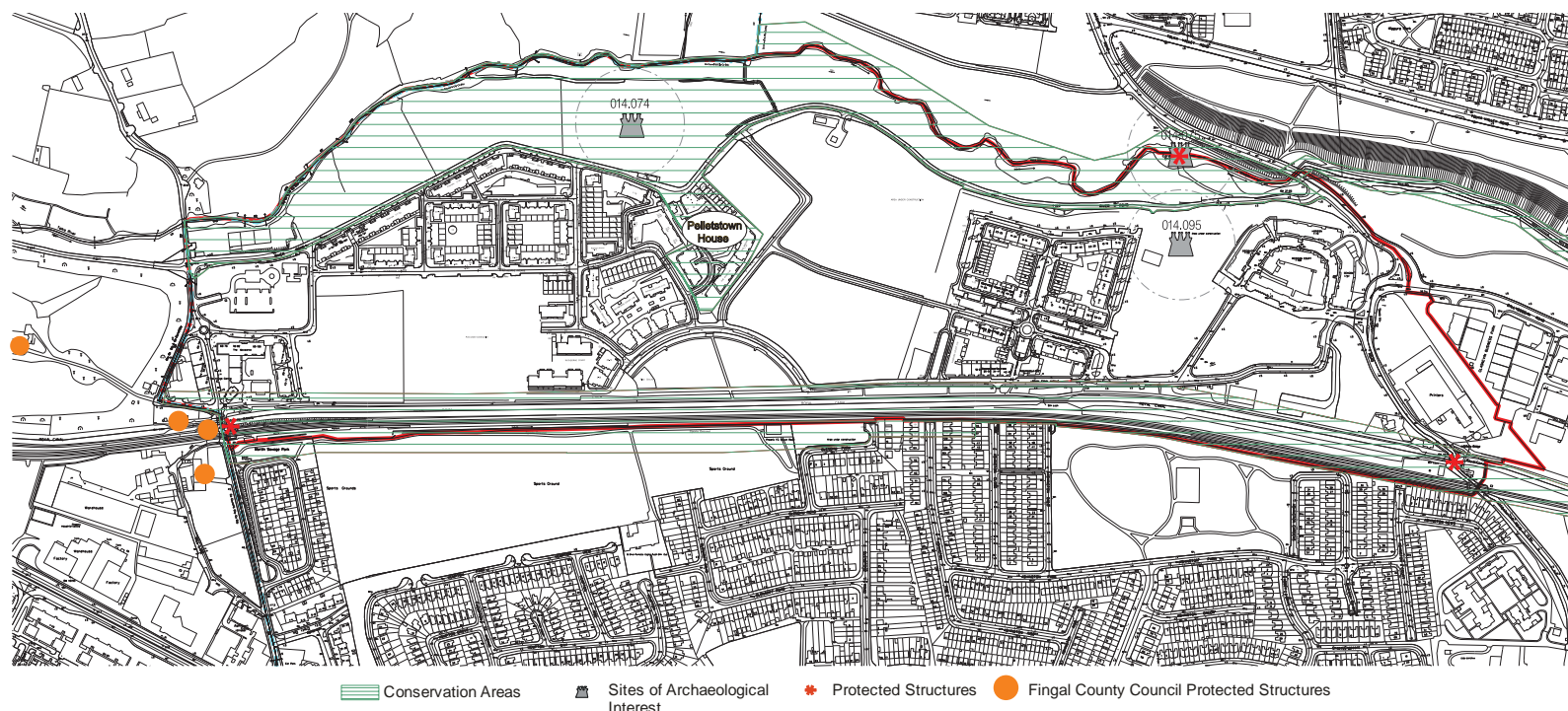


Table 2.1 Conservation and Related Designations

Structure/Feature	Designation
HS Reilly Bridge	Protected Structure (Ref 913)
	Industrial Heritage Record (Ref 18.02.007)
Longford Bridge	Protected Structure (Ref 913)
Cardiffsbridge Bridge	Protected Structure (Ref 895)
	National Monument (Ref DU014-075)
Castle Remains	National Monument (Ref DU014-074)
Burial Ground	National Monument (DU014-095)
Royal Canal	Conservation Designation in Development Plan.
	Industrial Heritage Record (Ref 18.02.001)
Lock Keepers Cottage	Industrial Heritage Record (Ref 18.02.022)
Lock Keepers Cottage	Industrial Heritage Record (Ref 18.02.024)
8 th Lock	Industrial Heritage Record (Ref 18.02.004)
9 th Lock	Industrial Heritage Record (Ref 18.02.003)
Royal Canal Tow Path	Conservation Area in Development Plan.
	Industrial Heritage Record (Ref 18.01.010)

The current development plan for Dublin City sets out designations and details policies and objectives supporting the ongoing protection and enhancement of the city's built heritage. These include (a) safeguarding historic sites and Zones of Archaeological Interest, and (b) protecting and embracing the built heritage as a finite resource. Map 2.3 illustrates to location of protected structures, archaeological sites and Development Plan conservation areas.



2.3 Current Land Uses

Further to AAP (2000) developments that have been completed to date, have generally adhered to the design and layout envisaged, with blocks of development connected by thoroughfares. The dominant form of existing development is now residential – mainly in the form of apartments, although there are also duplex units and some standard houses. Mixed uses are generally at service centres where there are retail outlets and services mainly at ground floor level, and these are the main employment related uses.

The services available at the Village Centre and the smaller River Centre are varied, and whilst retail and office units are available at Royal Canal Park (eastern end), these remain largely vacant at present. The only brownfield industrial site in the area is the ‘Ormond Printworks’ site at the eastern extreme of the LAP area, and this includes a large vacant building.

Tolka Valley park and the centrally-positioned crescent park now provide natural amenity resources, and the linear route of the canal and its associated towpath is now a well recognised amenity for cycling and walking. Community uses are generally dispersed and comprise crèches, gyms, community rooms and other services.

There are a number of large undeveloped sites, mainly earmarked for residential uses, and some of these have live permissions that have not commenced due to economic circumstances. Most of these lands have however been screened off with hoarding and remain available for development having (in some cases) pre-existing service infrastructure.



2.4 Population and Housing Profile

The National Census was conducted in 2011, correlating such information as population, household formation and employment. Information is gathered for every ‘Electoral Division’ (the smallest administrative unit for electoral purposes). The LAP area is located within the northern section of ‘Ashtown A’ Electoral Division (ED), an area which includes large areas of older housing stock in Ashtown. ED figures therefore reflect the characteristics of both the new housing stock in Ashtown/Pelletstown and also the longer established areas.

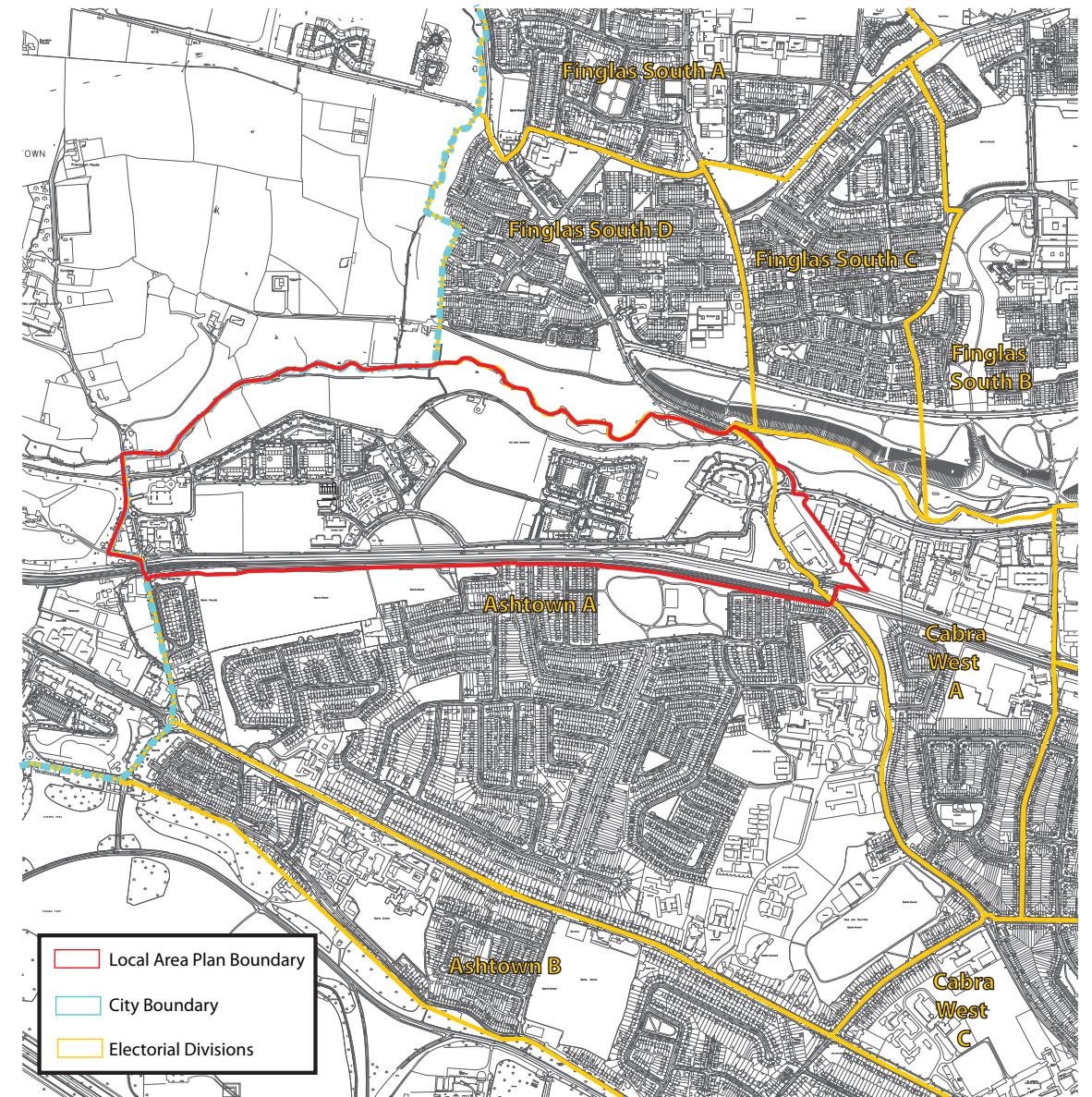
‘Ashtown A’ Electoral District Statistics

‘Ashtown A’ ED showed an increase of 32.6% in population from 2006 to 2011, while EDs adjoining it and within the DCC administrative area have shown either a decrease or no increase. The ED population rose from 6,817 in 2002 to 7,715 in 2006 and then to 10,227 in 2011, an increase of 50% over 9 years. This increase in population is explained largely by the development of residential schemes on foot of the AAP.

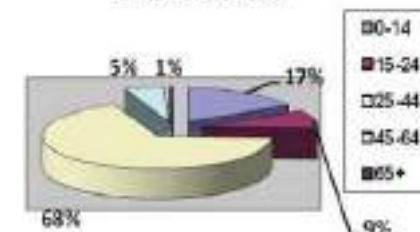
LAP Area Statistics.

Using small area statistics based on sub-areas contained within the LAP area boundary, the census figures 2011 details a total population of 3,777. In terms of nationality, 2115 of those were Irish and the remaining 1662 were other EU or non EU citizens. The age profile shows a relatively high proportion in the 25-44 age bracket, when compared with the city as a whole, and a low proportion in the 65+ bracket, reflecting a young population generally, as illustrated by the pie charts below. (Data from 2011 Census)

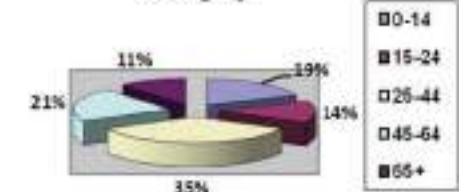
Map 2.4: ‘Ashtown A’ ED Area in Context



LAP area: Population breakdown by age category



Dublin City and Suburbs: Population breakdown by age category





Map 2.5- Development Typology

The average number of persons per household in Ashtown/Pelletstown in 2011 was approximately 1.86 (based on total census population divided by number of dwellings). This may be compared with a figure of 2.73 for the 'Ashtown A' DED or 2.4 for Dublin. In terms of accommodation, Census 2011 figures show that 19% of households in the plan area live in duplexes/houses while 81% live in flats/apartments. The following table gives a breakdown of units built to date in the area as of 2012 ;

Table 2.2 Existing housing number by housing type

Unit type	Number built	% of total
Apartments	1725	81
Duplexes	239	12
Houses	157	7
Total	2121	100

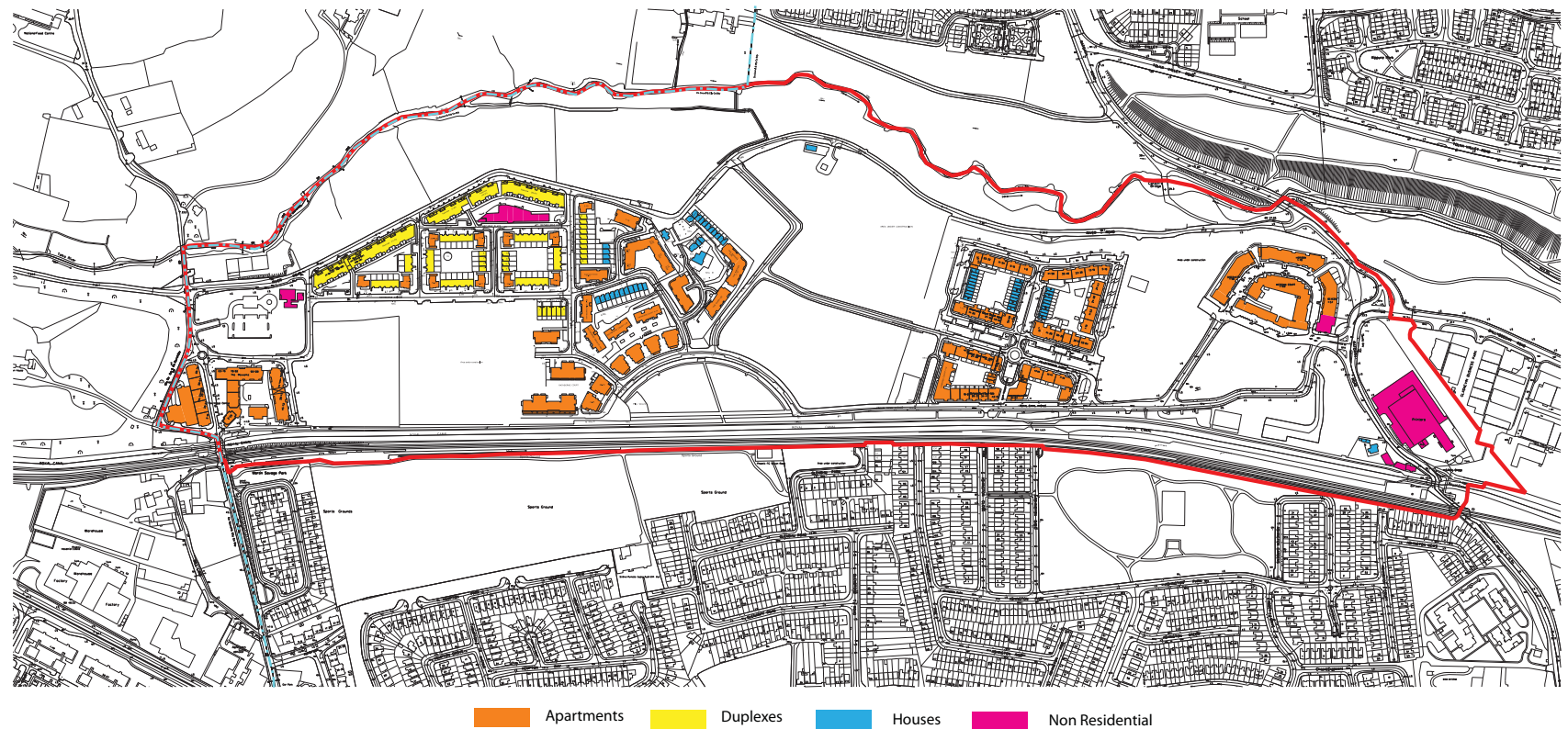
Source ; compiled planning application data and survey work , 2012

The geographical distribution of the above unit types is shown in Map 2.5, in which it is evident that standard houses are very limited in both number and location. Apartments are present both as freestanding blocks and as larger perimeter blocks enclosing communal open spaces, and duplex units are largely confined to a few specific areas.

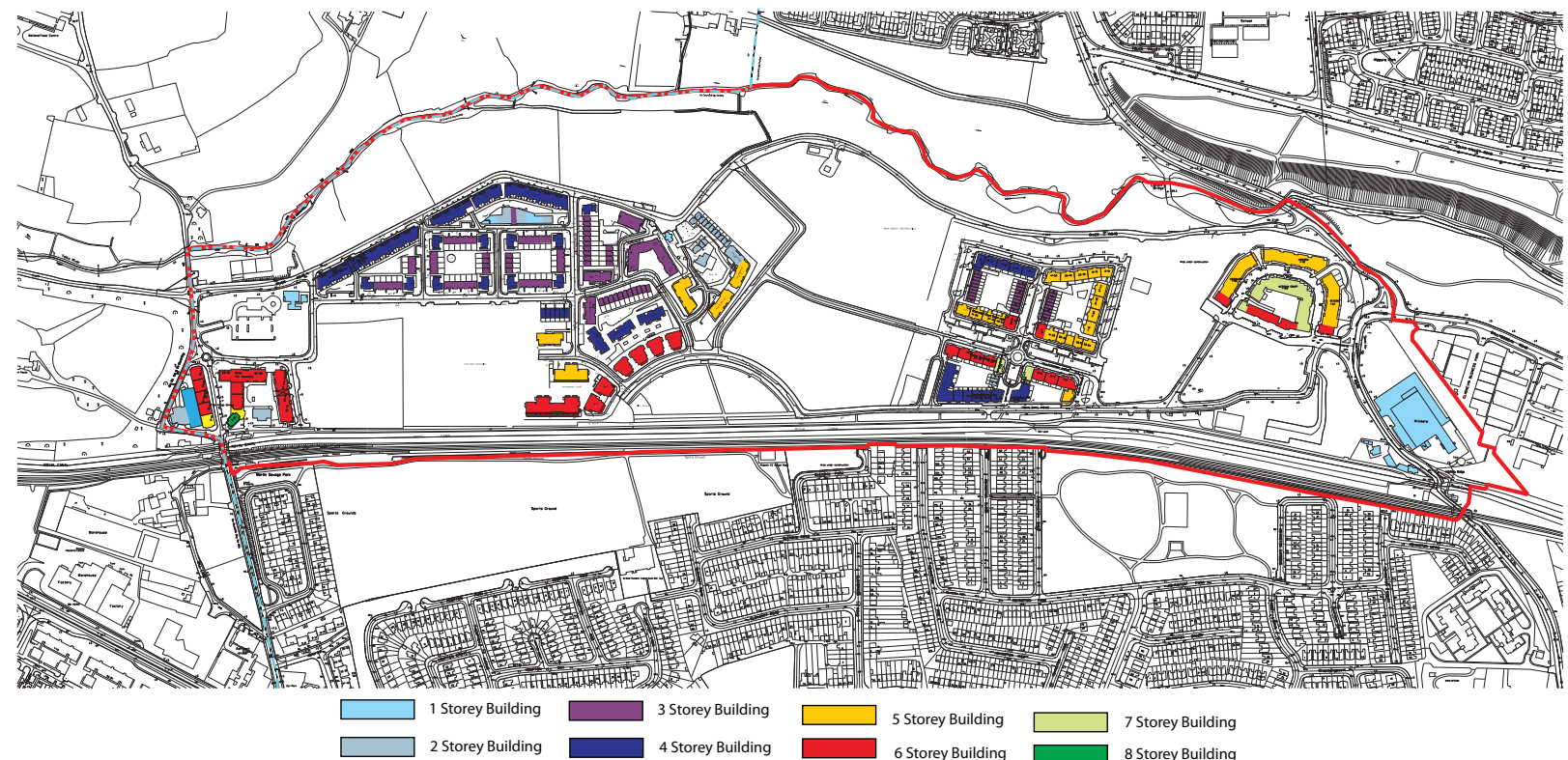
In terms of the size of units delivered to date, an examination of the breakdown of one, two, and three plus bedroomed units has shown that one and two bedroomed units, when taken together, account for 77% of the existing total. In summary, there is a high proportion of apartments and a low proportion of larger (3+ bedroomed) units. A challenge for this LAP is therefore the delivery of a balanced mix of housing types supporting a sustainable community, and the availability of undeveloped lands represents an opportunity to address this.

2.5 Building Heights

The area contains a variety of building heights and designs, reflecting the aims of the Action Area Plan (2000). The majority of existing buildings are three and four storeys high, with buildings higher than this generally positioned around the eastern and western mixed-use nodes – where heights extend to 8 storeys, and also around the central crescent park and at locations facing the canal (6 storey blocks). Map 2.6 adjacent shows the heights of all existing buildings within the LAP area. The pattern of heights generally reflects the content of guidelines set out in the 2000 Action Area Plan - which had a strong urban design focus. Hence there is a discernible pattern of elevated storeys at corners and at locations fronting public spaces, where these height variations provide visual punctuation and legibility.



Map 2. 6 - Existing Building Heights





2.6 Infrastructure

The LAP area has reasonable accessibility in terms of vehicular and public transport links, although there is restricted access across the level crossings, which are barrier controlled, and this can cause significant traffic delays, particularly at peak times. Access through the plan area is also limited for pedestrians and cyclists because some sites remain fenced off pending future development.

There are two principal north/south roads, located to the east and west of the site. They are the Ratoath Road serving Finglas, and the Ashtown Road linking to the Navan Road (N3 primary route). Main east-west road routes in the area include the Navan Road to the south, and River Road, which forms the northern boundary of built development. At present River Road is problematic due to poor alignment and narrow width, carrying high traffic volumes at peak hours.

There is a commuter rail stop at Ashtown that provides regular services to the city centre, (20 minute journey) and westwards towards Maynooth. Dublin Bus provide the No 120 service through the site linking to the city centre and terminating at RDS, Ballsbridge for selected journeys. Future plans include a new vehicular bridge across the rail line and canal at Ratoath Road and also a new rail stop close to the existing Ratoath Road. The 'Luas Cross City' line, when complete in 2017, will terminate at Broombridge a few hundred metres east of the new rail station.



2.6.1 Service Infrastructure

Water supply for the Pelletstown/Ashtown area is part of the Dublin Region Water Supply which is sourced from the Liffey, Dodder and Vartry Rivers and is an integrated network covering Dublin City and adjoining counties. Drainage infrastructure in the area is relatively new, having been designed and constructed as one overall masterplan serving the new residential developments in the area. At a local level, water supply to the Ashtown/Pelletstown lands is supplied from the public watermain at Deanstown Avenue approximately 1km north of the development lands. The connection to this watermain involved the construction of a new 300mm diameter watermain from Deanstown Avenue along Ratoath Road junction crossing the River Tolka at Cardiff's Bridge and entering the subject lands at the new Ratoath Road junction. The water supply network also includes a 300mm diameter spine through the site to Ashtown Road with the potential for linking the existing mains to the west if required by DCC Water Division. Therefore a substantial area of the site is already serviced. Sustainable Urban Drainage Systems (SuDS) installed to date include surface water attenuation lakes located just west of buildings at Royal Canal Park.

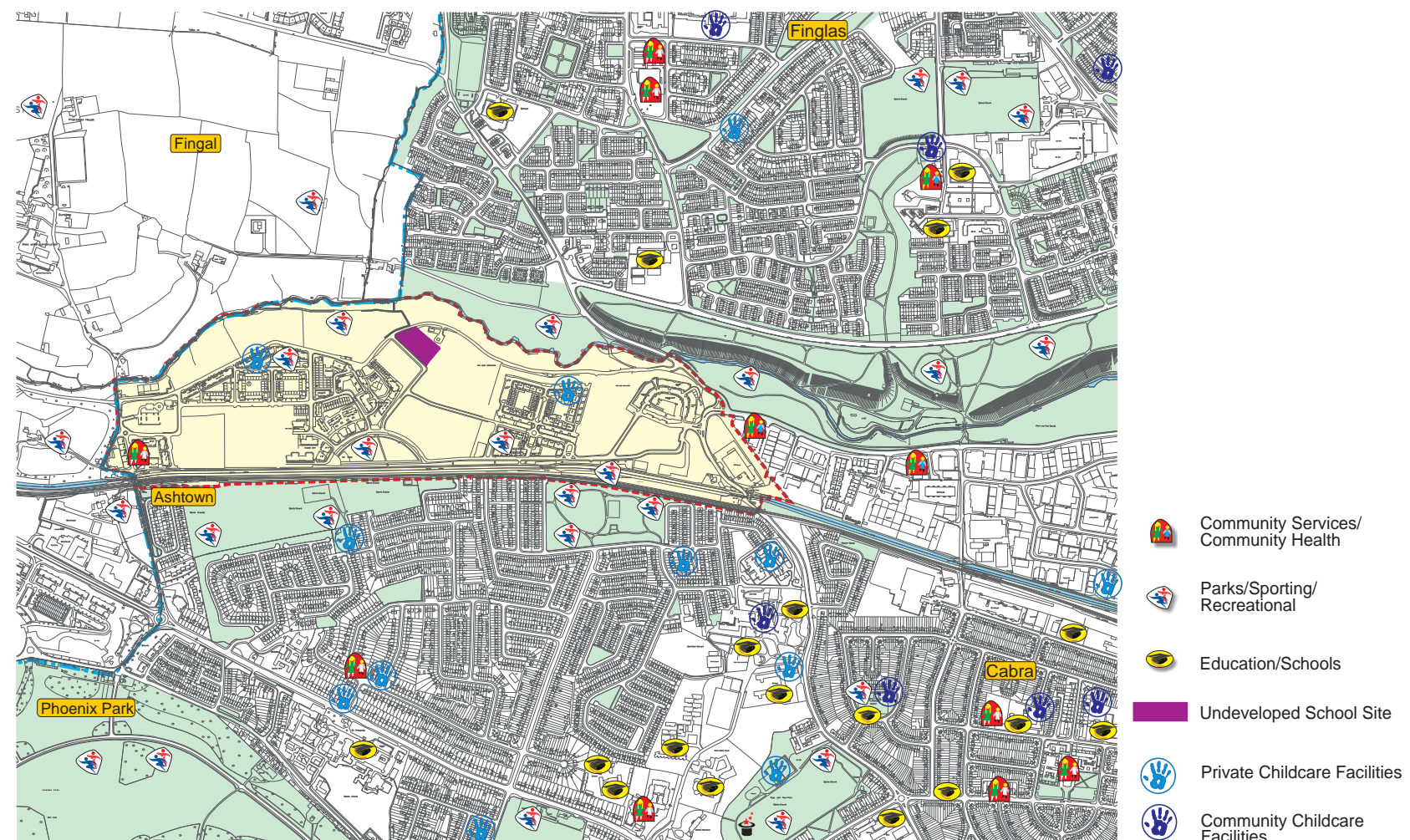
2.7 Community, education and childcare facilities

2.7.1 Community Facilities

Having regard to the extent of development to date, provision of community and related facilities has been somewhat limited. A community room in the River Centre is frequently used by local residents and organisations. A second facility, a room within the Royal Canal Park complex, will soon be available for similar purposes. There are also two operational gyms, one in the River Centre and the other in Royal Canal Park. Within a 2-kilometre radius of the plan area however there is a range of established and well-frequented sports and community facilities. Many of them are not easily accessed on foot from the plan lands due to the distances involved. The vast majority of the facilities in this wider area relate to outdoor sports, and consist primarily of playing pitches for football and GAA games. Extensive GAA sports grounds and a clubhouse for the St. Oliver Plunkett club are located directly to the south of the plan area in Martin Savage Park. This park is easily accessed from the western side of the Pelletstown plan lands. To the east of Martin Savage park lies Ashington Park, which includes hardcourt surfaces set in open space.

The closest community centre, Cabra Parkside Community Sports Centre, is located approximately 1.5 kilometres from the eastern end of the plan lands to the south on Ratoath Road in Cabra. This is a modern centre and includes a community and leisure centre, a skateboard park, a children's playground and games pitches. In relation to healthcare, one health centre has been built in Royal Canal Park, but is not yet operational. Other community facilities in the wider area include Cabra Library, located on the Navan Road.

Map 2.7 : Community Facilities within and around the LAP lands.





2.7.2 Education and Childcare Facilities

To date three crèches have been built and two are operational, - the Early Learning Crèche in Royal Canal Park and Giraffe in Rathborne. The completed Crescent Park now includes a public playground which is popular and well used. With regard to the provision of a primary school for the plan area, a site was identified under the AAP as a possible location for such a school along with associated playing pitches. This site is located towards the centre of the overall plan lands. Pending the provision of a permanent school by the DES, the possibility of providing a temporary school on another site within the plan lands remains an interim option.

Giraffe Childcare



Early Learning' Creche



2.8 Local Retail and Commercial Space.

Of the two mixed-use nodes planned under the AAP, the one at the western node has largely been completed and is now known as The Village Centre. The majority of retail units here are currently occupied. With regard to the provision of mixed uses at the eastern node, this is incomplete yet 7,000 sq.m. of commercial floor space has been built to date at Royal Canal Park. Of this floor area, approximately 5,500 sq.m of office space remains unoccupied. The smaller *River Centre*, located approximately 400 metres to the north-east of The Village Centre, accommodates some 1,800 sq.m. of non-residential floorspace including small-scale businesses, a retail unit and a gym.

Commercial and Retail areas in the LAP area ;

The Village Centre, Ashtown

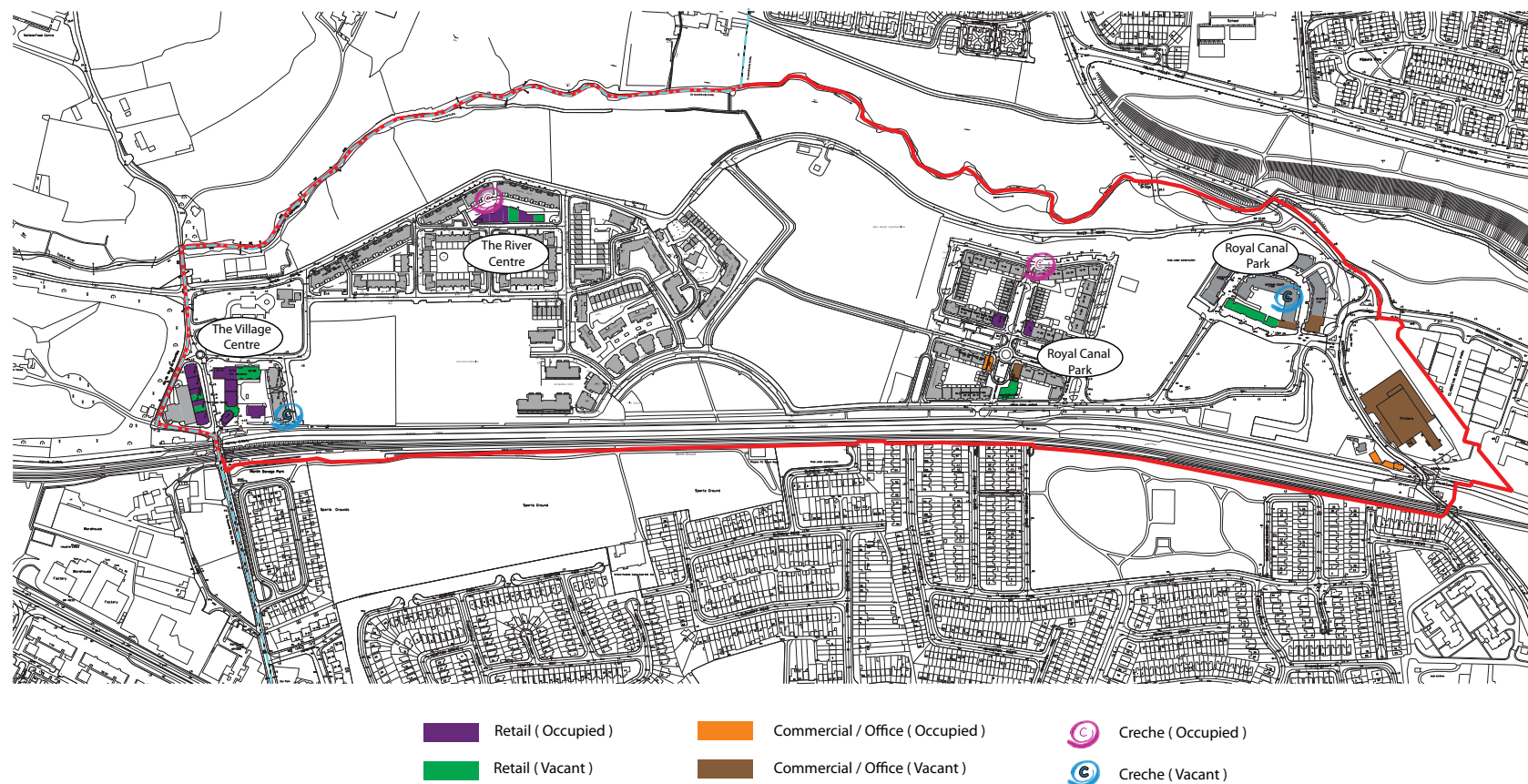
Royal Canal Park.,

The River Centre.



Map 2.8 illustrates retail, commercial and crèche locations throughout the plan area, distinguishing between occupied and vacant spaces.

Map: 2.8 Commercial and Retail Cores



2.9 Implementing the 2000 Action Plan; Progress to Date.

The AAP was published during the housing boom, and significant development took place up until 2008 when the property market collapsed. Just over half of the developable lands (21 hectares) were developed in accordance with the structuring principles of the Action Plan, and this took place on large land parcels which are now separated by some undeveloped lands. Over 2000 housing units were built in total and the residential population now exceeds 3,700. The remaining undeveloped lands are essentially in three areas – at the eastern and western ends and in central areas, and some of these sites include sewers and partly constructed roads installed in tandem with the development of adjoining schemes. These present an opportunity to re-examine opportunities for future development in accordance with best practice.

The dominant land-use to date is housing in the form of a variety of apartments, duplex units and standard houses. Supporting uses such as retailing, services and childcare facilities have also been provided, with most of these being either in the eastern and western commercial nodes or in the secondary 'River Centre'.

Public transport is now provided by both the Ashtown Train Station and also by a Dublin Bus service connecting to the city centre. Public open spaces have been provided in the form of a centrally positioned crescent park and playground, a linear park along the Royal Canal (incomplete), and the new park at Tolka Valley, which has recently opened. Whilst these are positive developments there is further scope for delivery of active recreational facilities and for new community/school facilities to support a growing community.



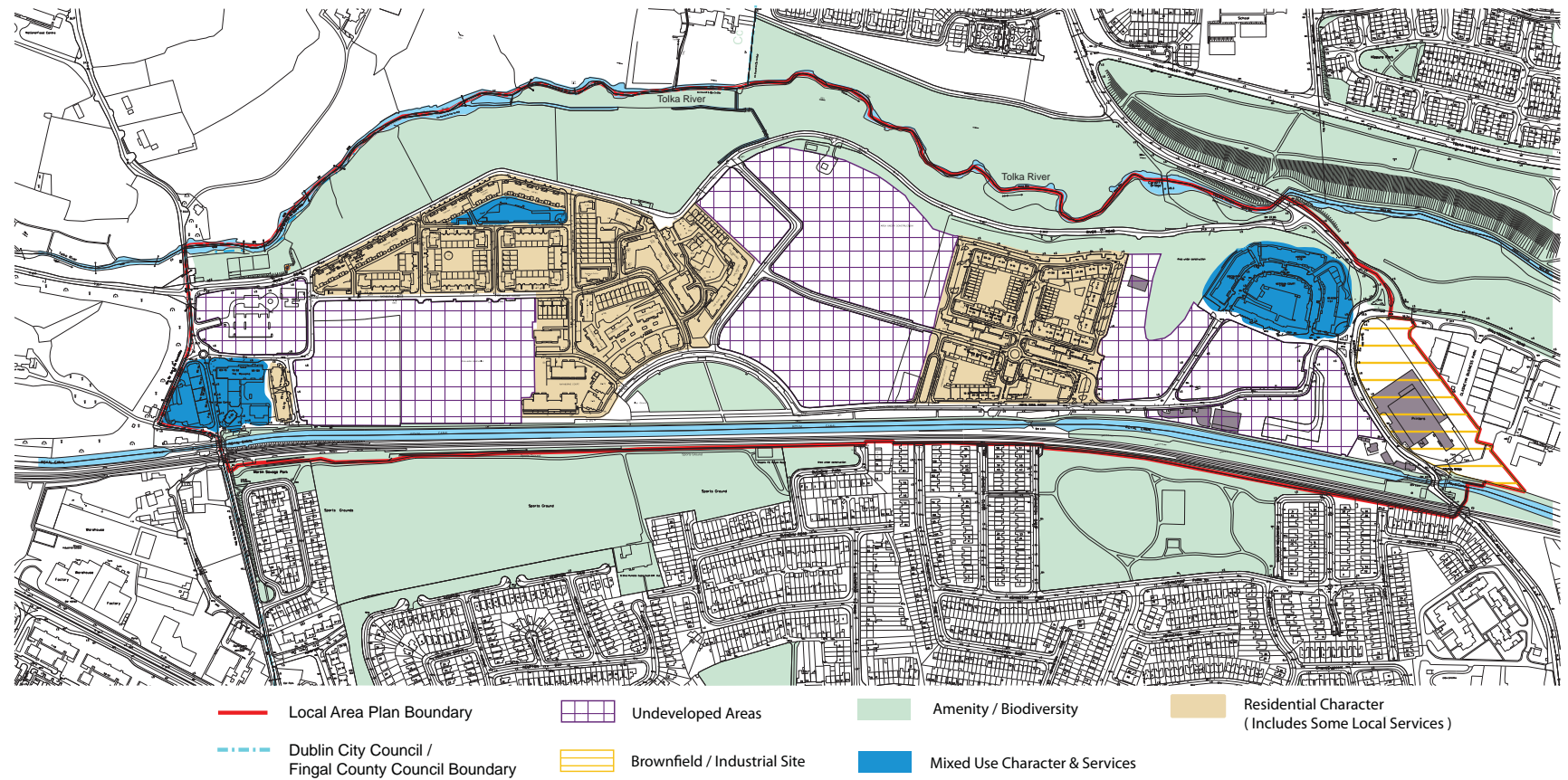


2.10 Character Appraisal

As illustrated in Map 2.9, the area can be sub-divided into distinct character areas based on broadly similar characteristics. The main developed areas are largely of occupied residential development within two large areas shown in beige colour. Within these there are some local services primarily to serve local residents. Contrasting with these are three large undeveloped areas, characterised by fenced off or hoarded development sites. A former industrial site located in the south-east corner constitutes the only 'brownfield' land in the LAP area and hence has its own character. Flanking the northern and southern boundaries are two biodiverse amenity areas - the Tolka Valley and the Royal Canal edge/towpath, the latter connecting to a centrally positioned crescent park. These have an open and attractive character. Given the proximity of the existing attenuation lakes to the Tolka Valley, this biodiverse area has been included in the same character area. Mixed use development of residential over office, services, and commercial units, are shown in blue shading and denote the three hub areas of Rathborne Village, the River Centre and Royal Canal Park.



Map 2.9: Character Areas



2.11 Challenges and Opportunities for the LAP.

In considering future policy options, the following are considered strong positive attributes of the area ;

- The established local community is both strong and focused, having a keen interest in the planning and development of the area.
- The existing built living environment is of high quality, both in terms of design and also in regard to access to quality amenities including the Phoenix Park, the Royal Canal, Tolka Valley Park, and Crescent Park.
- The area benefits from good access to public transport - both bus and heavy rail, and this is reflected in a high level of current public transport use.
- The area is well positioned on a developing cycle network that includes scenic routes along the River Tolka and Canal towpath.

Notwithstanding the above, the area faces a number of challenges which must also be considered in devising future policy ;

- There is a limited housing mix in the LAP area at present, with limited availability of family-sized accommodation, i.e. units with three bedrooms or more.
- The road network remains incomplete and there is limited connectivity throughout the area. River Road is also a challenge because of its poor alignment, its use by high volumes of through traffic, and because it acts as a barrier between housing areas to the south and Tolka Valley Park. The realignment of Ratoath Road is a second challenge, and delivery of an overbridge remains an urgent need because of ongoing traffic delays at the Ratoath Road rail level crossing, where road users are inconvenienced by long delays.
- Given current population and demographic trends, there is an emerging need for a local primary school and additional community facilities to support and sustain the growing community.

- The severance of developed areas from nearby development due to the presence of large fenced-off and undeveloped sites is problematic. This has restricted walking and cycling options and has generated circuitous vehicular journeys. The challenge is now to improve connectivity in tandem with the delivery of a more integrated urban structure.





Chapter 3 Vision

3.1 Strategic Vision

The vision for Ashtown/Pelletstown LAP area is as follows:

The creation of a sustainable living and working environment with a strong urban identity, anchored by mixed-use supporting hubs and benefitting from both good permeability and quality public transport options. The area shall be characterised by a vibrant social mix, reflected in a variety of housing options and community facilities/amenities, well integrated with the wider city via improved infrastructure and green infrastructure.

Future development in the area will be guided by the policies and objectives set out in this LAP, as well as by the policies and objectives of the Dublin City Development Plan.

3.2 Guiding Principles

Guiding principles for this LAP which aim to support the above vision are as follows:

Land Uses

- Ensure a land use strategy which capitalises on the area's locational advantages and realises its full potential in light of the area's designation as a key development area (KDA) and as a strategic development and regeneration area (SDRA).
- Support the development of a coherent spatial structure, characterised by two mixed use hubs (east and west) and predominantly residential areas in between. The Tolka Valley and Grand Canal amenities framing the northern and southern boundaries shall be interconnected via links through key open spaces, contributing to an attractive public realm.
- To encourage employment-generating uses in vacant commercial buildings, on brownfield sites, and in identified mixed-use areas.
- In light of the current challenging economic environment, to focus on phasing opportunities to sequentially deliver key elements of the overall strategy pending the achievement of longer term objectives. Temporary land-uses may also provide an opportunity for interim benefits.

General Urban Design/Layout

- To improve connectivity throughout the area, removing existing barriers to movement and facilitating completion of a main east/west thoroughfare with associated public squares at each end and secondary north/south routes. Pedestrian and cycle routes are given specific consideration.
- In conjunction with the above objective, to interconnect the existing amenities of the Royal Canal and Tolka Valley Park as a basis for expanding a green infrastructure network integrating with the wider city area.
- In determining future block layouts and building heights, to ensure a smooth visual transition is achieved between existing and proposed development. Contemporary sustainable urban building design will be encouraged.

Detailed Design:

- To ensure a mix of residential typologies and designs at densities appropriate to ensure the viability of public transport and other supporting community facilities within a high quality living environment.
- In developing remaining vacant lands, to ensure a quality and legible urban design approach is achieved, based on effectively integrated masterplanning.
- To promote high environmental standards and energy performance at a practical level in the plan area through appropriate planning and design of all developments.

Note: Development management guidance set out in this LAP should be read in conjunction with the relevant chapters of the city development plan



Chapter 4: LAP Development Strategy

4.1 Introduction

The overall strategy for the Ashtown/Pelletstown LAP area is the completion of development on the remaining sites and their successful and sustainable integration into the urban fabric of both the immediate area and the wider city. Building on developments in the area to date and current development plan designations, the original strategic structuring principles of the AAP remain largely applicable, and the significance of the area as a priority is reflected in the KDA and SDRA designations in the current development plan.

Given that the area is intended primarily as a residential area, it is important that any strategy recognises the supporting requirements of sustainable communities, and therefore this strategy seeks delivery of these, including quality amenities, community facilities, infrastructural improvements and commercial services. Mixed-use areas need to be identified, and these can accommodate a range of uses in close proximity to good public transport. In addition to the above, objectives can be applied to specific locations where it is considered appropriate to provide more focused land-uses. A theme relevant to all land-uses is that of permeability and sustainable transport linkages, and green infrastructure objectives can effectively integrate walking and cycling routes with biodiversity and attractive amenities. Hence, this section should be considered in tandem with Green Infrastructure and related urban design objectives.

4.2 Land-Use Strategy

4.2.1 Shaping the Land Use Strategy

In shaping a land use strategy for the LAP, a number of key inputs are seen as influential. These include ;

Table 4.1 LAP Key Inputs

Input	Relevance
1 The City Development Plan	Development plan guidance for the area is contained in the core strategy, zoning objectives, and also KDA and SDRA objectives. Various standards also apply.
2 The AAP 2000	Re-evaluation of the objectives and structuring principles therein, on foot of development realised to date.
3 Planned infrastructure Provision	The proposed Ratoath Road realignment, new rail station and nearby Luas terminal (Broombridge) can influence the pattern of land-use.
4 Flood Risk Analysis, SEA and AA	Influential environmental assessments.
5 Recent survey and analysis work including public consultation.	This has assisted in identifying trends, understanding property market considerations, and identifying emerging community needs.

Survey and analysis work has identified the dispersed nature of pockets of development across the plan lands and has determined the extent of retail, services and commercial development to date. The natural resources associated with the Royal Canal and Tolka Valley are also important given their existing and future amenity/biodiversity potential, and the relationship of these to both existing and planned development is an important factor in defining specific land-use areas.

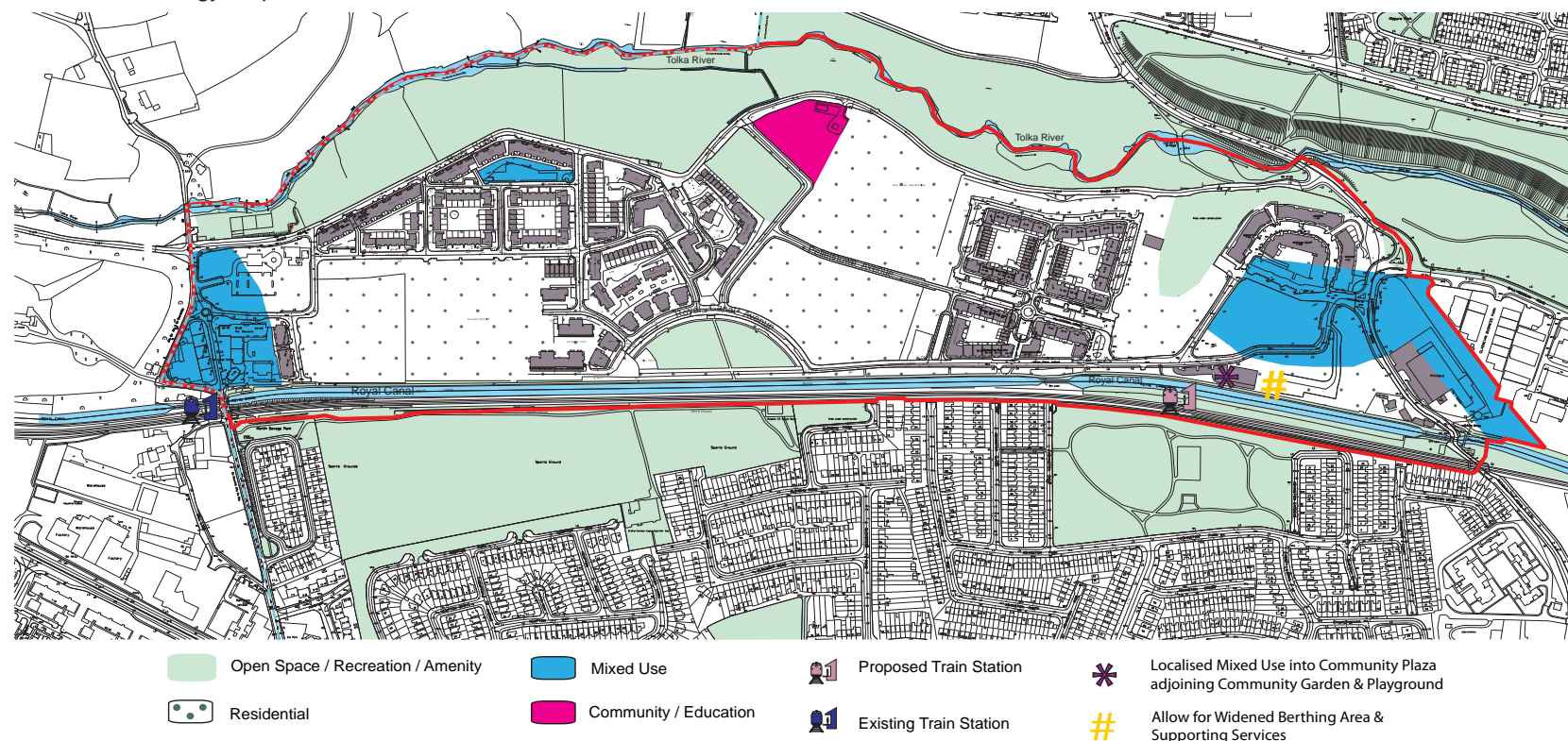
The Strategic Environmental Assessment (SEA) and the Appropriate Assessment (AA) were key elements in informing the plan. These environmental assessments were carried out in tandem with the plan and ensured full integration and consideration of the significant environmental issues during the plan-making process.

This represents a further iteration of environmental assessment at local area plan level, given that the higher level city development plan and the regional planning guidelines have also been subject to separate SEA and AA processes.

4.2.2 Development Plan Zoning and Designations

The plan area comprises three development plan zonings (Z6, Z9, and Z14). The predominant zoning, 'Z14', states 'to seek the social, economic and physical development or rejuvenation of an area with mixed use of which residential and 'Z6' would be the predominant uses.' There are also Z9 'amenity, open space and green networks' zones along the banks of the River Tolka and edge of the Royal Canal, whilst a Z6 objective relates to the 'Ormond site' at the eastern end of the plan area.

Map 4.1 Land-use strategy map



This reads 'to provide for the creation and protection of enterprise and facilitate opportunities for employment creation'. KDA and SDRA designations that apply to the area have been previously documented and highlight the significance of Z14 zoned lands.

4.2.3 Land Use Strategy

This land use strategy seeks the following:

- To support the continued development of residential, employment and enterprise uses as articulated for the Z14 area.
- To encourage further residential development on specified lands and its effective integration with established development.
- To progress the development and growth of two high quality mixed-use centres, to the east and west respectively, supported by a secondary centre at the River Centre.
- To seek the enhancement of open spaces and amenities and their connectivity both within and beyond the plan area.
- To allow for community, educational, and cultural uses/services at appropriate locations to serve the growing population.



The form of development sought in relation to each of the mapped land-use categories is also set out hereunder.

Residential

This is the main use of the lands, encompassing both development built to date and also lands considered suitable for further development. Whilst residential is the main use intended, other local services are generally permissible provided their function is clearly to serve local residents only.

On this basis, the scale of such services will be tightly controlled. New residential development should comply with other requirements of this plan relating to urban design, phasing, standards, layouts and heights. These ensure the effective integration of new development with that existing, and adherence to key structuring principles.



Mixed uses

The two main areas at the eastern and western nodes reflect the original structuring principles of the AAP and are partly built. The western area includes the existing Village Centre area (inclusive of shops, residential and services) and also some undeveloped lands further north.

The eastern area encompasses the existing commercial and office space available at Royal Canal Park, but extends further south and southeast, encompassing lands on the southern side of the access road and also a portion of the Ormond (former industrial) brownfield site. This area allows for uses considered appropriate to a gateway development and sufficient to serve the emerging larger residential community. A smaller mixed use area at the River Centre serves an immediate local catchment, and is illustrated on the land use strategy map in recognition of existing services at this location.

All new mixed use areas should contribute to active streets and quality public realm.

Ground floor shops, cafes and restaurants in particular can add vitality to an area. There is also scope for additional office development as part of mixed use buildings.



See also section 4.3.4 'economic development strategy' in relation to employment generating uses. In relation to retailing, a variety of local level shopping is envisaged, with possibly small-scale neighbourhood level facilities where it is demonstrated that they can contribute positively towards urban design and meet other planning requirements.

Community/education

The main area for community and education is a centrally positioned block of land adjoining river road which is reserved for a primary school site. This is seen as a necessary resource for the future based on the emerging residential demography and anticipated demand.

Associated with this school shall be a multi-functional hall, made available to the wider community. See 'community and social infrastructure' section of this plan for further detail and point locations identified for specific community uses such as crèches and community/cultural facilities.



Open space/recreation/amenity

This land-use category aims to protect and enhance existing green areas and allow for new ones. It includes the canal bank and towpath area, the crescent park and playground, and also Tolka Valley Park. A specific area beside the school site has been included as it shall provide for new active recreation uses.

A separate area surrounding existing surface water ponds located next to Royal Canal Bank has also been included in this category because of its amenity/biodiversity potential as part of any new development.

Note that more minor spaces to be provided in association with new residential areas are not set out here but are nevertheless a requirement, and the interconnection of the hierarchy of spaces for both walking and cycling is also an aim of this LAP.



The locations of these are represented by individual symbols on the strategy map.

- *Localised mixed uses onto community plaza - adjoining community garden and playground.*

Similar uses to those set out in the 'mixed uses' category above, these uses also apply to the area immediately around the proposed community plaza, and integrated community garden and playground. These uses provide a local urban form and design of activity in close proximity to the proposed train station. See 'Urban Design' section for further detail relating to the community plaza and community garden.



- *Allow for widened berthing area and supporting services.*

Adjacent to the above, this objective aims to create an attractive widened canal area, allowing for boat berthing and the provision of related waterside services. Such services would be tightly focused around the immediate area, supplementing mixed uses around the community plaza, and adding vitality to the area.

Temporary Land Uses

Temporary land-uses which benefit the community will be considered on their merits provided they do not militate against the achievement of longer term objectives for the specific lands in question. Any temporary land-use proposals should take into account phasing and implementation objectives of this plan.





Land Use Policies

LUS1 To actively pursue the completion of development on remaining lands, predominantly for residential uses and related services, with regard to planned infrastructural improvements and the need for improved connectivity and integration with both existing adjoining development and also the wider city.

LUS2 In support of residential development, to seek appropriate mixed use development in selected areas, the protection and enhancement of green areas and amenities, and to allow for the sustainable development of community/educational uses.

Land-Use Objectives

LUSO1 To promote the development of an urban community plaza adjoining the entrance to the proposed new train station, and framed by mixed uses. A playground and community garden will be integrated with this plaza

LUSO2 To promote the provision of a widened berthing area at the Royal Canal and adjacent to the community plaza. Associated with this will be related services focused around the immediate area, and supplementing mixed uses around the community plaza (see above)

Note ; The development of lands for all uses are subject to normal constraints and development plan policies and objectives





4.3 Economic Development and Employment

4.3.1 Introduction and context

The City Development Plan sets out a strategic approach to the challenges facing the economy and focuses on the importance of enterprise and innovation as drivers of economic progress.

As one of a number of designated Key Developing Areas in the city, the LAP area has potential for clustering of economic, commercial and residential neighbourhoods.

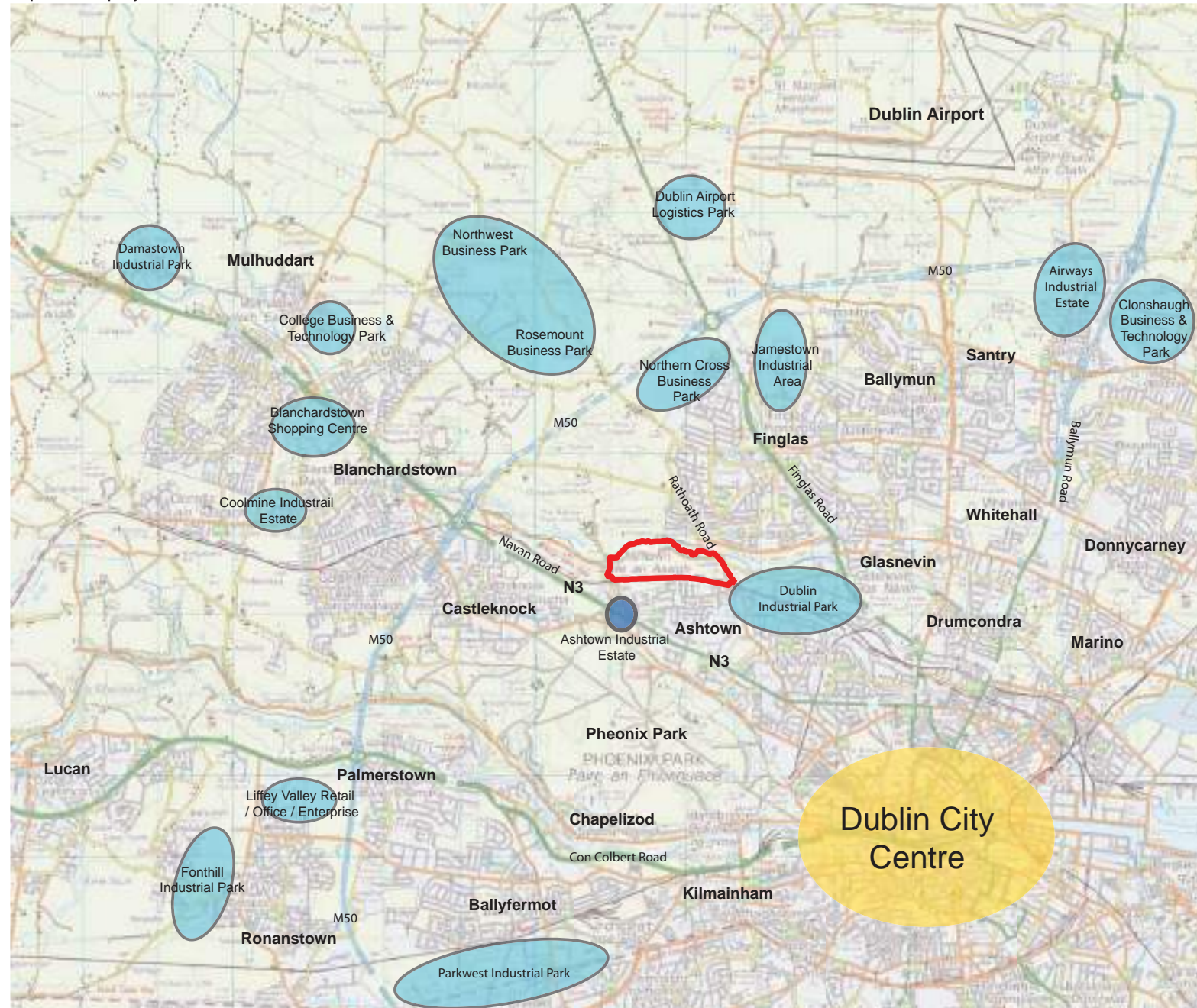
The development plan identifies an economic cluster of manufacturing in the northwest of the city, which includes industrial areas at Finglas and Broombridge, - the latter containing a range of industrial schemes at Tolka Valley Business Park and Glasnevin Business Centre.

These areas form a substantial portion of the city's resource of industrial lands and are positioned to the east and northeast of the LAP boundary. Broombridge, Dublin Industrial Estate, and Jamestown Industrial area (to the north of Finglas village) are long established industrial areas, yet there are also new office developments in the vicinity – e.g. 'Ashtown Gate' on the N3 route.

Given the high level of accessibility through the wider area, the general employment context must be considered, and in this regard there are large industrial areas and business parks nearby, many of which are within the functional areas of Fingal County Council and South Dublin County Council

The illustration shows the distribution of these areas, which range from traditional industrial estates, to business campuses and logistics parks, a number of which have the locational advantage of proximity to the M50 orbital motorway and other primary routes.

Map 4.2 Employment centres and industrial lands in the wider environs



 LAP Boundary  Main Industrial Employment Areas





4.3.2 Pelletstown Action Area Plan 2000 and progress to date

The Action Area Plan, in setting out a proposed distribution and location of land-uses, referred to offices, commercial/retail and hotels, and general locations within the plan area were specified for each. Within the proposed spatial structure, village nodes were seen as the obvious location for the highest concentration of commercial activity, and commercial to residential ratios of 40:60 and 20:80 were recommended for the eastern and western nodes respectively.

Outside these, non-residential uses would provide community/cultural uses, hotels and local shopping. Heavy industry was not referred to, and by its omission not encouraged.

Offices.

There was perceived demand for office space at the time of the AAP and particularly for 1,000-2,500 sq ft = 93sqm-232 sqm 'own door' offices. Small offices could be integrated with other uses, and located over ground floor uses. The scale of office floor areas were to be related to proximity to public transport, with larger offices of over 10,000 sq ft discouraged. 8000 sq m of commercial space has now been constructed at Royal Canal Park, and a substantial portion of the 5,500 sq metres of office space constructed now remains vacant and available at this gateway development. This reflects recent poor market demand for offices at this location.



Retail and services

In the AAP, restaurants and shops were encouraged around squares and on frontages facing the canal. Hotels were also encouraged having regard to the then proposed rail link to the airport, with suggested locations on the proposed eastern square, or on sites overlooking the canal

Significant retail and service development is now complete at the western node, generally known as the 'Village at Rathborne', which adjoins Ashtown train station. This includes approximately 4000 sq m of non-residential space integrated with dense residential development on upper floors. Units developed to date include restaurants, estate agents, an off licence, and shops including a convenience scale Superquinn. At the eastern end (Royal Canal Park) despite some vacancy, a retail unit, hairdressers and convenience shop are now operating.

In addition to the above, a small retail/commercial centre is now also operating at Rathborne Place toward the west of the plan area.

Known as the 'River Centre', this serves local needs and is secondary to the Village development at the western node. It includes a gym, small-scale services, a crèche and a community space. No hotels have been built and this perhaps reflects the absence of the airport rail link originally planned. It is anticipated that further residential development in the area will support existing employment uses and also generate demand for new ones, particularly retailing and services.



Other

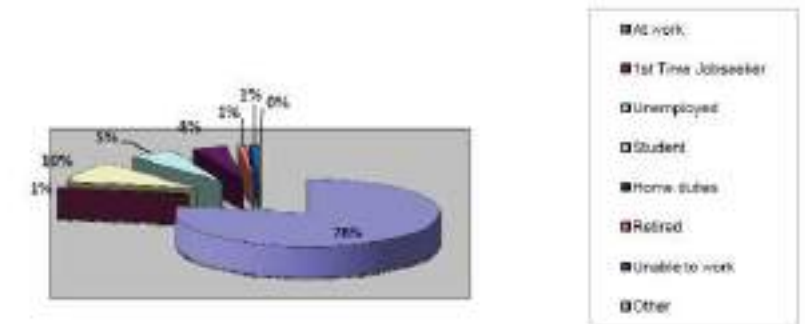
The Ormond factory site, originally not part of the AAP area is now included within the LAP boundary. It is zoned Z6 in the city development plan, which reads 'to provide for the creation and protection of enterprise and facilitate opportunities for employment creation'. Vacant for some time, this site is considered appropriate for redevelopment and integration into the future mixed use environment around the eastern node.



4.3.3 Ashtown/Pelletstown ; relevant Census data.

Census 2011 figures based on 'principal economic status' show 77% of persons aged 15 and over in the plan area are at work, with low proportions of students and retired persons (see chart below) when compared with overall figures for Dublin city. To some extent, this reflects the type of residential units in the area, and the time of construction – the area being relatively newly occupied in comparison to many areas.

Ashtown/Pelletstown ; Persons aged 15+ by principal economic status.

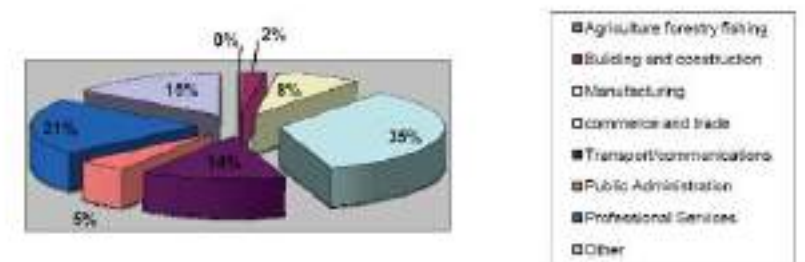


Of the total 2447 persons employed, the majority were working either in professional services, commerce and trade, transport and communications, or 'other' forms of employment.

An analysis of 'at work by industry' data shows that the 'commerce and trade' category represents by far the largest proportion of workers, accounting for 35% of those working (see chart). When compared with figures for Dublin as a whole, the plan area shows lower proportions involved in manufacturing and in transport/ communications, but higher figures in commerce, trade and professional services.

Social class statistics also reflect this, with 'professional' and 'managerial/technical' categories together accounting for 49% of the working population.

Plan area ; At work by industry



The above statistical profile demonstrates that the LAP lands are a suitable location for investment both in local retailing and also in local services such as professional services and restaurants/cafes. An increase in family sized accommodation in future residential phases may diversify the existing range of local services and related employment opportunities.





4.3.4 Economic Development Strategy

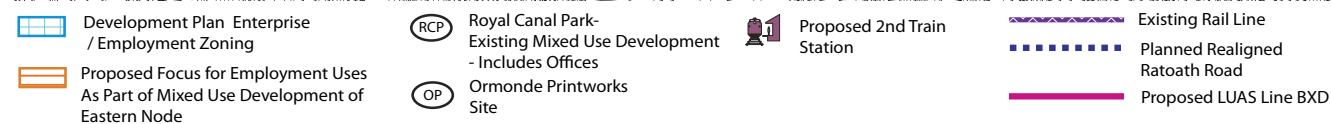
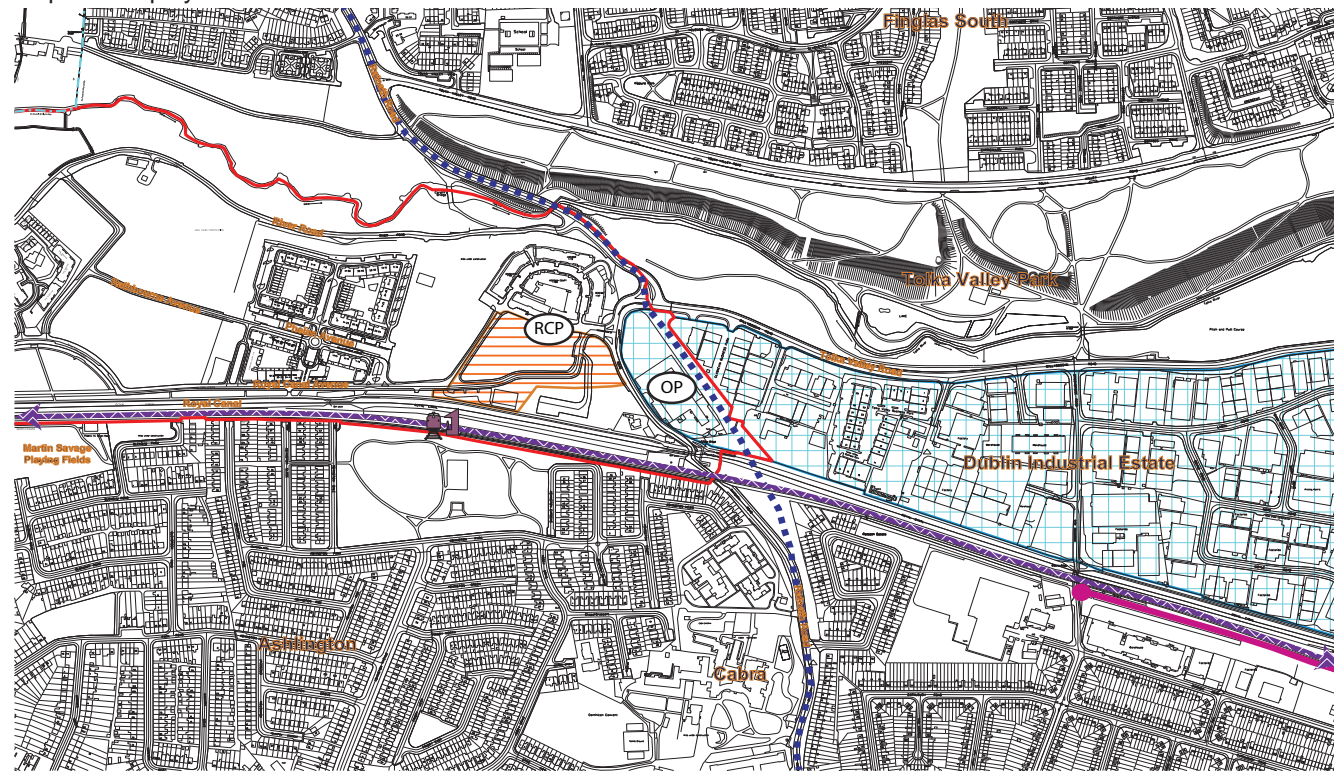
Having regard to the extent of economic development to date in the plan area, and taking into account the above analysis and the current economic climate, it is considered appropriate to take a modest approach to future economic development and to focus mainly on employment associated with services that support the existing community and future residents.

Given the general aim to provide a mix of uses around the 'eastern node' however, there is scope for additional office space and small-scale enterprise development to supplement existing office provision at Royal Canal Park, a gateway to the plan area (see land use strategy in section 4.2). This is of course dependent on improved market demand and therefore there will be reasonable flexibility in regard to land-uses.

Planned improvements to public transport in the vicinity – and particularly the planned second train station and Luas terminus at nearby Broombridge will combine to improve the market for business investment in the environs of the eastern node.

The realignment of Ratoath Road and the removal of manual level crossings will further improve accessibility to make the area more attractive to businesses. It is expected that there will be a cumulative effect arising from these improvements, and this may stimulate regeneration of older industrial lands, giving rise to increased demand for spin-off services.

Map 4.3 Employment areas - Environs of eastern node.



For the majority of the immediate plan area, future employment will be largely dependent on existing and new local services including shops, cafes, restaurants, and community uses. Such uses will be encouraged on pedestrian thoroughfares and fronting urban spaces, where active frontages can add to urban vitality, providing community focus.

Such uses will be supplemented by education-related employment when the primary school is built, and also by temporary employment during construction phases. Small-scale development adjoining the Royal Canal, in the form of bars/restaurants and other services have potential to enhance public appreciation of the canal as an amenity, and may generate additional service-sector employment.

'The Ormond' Printworks site on the eastern extremity of the plan area remains vacant, and given its current zoning it has potential to accommodate new employment generating uses. 'Science and technology based industry', 'enterprise centre', 'training centre' and 'cultural/recreational building' are examples of permissible uses on this large site.

In conjunction with the land-use strategy, and having regard to existing undeveloped sites, there is also scope for consideration of interim/ temporary land-uses on selected sites (e.g., a temporary school or community facility), and these may provide related temporary employment pending delivery of more permanent facilities.

Policies

ED1 To encourage employment-generating sustainable developments at the eastern and western nodes as part of mixed-use developments, benefitting from planned improvements in infrastructure and public transport. In particular, small-scale offices, business services and local level retailing will be encouraged.

ED2 To foster linkages with existing and emerging employment areas, including those at Finglas, Ashtown, and Broombridge/ Dublin Industrial Estate, in order to maximise employment-generating potential.

ED3 To promote the provision of employment-generating small-scale retailing and services in tandem with new residential developments in this Key Developing Area.

ED4 To adopt a flexible approach towards appropriate temporary/ short-term uses on vacant and/or underutilised lands and buildings as an interim solution, whilst ensuring that any such uses will not preclude the realisation of the longer term economic vision for the area.

Objectives

EDO1 To promote the sustainable economic role of the area around the eastern node, encompassing Royal Canal Park and the areas around the proposed train station and Ratoath Road, as an area for new investment and employment as part of an integrated mixed use environment at this gateway location. Uses encouraged include a mix of smaller-scale office uses, small-scale enterprise, local-level retailing and local/community services.

EDO2 To encourage the provision of sustainable employment generating local services, local retailing, and small-scale enterprise adjoining main pedestrian thoroughfares and urban squares in conjunction with the urban design strategy.

EDO3 To encourage development of small-scale canal-side services which enhance public appreciation of the Royal Canal and its amenities. Any such proposals will necessarily consider impacts on existing and planned residential amenities.

EDO4 To promote appropriate employment-generating uses for the vacant Ormond Printworks site, which occupies an important transitional area between established industrial lands and the emerging mixed-use environment at the eastern extremity of the LAP lands.



4.4 Movement and Access

4.4.1 Introduction

The Ashtown/Pelletstown area benefits from a location close to Dublin's City Centre (approx. 4 km), making it easily accessible by bicycle, and serviced by both a bus route and a rail service from Ashtown station to Connolly Station on the main Sligo line. The area has been planned around the integration of land-uses and transportation objectives as set out in the AAP. Objectives included the delivery of two rail stations, good public bus access, and a layout that promotes cycling and walking. This strategy remains valid today. Road access within the area has been constrained somewhat by the cessation of building works following the collapse of the housing market, and level-crossings which remain in place for traffic traversing the Sligo rail line remain a source of delay for road users entering and exiting the area.

A challenge for this LAP is to both promote use of sustainable transport options and to improve road connectivity and vehicular circulation. There is scope, given planned public transportation improvements, for further increases in public transport use, and also to further promote and support cycling and walking as sustainable options - either in tandem with public transport or as individual modes of travel.

The policy and objectives of this section seek to support strategic documents including the Governments 'Smarter Travel, A Sustainable Transport Future 2009-22', the National Transport Authority's 'Greater Dublin Area Draft Transport Strategy 2011-30', and Dublin City Development Plan 2011-17. These encourage pedestrian and cycle movement, increased public transport provision/usage, and seek densities of development that support this approach.

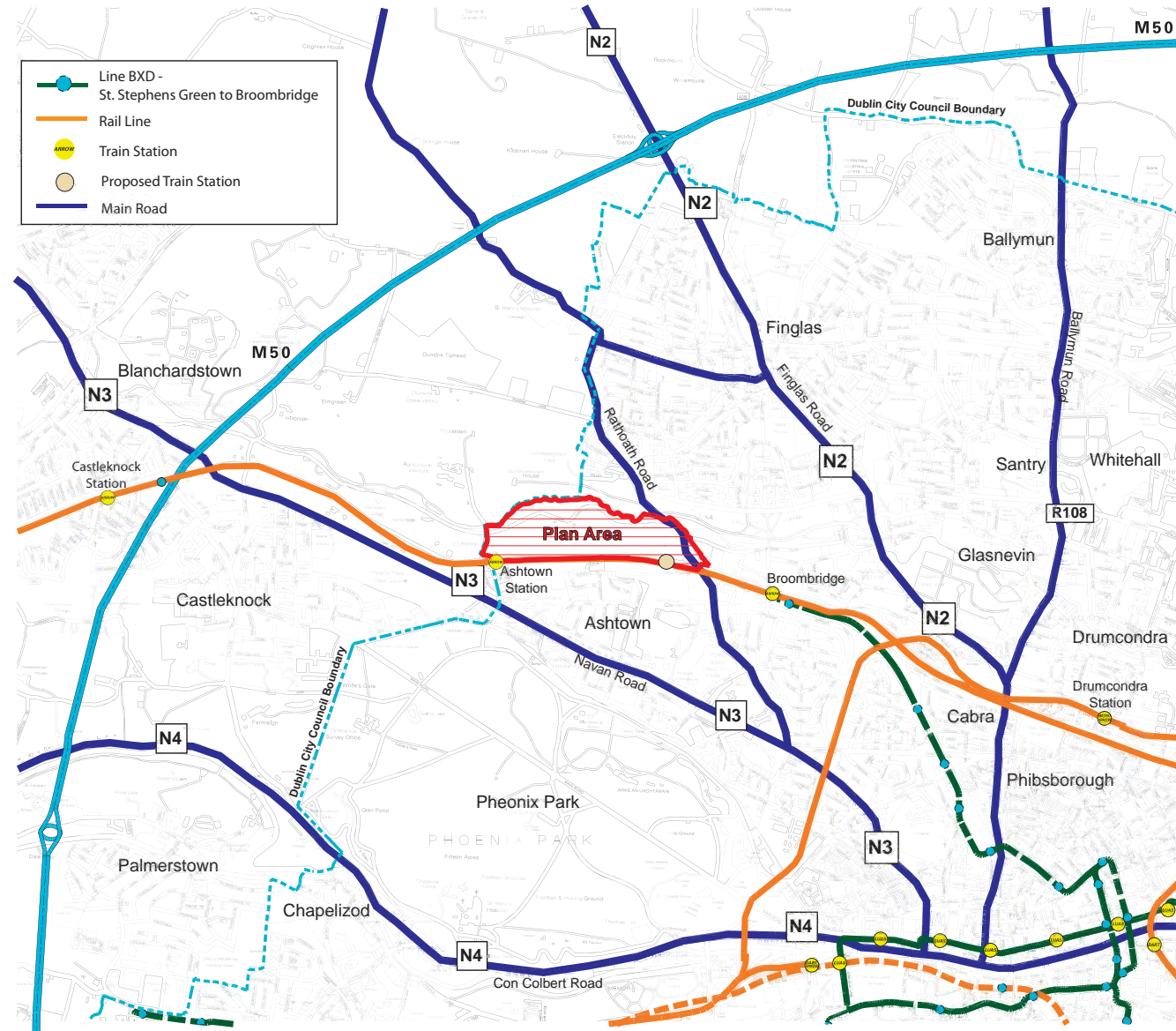
4.4.2 Pelletstown Action Area Plan 2000 and progress to date

4.4.2.1 Public transport

A potential new rail station was planned at the eastern end of the area adjoining Ratoath Road, and this was a key influence on the AAPs key structuring principles, including the approach to density. Whilst not commenced to date, lands remain available for this station, and the project is the subject of a planning application to Dublin City Council.

The nearby Broombridge station (some 700m east of the plan area boundary) will remain operational and will be supplemented by a new LUAS terminus to the proposed extension to the Green Line, known as 'Luas Cross-City'. This will facilitate interchange of passengers between train and Luas, and because the Green and Red Luas lines shall be integrated, the range of potential destination stops is greatly increased. Enabling construction works for Luas Cross City are now commencing, with passenger services planned to start in 2017.

The proposed airport rail link originally proposed in the AAP has not been delivered, and is not included either in the NTA draft strategy nor in the City Development Plan, and will therefore not be included in this plan.



Map 4.4 Existing road and rail network showing location of proposed rail and Luas stations

A bus service through the site was also sought in the AAP, and a privately run route operated until the route became feasible for Dublin Bus to take over. This route 120 now traverses the plan area, terminating at River Road (near Ashtown Road) . It is understood that the frequency of the service was reduced in 2012 due to low passenger numbers, and hence a larger catchment population would be likely to increase use of the route, supporting a higher frequency service.

In relation to modal split, a target of 40% of journeys by public transport and 60% by car was sought for all journeys - the delivery of the second train station near Ratoath Road being key to achieving this.

Persons aged 5+ ; Means of travel to work school or college (Total figure and percentage, 2011 Census)





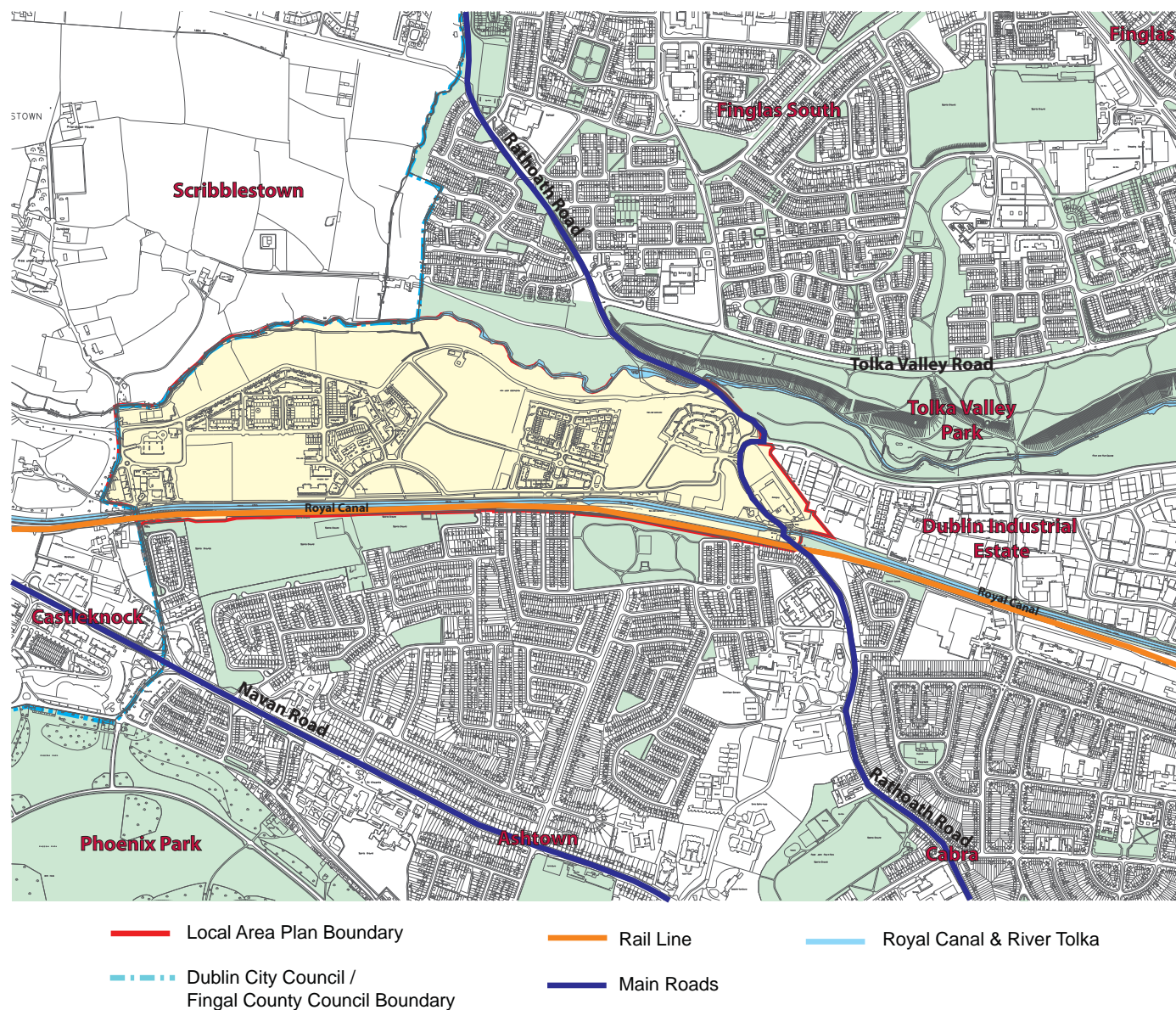
4.4.2.2 Road network;

Using small area statistics from the 2011 census in relation to journeys to work/school/college, the figure now calculates at 40% public transport and 50% private transport (see pie chart). The public transport share is considered a significant positive in the absence of the second train station, and there is potential to increase this percentage.

Examining the breakdown of sustainable modes of transport, bus/minibus users represent 45% and 36% represent train/Dart/Luas users. The remainder represent those travelling on foot or by bicycle. It is anticipated that the proportion of rail and Luas users will increase in the future in tandem with the delivery of the new stations. Improvements planned to the cycle network connecting the LAP area to the city are also expected to increase this modal share.

The AAP sought a high level of connectivity, with a network that encourages low traffic speeds by integrating traffic calming measures into road design. Whilst main access routes are largely in place, the overall network remains incomplete. Some undeveloped lands have partially constructed roads with drainage and other services already in place. In devising policy for the area, consideration should be given to the level of car ownership, and 'small area' statistics from the 2011 census reveal that 57% of private households had one car, 21% had two, and the remainder had none.

Map 4.5 ; Plan area in context showing main transport routes;



5 key objectives were set out in the 2000 AAP in relation to the road network, and the status of these objectives is detailed below.

Table 4.2 Roads Objective of 2000 AAP

	Roads Objective contained in the 2000 AAP	Current status
1	<i>The improvement and re-alignment of the Ratoath Road including a new bridge across the railway and canal and a new junction with the Ballyboggan Road and the Pelletstown Development.</i>	Whilst not delivered to date, this objective is now included in the Development Plan to be delivered within the lifetime of the plan subject to funding availability (see objective SI038). The new route would run through the adjoining business park and connect to a new bridge positioned just east of Reillys Bridge. Realignment of the road at Reillys Bridge is an NTA funded Irish Rail project which allows for the removal of the existing level crossing. Having received tenders for the project, construction is expected to commence by mid 2013 and take approx 21 months.
2	<i>The re-alignment of the Ashtown Road between the Canal bridge and the junction with River Road</i>	This was realigned as part of the redevelopment of this area.
3	<i>The down-grading of River Road to take light vehicles and local traffic only</i>	A development plan roads objective has been applied to River Road (objective SI038), seeking its upgrading subject to funding availability. Design options are currently being examined in light of the above objective, and funding is being sought. River Road currently has a restriction on HGV vehicles using it. It is currently however well used by non-local traffic and is signposted as a regional route.
4	<i>The creation of a discontinuous boulevard route alongside the canal with buses only provided with a through route across the site.</i>	This boulevard has been delivered with the exception of an area to the west of the central crescent park and extending to Ashtown Road. Having regard to the pattern of development to date, it is now considered more appropriate that Rathborne Avenue become the main east-west axis in this area, with the boulevard route on the canal reserved solely for walking and cycling .
5	<i>A series of transverse secondary routes running north/south across the site and feeding back into the primary route at the original section of Ratoath road to the east and into River Road to the West.</i>	Secondary routes have been provided where new developments have taken place and these generally connect to the main east-west routes. Some unfinished routes are also in place on undeveloped lands. Further transverse routes are yet to be delivered.





4.4.2.3 Parking and 'park and ride' facilities.

The AAP sought that parking be provided at a level to encourage public transport use, and the majority of parking provided was sought in off-street garages, and in basements. On-street parking was allowable on major pedestrian axes and local service routes. Table 17.1 of the development plan sets out parking standards in detail, and parking provision in this area is at a rate of one per dwelling within close proximity to a rail station, and 1.5 per dwelling outside this. On completion of the second train station, the entire plan area will be within 'area 2', with 1 parking space per residential unit as standard. To date residential parking has been provided mainly in underground car parks and in on-street locations. It is apparent in some areas however that there is a higher demand for parking spaces than there are spaces, and this has given rise to some unplanned parking around the perimeter of undeveloped sites and on streets where parking restrictions are less stringent.

'Park and ride' facilities ;

A park and ride facility was originally intended to serve commuters and those using the (then proposed) rail route to the airport. A site earmarked near Ratoath Road has not been developed for this purpose and is not considered necessary now, given the presence of nearby park and ride facilities serving the existing rail route ; the removal of the proposed airport connection, and also taking into account the potential of more sustainable modes to serve the train station.

4.4.2.4 Pedestrian and cycle movement.

The AAP strongly encouraged safe and direct routes through the scheme for walking and cycling. Whilst pedestrian and cycleways have been provided, they are not fully connected due to a number of fenced-off sites remaining undeveloped. In regard to specific objectives, two new pedestrian/cycle only bridges were proposed across the canal, and these would also necessarily traverse the rail line. Whilst these have not been delivered to date, the planned rail station near Ratoath Road will accommodate a pedestrian and cycle bridge over the canal and rail line. Public access to the canal towpath has however been delivered and there is now continuous linear access through the plan area as part of the wider 'Dublin Canal Way' off-road cycle route.

This shall eventually connect with Fingal County Councils planned improvements to the towpath along the canal in the immediately adjoining area to the west.

In addition, new pedestrian and cycle routes are almost complete in Tolka Valley park, adjoining the river within the plan area. Furthermore, objective GC02 of the Dublin City Development plan aims 'to provide a pedestrian and cycle green way link, interconnecting the Royal Canal and the Grand Canal via the Phoenix Park in consultation with the Office of Public Works'.

4.4.3 Movement and Transport Strategy

Key aims of the LAP strategy are ;

- To improve accessibility and maximise public transport use, taking account of planned rail and light rail developments which will benefit the area.
- To encourage use of sustainable transport options. Walking and cycling shall be encouraged, particularly for shorter trips. The City Council shall also seek removal of existing barriers to walking and cycling. Emphasis is placed on interconnecting all proposed cycle routes including those illustrated in section 4.4.4 (Map 4.6) and detailed or referred to in objectives MAO1, MAO2, MAO5 and MAO7.
- To prioritise planned infrastructure that supports public transport, and secondly to ensure the land use strategy is informed by, and integrated with transportation objectives.
- To encourage improved traffic flow through the scheme through removal of barriers to traffic movement in association with new development.
- To seek the interconnection of walking and cycling routes with key public transport and amenity destinations (both existing and planned).
- To encourage sustainable densities of population, such that public transport is supported and sustained, and walking and cycle routes are kept active.



4.4.4 Key elements to deliver the strategy

The following transport infrastructure projects are seen as key to the longer term success of the area and its effective integration into the wider urban fabric.

- *The delivery of a second train station on the eastern end of the plan area ;* Notwithstanding the current hiatus in building and development, the sustainable development of the eastern end of the plan area will benefit significantly from the opening of a second station. Whilst still at permission stage the eventual station will include a pedestrian/cycle bridge over the rail line and canal connecting to residential areas at Ashington. In order to ensure sustainable and efficient use of land in the vicinity of the station, no 'park and ride' facility shall be provided but high quality cycle parking will be sought.
- *The upgrading/improvement of River Road.* River Road currently takes significant traffic volumes and a high proportion of through traffic in addition to traffic using the road to access properties in the plan area. The physical alignment is in need of improvement and significant works are necessary both to bring the road to modern standard and to manage traffic generally. Also, given the proposed opening of a series of public access points to the new section of Tolka Valley Park, it is important to ensure safe public access across River Road at selected crossing points.

Achieving this will require steps to slow down current speeds of vehicles, improvements to visibility, and clearly marked crossing points. The current arrangement at the road does not provide for pedestrians and cyclists, and for a large section is rural in character lacking the width of carriageway to provide for a footpath or cycle lane. The condition and form of the road, in combination with the current use of the road by traffic as a through route, and the need to provide for safe pedestrian and cycle connections, mean that the current arrangements for this road cannot remain.

The Council will therefore pursue two possible solutions during the lifetime of the LAP.

Solution 1. Seek funding for a full upgrade of River Road from Ashtown to Ratoath Road, to provide 2-way traffic with pedestrian and cycle provision.

Solution 2. Where funding cannot be provided, the role of River Road shall be downgraded to cater for local traffic only. As part of this it is proposed to divide the road into a two-way section at the western end, and a one-way section on the remainder, using available carriageway widths to provide for pedestrians and cyclists on the road and for crossing points to the park.

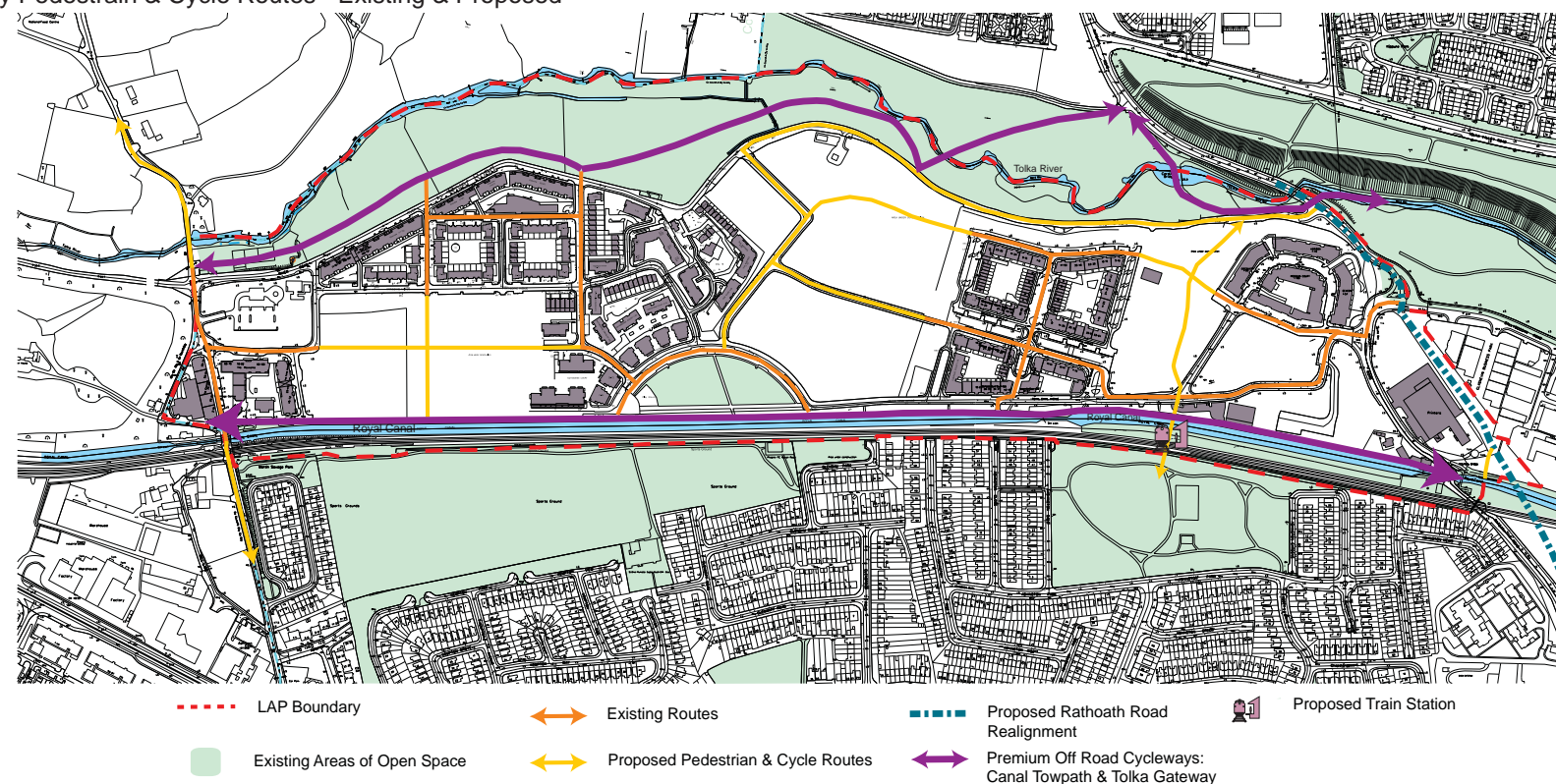
Also, because of the need to resolve safety concerns at the bend of River Road adjoining the entrance to Pelletstown Manor, traffic calming measures are currently being drawn up for implementation.



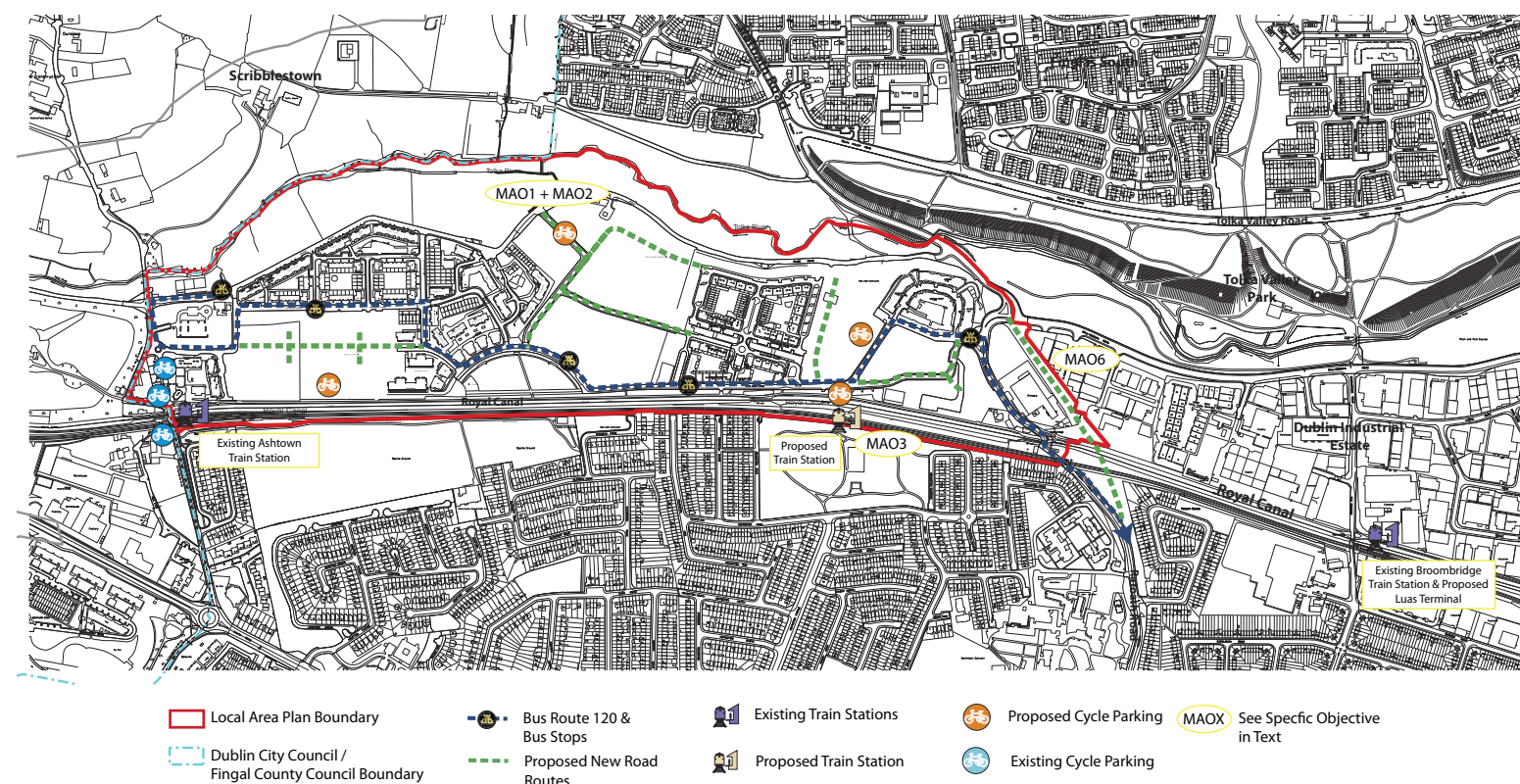


- The implementation of the Ratoath Road Realignment scheme and associated rail overbridge. At present, vehicular traffic travelling on the Ratoath Road must wait at a manual level crossing at Reillys Bridge at a point where the road alignment is poor. As this rail line is an important commuter service, the numbers of trains at peak hours result in significant congestion at the level crossing, impacting on the LAP area. Pedestrian access to the existing pedestrian bridge is also in need of improvement and cyclists have no dedicated lane. For pedestrians and cyclists using the towpath, crossing the road to the next section can be difficult. On this basis the design for the realigned route as approved under An Bord Pleanála reference 29N.HD0017, shall include a flyover bridge with integrated pedestrian and cycle routes. The existing level crossing shall be removed and pedestrian access from the towpath to the bridge shall be incorporated. This will result in the removal of traffic from Reillys Bridge allowing for improved through access for those using the towpath.
- The replacement of the existing manned rail level –crossing at Ashtown. It is understood this is prioritised for removal as part of Irish Rails current 5-year plan. No detailed plans have yet been developed to address the future of this crossing. In any solution proposed, Dublin City Council will seek to ensure that strong connectivity, particularly for pedestrians and cyclists, is maintained at the junction.
- The delivery of a LUAS terminus at Broombridge rail station in association with proposals for Luas Cross-City. Whilst located some 700 metres east of the plan area, this will be of benefit to the area because of its close proximity and also because it serves a different route to both the rail line and bus service. The line was granted permission by An Bord Pleanála in August 2012 and works on this line have commenced in 2012, with the service due to be operational by 2017.

Map 4.6 Key Pedestrian & Cycle Routes - Existing & Proposed



Map 4.7 - Proposed Road Network with Public Transport Routes & Cycle Parking





- The completion of main distributor road routes through the plan area in tandem with new development . This shall ensure an appropriate hierarchy of streets and more dispersed traffic movements.
- The completion of a network of walking and cycling routes throughout the area, with appropriate connectivity to both the park to the north, the canal towpath to the south, and other amenities within the plan area . This network will also be beneficial for residents in regard to accessing local services and connecting/integrating with adjoining communities and areas. Advantages will include improved access to sports clubs to the south, enhanced cycleway connectivity to the Phoenix Park and to the Canal, and improved connectivity to nearby destinations including Teagasc and Dunsink Observatory (both located in Fingal County Councils area).

- Vehicle Parking.

- a) Residential.

Car parking should be provided in basements/undercroft, garages, within the curtilage of dwellings, or on-street along major pedestrian axes and local service routes.

Having regard to the eventual development of vacant sites and the poor availability of overflow and visitor parking, but also considering the need to restrict parking close to the rail stations, it is considered appropriate to allow for a higher rate of parking space provision, 1.5 spaces per unit, in all areas over 200 metres from any existing/planned rail station (measured 'as the crow flies'). Within this radius (see map 4.8) a lower standard of one space per unit shall be the standard. The higher rate will assist in facilitating a relatively high proportion of family sized units in areas more distant from the stations. A minimum of one assignable space per unit should be provided in all cases.

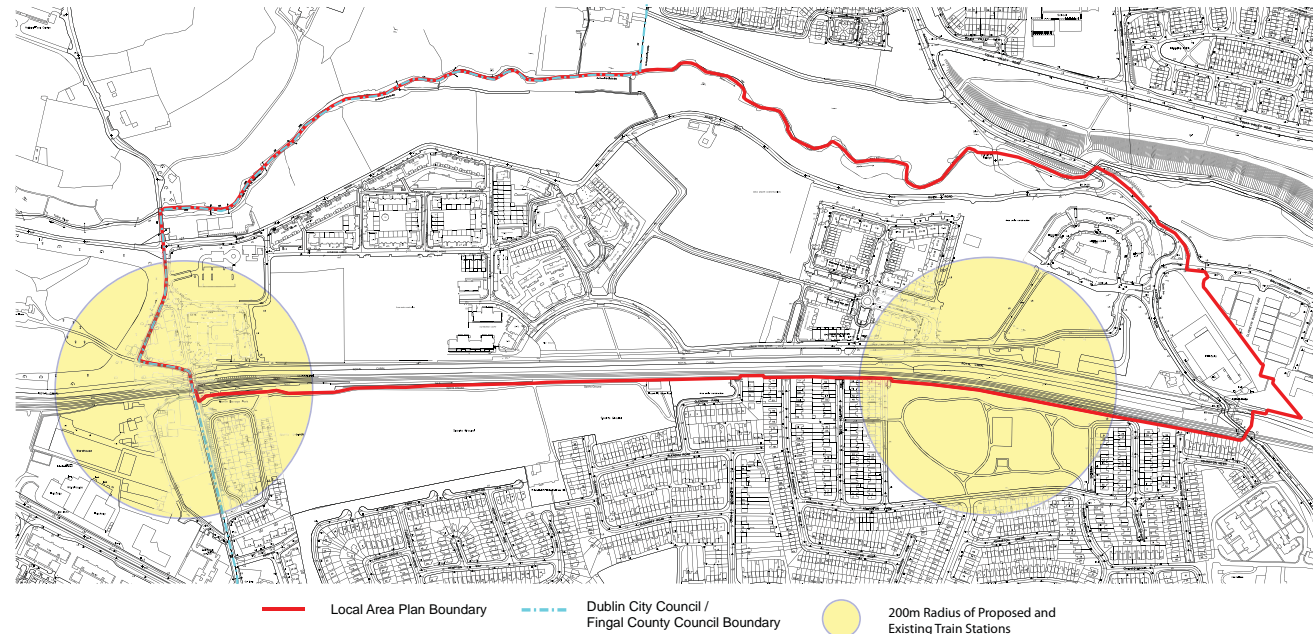
In addition to the above, and to allow for some anticipated excess, visitor parking spaces may be provided at the rate of one for every 10 units for sites within the 200m radius and one for every 5 outside it. The table below summarises the approach ;

Table 4.3 Residential car-parking standards.

Distance from existing or planned rail station.	Within 200m radius	Outside 200m radius
Parking standard	1 space per unit or 1.5 for units of 3+ bedrooms. Note ; A minimum of one assignable space per unit should be provided.	1.5 spaces per unit Note; A minimum of one assignable space per unit should be provided.
Additional visitor parking	One space for every 10 units	1 space for every 5 units.

Taking an example of a 32 unit 3 bed scheme. It would generate a parking requirement of 51 spaces (ie 48+3 visitor spaces) if within the 200m radius, and 54 (ie 48+ 6 visitor spaces) if beyond it.

Map 4.8 Location of 200 metre radius around the existing and planned train stations



In the event of parking being proposed in building basements- demonstrating efficient use of land, the Council may, depending on the quality of public realm proposed, look favorably on provision of spaces in excess of the above standards.

- b) Commercial and community uses.

Development plan parking standards will apply in relation to these land-uses which include offices, retailing, and various community uses. Particular attention will be paid however to the layout and design of such parking provision in or close to the eastern and western nodes and adjoining public squares, where public realm is the main consideration. In some such contexts there may be a need to restrict the extent of surface parking.

- Cycle Parking.

In conjunction with other objectives relating to sustainable transport, provision for cycle parking is considered essential at destinations including train stations, at shops and community facilities, and at schools. Apartment blocks and houses also need to allow for convenient and safe cycle parking. Provision should accord with development plan standards (please refer to same for further detail), the required number of cycle stands being dependent on the specific land-use.

- Mobility Management/Travel Plans.

In order to achieve sustainable transport objectives, pro-active encouragement of sustainable transport modes is considered necessary, particularly given the high level of planned public transport provision in the area. Requirements for Mobility Management Plans and Travel Plans shall be as per development plan requirements as set out in Appendix 5 and section 5.1.4.6 of the plan.

- Phasing.

Phasing proposals that actively encourage early improvements to permeability within the LAP lands will be encouraged. For example, it may be feasible to open a cross-site pedestrian and cycle route, or to open a new section of road on those portions of land that will not be developed until later phases. This can assist in resolving existing barriers to movement pending full development of the sites in the final phases, with clear benefits for connectivity and sustainable commuting.





Movement & Access Policies

MA1 To improve accessibility throughout the plan area, facilitate the completion of a hierarchical road infrastructure network, and encourage links to existing and proposed public transport nodes both within and beyond the LAP boundary.

MA2 In tandem with new public transport service delivery, to sustain and build upon the existing high percentage (40%) of residents using public transport and soft modes (10%).

MA3 To promote increased cycling and pedestrian activity through the development of a network of routes that connect to public transport routes, centres of employment, amenities, and community and retail destinations.

Movement & Access Objectives

MAO1 To implement an improvement scheme for River Road by 2017 in accordance with objective SI038 of the Dublin City Development Plan 2011-17 that provides for (i) safe movement of traffic, (ii) pedestrian routes along and across the road, and (iii) cycle connections. The eventual design will incorporate a two-way section on the western (Ashtown) side, and a one-way eastbound section on the remainder, connecting with Ratoath Road. This design shall be the subject of detailed study. Interim road safety measures will also be carried out.

MAO2 In association with MAO1, to deliver a series of visible and safe pedestrian/cycle crossing points across River Road to interconnect key routes with access gates to Tolka Valley Park.

MAO3 To facilitate the delivery of a second train station close to Ratoath Road, incorporating a pedestrian and cycle bridge over the canal and rail line.

MAO4 To deliver an integrated road network of primary and secondary routes involving a series of transverse road routes running north/south across the plan area and connecting to existing and proposed east-west routes. This will provide a permeable street network, allowing for balanced dispersal of traffic and serving both existing and new developments.

MAO5 To require the preparation of a phasing programme with all proposed large-scale developments, to include (*inter alia*) clear reference to the intended roll-out of transportation infrastructure on the site. This programme shall also refer to planned improvements in connectivity for pedestrians, cyclists and motorists in the area, taking account of existing infrastructure and current barriers to movement.

MAO6 In accordance with objective SI038 of the City Development Plan, to seek the delivery of the proposed re-alignment of the Ratoath Road including a new bridge across the railway and canal and a new junction with Ballyboggan Road (expected completion date end 2014)

MAO7 To encourage and facilitate, in cooperation with Fingal County Council and Iarnrod Eireann, the replacement of the existing manually operated rail level crossing at Ashtown Road, with a suitably designed alternative. The eventual design shall have regard to both existing and proposed developments in the immediate vicinity of the plan area and provide for high quality pedestrian and cycle facilities linking with existing and proposed pedestrian and cycle networks both within and surrounding the LAP area.

MAO8 To provide for adequate car parking provision for new developments within the LAP area that promotes sustainable modes of transport, discourages casual park and ride, whilst also catering for the needs of car storage and commercial and community activities, as per section 4.3.4 of this plan.

MAO9 To promote appropriate temporary uses on existing surface car parking areas associated with former marketing suites in the LAP area, pending proposals for more permanent development.

MAO10 To seek the provision of new cycle parking facilities in tandem with new development, including community, residential, commercial and public transport developments. As part of such provision, the Planning Authority will seek secure cycle parking provision at the specific locations illustrated in map 4.7 .

MAO11 Within the plan period, to seek the achievement of a target of 50% of journeys by public transport modes combined (based on means of travel to work / school / college)

MAO12 All planned infrastructural improvements (including widening berthing areas at the Royal Canal bridge crossings etc) shall ensure that the requirements of the EIA, Habitats, Water Framework and Floods Directives respectively are taken into account where appropriate

MAO13 To maintain ongoing contact with Fingal County Council in relation to traffic issues and transport-related objectives or works that may impact on the delivery of the planned transportation network in the LAP area.

MAO14 To review existing signage both (a) on the adjacent main roads, and (b) within the LAP area, with the intention of providing new directional signage to encourage a sense of place for people who work and live in the area.





Section 4.5: Urban Form & Design

To complete a new residential community that has an identifiable and attractive character, with high standards of building and public realm, design and finish set within a series of legible, permeable spaces and streets that capitalise on the green character of the LAP setting.

4.5.1 Introduction

The aim of this section is to set out the principles and spatial structures that achieve a high quality sustainable urban community, with a strong sense of place. Good urban design requires high quality spaces and buildings, framing spaces and the public realm so that streets, civic spaces and residential areas achieve high standards for their local environment, are finished in high quality materials and will add value to the community. Quality urban design is essential in setting down a built environment template that will be successful and go a long way in ensuring the long term economic viability of the neighbourhood.

The LAP seeks to co-ordinate the various physical, infrastructure and policy strategies to ensure that a viable and attractive new urban community is developed.

This section of the LAP examines the current urban structure of the LAP area; will address the future role of the original structuring principles in the LAP, and following this also addresses the related and mutually supporting topics of height, public realm and building design.

4.5.2 Existing Urban Structure

Within Ashtown/Pelletstown there remain substantial areas of vacant land adjacent to residential development. The completed development is generally mid-rise, comprising of 4-8 storey apartment or duplex type dwellings. The road network remains incomplete.

The perimeter block form has been extensively used for existing housing, with a mix of house types forming the square addressing the street, and private shared open space for the residents located to the rear, the other dominant form of housing is that of apartment blocks over underground car parking.

A range of buildings in the Rathborne village centre beside Ashtown rail station is completed and include shops and restaurant forming a recognisable retail core. The second "village centre" at Royal Canal park, has provided a range of retail and commercial premises but has not developed the same level of activity or been completed to the scale originally envisaged as a result of the current economic downturn. A smaller local retail focus provided at the River Centre supplements these two nodes.

The existing pattern of development, though incomplete, shows the potential of some of the original urban design principles such as the Crescent Park, creating a pivot point connecting the west with the east and framed by residential units that frame the space, and the linear park along the canal, overlooked by residential units to create a pleasant and safe asset.

4.5.3 Structuring Principles

The Dublin City Development Plan 2011-2017, Section 16 set out the urban design guidelines for the city encompassing streetscape, building layout and public realm. In addition, the Strategic Development Regeneration Area (SDRA) designation prescribes further urban design aims. These policies are reflected in the LAP and future development must address these, along with the more detailed policies and objectives of the LAP.

Critical to developing a successful urban design strategy for this LAP is to review and where suitable, build on the 2000 Action plan urban design framework; of which sections have already been delivered.

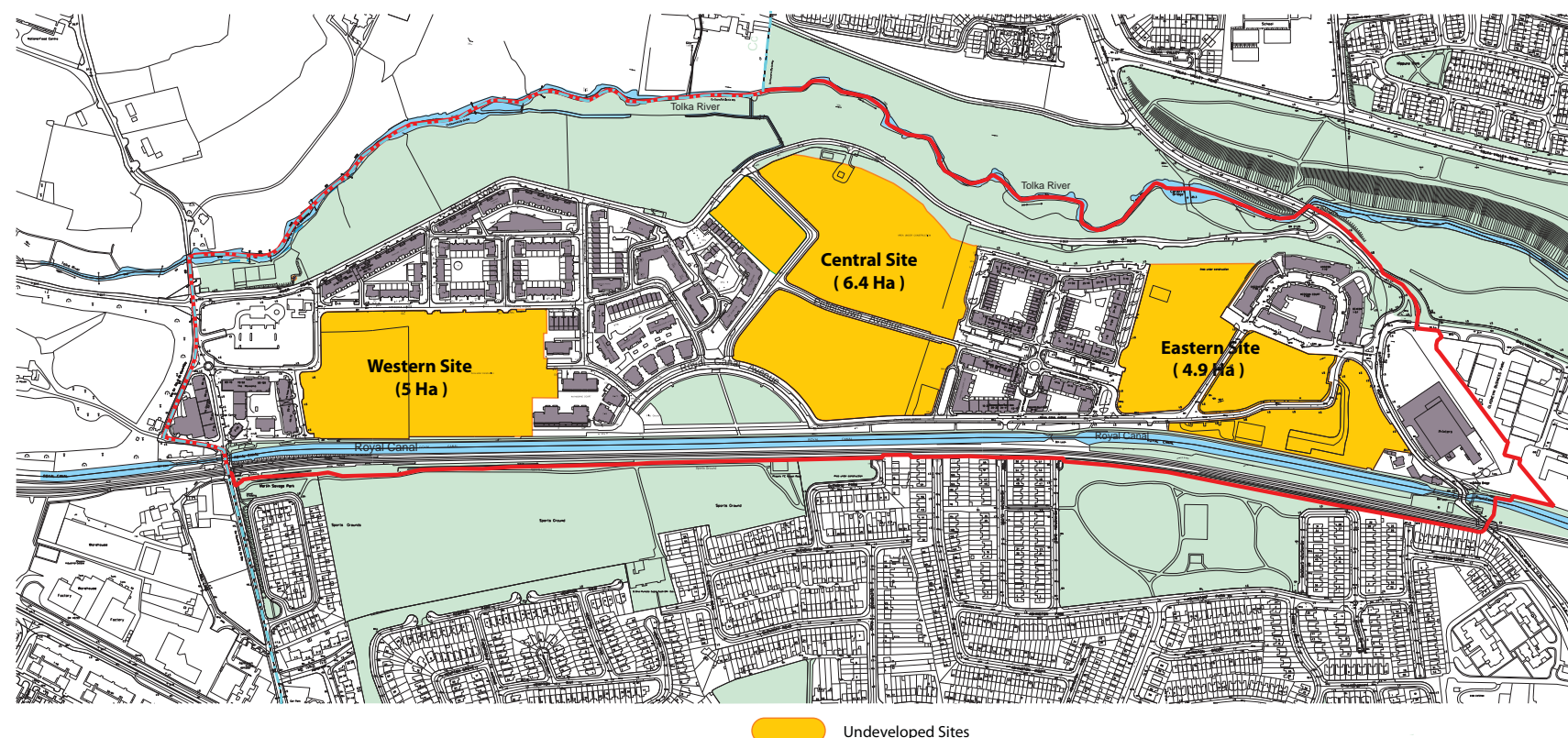
In summary, the AAP Structuring Principles were:

- 1- Two new public spaces located at either end of the LAP area
- 2- Central park bounded by the Canal and with a crescent of villa housing
- 3- Tree lined canalside boulevard running into the new public space
- 4- North-south secondary routes connecting the canal to the river valley
- 5- The canal path to become a sequence of hard and soft landscapes
- 6- Well defined building line on the north-east ridge overlooking the valley
- 7- Gateway development at new junction to Ratoath Road.

Of these, one of the two public spaces has been completed; the central park with the crescent partially complete; the boulevard is partially complete, and a strong building line and gateway building were provided at the eastern end of the LAP. The north south routes are not yet completed, and the towpath has been upgraded and forms part of a hard and soft parkland setting except where adjacent to undeveloped sites.

In establishing the urban design principles for the LAP and to achieve coherence in the integration of existing and new development, it is considered that as much of the original principles from the 2000 Action Plan should be delivered and/or completed in future schemes; with some adaptation or modification to reflect changed circumstances or needs.

Map 4.9 - Ashtown / Pelletstown Undeveloped Sites





Public Spaces

Rathborne Village as a new public space and commercial centre is one of the successes of the LAP area, with this quarter being a local hub and the public space interlinking with the canal and access to the train station at Ashtown. In the 2000 plan the eastern part of the LAP was also to have a public space, involving also a harbour area and significant commercial development.

This scale of development is no longer appropriate, and the LAP now proposes the creation of a new community park interlinking with a new smaller scale urban space focussed around the entrance for the proposed train station at Pelletstown. A commercial “heart” for this part of the LAP is now proposed to be refocused closer to the junction with Ratoath Road with the existing units and commercial development forming a central part of this “heart”.

Central Park & Crescent

The completed park forms an attractive central feature of the LAP area, and is actively used by the residents of the surrounding community. The playground is an important local facility for young children. The appropriate completion of the crescent addressing the park is vital to the urban design approach to this space; using buildings of a suitable height and scale to adequately achieve a strong crescent form and integrate with the existing pavilion blocks. The new buildings must achieve heights between 4-6 storeys facing the park to ensure that an integrated approach, essential to forming the crescent, is fully delivered.

Of the park itself, it is recommended that future planting and landscaping within the space gives greater emphasis to providing native species and plants which will support a wider biodiversity mix.

Tree-lined Canal Side Boulevard

The boulevard route proposed in the 2000 Action Plan joined the two villages and followed for a large part of the route, the line of the canal and towpath, looping around the Crescent park and exiting the LAP area a block north of the canal route. As the area has developed and policies and context have evolved, the delivery of this boulevard has changed, in that the risk of this becoming a fast trafficked route alongside the Canal emerged. The decision not to facilitate the completion of the boulevard was made, with the more recent developments west of the Crescent not providing for its continuation. As a result it is not proposed to seek full achievement of this urban design principle.

However, in creating an attractive and suitable public realm between the towpath and new housing, the provision of a local access road between (and serving) new housing facing the canal and the linear park framing the towpath provides a level of both passive supervision and suitable separation of the private spaces of the new housing from the public route.

Completion of local access roads adjoining the canal, which can connect with pedestrian and cycle routes already provided, will increase local connectivity within the LAP residential area, without creating a traffic ‘rat run’.

Canal Path

This LAP area is unique with its number of significant attractive natural and historic assets. The Royal Canal, with its historic locks, attractive waterside setting and towpath walk linking the LAP area west to Clondra on the Shannon and east to Dublin Bay provides a wonderful asset to the residents of the LAP area. To make the most of this asset, it is essential that the canal is given the best setting possible. The already provided linear park in the mid-section of the LAP gives the towpath walk a pleasant setting and enhances the natural and green “soft” environment of the canal itself, allowing for new tree planting to provide light and shade and protecting existing mature trees. At the western end of the LAP, the towpath park becomes an urban setting, reflecting the urban character of this area and its role as a key crossing point of both the canal and rail line.

For the lands remaining to be developed that face the towpath, the completion of the linear park between the two urban “points” is a critical element of the design strategy of the LAP. A minimum set back of 10 metres from the towpath to form part of the linear park will be required; with allowance to taper this as it approaches the main crossing points at Ashtown station and Ratoath Road.

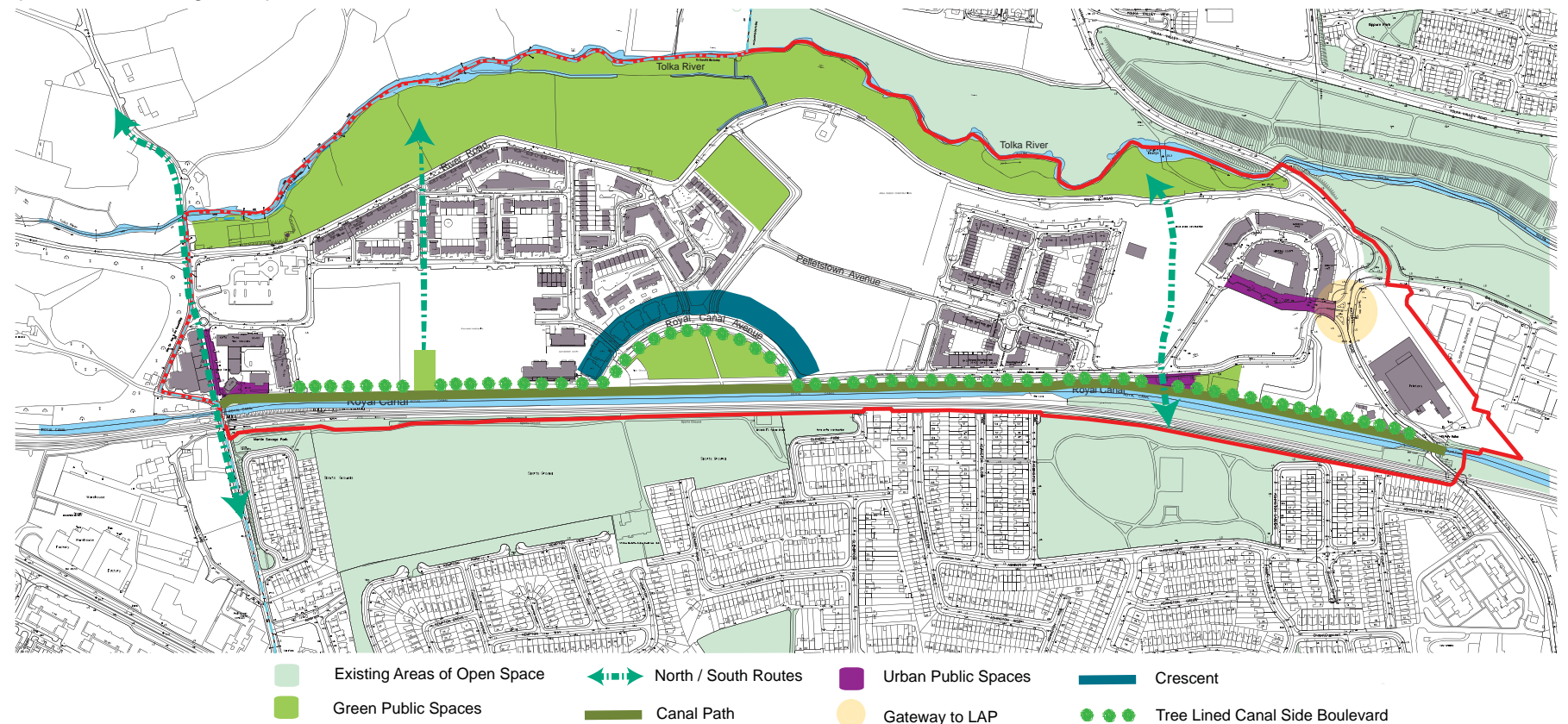
To increase accessibility and safety, new stretches of the linear park shall provide new gate entrances to link with existing and proposed north-south routes and provide direct and easy access to the towpath for residents in the vicinity.

Gateway to LAP at Ratoath Road

The 2000 Plan provided for a strong commercial centre at this location by Ratoath Road, partially predicated on a new airport train link being provided from this location on the Sligo line, with 60% of floor space to be commercial uses. In light of changed transport and land use policy since 2000, and the lack of a strong market for a large volume of new commercial space in this location, this approach is being modified by this LAP. (Section 4.2 refers). This change also has an impact of the shaping of the gateway. The volume of commercial development previously proposed is no longer considered appropriate.

However the original concept of ensuring that the entrance into the area from the Ratoath Road is both attractive and visually impressive should not be lost. Also, taking into consideration that some of the gateway has already been completed, the development of the remaining area of land will need to respond adequately to these buildings. Alongside this, the commercial character at ground floor level of the existing buildings provides opportunities for further retail at ground/first floor as part of an integrated design.

Map 4.10 - Structuring Principles





The development of the lands to the south of the entrance shall provide the location for well designed buildings, with a high quality landscaped setting that addresses the corner, and use some height (4+ storeys) to provide a counterbalance to the existing buildings. In the shorter term, this space must be landscaped and maintained to ensure that the entrance to the LAP area is inviting, attractive and supports the residential amenity of the existing residents.

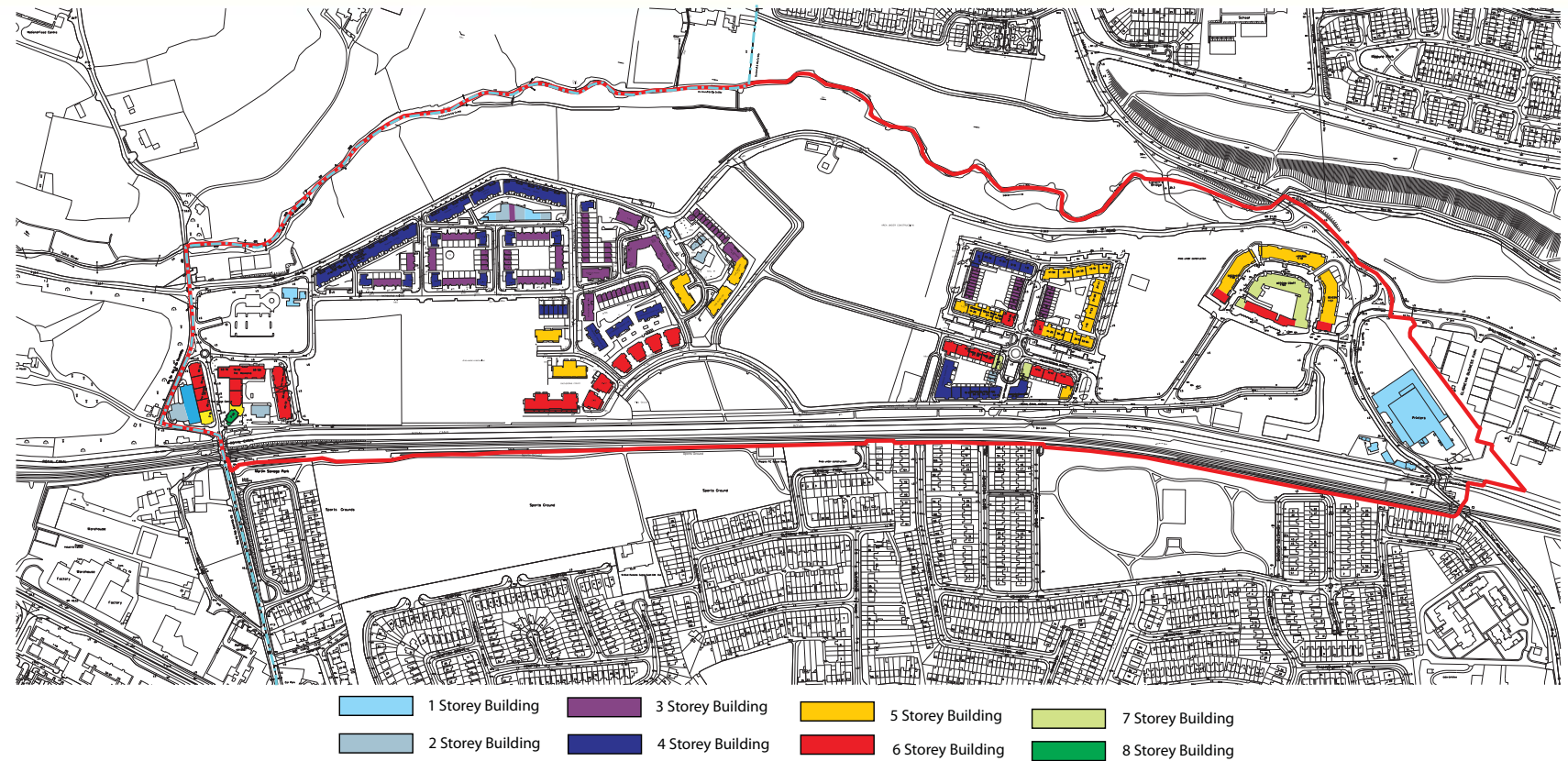
Secondary North/South Routes

In the 2000 plan, two secondary north/south routes with pedestrian links from the canal and railway linking to the Tolka Valley Park were proposed, with one shown connecting across the rail line into the park at Ashington. So far, elements of the routes have been put in place but due to the cessation in construction, they have not yet been completed. This cessation provided an opportunity to re-assess the location and function of the routes.

This “green” connectivity approach is a positive concept for the LAP, and the concept has been further developed and related to what has already been provided within the area. (See Section 4.9 for greater detail). The LAP now proposes three “green routes”, (i) from the Phoenix park to Dunsink via the Ashtown crossing, to provide an attractive pedestrian and cycle friendly tree lined route with a mix of hard and soft environments; (ii) from the Canal through Rathborne via a new green space on the “Capel” site to Tolka Valley park and (iii) from the pedestrian bridge to serve the new Pelletstown Rail Station beside the Canal linking the biodiversity park/attenuation area and through into Tolka Valley Park. These routes will connect directly to existing and proposed pedestrian and cycle routes that connect the LAP area to the wider City, and also provide connections to support biodiversity within and surrounding the LAP.

4.5.4 Height Strategy

The Development Plan tasks each LAP to set parameters for appropriate heights with the LAP area. Currently the completed developments provide quite a mix of heights across the area, reflecting the higher percentage of apartments built. The majority of the buildings are three and four storeys, with higher buildings at the two centres at the eastern and western ends, rising in excess of seven storeys. Map 4.11 shows the heights of all existing buildings within the LAP area.



Map 4.11: Existing Building Heights (2013)

The pattern of heights of existing buildings reflects elements of the 2000 Plan. It gave general guidelines that heights could be up to five storeys at the periphery, and for those facing public squares and overlooking the Canal. Heights up to four storeys were recommended overlooking the Tolka river, and between 3-4 storeys on linking routes within the site, with heights and scale reducing in the central part of the LAP. As the property market surged during the 2000's the heights for some developments built exceeded the 2000 plan guidelines.

Though there is an irregular street pattern in areas due to layout arrangement, there is a discernable pattern of an elevated storey at corners, creating a strong visual element, particularly when arranged in a block pattern e.g. Rathborne Avenue/Rathborne Close. There are also examples of 2/3 storey development, adjacent to Pelletstown House integrating new with the existing and this also adds to the variety in the area.

The LAP seeks to safeguard and enhance the urban structure and landscape character of the area while facilitating a mix of new development types and providing for higher densities at premium locations. This can encompass appropriately sited and designed taller buildings within the village centres, in keeping with the 2000 action plan desire to see higher densities and distinction at transport nodes.

In setting a height strategy for the LAP a number of considerations must be taken into account, namely;

- (i) the existing buildings and their relationship to new buildings;
- (ii) the 2000 Action Plan and the partially delivered elements thereof;
- (iii) the housing types to be provided on the remaining lands;
- (iv) the principles outlined in the City Development Plan for this area in Section. 16.3.1;
- (v) the comments relating to height in the submissions received during the preparation of the LAP;
- (vi) the landscape and setting of the LAP area in the wider district and
- (vii) the relationship of height to the two key heritage assets – the Tolka Valley and the Royal Canal.





The issue of sustainability also plays an important role.

The LAP seeks to provide a greater diversity of housing types, whilst also remaining true to the urban design approach set out in 2000, and which is partially implemented in the existing buildings, roads and amenities. It is proposed therefore, that the previous general approach of lower heights in the centre of the LAP, with an increase in height at the villages will be continued, and that some element of height should address the Canal for the full length of the towpath, and the Crescent completed, supporting the delivery of the urban design principles outlined above. To achieve this a range of suitable heights are identified for areas within the LAP, which will set parameters and give clarity, but will also allow for variation in design and building types within each area. See map 4.12 below.

The Development Plan allows each LAP to decide the most appropriate heights for development within the LAP area, within a maximum parameter. For this LAP the maximum parameter is which can be used is up to 50m (16 residential storeys or 12 office) as this LAP was identified as one which had the potential to accommodate an element of height within the overall development. Having reviewed heights and existing development however, it is not intended to pursue heights to this maximum parameter and the approach to maximum heights allowable in the LAP is set out hereunder;

Overall the general height maxima for this area are up to six storeys residential or six storey office, due to the proximity of the rail line. Any proposal for buildings with significant height will be assessed against the policies of the Dublin City Development Plan and must have regard to the criteria set out in section 17.6.3 of Dublin City Development Plan 2011-2017.

The strategy contained in this LAP seeks to support the principles of the 2000 Plan and also adapt elements to reflect both the existing built fabric and the issues raised during the preparation of the LAP. Heights above six storeys will be focussed solely in each of the two “village” locations, with a general maximum height of 8 eight storeys and with only one mid-rise building (limited to 10 storeys) suitable in each village location, and must be both high quality in design and add character and distinctiveness to the village setting.

It should be noted that it is considered the existing buildings built at Rathborne village already provide for this single mid-rise building.

Within the ‘main area’, illustrated by the yellow hatching on the height strategy map the approach is to allow for a stepping down of height to housing developments averaging between 4 and 2 storeys generally in the central area, with an extra storey plus the option of a setback floor allowable (6 storeys) to turn corners or mark ends of longer terraces.

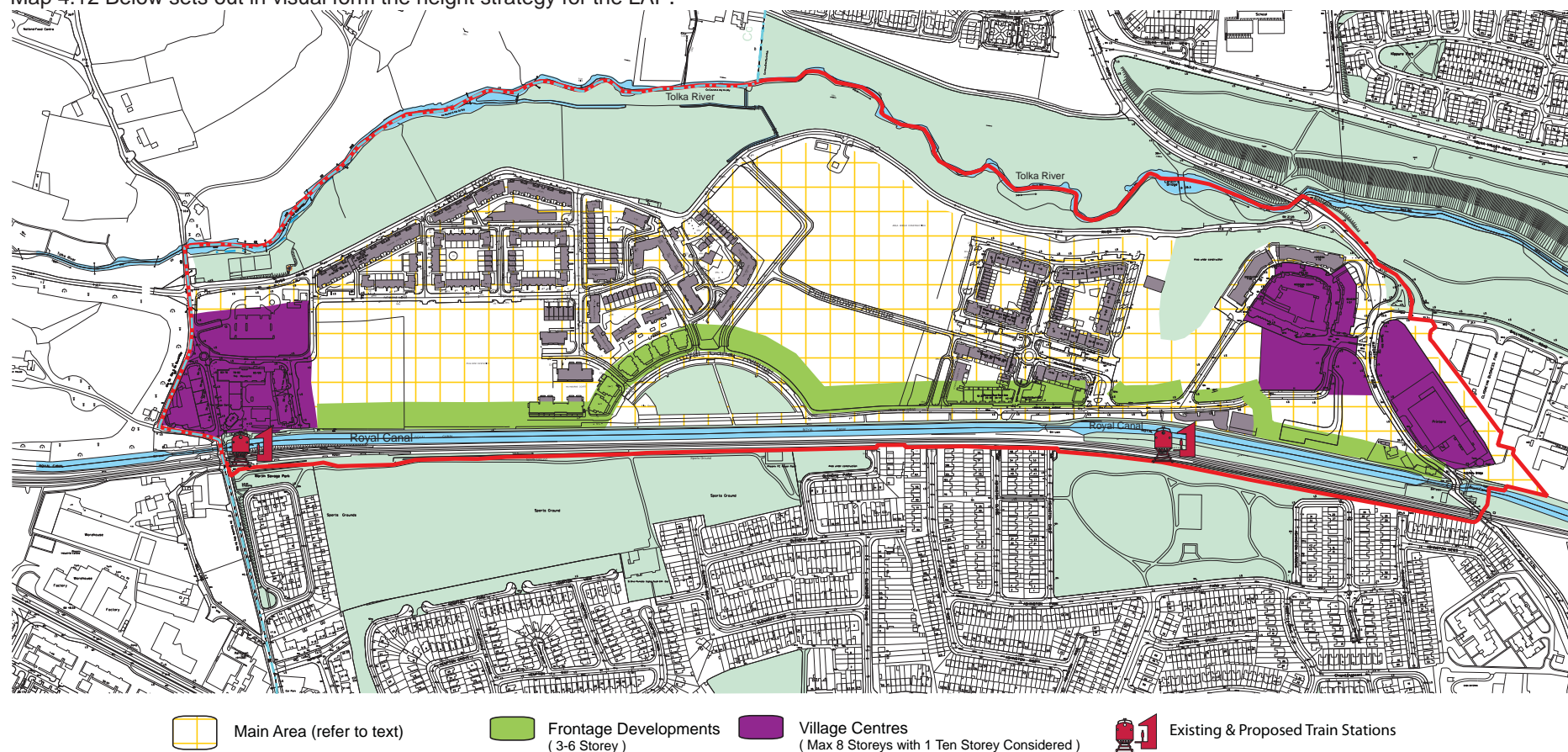
For addressing the canal, the need for strong visual presence to provide vitality, natural supervision and interest heights of buildings will range from a minimum of 3 up to 5 storeys (in the central area) up to between 5 and 6 storeys closer to the village locations.

The existing built form presents some challenges in that the framing of incomplete streets to the height of the existing buildings on one side is no longer viable. For these locations a gradual step down will be needed, with opposing street blocks approximately 1-2 storeys lower rather than allowing a significant drop to the more general heights described above. (A height drop of 2 storeys interspersed with lower height or with gaps in frontage may be necessary if the existing block is on the northern side of a road, to facilitate adequate sunlight availability to the existing residents).

Where the drop is noticeable, design solutions to minimise the impact must be employed, for example such as mono-pitch roof or increased height to the front, set back to create a green strip/linear park to create distance between the two building lines or including a varied height mix that provides for some height and correlation between the two sides of the road. Detailed design and the palette of materials used can also play a role in ensuring some visual compatibility between buildings of differing heights and can add interest to the street.



Map 4.12 Below sets out in visual form the height strategy for the LAP.





4.5.5 Public Realm

The Local Area Plan seeks to create a connected, vibrant and high quality public realm where people can enjoy and experience a wide variety of functions. This will involve the creation of legible connections, quality landscaped areas and robust streetscape features. The City Development Plan 2011-2017 requires development proposals which include or impact upon the public realm to consider the design of public spaces as a priority and demonstrate compliance with the Guiding Principles for the Public Realm as set out in the plan.

The development of attractive, safe streets and public spaces that encourage pedestrian movement and casual overlooking is the central principle of what is sought by the LAP in relation to designing and framing the public realm. Streets should be designed to be welcoming and public spaces should support informal and incidental community gatherings. The LAP will seek the delivery of high quality surface treatments, street lighting, street furniture and public art across the LAP area. It is essential that the public realm is accessible, attractive to all age groups, comfortable and clean. The existing public realm within the Ashtown/Pelletstown area is a work in progress concurrent with the development process. Areas such as the Crescent Park, Canal boulevard and square at Ashtown station have established a hierarchy of spaces of different types, sizes and scales throughout the area, which should be expanded and integrated within future developments.



Two areas within the LAP area will require particular attention with regard to designing and completion of the public realm; and for both a detailed design plan will be required to show how certain criteria, objectives and possible concerns can be successfully addressed. The first area in question is the lands to the front of the entrance bridge for the new railway station, where it is proposed that a small urban space be created to give a sense of place. The second area is Reillys Bridge and the section of the Ratoath Road that will become a cul-de-sac following completion of the overpass. Both of these spaces are related to the delivery of key infrastructure in the area-the new station at Pelletstown and the new overpass bridge for the Ratoath Road. For both, the LAP identifies what must be addressed in a detailed plan for these locations below.

For the new urban space to the north of the canal and providing the route to the station the space should;

- Be integrated with the towpath linear park as a northern extension to it, and be part of a new public space making a new community square incorporating both hard and soft landscaping
- Provide a green area for play and a community garden as part of the green area where this can be coordinated and agreed with residents, and if not, as a landscaped green area for casual relaxation
- Directly link with the canal towpath park and be south facing
- Be framed by buildings generally at a minimum 4 storeys (with some elements higher and/or at 3 storeys to allow for variation), with the option of a retail/cafe element within one of the buildings facing the space
- Become a destination point within the LAP area, benefiting from its role as a meeting point of 3 internal roads.

For the Ratoath Road and Reilly bridge the design shall-

- Provide an attractive and workable end of public road to the north of the bridge and finishes and screening of the railway line to be both safe and visually pleasing. The boundary treatment of the now segregated rail line must not detract from the protected structure.
- Provide a safe and pleasant pedestrian and cycle connection to the towpaths either side, fully separated from traffic, with connections onto the overpass
- Provide for the public to enjoy the views of the canal and protected structure of the bridge and lock
- Discourage illegal fly-tipping and dumping.



4.5.6 Building Design

The design, quality and finish of buildings in a newly developing area is critical in achieving a sustainable neighbourhood. Good buildings with quality materials will weather well, will reduce maintenance costs for future owners and will remain attractive and pleasing for years to come. Good design gives the area character and distinctiveness, as well as providing attractive "frames" for the public spaces and areas provided within the LAP.

As an area that has already seen significant development, and with each area having its own design approach, it is important that future development respects and is integrated with what is already provided. This is not to require repetition of existing designs, but to seek that new designs show respect and some continuity to adjoining developments, either through some of the finishing materials chosen, thematic link to certain elevations or layouts, or linking with existing landscaping.

The block approach to development, providing for good corner turning, protected private spaces and a strong street frontage has proven a successful design approach so far and the LAP supports continuing this model, adapted to each site, housing mix and setting.





Urban Form & Design Policies

UD1 To ensure that all future development delivers a high quality, attractive and robust public realm, that will provide a pleasant setting for new residential communities, support biodiversity and ensure public safety.

UD2 To require that new development delivers the structuring principles of the LAP, as outlined in Section 4.5.3, so that an integrated, permeable and pleasant environment is provided capitalising on the assets of the area and fully integrating with the existing build areas.

UD3 To ensure that all new buildings are designed and finished to a high standard using finishes that are lasting, easily maintained and attractive, and that the designs chosen enhance the character of residential areas, fully address the street, and through finish and elevations integrate well with existing development, without seeking to imitate.

UD4 All development will be required to comply with the height strategy for the LAP area outlined in Section 4.5.4 and Map 4.12, and for all areas excluding the three identified locations for some height, the Development Plan standards regarding height shall apply.

Urban Form & Design Objectives

UDO1 To require that new development facing the Crescent is designed and scaled appropriately to ensure that the Crescent is an area of character and distinctiveness, providing a strong elevation and passive supervision to the park, and to support the role of the Crescent Park as an area of relaxation, play and biodiversity enhancement.

UDO2 To ensure the completion of the linear park on the Royal Canal towpath for the full extent of the LAP area, with a minimum width of 10 metres from the Canal edge to park railing and to seek an increase in future sections of park of access points to the towpath park to improve permeability and safety.

UDO3 To seek the completion of a main boulevard through the LAP area, providing an attractive tree lined route through the lands with a strong emphasis on walking and cycling connections, creating links between the towpath park and the main vehicular access routes for the LAP area.

UDO4 To require the creation of a new 'community' square comprising of both hard and soft landscaped areas adjoining the entrance point to the proposed new rail station. This space shall provide a small pocket park with a play area for children and, subject to the agreement of residents, a community garden or landscaped garden.

UDO5 To seek the completion of the 'gateway' entrance to the LAP area from the Ratoath Road with the southern site developed appropriately, using both some height and a high quality frontage design to frame the entrance. In the short term, this space should be landscaped and maintained to a high standard to ensure an attractive setting for entering the LAP area.

UDO6 To require the completion of two secondary north south routes for pedestrians and cyclists that have a strong green infrastructure character, linking the Canal to the Tolka Valley Park via existing and proposed public spaces. Design and planting of these links should promote and encourage biodiversity through careful selection of tree species and under storey both along roads and within the parks provided.

UDO7 To support and promote the development of a pedestrian and cycling connection linking the Phoenix Park and Ashtown Station to Dunsink Observatory through the LAP area as a joint project between Dublin City Council, Fingal County Council, Waterways Ireland, the Office of Public Works & the Dublin Institute of Advanced Studies.

UDO8 To provide for three locations where building above the prevailing height can be provided; at

- (i) the village centres at the eastern and western edge of the LAP;
- (ii) facing the canal towpath park; and
- (iii) the Crescent; thus providing variation and interest across the LAP area, give strong passive supervision of public spaces and provide civic identity to the village locations.

UDO9 To prepare and implement a landscape and public realm plan for the Ratoath Road in consultation with Irish Rail where it crosses Reillys Bridge following the completion of the overpass, so that safe and pleasant pedestrian and cycle routes are accommodated, an appropriate setting for the protected structure is provided, and the design and planting provides an attractive and workable cul-de-sac.

UDO10: To minimise the adverse impacts of noise and promote good health and a good quality of life through effective management of noise within the Ashtown-Pelletsown Local Area Plan.



4.6 Housing

4.6.1 Introduction

A core aim of this LAP is the successful completion of residential development on vacant sites and undeveloped lands. As the main land-use proposed, residential development needs to be appropriately integrated with existing development and designed with sustainability in mind, complying with the policies and objectives of the City Development Plan, including the core strategy, and providing for an appropriate social mix. The area is identified as a key developing area of the city, and is one of only a small number of locations earmarked for large-scale residential development within the city boundary. For these reasons, this LAP plans for housing which delivers a sustainable range of housing options, to an appropriate density and of a high standard in terms of urban design and materials.

The City Development Plan Housing Strategy, alongside recent government guidelines including 'Delivering Homes Sustaining Communities' (2007), 'Quality Housing for Sustainable Communities' (2007), Design Standards for New Apartments (2007), 'Sustainable Residential Development in Urban Areas' (2009), and 'Urban Design Manual - A Best Practice Guide' (2009), all input into the future form and quality of new housing within the LAP area.

The Development Plan also stipulates residential quality standards that must be met, and these vary according to the scale and type of residential development proposed. Larger schemes must demonstrate for example how they function in urban design terms and contribute towards sustainable neighbourhoods. In terms of the potential of available lands, the settlement strategy of the City Development Plan estimated that this area had an approximate capacity for 1,800 units, excluding development to date.

4.6.2 Development to date.

Approximately 2,121 residential units have been built to date, housing a population of 3,777 people in both residential areas and mixed use developments. Development is dispersed across the plan lands, but grouped into four identifiable areas. Extant planning permissions allow for a further 1,006 residential units, predominantly apartments, yet these sites remain undeveloped.

Typologies

Unit-types developed to date are mainly 2 bedroomed apartments, with the remaining units being a mix of houses and duplex units (see pie chart).

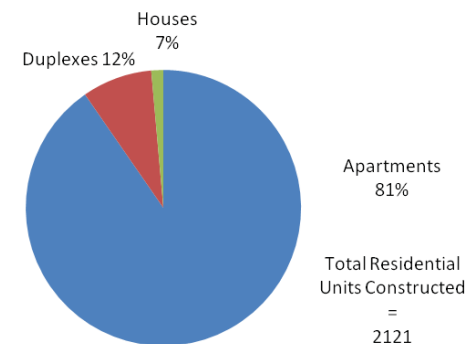
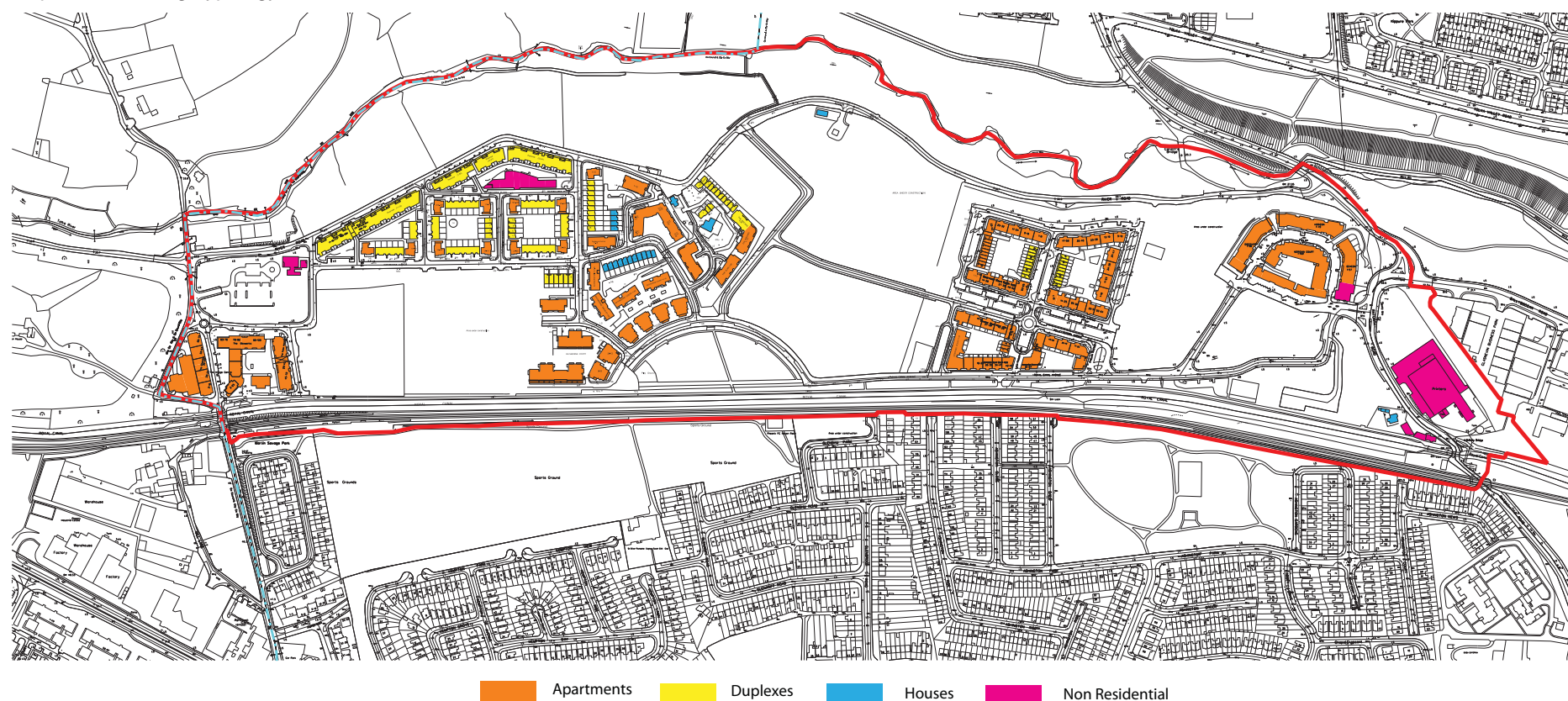


Chart 4.6.1 Units developed to date ; Breakdown by percentage of unit types.

Source ; Planning Department survey of existing development (summer 2012)

The mix of units comprises 81% apartments, 12% duplexes, and 7% houses. One and two bedroom units predominate with 77% of all units having no more than 2 bedrooms. The map below illustrates the spatial distribution of the main typologies and shows the broad extent of apartment development and the concentration of duplex units in north-western areas, with the small number of standard houses generally confined to the central area.

Map 4.13- Building Typology



The table below provides a comprehensive breakdown of unit types built to date, giving absolute numbers and percentages for the three main typologies, and breaking each down further to show unit sizes based on the number of bedrooms in each case. One and two bed units are clearly the most common.

Table 4.4 Existing Residential Units ; Breakdown by typology & bedroom number

Unit type	No. Bedrooms	Number of units built	% of unit type	% of Total
Apartments	1	392	23	81%
	2	1011	58	
	3	252	15	
	4+	70	4	
	Total	1725	100	
Duplexes	1	30	12	12%
	2	97	41	
	3	110	46	
	4+	2	1	
	Total	239	100	
Houses	1	1	0	7%
	2	97	62	
	3	50	32	
	4+	9	6	
	Total	157	100	
Overall total		2121		100%

Source ; Compiled by Planning Department from both planning application history and survey work during 2012.



This LAP seeks to promote the development of a balanced mix of unit types in the area, which will assist in delivering integrated communities and a sustainable social mix. In this regard, and considering the need to attract and sustain existing and future social infrastructure, it is considered desirable to seek provision of a higher proportion of larger sized units, i.e. 3 bedrooms and above.

The table below sets out the basis for this, summarising the quantum of 1, 2 and 3+ bed roomed units built to date and projecting percentage figures for the future. As can be seen, one and two bed units, when combined, account for 77% of the existing total, with the remaining 3+ bed roomed units accounting for 23% only. Three bed roomed units are desirable for families and larger households, as they can more readily cater for higher occupancy, providing more generous floor areas and storage space. Such units can also cater for growing households in the local area, allowing families the option of trading up when they have outgrown existing accommodation.

In regard to planning an appropriate mix of units in future developments, a minimum of 50% 3 bed+ units has been chosen as an appropriate figure, counterbalancing the high proportion of existing one and two bed roomed units.

Table 4.5 Breakdown of existing and planned unit sizes based on no. of bedrooms

No. of bedrooms.	Existing no. of Units (as of end 2012)	Existing % of total.	% of total planned units on remaining lands.
1	423	20%	20% (development plan maximum %)
3 +	493	23%	50% minimum
2	1205	57%	30% (balance)
Total	2121	100%	100%

Whilst there will be flexibility in regard to the allowable proportion of one and two bed units, the development plan maximum of 20% one bed units shall apply. It is recognised that some sites are more suitable than others for the provision of larger units, and that higher density sites close to train stations (for example) may not be best suited for the provision of own-door type units.

On this basis, the 50% minimum standard shall apply generally across remaining developable lands and it will be necessary for each developer to demonstrate how any proposed housing development can contribute towards the realistic achievement of this target. As part of this process the submission of a proposed accommodation schedule will be required to include a breakdown of numbers of different unit types.

4.6.3 Residential Density.

In the earlier AAP, Ashtown/Pelletstown was envisaged as a medium/high density area, availing of its close location to the city centre and good transport links. Examples of completed developments now reflect this approach.



Ashtown Village Centre - Average Density 132 uph



Meridian Court - Average Density 120 uph



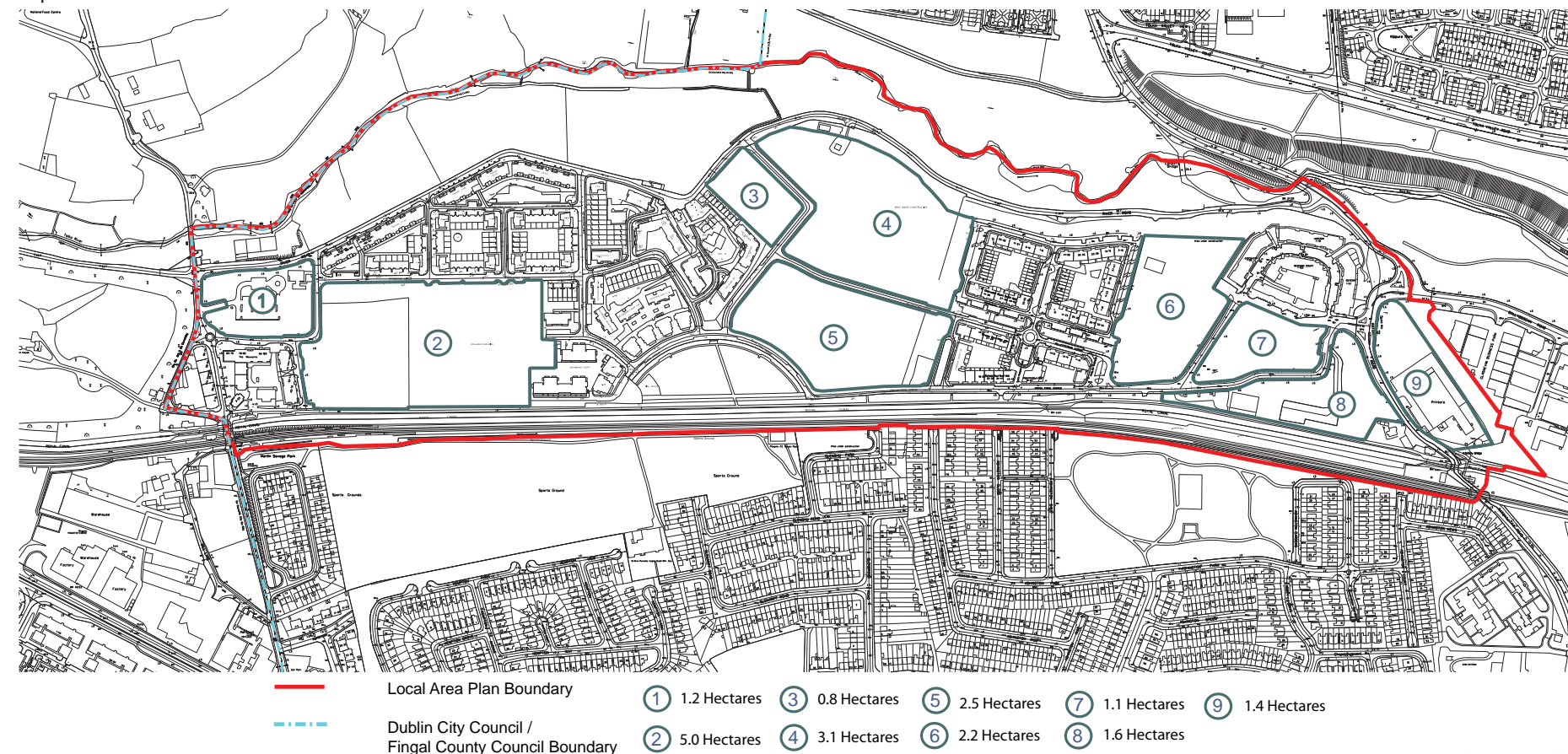
Rathborne Court - Average Density 80 uph

Overall, residential densities range from 75 units per hectare 150 per hectare at Royal Canal Court. The average density calculates at approx. 100 uph. Guidance in the 'Sustainable Residential Development in Urban Areas' document, (DoEHLG, 2008) advises that a minimum density of 50 uph is sought within public transport corridors, a figure that can be revised upwards as long as residential amenity is maintained.



For this LAP, it is intended to pursue a graded approach to density, applying different density ranges to different sites, considering built context and proximity to train stations. In this regard, the map below identifies the remaining development land parcels.

Map 4.14 Vacant Sites





It should be noted that site 3 is reserved primarily for leisure/amenity uses and a 1.2 hectare portion of site 4 is reserved for a primary school (leaving 2.7 hectares remaining). In regard to site 6, only a portion is for development as approx 1 hectare forms a large surface water attenuation feature. Also, site 9 will involve a mixed use scheme, impacting on overall residential density.

By applying indicative density ranges to each of the numbered sites, approximate numbers of units are calculated, as are estimated populations. Whilst the specific density range figures for each site allow for some flexibility of design and layout, the lower end of the density range will only be considered where particularly onerous or unusual site constraints significantly limit the extent of the site developable.

Table 4.6 Planned indicative density ranges for each site, and related unit and population figures ;

Site No. (See map for location)	Hectares developable	Proposed residential density range (uph)	Indicative number of new units (i.e. area x density)	Estimated population range (No. of units in previous column x 2.7 persons per household *)
1	1.2	80-100	96-120	259- 324
2(western part)	2.0	60-80	120-160	324-432
2 (eastern part)	3.0	50-70	150-210	405-567
4	2.7 (excludes school site of 1.2 ha)	40-60	108-162	281-421
5	3	50-70	150-210	405-567
6	1.2 (excluding attenuation area)	50-70	60-84	162-227
7	1.1	60-80	66-88	178-238
8	1.45	60-80	102-136	275-367
9	1.4	60-80	87-116	235-313
Total	17.05 ha	Range # ; 54-74uph (average uph = 64)	921-1262 (average = 1091)	2487-3407 (average = 2947)

* Assumes 2.7 persons per unit, based on the average no. of persons per household in 'Ashtown A' Electoral District in the 2011 Census.

calculated from total range in following column.

There would hence be approx. 920 - 1260 residential units and an estimated population of between 2490 - 3410. When added to the existing population of 3,777 there would be a total population range of approx. 6267 - 7187. For purposes of this plan, a population range of 6,300 to 7200 is planned for, based on 920 - 1270 new units. Whilst the upper figure is somewhat lower than the figure of 1800 units set out in the development plan settlement strategy, it reflects the current position, site constraints, and full survey and analysis.

The total number of units in the plan area, were the Lap area fully built out, would then calculate at approx. 3040 - 3400.

Using the anticipated average number of new units from the earlier table, the following table gives an indicative breakdown of the number and proportion of 1, 2 and 3+ bedrooled units in regard to both existing and planned units. As can be seen, the eventual fully-built out LAP area will have a minimum of 32% family sized units (i.e. 3+ beds), a significant increase compared with the current situation (23%), and supporting a diverse demography.

Table 4.7 Planned breakdown of bedroom-types for the LAP area, based on 50% minimum of 3+ bedrooled units in new development.

No. of bedrooms.	% of total planned units on remaining lands.	Indicative planned no. of new units on remaining lands assuming 920 - 1270 new units and applying planned percentages (previous column).	Overall Total Units for the LAP area (i.e. summing existing + planned)	% of overall total
1	20% (development plan maximum %)	184-254	607-677	20% max
3 +	50% minimum requirement	460-635	953-1128	31% min
2	30% balance	276-381	1481-1586	49% balance
Total	100%	920-1270	3041-3391	100%

Calculating Densities.

Dublin City Council recognises that 'bedspaces per hectare' are sometimes used as an alternative to 'units per hectare' for calculating residential density. For the purposes of this plan it is intended that units per hectare is the predominant measure in accordance with previous tables. However, for some lower density and centrally located areas, the Planning Authority may look favourably on a bedspace measurements being used, provided ; (a) it can be demonstrated that the figures are generally equivalent to the unit per hectare figures sought, and (b) the proposal is favourable in regard to meeting urban design requirements for the site.

The table below summarises existing development, planned development, and overall totals in regard to key statistics, illustrating an expected minimum density of 79 uph across the entire Lap area when fully built out.

Table 4.8 Key statistics ; existing and planned development.

	Existing development	Planned development on undeveloped lands	Total; existing + planned.
Area (ha)	21.3 ha	17.05 ha	38.4ha
No. of units	2121 units	920-1270 units	040-3400 units
Density (uph)	99.5	54-74	79-89uph (average = 84)

4.6.4 Vacancy and unfinished estates.

As a large housing area, the sudden decline of the housing market has impacted on the LAP area. In the 2011 census, the vacancy rate recorded for the area was 9%, lower than the city average ; and this figure has appeared to decline during 2012 due to the take-up of vacant units for occupancy.



Two blocks of apartments units remain unfinished within the area ('the waterways') with blocks close to completion. The Council will seek the completion and occupancy of these units in the short term so as to prevent decline or negative impacts on the LAP area.





Housing Policies

H1 To seek a balanced range of residential typologies and unit sizes across the LAP area, and having regard to the existing typologies, to encourage larger unit sizes and particularly those that can accommodate larger households or families.

H2 To ensure new residential development is effectively integrated into the existing environment in terms of design, layout and scale.

H3 To seek new housing provision at sustainable densities to create and sustain critical mass necessary to support existing and future infrastructure investment and services in the plan area

H4 To encourage the development of high quality, energy efficient, sustainable housing that meets development plan standards and complies with the Dublin City Housing Strategy as outlined in the development plan.

Housing Objectives

HO1 To encourage the sustainable development of approximately 920-1270 residential units on remaining developable lands in the LAP area

HO2 To ensure a minimum of 50% of larger sized units, i.e. of 3+ bedrooms, are provided within the LAP area on completion of all development. Whilst percentages may be permitted to vary above or below this figure on a given site, any significant housing proposal will be required to demonstrate how it can contribute towards achieving the eventual 50% minimum across the LAP area.

HO3 To achieve an average net density figure of 64 units per hectare across remaining residential lands, and 84 uph across the entire LAP area (including existing). Calculations based on equivalent bedspaces per hectare will be considered on their merits.





4.7 Cultural Heritage

4.7.1 Introduction

Protecting an area's heritage involves the retention of landscape features, and maintaining and protecting historic buildings, features and their settings. The continuing importance and need to protect the built and natural environment is most recently highlighted in *Ministerial Guidelines for Sustainable Residential Development in Urban Areas (2008)* and *Local Area Plan Guidelines for Local Area Plans* along with the accompanying manual (draft, June 2012) with both sets of guidelines emphasising that the retention and use of natural and built features can help to define the identity and sense of place of communities and give a sense of maturity to an area.

A key challenge in the city is to balance the protection of its significant archaeological and architectural heritage with its continuing growth and development. An important mechanism to achieve this is to formulate appropriate objectives for the protection, enhancement and management of the built heritage, while encouraging and facilitating regeneration, development and change in a sustainable manner.

4.7.2 Existing Cultural heritage in Ashtown-Pelletstown Plan Lands

As detailed in Chapter 2 of this plan (context and analysis section) the Ashtown-Pelletstown plan lands and the environs, while dominated by more modern development, contain a small amount of valuable heritage features, both natural and built. Within the boundary of the plan area there are three sites of archaeological interest, three protected structures and two conservation areas. There are also a number of identified features of industrial heritage. In addition there are a number of protected structures directly adjoining the plan area to the west in the administrative area of Fingal County Council. See map 4.15 overleaf for locations of heritage features in the plan area and the immediate environs.

4.7.3 Shaping Principles

The city development plan details policies, objectives and designations supporting the ongoing protection and enhancement of heritage features of merit, including:

- Coordinating and developing new approaches to the successful management and protection of Dublin's built heritage
- Developing a research agenda for architectural heritage in the city
- The protection, conservation, preservation and promotion of awareness of the city's cultural and built fabric.
- The implementation of the Architectural Heritage Protection Guidelines for Planning Authorities.
- The continuation of the review and implementation of the Dublin City Heritage Plan.
- The implementation of the recommendations of the Dublin City Industrial Heritage Record.

The Ministerial Guidelines for LAPs advise that meeting the needs of a community at a local level should include a focus on conserving and enhancing heritage of the built and natural environment which helps to define the identity and sense of place of local communities

4.7.4 Policy Direction

4.7.4.1 Protected Structures

The city's built heritage significantly contributes to the city's identity and to the richness and diversity of its urban fabric.

There are three protected structures contained within the plan lands.

- **H.S. Reilly Bridge** (protected structure ref. 913), Ratoath Road.
- **Longford Bridge/Ashtown Road Bridge** (Dublin City Council ref. 907; Fingal County Council ref. 693)
- **Cardiffsbridge** (protected structure ref. 895)

The location of each of these is shown on map 4.15 and detail relating to each is set out earlier in chapter 2. The protection of buildings on the Record of Protected Structures (RPS) requires protection of the built fabric of the structure and also the safeguarding of the curtilage and attendant grounds.

It is policy of the city council to protect the structure and maintain and enhance the potential of protected structures to contribute to the cultural character and identity of an area.

4.7.4.2 Archaeological Heritage

The Record of Monuments and Places is the statutory list of all known archaeological monuments provided for in the National Monuments Acts. The archaeological heritage relevant to the plan area is located around three sites of interest. It is within these sites that archaeological features are likely to occur. The sites relate to a castle site, a bridge and a burial ground. References below relate to the Archaeological Survey database of the National Monuments Service ;

DU014.074 Remains of fortifications. The Civil Survey (1654-6) mentions this castle at Ashtown.

DU014.075 This bridge spans the River Tolka south of Finglas. It is a four-arched example with three round arches close together and one on the south bank.

DU014.095 Three unenclosed inhumation burials, probably pre-Christian (2nd to the 7th century)

The locations of these are illustrated in map 4.15 and further detail relating to each is set out in Chapter 2.

4.7.4.3 Conservation Areas

Dublin City Council has identified conservation areas in recognition of their unique contribution and importance to the heritage of the city. The conservation area designation is applied both to the built and to natural heritage.

The conservation area designation (represented by a red hatched line on the development plan maps) as it relates to this plan area applies to i) Tolka Valley along with Cardiffsbridge Park extending into the area of Pelletstown House and environs, and ii) the Royal Canal to the south. The Royal Canal is also a proposed Natural Heritage Area.

There is a recognised need to protect these two conservation areas in the plan area. Dublin City Council seeks to protect the special character of the conservation areas and ensure that all development proposals within these designated areas consider the impacts of the development proposed and ensure that the development complements and enhances the character and setting of the area





4.7.4.4 Industrial Heritage

Structures of architectural heritage merit, although not all are put forward for inclusion in the Record of Protected Structures (RPS), designated as a Conservation Area or as a Natural Heritage Area, may continue to contribute to the identity of a locality.

The contribution of any features which give identity to and enhance that uniqueness, should be given recognition. In this regard, the industrial heritage of the plan area is of importance. This is a relatively new area that refers to industrial activities of the past and associated infrastructure. Regard for industrial heritage is an important issue for future planning and development.

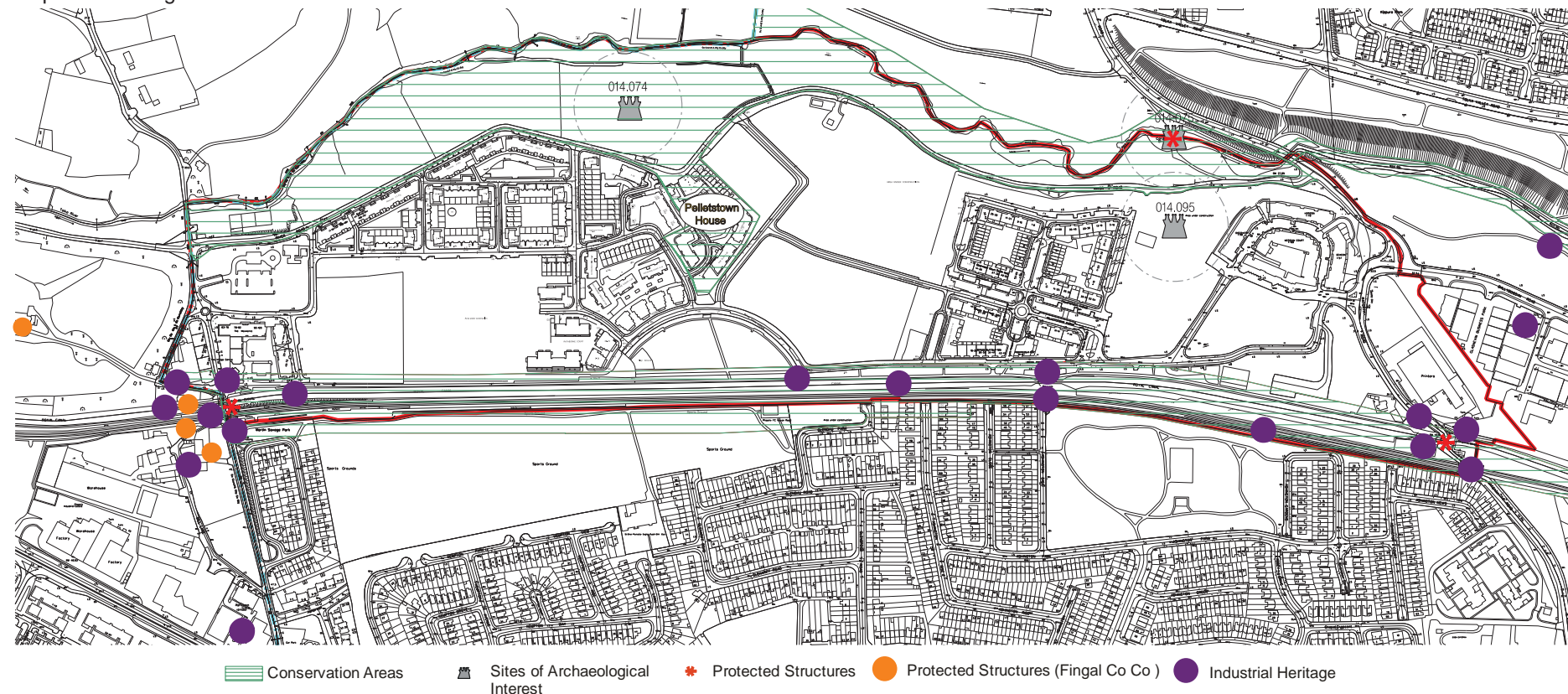
In recognition of the role of industry in the development of the city, the City Council commissioned a comprehensive survey of the industrial heritage of the city area – the Dublin City Industrial Heritage Record (DCIHR). In 2007, Phase 5 of the DCIHR project commenced. This stage focused on the area referred to as the ‘North City’ and includes three City Council administrative areas (i) Central, (ii) North West and (iii) North Central. A total of 529 sites and structures were surveyed. Of the 529 sites and structures surveyed a total of 19 were found within, or very close to, the LAP area. These include the Royal Canal, Ashtown station, the 7th, 8th and 9th local, the tow path, the remains/sites of lock keepers’ house and two level crossings. Of the 19 sites, five of the features are designated as ‘national merit’ (the Royal Canal, 8th and 9th locks, H.S. Reilly Bridge and Midland Great Western Railway), one as ‘regional merit’ (towing path), two as ‘local merit’ (level crossings) and the remaining as ‘recorded only’ or ‘unknown’.

Those sites/features categorised as ‘unknown’ are located within the administrative boundary of Fingal County Council and information on them is held by that local authority. The DCIHR recommends that those sites that have been evaluated as of ‘regional or higher merit’ should be considered for inclusion in the RPS.

See Chapter 2 for further detail in relation to industrial heritage.



Map 4.15 Heritage Sites



Cultural Heritage Policies

CH1 To promote awareness, appreciation and protection of the cultural and built heritage of the Ashtown-Pelletstown plan area and environs in order to sustain its unique significance, fabric and character and to ensure its survival as a unique resource to be handed over to future generations

CHO4 To protect the buildings and features of industrial heritage of the Ashtown-Pelletstown Plan area in situ and their related artefacts and plant where appropriate.

Cultural Heritage Objectives

CHO1 To protect and conserve the special character of all built heritage features both within the plan area as well as those within the surrounding areas

CHO5 That the RPS be revised and updated in relation to the findings of the DCIHR for the Ashtown-Pelletstown plan area and that the following industrial heritage sites that have been evaluated as being of regional or higher merit be assessed for protection under the criteria set out in Part IV of the Planning and Development Act 2000:

CHO2 To promote awareness and appreciation of and access to the plan area’s archaeological inheritance while also ensuring their protection and conservation

- (i) Royal Canal
- (ii) Midland Great Western Railway
- (iii) 8th Lock
- (iv) 9th Lock
- (v) Royal Canal Towing Path

CHO3 To protect and enhance the character and historic fabric of the Royal Canal and Tolka Valley conservation areas as contained within the Ashtown-Pelletstown plan area and the extension of same into the environs surrounding the plan area



4.8 Infrastructure & Water Management.

4.8.1 Introduction

Adequate services and infrastructure are an essential component of development. Infrastructural services include water supply, wastewater and surface water removal and treatment, electricity supply, broadband, gas, mobile phone coverage and telecom connections.

The purpose of this chapter is to identify the existing public water supply, drainage and other key infrastructure within the Local Area Plan (LAP) area, and to set out the requirements and investment needed in infrastructure to meet the objectives of the LAP. The implementation of the LAP will take place in a phased approach and it is envisaged that upgrading or expansion of elements of the public infrastructure both within and outside of the LAP will be required as development progresses.

This chapter addresses these issues in two sections (i) water services (including supply, drainage and flooding) and (ii) utilities (section 4.8.7); with the final section setting out the policies and objectives on infrastructure for the LAP.

4.8.2 Water Supply

4.8.2.1 Sources

Water supply for the Ashtown / Pelletstown area is part of the Dublin Region Water Supply which is sourced from the Liffey, Dodder and Vartry rivers and is an integrated network covering Dublin City, South Dublin, Dun Laoghaire-Rathdown and Fingal County Councils, and parts of Wicklow, Kildare and Meath County Councils.

Currently across the region supply and demand for high quality drinking water is finely balanced and this will remain the case in the short to medium term pending the delivery of a number of projects to increase production, storage and delivery capacity. Projects being implemented include pipe renewal across the region to reduce leakage as well as demand management measures to encourage water conservation while the provision of a suitable long term new supply source for the Dublin & mid-Leinster area is being investigated.

4.8.2.2 Network

At a local level water supply to the Ashtown - Pelletstown lands is supplied from the public watermain at Deanstown Avenue approximately 1000m north of the development lands. The connection to this watermain involved the construction of a new 300mm diameter watermain from Deanstown Avenue along Ratoath Road junction crossing the River Tolka at Cardiff's Bridge and entering the subject lands at the new Ratoath Road junction. The water supply network also includes a 300mm diameter spine through the site to Ashtown Road with the potential for linking the existing mains to the west if required by DCC Water Division. In total 2995m of 300mm diameter water supply mains have been constructed from Deanstown Avenue. A network of 100mm, 150mm and 200mm diameter pipes are fed from the 300mm diameter main.

Alongside ensuring adequate supply this LAP will also seek the delivery of a number of measures to sustainably manage water demand. New developments and upgrading of existing development will need to install suitable water conservation measures including the use of rainwater harvesting and greywater recycling for example. See section 4.11 also.

4.8.2.3 Supply Management

The Water Services Act 2007 provides for the conservation of water where leakage occurs due to unrepaired pipes or equipment, or where poor management results in wastage or excessive consumption of water.

Drinking water comes from various different sources such as lakes, rivers, streams, springs and boreholes. Depending on the quality of its source, water will almost certainly have to be treated to make it safe to drink. All water suppliers for consumption must meet standards laid down by the EU. They must be free from micro-organisms, parasites, and any substances that endanger public health if found in sufficient numbers or concentrations.

Dublin City Council is responsible for maintaining the public mains systems and ensuring the quality of the water distributed. The Environmental Health section in each Local Health Office monitors water supplies on behalf of the local authority to make sure that all water sources meet the required public health standards. The HSE is also responsible for monitoring the fluoride content of public water supplies. The Environmental Protection Agency (EPA) produces a yearly report on the quality of drinking water in Ireland. This report contains information from each local authority about the monitoring of the various water supply schemes in its area. The EPA has enforcement powers in relation to drinking water quality. These powers require public water suppliers (mostly local authorities) to notify the EPA and the HSE where there is a potential risk to human health, and to comply with their directions



4.8.3 Water Quality

Eastern River Basin District Management Plan 2009 - 2015

To the north of the Plan area is the River Tolka which forms part of the Eastern River Basin District Management Plan. This was published in 2008 for public consultation, with its accompanying programme of Measures (POM). The Tolka River is within the Tolka Water Management Unit (WMU) which is a geographic area primarily defined by similar hydrology and topography. In the Tolka sub-catchment the principal pressures on water quality are agriculture in the upper catchment and wastewater and industrial discharges in the lower catchment. In the upper catchment agricultural impact amplified by poorly drained soils which assist runoff of nutrients to surface water. In the lower catchment combined sewer overflows (wastewater discharge) and foul sewers from houses and business misconnected to rivers are principal concerns. The aim of the Water Framework Directive (WFD) is to achieve good status for all water bodies by 2015. The WFD however recognises that in some cases it may not be possible to achieve all core objectives by 2015. In this water management unit, the main pressure preventing achievement of Good Status in 2015 is diffuse agriculture and urban diffuse pollution. Full implementation of the measures is expected to correct this, however recovery time will mean that larger rivers will not achieve good status before 2015. It is hoped that that 100% of the river will achieve good status by 2027. The River Tolka can be classified as a heavily modified waterbody, due to its flood defences

4.8.3.1 Water Framework Directive

In response to the increasing threat of pollution and the increasing demand from the public for cleaner rivers, lakes and beaches, the EU has developed the Water Framework Directive (WFD). It establishes a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters and groundwater, and their dependent wildlife/habitats under one piece of environmental legislation. Specifically the WFD aims to:

- protect/enhance all waters (surface, ground and coastal waters)
- achieve "good status" for all waters by December 2015
- manage water bodies based on river basins (or catchments)
- involve the public
- streamline legislation



4.8.3.2 River Basin Management Plans

The Water Framework Directive requires that management plans be prepared on a River basin basis and specifies a structured approach to developing those plans. Eight RBDs have been identified on the island of Ireland for the purpose of implementing the Directive.

4.8.3.3 Groundwater/Water Conservation

The protection of groundwater has become an issue of growing importance as it is a non-renewable resource. There is a requirement under the Local Government (Water Pollution) Act 1977 to register groundwater abstractions, which is managed by DCC Drainage Division. The European Communities (Drinking Water) (No. 2) Regulations 2007 confers stringent responsibilities on a Water Supplier to ensure that the water supply complied with acceptable qualities and standards. The proposal must comply with the Water Framework Directive and with the River Basin Management Plan of the Eastern River Basin District. Please refer also to the ERBD Final Background Policy Legislation and Authorities Report as well as the Water Matters report (with particular reference to threats to groundwater quality). Both are published on www.erbd.ie.

4.8.4 Waste Water Network & Treatment

Drainage infrastructure in the Ashtown/Pelletstown area is relatively new, having been designed and constructed as one overall masterplan serving the new residential developments in the area. There are both foul and surface water pipelines servicing most of the area. The main trunk water and drainage services have been completed and taken in charge which means new development in the area can be serviced by water and drainage. The foul system drains to a newly constructed pumping station from where it is pumped into the North Dublin Catchment at Ratoath Road. From here it flows to Sutton Pumping Station and is ultimately delivered to Ringsend Treatment Works for treatment.

The catchments ultimately discharge to the Regional Waste Water Treatment Plant at Ringsend. At the time of preparing this LAP, this facility is operating at its design capacity. Dublin City Council, is currently finalising proposals to increase capacity of the plant at Ringsend from 1.7 million PE (population equivalent) to 2.1 million PE, with a target completion date of 2015.

In 2010, the Environmental Protection Agency granted a Discharge Licence to Dublin City Council under the Waste Water Discharge (Authorisation) Regulations (2007). Dublin City Council must comply with the conditions of this discharge licence. The ultimate objective of this licence is to restrict discharges from the wastewater network into rivers and waters. The 2007 Regulations also require that the Water Service Authority satisfies itself that there is drainage capacity available in the network prior to granting a planning permission for any development. This requirement will apply to all developments within the LAP.

4.8.5 Surface Water

The surface water infrastructure from this area discharges to the River Tolka. As part of the attenuation requirements of the Surface Water (SW) Masterplan, various features, such as lakes and holding tanks, were constructed in the area. Elements of sustainable drainage such as permeable pavement are also features of the SW network. The attenuation tank and attenuation lake have been completed but have not yet been taken in charge by Dublin City Council.

In relation to surface-water all new developments will be required to limit discharge to greenfield runoff rates in accordance with the GSDSDS and to lay spine sewers in accordance with the code of practice. Sustainable drainage is required in all development, with overground soft-engineering solutions being recommended and a minimum 2-stage treatment train to be considered.

For future development in the area, spine sewers will be required to be laid in new development to connect to the existing trunk sewers in accordance with the Greater Dublin Regional Code of Practice for Drainage Works. Total permissible discharge from new development is however limited to the capacity of the pumping station.



4.8.5.1 Storm Water Management and SuDS

The drainage strategy for the site will also take due cognisance of the objectives of the Flood Resilience Project, which promotes an integrated approach to flood risk management. This project promotes Awareness, Avoidance, Alleviation and Assistance' when considering pluvial flood management.

The surface water discharge from the development shall replicate existing Greenfield runoff rates by limiting flow by means of flow control devices constructed to the requirements of Dublin City Council

As part of the implementation of the local area plan, Dublin City Council will seek to remove the storm runoff from any existing combined system, such as requiring new surface water pipes to be constructed. Any development in this area will be expected to manage surface water in accordance with modern sustainable principles to minimise peak flows in the system using for example, green roofs or rainwater harvesting. A SuDS strategy has been outlined for the local area plan to ensure that the level of development proposed can be dealt with adequately. Please see www.irishsuds.com for more details.

The following drainage design SuDS measures shall, where feasible, be incorporated into the development in line with appropriate sustainable drainage practices:

- a) Infiltration systems including infiltration trenches, infiltration basins, permeable paving, soak ways and green roofs. (green gardens)
- b) Filtration systems, including swales, bio retention systems and filter strips
- c) Retention systems including retention swales
- d) Detention systems including underground tanks, underground attenuation, detention basins and filter drawings
- e) In addition to the above extreme storm events can be accommodated by designed landscaped areas or playing pitches, etc to temporarily flood, and thus control the rate of outflow from the site.

Each section and phase of the development within the LAP lands must demonstrate to the satisfaction of Dublin City Council, that water quality improvement measures are adequately provided. Design of surface water attenuation shall be based on the requirements of the Greater Dublin Strategic Drainage Study. Particular reference shall be made to Volume 2 Appendix E which provides guidance on attenuation design.





4.8.6 Flood Risk Management

Accompanying this Local Area Plan is a flood risk assessment (see Appendix (1), which includes a number of measures necessary to ensure flood risk is incorporated into the planning of this area.

The River Tolka runs to the north of the plan area. This is one of Dublin's three main rivers, (the other main rivers are the Liffey and the Dodder). The Tolka River rises east of Dunshaughlin in Co Meath and bypasses Dunboyne joining up with the Castle Stream Tributary. From Clonee where it is joined by the Clonee Stream, it flows into County Dublin. The river then continues through Damastown, and Mulhuddart, Blanchardstown and Ashtown (south of Finglas) and then into the north Dublin suburban districts of Glasnevin and Drumcondra where it comes closest to the Royal Canal near Binn's Bridge. At the southern end of Tolka Park it forms the border between Ballybough and Fairview, before entering Dublin bay between East Wall and Clontarf. The Tolka River has many tributaries the first major one being the Castle Stream at Dunboyne. There are at least fourteen infalls within Dublin City boundaries. The Wad River system, coming from north Ballymun, interconnects with the Tolka via a link with the Clarendon Stream and with the Wad River Diversion, which flows along the Ballymun Road and Glasnevin Avenue.

The River Tolka has a history of flooding after heavy rainfall and has been well documented after major flood events in 1954. Severe flooding from the Tolka River and its tributaries occurred in the Dublin City, Meath and Fingal areas in November 2000 and November 2002. In 2001 Dublin City Council commissioned the Greater Dublin Strategic Drainage Study (GSDSDS) to look at the strategic drainage requirement for the Greater Dublin area. A full study of the Tolka was not included in the GSDSDS, however in view of the November 2000 flood the OPW requested that it be included. The River Tolka is the second largest river entering Dublin City in terms of its length and catchment area, after the Liffey. It rises in County Meath and serves a catchment which is roughly divided in three parts between a generally rural area in County Meath, a developing area in Fingal and a substantially developed area in Dublin City Council.

The river has a relatively flat gradient and is characterised by small summer flows and a tendency to occasional extreme floods generally in response to particular hydrological conditions. During the study the Tolka suffered a major flood event in November 2002., this resulted in peak river flows in Dublin City were 10% in excess of those estimated in 1954. Analysis of this event showed that the classic conditions for a severe flood, namely winter conditions with heavy rain in the previous days and weeks leading to saturated conditions followed by sustained severe rainstorm of around 48 hours duration. The Tolka Flooding Study identifies that substantial areas of urban development in the study area are at risk of repeat flooding from the River Tolka. The separate Dublin City Coastal Flood Risk Assessment (DCCFRA) study examines the issue of tidal flooding of the coastal areas.

The outcome of the study was to outline the works required to reduce the risk of flooding in the study area to less than 1% annually. These works comprise the River Flood Alleviation Scheme which include preliminary works currently being implemented, It was estimated that the cost of implementing the proposed scheme was circa. €32 million, with recommendations that a budget for maintenance and monitoring be provided to the order of €100K per annum.

In terms of flooding the river floods infrequently but with occasional severity. It is not typically flashy like the Dodder but builds up over a period. There have been a number of occurrences of flooding over the years. For a summary of historic flood events please refer to www.floodmaps.ie (see appendix 1 for summary)

4.8.7 Utilities

The Ashtown – Pelletstown Area is currently serviced by the necessary electrically, gas services and telecommunication infrastructure and can support the expected increase in population and intensification of economic activity. It is expected that upgrading as and when required of each network will take place at a local level to meet growth in demand and that these upgrades will be delivered by individual service providers.

Telecoms & Broadband

There are a number of service providers offering broadband and integrated telecoms services in the area. Telecommunications infrastructure has been extended into the Pelletstown development lands, including the construction of a new Eircom Remote Services Unit (RSU).

New development in the LAP area shall accommodate the provision of a universal open access ducting network to support telecommunications, broadband and digital services. All arrangements for exchange buildings, communications, towers containing antenna, dishes, etc shall be agreed in advance in order to ensure that their location, design and access thereto is compatible with the design strategy for schemes and the area.

Gas Supply

An Bord Gais have completed the infrastructure works required to service the Pelletstown Lands, including a new crossing under the Maynooth Railway line and the Royal Canal. The trunk gas infrastructure has been constructed.

Where Bord Gais identifies a need to upgrade the existing network the distribution pipe work shall be routed in line with the main infrastructure in the paved footpath areas or roadways dependent on the pressure of the mains.

Waste Management

Waste Management is concerned with the generation, collection and disposal of waste. The Waste Management Act 1996 defines waste as 'any substance or object which the holder discards or intends or is required to discard.' Delivery of the objectives of the DCC Waste Management Plan will be implemented through the development management process by accommodating recycling facilities for new residential and commercial developments.

Electricity Supply

The electricity supply network has been extended into the Pelletstown lands and this network has been designed by the ESB to service the entire development lands.



4.8.8 Construction Management Plans

Developer(s) at application stage shall be required to submit a construction programme setting out a planned programme for the management/recovery/disposal of construction/demolition waste material generated at the site during the excavation and construction phases of development, this should be in accordance with the relevant national waste management legislation, at planning application stage. It is an objective of this LAP that developers shall ensure that all waste is removed from the plan lands by approved waste disposal contractors to approved waste disposal facilities. In addition, it is an objective of this plan that developers shall take adequate measures to minimise the impacts of traffic, noise and dust during construction phases.





Infrastructure Policies

IW1 To actively seek the funding and delivery of key infrastructure including water supply and waste water for the Dublin Region to enable development in the Ashtown – Pelletstown area.

IW2 To ensure that development is permitted in tandem with available water supply, waste water treatment and network capacity. To manage and phase development so that new schemes are permitted only where adequate capacity or resources exist or will become available within the life of a planning permission.

IW3 To require that all large development proposals include water conservation and demand management measures.

IW4 To protect existing infrastructure by ensuring through consultation with Dublin City Council, that buildings and structures are designed and constructed so that they do not compromise the structural integrity of trunk watermains drainage pipes, gas mains, overhead cables, and other services in the area.

IW5 To seek to improve water quality and meet the objectives of the Eastern River Basin District Management Plan by ensuring the separation of foul and surface water effluent through the provision of separate sewage networks in any new permission, and by ensuring the implementation of a stormwater management system in the detailed design of the plan lands, following the principles of Sustainable Urban Drainage Systems (SuDS).

IW6 To encourage provision of suitably high quality strategic telecommunications including fibre optic, broadband links and utilities (including gas and electricity) infrastructure within the area of the local area plan.

Infrastructure Objectives

IWO1 To promote the achievement of good ecological status, good ecological potential and good chemical status for the River Tolka by 2027, in accordance with the Water Framework Directive.

IWO2 To implement the programme of measures (POM) for the River Tolka set out in the Eastern River Basin Management Plan 2009 – 2015.

IWO3 To support the principles of good waste management, and to provide for local recycling facilities. Any large retail site must provide a glass recycling facility.

IWO4 To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and Appendix 1 of this plan. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks.

IWO5 All planning applications shall be required to submit a surface water drainage plan, following the principles of Sustainable Urban Drainage Systems (SuDS) which will include proposals for the management of surface water within sites, protecting the water quality of the River Tolka.

IWO6 A construction management plan shall be submitted for all large developments setting out a planned programme for the management, recovery, disposal of construction and demolition waste material generated at the site during the excavation and construction phases of development, in accordance with the relevant national waste management legislation. Developers shall ensure that all waste is removed from the plan lands by approved waste disposal contractors to approved waste disposal facilities. In addition, it is an objective of this plan that developers shall take adequate measures to minimise the impacts of traffic, noise and dust during construction phases.

IWO7 Any works for infrastructure development adjacent to the Royal Canal pNHA, in particular works in pursuit of the delivery of Objectives MAO3, MAO6 and LUS02, shall require effective mitigation measures, agreed with Waterways Ireland and agreed with the planning authority through the appropriate planning and environmental assessment process for each project, to minimise the potential for significant adverse short term and long term impacts on the canal, its water, habitats and amenity value.

IWO8 - To ensure the protection of surface and ground water quality in the plan area and surrounding areas in the construction of enhanced infrastructural requirements, and the protection of protected habitats and species including designated national and international conservation sites in implementing the plan.

IWO9 – The recommendations of the Eastern Catchment Flood Risk Assessment and Management Plan (CFRAM) study shall be incorporated into any future development of the area, upon its adoption





4.9 Green Infrastructure & Biodiversity

4.9.1 Introduction

Green infrastructure incorporates concepts of multi-functionality, conservation of ecosystems, establishing new linkages and improving networks, and enhancing biodiversity. These can all contribute to society through improved sustainability and enhancement of living environment. Dublin City Council has adopted the following definition for green infrastructure:

'a network of connected, high quality, multifunctional open spaces and corridors and the links in between that provide environmental services and multiple benefits for people and wildlife. It is also used to describe a broad range of design techniques and materials that have a sustainable character and have a beneficial environmental impact such as solar panels, wind turbines etc'.

Recent government guidelines (June 2013) issued for local area plans emphasise the need for the integration of environmental considerations such as climate change, biodiversity and green infrastructure into the local planning process in order to meet future environmental challenges. To this end, the core strategy of the Dublin City Development Plan 2011 – 2017 sets policy for the creation of a compact, quality, green, well-connected city which generates a dynamic, mixed-use environment for living, working and cultural interaction. The plan also includes specific objectives relating to greening the city, biodiversity, amenity, sustainable transport and water treatment. The city's green infrastructure includes public parks, recreation areas, street trees and emerging greening technologies such as green roofs, green walls and sustainable urban drainage systems.

The City Council actively promotes the concept of a Green Infrastructure (or 'GI') strategy comprising a spatial strategic network to be delivered through the development management process and local area plans, and a city-wide strategic green network has been mapped. Map 4.16 illustrates strategic green corridors along both the southern and northern boundaries of the plan area – ie the Royal Canal to the south and the Tolka River to the north, and this plan presents an opportunity to plan for improved links between these strategic green assets.

Policies of the city development plan relating to green infrastructure place emphasis on the encouragement of new linear parks and connections (including both pedestrian and cycle access), enhancing biodiversity, and co-ordinating with flood management requirements. Objectives focus on specific components of the city-wide network. More locally, there are opportunities to enhance connectivity between strategic routes and also to extend to nearby green spaces/amenities and the phoenix park.

Integrated with the above approach is the opportunity to achieve a rich and varied biodiversity – both by protecting key assets and by encouraging a variety of habitats that attract varied flora and fauna. These can be interlinked by green corridors on the Green Infrastructure network and hence contribute to the visual attractiveness of the area. Baseline work has been carried out to establish the extent of different habitats and to determine species (including protected species) present, and this will inform policies and objectives.

Map 4.16 Strategic Green Infrastructure for the city as set out in the City Development Plan.





4.9.2 Developing a GI Strategy - Key Inputs.

An effective Green Infrastructure strategy demands that attention is paid to the sufficiency and suitability of both green spaces and links for achieving multiple objectives. How greenways or green spaces are experienced by users is also key.

The main aim of the green infrastructure strategy for the plan area is to:

- (i) develop a linked green network of multi-functional open spaces and green corridors/links, working with existing amenities, established routes and opportunities for visual variety and enhanced biodiversity.
- (ii) ensure the incorporation of a broad range of existing and proposed sustainable design techniques that have beneficial environmental impacts (section 4.11 of this plan, which addresses 'environmental sustainability and sustainable design', is relevant here)

The proposed network will be mapped out not only within the plan area but also allowing for wider connectivity as part of the city-wide network area and wider environs extending into Fingal. It is intended to capitalise on the existing strategic GI assets by seeking that, where feasible, future developments of remaining vacant sites within the plan lands will reinforce the benefits of existing GI features in the area. This network must be both compatible and consistent with both structuring principles and urban design objectives of this plan.

The City Development Plan contains a number of site specific objectives and principles to add to the city's green network that are directly related to the plan area.

Relevant Policies and Objectives of the Dublin City Development Plan 2011 – 2017.

- *To promote the development of the city's urban forms so that they positively contribute to the city's neighbourhoods, public spaces and natural environment (Policy SC29)*
- *To promote the development of architecture and urban design which enhances local environments and which mitigates, and is resilient to the impacts of climate change (SC32).*
- *To develop new cycle links includingGrand and Royal Canal Premium Routes (Objective SIO3)*
- *To provide a pedestrian and cycle way green link interconnecting the Royal Canal to the Grand Canal via the Phoenix Park in consultation with the Office of Public Works (Objective GCO2)*

- *To seek to provide pedestrian and cycling green links connecting the Royal Canal and the Tolka Valley via a route through Botanic Gardens/Prospect Cemetery and a route in the vicinity of Holy Cross College (or routes as close as practically possible) in consultation with the Office of Public Works (Objective GCO2)*
- *To continue to cooperate with Waterways Ireland and other agencies to develop the amenity and biodiversity of canals as set out in Dublin City Canals Framework (January 2010) and supporting 'Waterways Ireland: Interim Environment and Heritage Policy' document (GC20)*

Note ; some related objectives may be contained in separate chapters of this document (i.e. the above is not an exhaustive list)

Relevant Guiding Principles for Pelletstown SDRA ;

- *To develop a coherent spatial structure, based on a hierarchy of linked streets, public spaces, and design in keeping with the natural and other adjacent amenity areas of the Phoenix Park, the Royal Canal and Tolka Valley. The main components of this spatial structure are a tree-lined canal side boulevard linking the two village centres and providing the potential for developing a range of different experiences, including recreational uses ... a central park to provide the setting for leisure uses and community activities ... north/south linkages facilitating good access to public transport and to the amenity of Tolka Valley (SDRA principle no. 6)and ...To promote the creation of a high quality public domain by establishing a high standard of design in architecture and landscape architecture (SDRA principle no. 7)*

Dublin City Canal Framework

The Dublin City Canal Framework (2010) sets out the proposals and projects for this area. It seeks canal corridor widening, habitat and landscape enhancement and integration with parks. Projects relate to fishing, improving access and interlinking communities.

Other relevant plans:

Regional Planning Guidelines for the Greater Dublin Area 2010-2022 contain strategic recommendations relating to SuDS, encouraging an integrated response to addressing flooding , and the need for sustainable water management. The guidelines also include actions for Green Infrastructure development. In summary these include ;

- The need for linkages both along and between river and canal corridors.
- Development of targeted walkways and cycleways.
- Increased opportunities for ease of access to the countryside for residents, whilst supporting wildlife and biodiversity

The Fingal County Development Plan contains the following specific objective for the Royal Canal:

To prepare a coordinated brief for all Royal Canal Crossings and development adjacent to the Canal in cooperation with relevant stakeholders. The design brief will include pedestrian/cycle links.

This LAP will support and facilitate the progression of these policies and objectives.

'TURAS' project

The TURAS project is an EU-wide initiative, the acronym meaning 'Transitioning towards Urban Resilience and Sustainability'. It aims to see how resilience measures can be developed in the face of challenges to sustainability . New transition strategies at an EU wide level can help reduce the urban ecological footprint, and strategies being developed in association with University College Dublin may include re-use of derelict sites, improving biodiversity, reducing energy consumption, and reducing flood risk (see also section 4.10.5). Areas of Ashtown- Pelletstown and Dublins Docklands may be examined as case studies.



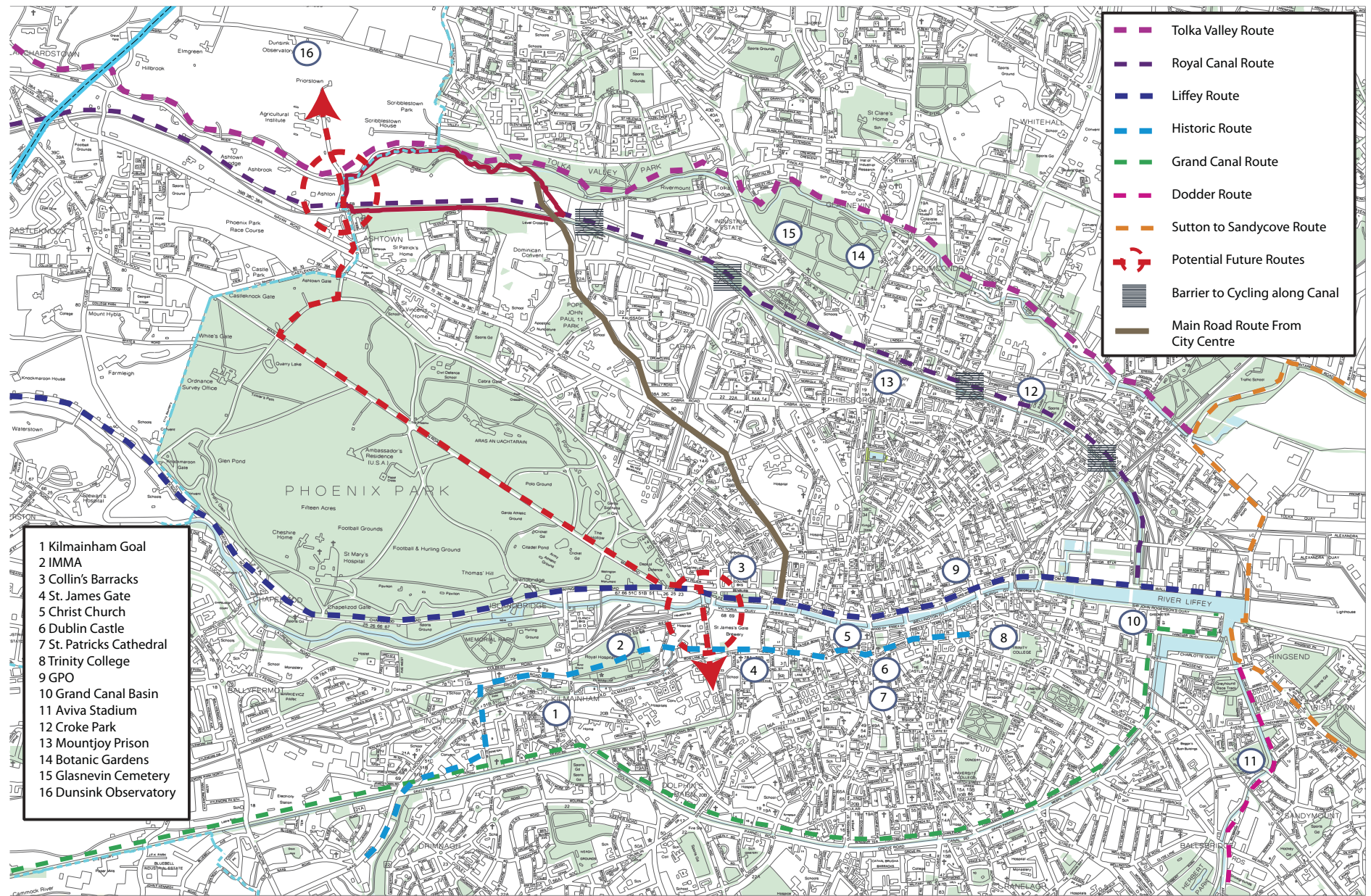


4.9.3 The LAP area context and green Infrastructure connectivity opportunities.

Drawing on strategic level material, Map 4.17 focuses on the relationship between the plan area and key green routes to the city and associated destinations. This provides a useful contextual view, distinguishing between different riverside routes, historic routes, and identifying the route of the planned coastal Sutton to Sandycove route (a dedicated cycling and walking route). In essence, this highlights the opportunity to develop an integrated network. The Royal Canal , River Tolka, and significant heritage sites are all illustrated, and close proximity to the Phoenix Park is evident.

It is clear that there is potential for improved future connections, including an opportunity to link to Dunsink Observatory - located to the northwest (in association with Fingal County Council), and also to improve links to the River Liffey and further southwards to the Grand Canal . The location of these lands, connecting at the River Tolka to the Royal Canal is advantageous, and this LAP focuses on both wider connectivity and internal green infrastructure and biodiversity.

Map 4.17- Strategic Diagram showing relationship of the LAP area to Tolka Valley Park, Phoenix Park and city centre



4.9.4 Existing Green Infrastructure at Local Level

In the Ashtown-Pelletstown plan area and its environs there are significant green infrastructure features, - both natural elements and man-made components, green linkages, habitats and biodiverse areas already in place. These include the following:

- i) Tolka River Valley Park – multi-functional parkland of strategic significance on the city's GI network. The Tolka River forms the northern boundary of the plan area and is considered to be of county-level ecological importance. Areas around the river consist of both natural and semi-natural green spaces providing important habitats for plants and animals. Recent works by Dublin City Council improve accessibility both to and within the park.
- ii) Tolka Valley Greenway – a €3 million, 4-kilometre off-road cycling route (greenway) linking Glasnevin, Finglas and Ashtown funded by the National Transport Agency and running through the Tolka River Valley Park. Fingal County Council is currently progressing policy for a greenway along the Canal running west from Ashtown and incorporating a walkway and cycleway in a landscaped setting
- iii) The Royal Canal - running along the southern boundary of the plan lands and linking into the areas along the canal further west and east. This is a designated proposed Natural Heritage Area (pNHA), considered to be of National-level ecological importance and is a designated conservation area as provided for under the city development plan. Schemes built to date within the plan area have contributed towards the development of a linear park which increases the biodiversity, attractiveness and functionality of the improved towpath.
- iv) Features of existing developed and undeveloped lands including mature hedgerows, scrub, grassland, trees and woodland. These vary in extent, quality and range of species.
- v) Existing green corridors including long established hedgerows and linear planting on undeveloped lands, within Tolka Valley Park, and along the canal.
- vi) A series of interconnected artificial attenuation ponds towards the eastern section of the plan lands and positioned just west of buildings at Royal Canal Park. These are located on undeveloped lands and contribute both towards visual amenity and biodiversity.
- vii) Swales along Pelletstown Avenue (functionally related to the above-mentioned ponds). These are a visual break in the street and form an attractive backdrop for street furniture and seating.





Existing Green Spaces

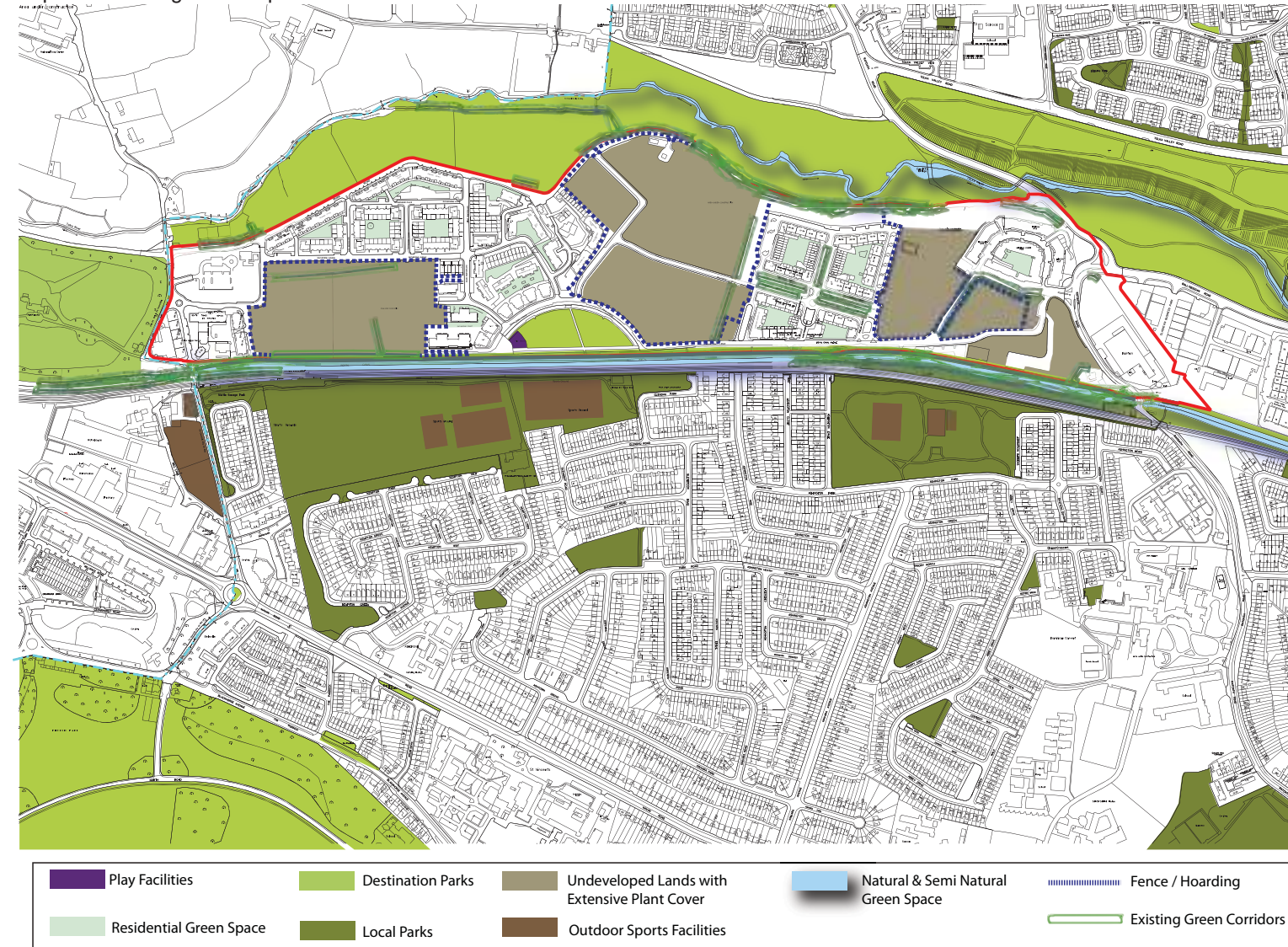
In relation to undeveloped lands there may be opportunities to integrate some of the above elements into new development and to provide interconnections to nearby features and green links. Map 4.18 illustrates green spaces in the LAP area, distinguishing between parks, open space associated with existing residential developments, and spaces for activities including sports facilities and locations for childrens play. Undeveloped sites are largely enclosed within fences or hoardings and these are denoted on the map by blue dotted outlines. Hedgerows and tree-lines are illustrated as 'existing green corridors'. Such 'Green Corridors' are distinguished from other links by the fact that they encourage wildlife and interconnect habitats. Whilst they provide both shelter and food for wildlife, they can also incorporate links for people, such as walking routes and cycle lanes.

The table below details relevant aspects of each colour-coded category shown in Map 4.18. and demonstrates the wide diversity and functionality of these spaces both within and near the LAP area. There is also a biodiverse rural hinterland to the northwest within the functional area of Fingal County Council.

Table 4.9 Existing Green Spaces – Details (refer to Map 4.18 for locations)

Green or Open space	Details
Destination Parks	Phoenix Park – Nationally significant historic park. Tolka River Valley Park Cardiffsbridge Park (extension of Tolka Valley Park)
Local Parks	Crescent Park (includes play area) Ashington Park (south of canal)
Natural and semi-natural greenspace	Tolka Valley – River Valley Canal Edge
Existing Green Corridors	Hedgerows, canal edge
Undeveloped lands with plant cover	Various undeveloped sites. Some have utilites in place. Attenuation pond area.
Outdoor sport facilities	Elmgreen Golf Club (to the northwest) Phoenix Football Club (to the northwest) Oliver Plunkett GAA grounds (south of canal) Coolmine Rugby Club Ashtown Stables (southwest of LAP lands) Ashington Park court/pitch (south of canal)
Other Green spaces	Private grounds of Ashtown House/demesne Grounds of Teagasc (Food research centre) Private residential courtyards and gardens.
Play facilities for children	Play area at Crescent Park

Map 4.18 Existing Green Spaces



4.9.5 Biodiversity

Recent biodiversity policy and legislation includes the National Biodiversity Plan 2011-16, Dublin City Biodiversity Action Plan 2008-12, the Wildlife Acts, and various provisions at EU level including the Habitats and Birds Directives, and the Bern and Ramsar Conventions. These all focus on the protection of important species and related habitats.

In relation to the LAP area, a baseline biodiversity study has been carried out and this informs the GI strategy. Survey work was conducted during the period Sept-Oct 2012 in accordance with best practice. Areas not normally available because they were screened off by hoarding were temporarily made available to facilitate some survey work. Specific areas studied included invasive flora, hedgerows and treelines, and ecological corridors/Stepping Stones

Table 4.10 Habitats identified

Habitats present	Types
Aquatic	Artificial lakes/ponds, canals, drainage ditches, reed and large Sedge swamps, tall herb swamps.
Grassland	Amenity grassland, dry meadows and grass verges, wet grassland
Woodland	Riparian woodlands, mixed broadleave woodland, scattered trees and parkland, scrub, immature woodland, hedgerows, treelines.



For each of the above habitat types, both the biodiversity value and biodiversity potential was explored. In relation to the built environs, the merits of stone walls, buildings, flower beds, spoil and bare ground were also determined, and a hedgerow survey conducted. Waterways and wetlands provide a defining character to the northern and southern boundaries of the LAP area, and the Royal Canal is a proposed Natural Heritage Area. Tolka Valley Park includes an Integrated Constructed Wetland, which has been successful in attenuating pollutants, and providing new habitats.

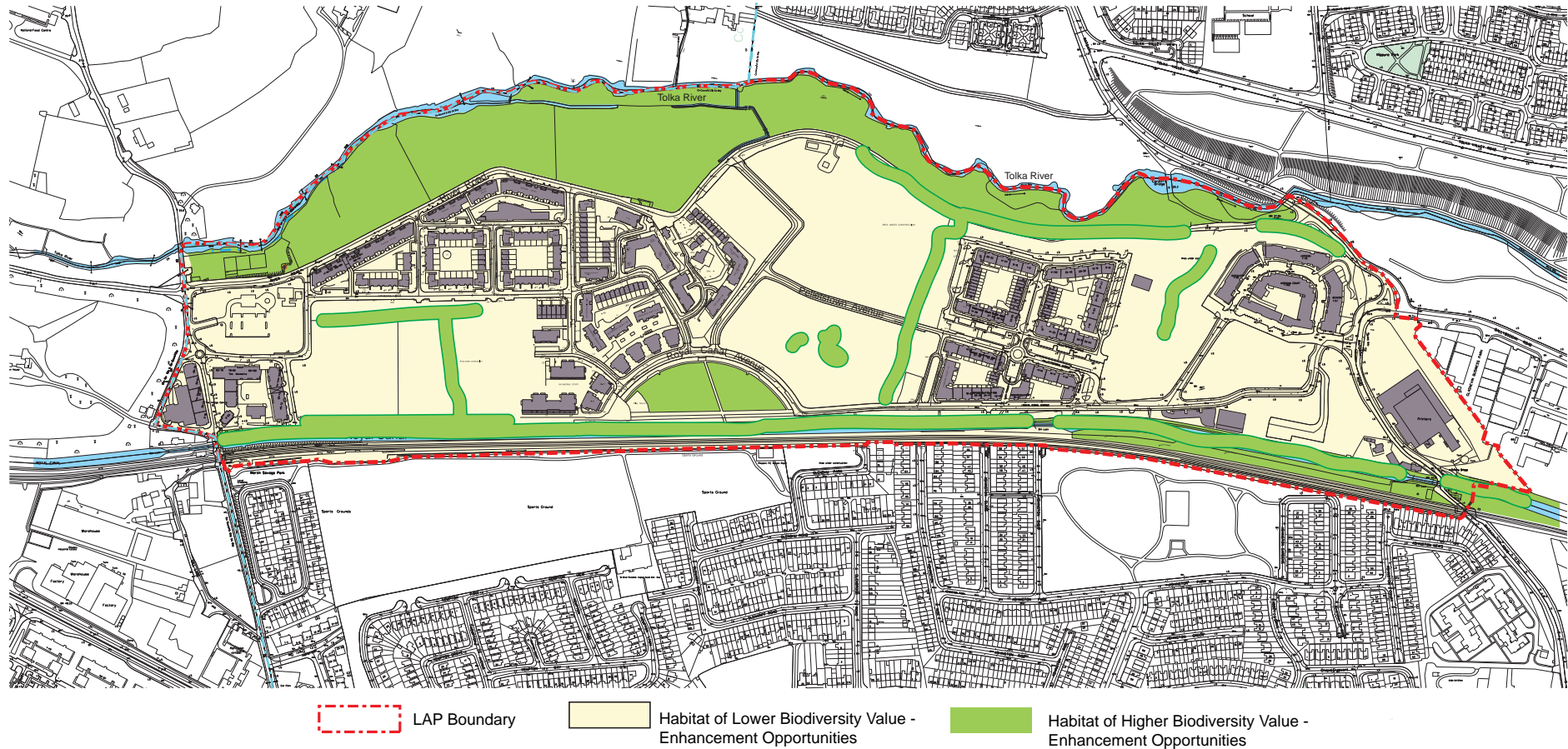
Table 4.11 below shows the diversity of habitats and the range of life they support. Many of these habitats perform important buffer functions, protecting waterbodies from pollution for example, or preventing excessive surface water runoff.

Location/Feature	Habitat Code	Habitat Code	Habitat (s) of Conservation Importance	Buffer Function
Tolka River	FW2	Kingfisher, Bats, Otter, Lamprey Salmon, Trout, amphibians	River Tolka	Yes (Sea and estuarine environment from pollution)
Tolka Valley Park	WD5, FS1, WS2, GS2, GA2	Otter, Bat species, wintering and breeding bird species, amphibians	Rivers, Riparian Woodland, Calcareous Grassland	Yes (River corridor buffer and flood plain)
Royal Canal	FW3	Otter, Bat species and a range of bird species, rare and protected plant species	Canal waterbody and fringing habitats	Yes (Sea and estuarine environment from pollution)
Walkway and park parallel to Royal Canal	BL3, WD5, FS1, GS2	Bird species, bat species, Otter	Parkland	Yes (buffer to Royal Canal)
Remnant treeline strip (in two areas previously cleared for development)	WL2	Bat species, wintering and breeding birds, amphibians	Treeline, drainage ditch	Yes (Ditch from pollution)
Three large undeveloped and abandoned developed areas	GS2, BL3, WS1	Bat species (roosting and foraging), birds of prey, wintering birds, breeding birds	Temporary drainage ditches, treelines, rank grassland, invading shrub	No
SUDS attenuation pond in undeveloped lands	FLB	Amphibians, wintering and breeding birds	Aquatic habitat (simulating pond conditions), rank grassland surrounding with scattered trees	Yes (grassland/planted woodland area buffers SUDS pond)

Table 4.11 ; Habitats, Species and Conservation Significance.

The survey concluded that there are opportunities to provide temporary wildflower meadows on undeveloped lands, and to strengthen existing hedgerows. There is also scope for additional enhancement and connectivity to both the Royal Canal and Tolka Valley Park, and new developments can assist by providing increased native tree planting, planter boxes and green/brown roofs. Invasive species need to be controlled. Map 4.19 identifies GI enhancement opportunities, distinguishing between habitats of lower biodiversity value from those of higher value. Apart from the obvious areas around the canal and Tolka Valley, the areas of higher value include areas around attenuation ponds, and both established hedgerows and areas of biodiverse growth on undeveloped lands.

Map 4.19 Green Infrastructure Enhancement Opportunities



This plan encourages integration of features of high biodiversity value into new developments, including treelines and hedgerows. Whilst this might not always be feasible or may be difficult to deliver given urban design objectives, the option should always be explored as there may be opportunities for integration of key elements. Areas of lower biodiversity value include large areas of undeveloped lands and whilst many of these area earmarked for development, some biodiverse features may be integrated into new public or communal open spaces.

This LAP also encourages greater biodiversity in new developments by seeking, where possible, aquatic features as part of SuDS proposals. In landscaping schemes, native species should be included as part of a 3-layered structure to include canopy, shrub and ground layers. (See Objective GI05).

Productive Landscapes ;

Productive landscapes include urban farming, community gardens and allotments, and the use of open space for growing food and flowers has clear benefits. Securing appropriate locations and available lands for such uses can however be problematic. Nevertheless, there are opportunities for new initiatives such as allotments and community gardens as part of new developments and ideally these should form an integral part of the GI network. An area close to the proposed train station has already been identified as a possible community garden location (see section 4.5 Objective UD04) and this would be aligned with a green corridor connecting to Tolka Valley Park.





4.9.6 Incorporating Sustainable Urban Drainage Systems

SuDS form an integral feature of green infrastructure. They increase the capacity of the soils to absorb run-off, reduce the risk of flash flooding, improve water quality and provide amenity through the use of such design features as permeable paving, swales, green roofs, detention basins etc. and can achieve multiple objectives such as removing pollutants from urban run-off at source, controlling surface water run-off from developments and ensuring flood risk does not increase further downstream.

Limiting the amount of paved and other hard surfaces in new developments and the incorporation of surface water drainage systems into new developments is an objective of this plan. The development of the remaining sites on the plan lands provides opportunities for the incorporation of SuDS into all new developments. In compliance with the Greater Dublin Strategic Drainage Study (2005), the city development plan, and in line with best practice recommendations, SuDS measures shall be incorporated into all new developments where feasible and appropriate. Appendix 2 provides specific guidance on specifics of SuDS requirements for new developments, and the content of section 4.11 – ('environmental sustainability and sustainable design') should also be examined in this regard, as this includes a 'green points' system that encourages biodiverse design and SuDS that are integrated with other options for sustainable design. Green roofs and rainwater harvesting for example can assist greatly in stormwater management, and green roofs along with green/living walls have the added advantage of providing new habitats. Hence, the variety of habitats achieved by including SuDS features as part of a green network can add significantly to the amenity and attractiveness of new developed areas.

4.9.7 GI Strategy

Map 4.20 draws together various strands of GI into a single map, identifying existing resources and recommending new proposals for the LAP area. The intention is to achieve a biodiverse network, incorporating SuDS options, green wildlife corridors, walking and cycling routes, and connections beyond the immediate plan area to nearby amenities. The objectives contained in the map incorporate and supplement objectives contained in other chapters and particularly those in sections 4.5 (urban design section).

The main components are ;

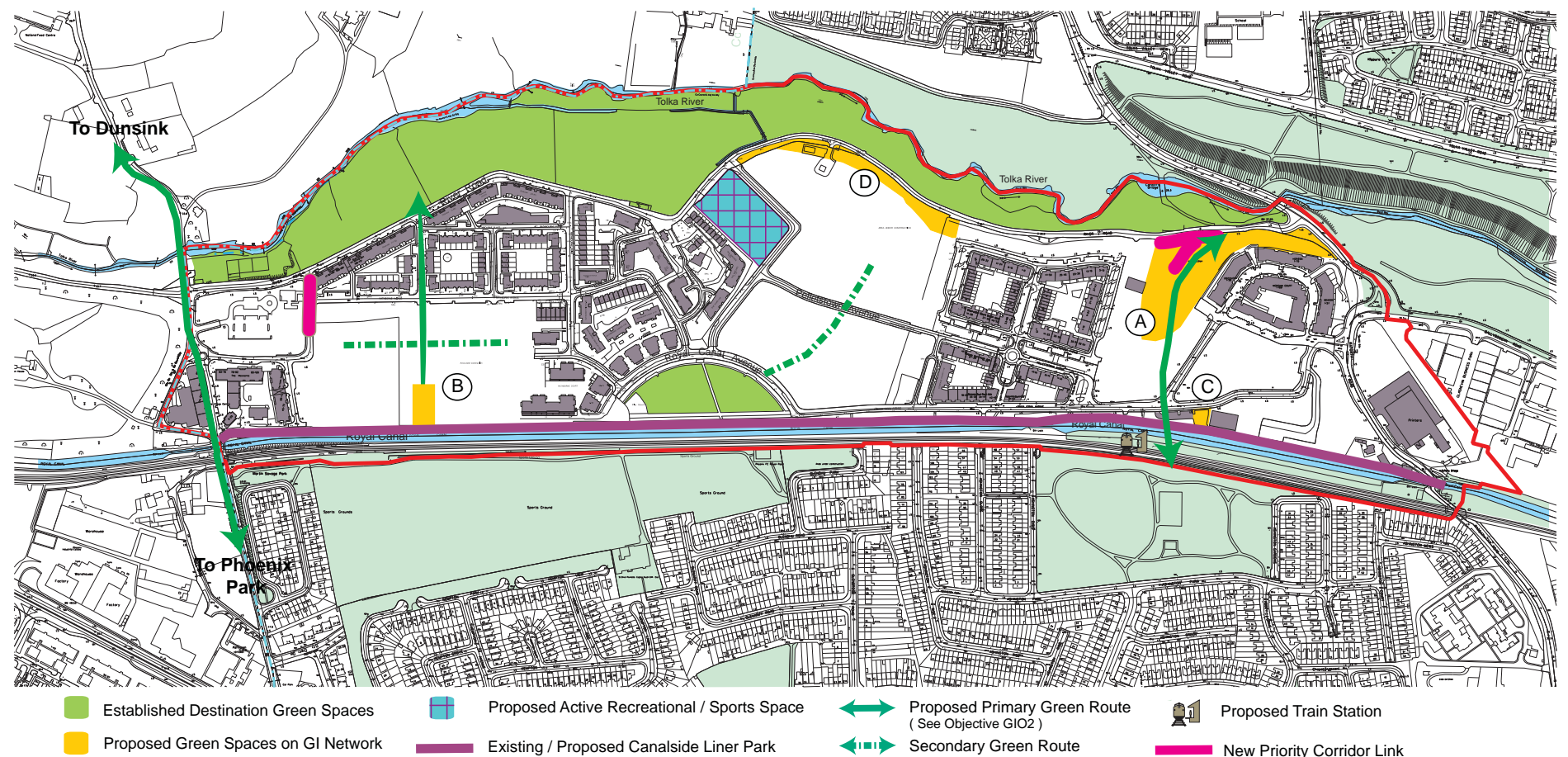
- Three separate 'primary green routes' providing new direct connections between existing strategic assets – the Royal Canal and the Tolka Valley. (Note that the primary green routes illustrated on the map are also set out in text as specific objectives at the end of this section). These are supplemented by suggested secondary links to expand the network.

- Four newly proposed green spaces on the GI network. These are positioned as follows ;
 - A..around the attenuation ponds near Royal Canal Park
 - B .. within the '12 acres' adjacent to the Royal Canal
 - C ..at the local park adjacent to the entrance to the proposed train station – to include a play space (& possibly community garden)
 - D ..at the northern end of Castlethorn lands on steeply sloping bank fronting river road.
- Two 'priority corridor links'
- A 'Green Points System' to encourage improved biodiversity and connectivity to the Green Infrastructure network, that will apply to all new developments. Please refer to section 4.11.3 for full details.

GI proposals in the area will fall into one or more of the following categories, the emphasis being on connectivity within an expanding network with eventual wide-ranging multifunctionality.

- Biodiversity and Ecological Value
- Recreation, Access and Quality of Life
- Climate Change, Watercourses, and Sustainable Resource management.
- Food Production and Community Socio-economic Factors
- Landscape Character and Local Heritage

Map 4.20 GI Strategy





4.9.8 Undeveloped sites – short term options.

Undeveloped sites have potential to deliver new GI features and increased biodiversity. Whilst in the longer term there is the possibility of delivering new green corridors, swales and perhaps some permanent woodland, shorter term options should also be strongly considered. In this regard and taking into account the phasing programme for the three main undeveloped areas as set out in chapter 5, there are opportunities to deliver ..

- Temporary woodland
- Temporary food production space.
- Temporary wild flower meadows.

These can be relatively inexpensive to deliver and maintain, yet greatly improve the attractiveness and biodiversity of an area pending eventual development. Because the phasing programme for each of the main landholdings specifies the sequential order in which development should progress, it is the areas phased for later development that are the obvious choice for such temporary interventions and these can form an attractive features when delivered. In choosing which of the three options (food production, woodland or flower meadows) to select, it is necessary that regard is had to the amenities of surrounding properties, site suitability, drainage conditions and the established ecology.

Green Infrastructure Policies

GI 1 To encourage the development of opportunities for green infrastructure, both within the plan area and connecting to surrounding lands.

GI 2 To implement a green infrastructure strategy in accordance with objectives herein and map.

GI 3 Applications for significant site development to demonstrate how the proposed development will contribute to green infrastructure and biodiversity'.

GI 4: Any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article (3) of the Habitats Directive.

GI 5: To enhance the biodiversity value of the local area by protecting habitats, in particular along water bodies, and creating opportunities for new habitats through appropriate native species landscaping schemes to integrate the natural environment with high quality urban development and to control / remove invasive species.

Green Infrastructure Objectives

GIO1: To complete the linear park along the Royal Canal in tandem with new development, enhancing biodiversity and ecological value, and improving amenity value for those using the towpath.

GIO2 In association with objective UD06 to provide/complete the following south-north green links from the Royal Canal to entrances to Tolka Valley park. Design and planting of these links should encourage biodiversity through careful selection of tree species and under storey planting.

(a) Through Ballymore lands from a proposed civic space adjacent to the entrance to the proposed train station (see objective UD04) at the Royal Canal through a proposed new public space incorporating existing attenuation ponds, to Tolka Valley Park. This shall be designed to function as an ecological corridor with associated recreational space.

(b) Through former Capel lands (the '12 acres') from a planned green space near the canal through Rathborne Avenue a proposed new public space incorporating existing attenuation lakes, to Tolka Valley Park.

(c) In association with urban design objective UD07 of this plan and proposals by FCC, to provide a link from the eastern end of the LAP lands at Ashtown Road, to Dunsink Observatory.

GIO3: To support Fingal County Council in relation to their proposals to prepare a coordinated brief, to include pedestrian/cycle links, for all Royal Canal crossings and development adjacent to the Royal Canal.

GIO4: To implement a Green Points System as set out in section 4.11, as a flexible means to achieve improved green infrastructure for new developments, and incorporating a high level of biodiversity. (see also objective ES01 in chapter 4.11)

GIO5 Landscaped and amenity areas to address biodiversity and where possible provide aquatic features as part of SuDS proposals. Native species should be included as part of a 3 – layed structure to include canopy, shrub and ground layers.

GIO6 Amenity and/or security lighting shall be designed to minimise negative impacts on protected species such as bats. Such designs may include directional/cowled lighting or be based on the advice of an ecologist. Particular attention shall be paid to areas close to water bodies.

GIO7 To retain and enhance, where feasible, remnants of existing hedgerows and treelines.

GIO8 To encourage the development of community gardening and provision of allotments at appropriate locations in new schemes.

GIO9 To support short term options for appropriate planting of areas of undeveloped lands pending future development and with regard to phasing programmes set out in Chapter 5.

GIO10 For new developments to examine the feasibility of connecting new swales to existing ones – thereby lengthening the existing linear habitat.





4.10 Community Infrastructure

To ensure that the existing and future Ashtown-Pelletstown plan lands are adequately served by a wide range of quality community and cultural facilities and infrastructure to serve all ages including educational and childcare facilities, flexible spaces such as community/cultural centres, outdoor activity areas for children and adults, playgrounds etc. All facilities and spaces should be fit-for-purpose, accessible by all, conveniently located, well designed and discourage anti-social behaviour.

4.10.1 Introduction

The importance of creating sustainable communities and neighbourhoods in the city cannot be over-emphasised. Creating such communities, the timely provision of sustainable civic infrastructure, the integration of new communities and accessibility issues have all been afforded much greater attention in recent years, both nationally and locally. Improving the quality of life is the underlying objective.

Ministerial Guidelines on *Sustainable Residential Development in Urban Areas* (2009), and statements on housing policy stress the importance of integrating housing provision with the delivery of community infrastructure. As stated in the national guidelines the integration of schools, community facilities, employment, transport and amenities with the housing development process in a timely, cost effective way is what sustainability is all about. Neighbourhoods require a range of community facilities to underpin them, including schools, libraries, community centres, cultural spaces, health centres, facilities for the elderly and persons with disabilities, crèches and other childcare facilities etc. The timely provision, convenient location and safe connection of such facilities to residential areas can have hugely positive impacts on the promotion of social inclusion, greatly enhance quality of life and greatly aid in the creation of sustainable communities.

Dublin City Council has placed the creation of sustainable neighbourhoods and socially inclusive communities as one of the three strands of the city's core strategy of the Dublin City Development Plan 2011 - 2017. The approach of the City Council extends the focus beyond the residential unit and the scheme and places emphasis on the quality of the surrounding area, particularly on the value of community infrastructure for sustaining and supporting strong communities. The City Council's settlement strategy prioritises the inner city, KDAs, SDRAs and KDCs with investment and growth, and this LAP area is a designated KDA and SDRA.

National, regional and local planning policies and guidelines all highlight the pivotal role that community infrastructure plays in helping to build, reinforce and maintain successful communities, particularly in newly emerging urban areas.

Recent Ministerial Guidelines issued in June 2013 titled *Local Area Plans* ; '*Guidelines for Planning Authorities*', require that local area plans should place an emphasis on providing walkable, mixed-use, & mixed tenure neighbourhoods with active streets, conveniently-located neighbourhood facilities commensurate with projected populations including playground/play areas and measures to encourage local people to adopt healthier ways of travelling around their local communities.

Existing and Permitted Civic Infrastructure in Ashtown-Pelletstown Plan Lands

As detailed in Chapter 2 of this plan, some community facilities have been provided and are operating in the Ashtown-Pelletstown area at present, including two crèches, a small community centre, a residents' only gym, a public gym, a dentist's surgery and a pharmacy, with the majority of these located on the western / Rathbourne end of the plan lands. Along with these facilities planning permission has also been granted for additional community facilities as part of larger mixed use schemes such as additional crèches, a leisure centre, medical facilities, a supermarket, and a cultural/community centre. However the majority of these facilities and residential units were not built, and it is likely that the planning permissions granted will expire and applicants will reapply for permission to develop mixed-use schemes on remaining sites.



4.10.2 Policy Direction

With regard to the more specific issue of the provision of community facilities in new developments across the city, policy of the city development plan requires all schemes with a residential element to include an element of civic infrastructure with the required level of provision increasing as the size of the development grows. While the original plan for Pelletstown in 2000 made little reference to the provision of specific community facilities a key overarching objective for the plan area was '*to encourage the creation of a sustainable living environment for the new community in a rich urban area.*' This living environment was to be diverse with a mix of land uses integrated with public transport. A site reservation was set for a new primary school with the adjacent site earmarked for playing pitches. Two new pedestrian bridges were planned to traverse the canal and railway line allowing for direct access into the sports grounds to the south. Public art was to be integrated into the design of streets and public spaces. The majority of these objectives still remain appropriate and this LAP will provide guidance for the future development on the remaining sites.

Most of the facilities provided to date are operating, while some remain earmarked as 'community facilities' but remain vacant as part of overall larger empty and mainly commercial buildings. Those facilities that are operating serve to support the existing residents of the 2,100+ homes built in the area to date. However from a review of what has been built to date and from the majority of submissions received at the public consultation stage, it is clearly stated that additional community facilities are required. This includes the need for existing facilities that have been built to begin operating as well as the provision of further facilities. Submissions received from people living in the area cite a number of facilities that are required and include i) a primary school, ii) additional crèches, iii) outdoor jogging paths/adult gyms, iv) community centre, and v) facilities for teenagers and older people. As new developments come on stream in the LAP area, there will be a requirement to provide community facilities as part of the development, and with the proposed increase in the proportion of family-sized units the demand for community facilities to support these new residents will increase further.

Development plan policy sets out the various design and development standards for infrastructure (including community infrastructure) provision expected having regard to the scale/extent of development proposed. These standards for community infrastructure are summarised in Table 4.12 and will apply to all developments proposed in the plan area. Requirements relating to urban design, crèche provision, public art, and childrens play are common to most categories, with an increased emphasis on community needs, school provision and phasing requirements for larger-sale developments. For any proposed development, requirements outlined in the table need to be considered with regard to structuring principles, urban design aims, and other objectives of this LAP.





Table 4.12 Social infrastructure requirements for various scales of proposed development.

DEVELOPMENT	SOCIAL INFRASTRUCTURE REQUIREMENT
15 residential units+ or 1,500sq.m.	Demonstrate how the proposal constitutes a positive urban design response and how it contributes to place making
75 residential units+	Urban design statement + Crèche + Children's play facilities
100 residential units+ or 10,000sq.m. & Public Transport Infrastructure	Urban design statement + Crèche + Children's play facilities + Contribution to social infrastructure
200 residential units+ or 20,000sq.m.	Urban design statement + Crèche + Public Art + Children's play facilities + Significant contribution to social infrastructure + Community Infrastructure Statement + Cultural Impact Assessment + Phasing and Implementation programme + Report identifying the demand for school spaces and an assessment of the capacity of the local schools
800 residential units+	Urban design statement + Crèche + Public Art + Children's play facilities + Significant contribution to social infrastructure + Community Infrastructure Statement + Cultural Impact Assessment + Phasing and Implementation programme + Phased completion of dwellings linked with provision of new schools

The manner in which the LAP will approach the provision of identified key pieces of social infrastructure is dealt with below.

4.10.3 Primary School

Planning guidelines issued in 2008, *The Provision of Schools and the Planning System: a Code of Practice for Planning Authorities*, seek to ensure that the planning system facilitates the timely and cost-effective roll-out of school facilities by the Department of Education and Skills (DES). The provision of schools is an integral part of the development of a compact and sustainable urban community. The DES is responsible for planning and developing schools while it is the responsibility of the planning authority to cooperate and coordinate with the DES in ensuring the timely provision of school places and the transfer of sites to the DES. The 2008 ministerial guidelines acknowledge the critical role that the planning system plays in anticipating future development and coordinating the provision of a community's essential supporting infrastructure including schools and amenity facilities.

Since 2000 a site has been reserved for a new primary school on the plan lands. This school was to be located on a site towards the centre of the plan area adjacent to a site identified for new playing pitches. The pitches were to be shared, accessed and used by the school as well as the wider residential community. To date these sites remain undeveloped.

The selected school site is adjacent to a site identified for playing pitches and a significant amount of existing and proposed residential development and as such allows for the possibility of sharing facilities. There is an opportunity for the Council to enter into partnership with the DES to achieve the provision of a shared school hall as a community resource.

Until such a time as a permanent school is provided in the plan area, the LAP will also promote the development of a primary school on a temporary basis on this site or on other suitable sites in the plan area. This temporary school may consist of temporary structure(s) or alternatively the temporary school facility may be accommodated in an existing building(s) in the area. In all cases, the planning authority will implement the Planning and Development Regulations 2008 on exempted development for temporary school accommodation to expedite the provision of temporary school facilities. See map 4.21 for possible locations for a temporary primary school.



4.10.4 Childcare Facilities

Ministerial Guidelines on Childcare Facilities place emphasis on the fact that access to good quality childcare can benefit children, parents, employers and communities in general. Dublin City Council recognised that quality childcare in a variety of locations is an integral component of successful mixed-use areas.

The pre-draft plan submissions received vary in their suggested approaches to the provision of crèches, with the main stakeholders citing an overprovision of crèches in the area and the residents of the plan area requesting that additional crèches be provided for. While one of the existing crèche facilities appears to be operating well the second crèche, possibly due to its location, does not appear to be operating as successfully. A third crèche built has not opened as a crèche to date. The Dublin City Childcare Committee has indicated that there is a shortfall in community (affordable) crèches in the area and to has advised that i) crèches (preferably community-run) should continue to be provided as part of new mixed-use schemes, and ii) that a larger crèche (possibly between two or more developments) be provided in the area. In regard to the western hub, it is considered appropriate that a crèche be provided as part of any future development on the marketing suite/carpark site (Castlethorn) where such a facility can integrate well with a mixed use scheme.

Having regard to the advice of the Dublin City Childcare Committee, the LAP's policy to provide an additional 920 - 1270 new residential units (see housing chapter) and the policy of providing an increased percentage of more family-friendly units in the area, it is clear that the demand for childcare spaces will increase. While there are a number of crèches in the wider area outside of the plan lands, these are not easily accessed by the residents of Ashtown-Pelletstown plan area. The City Council will therefore require the provision of additional childcare spaces and will support the provision of both stand alone facilities and larger-sized combined crèches depending on the design of developments proposed. Larger units can offer a variety of services – sessional/drop in/after school etc. Suitable indicative locations for childcare facilities have been identified on map 4.21 and include locations on the '12 acres' site, a centrally located site, and also at the eastern end of the plan area.

Play Spaces

The importance and necessity of play for children (0 to 18 years) is recognised by the City Council and expressed in detail in Dublin City's Play Plan 2012 – 2017. Play is acknowledged as a fundamental and integral part of healthy development and well being, sowing the seeds of experience, encouraging children and young people to learn and develop as individuals and as members of their communities. The vision for Dublin is that the city will be a child-friendly and playful city where all children and young people can enjoy their right to play.

Within the LAP lands there is one publicly accessible playground located in the crescent park. It is well-used, overlooked by adjoining residential units and easily accessed. It is considered appropriate, having regard to the existing and proposed population for the plan area, that additional





playgrounds and play spaces be provided. In line with city council policy, new play facilities are to be provided in new residential schemes containing 75 residential units or more.

These spaces should be designed to encourage varied and physically active play, be within easy walking distances of children's homes or within the curtilage of a residential block, and be of a high standard and overlooked.

Map 4.21 illustrates indicative locations of play spaces/facilities, - one located in each of the large undeveloped sites. In this regard the proposed play area adjacent to Royal Canal Park would be located within the setting of a new park and it is intended that this would be the largest of the new play areas being provided – being located near the eastern hub and adjacent to an existing higher density scheme.

The provision of playgrounds in public spaces such as squares and plazas adjacent to commercial facilities, and on a temporary basis on undeveloped lands will be encouraged in the plan area. Indoor recreational facilities will be required where it is considered that there is sufficient public open space in the vicinity.

(For details on the provision of parks and allotments see chapter 4.9 - Green Infrastructure).



4.10.5 Community / Cultural Centres

The provision of community and cultural facilities helps to build connections within an emerging community and facilitates the integration of communities with the surrounding neighbourhoods in the wider area. Dublin City Council, in partnership with key cultural stakeholders, has devised a Cultural Strategy (2009 – 2017). This strategy sets out a shared vision that culture is integral to the city's identity and quality of life. Over the lifespan of the strategy the City Council seeks to lead and support the development of culture in the city, support artists, create opportunities for everyone to participate in culture, develop cultural infrastructure, recognise that culture is essential to the city's economic vitality, and ensure that culture plays a significant role in urban regeneration and reflects the identity of Dublin's neighbourhoods. The city development plan supports the implementation of the cultural strategy and includes policy that all local area plans incorporate relevant priorities and actions of the cultural strategy.

In Ashtown/Pelletstown there is one small community centre operating in the River Centre and a second facility available in Royal Canal Park. The latter remains unfitted but is understood to be generally suitable for community use subject to this being resolved. Given the planned higher density development around the eastern hub and public square, it is considered that this is an appropriate location, mirroring the facility on the western side of the plan lands at the River Centre. Such rooms can accommodate a range of events such as for meetings, displays, talks and functions for example.

The above approach of maintaining two centres in the medium to longer term is seen as appropriate to meet local needs, yet should demand arise there is also scope in the shorter term for use of empty units throughout the plan lands for cultural/community uses, including more specialist uses such as art galleries or other cultural or individual creative activities.

TURAS project – Community Aspects

The TURAS project is an EU-wide initiative, the acronym meaning 'Transitioning towards Urban Resilience and Sustainability'. It aims to see how resilience measures can be developed in the face of challenges to sustainability. New transition strategies at an EU wide level can help reduce the urban ecological footprint, and local communities can get involved. Such strategies being developed in association with University College Dublin may include re-use of derelict sites, improving biodiversity, reducing energy consumption, and reducing flood risk. These aspects are being studied at present in association with European partners. Some areas of the Ashtown/Pelletstown LAP lands may be suited to project work relating to the above, and with landowners agreement there may be opportunities to develop projects encouraging active community involvement.

4.10.6 Sports Facilities

In addition to walking and cycling objectives in this plan, active sports facilities should be within easy reach of residents without the need to drive. Within the plan area, the only active sports facilities are two operating gyms ; one located in the River centre at Rathbourne and a second one (for residents only) at Royal Canal park. Provision within the LAP area is weak in regard to availability of active sports facilities. The range of sports facilities within a 2km radius is however very good, and includes existing GAA sports grounds and a clubhouse at Martin Savage Park to the south of the canal, and also tennis courts and other facilities at Ashington Park, also south of the Canal (eastern end). The closest community centre is Cabra Parkside Community Sports Centre, approx. 1.5 km to the southeast, on Ratoath Road. This has modern facilities including a skateboard park, a children's playground, games pitches, a gym, and classes/activities aimed at both adults and children.

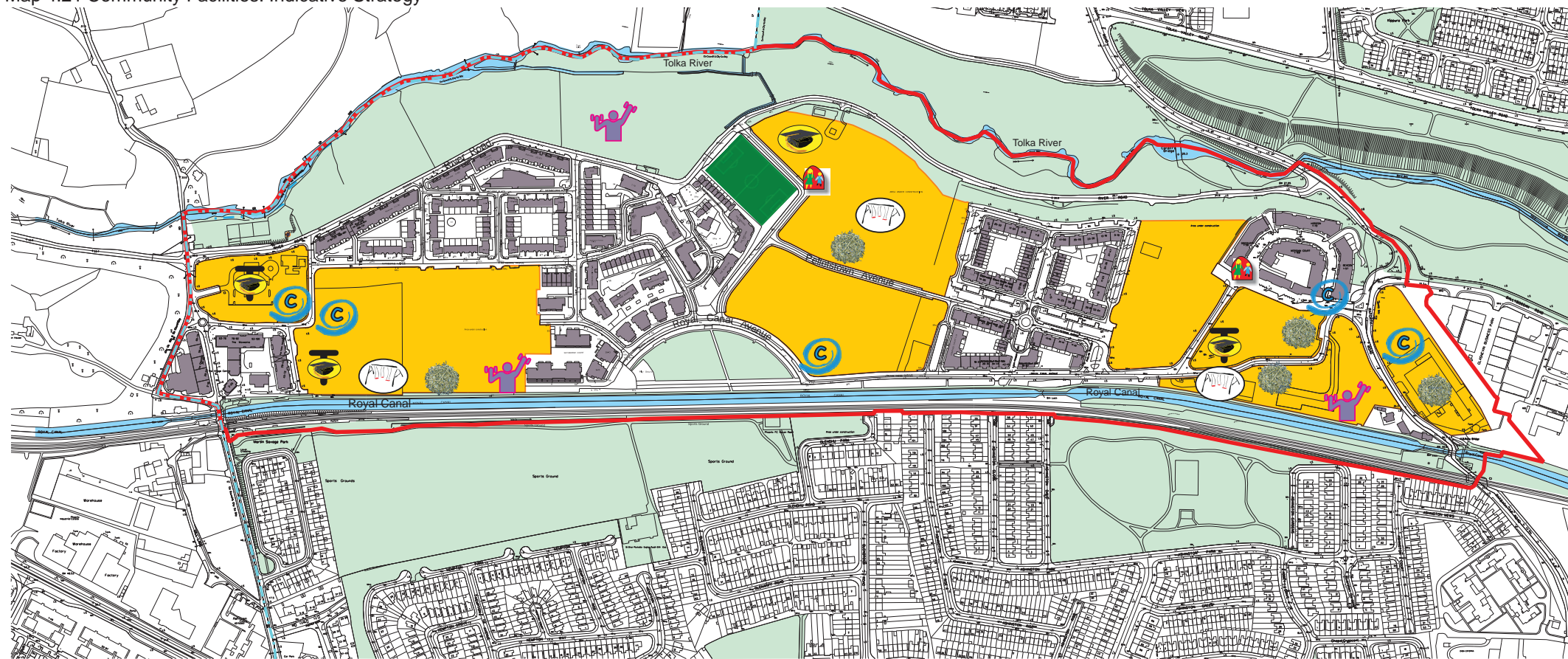
Further to objectives of the AAP, this LAP aims to deliver open space / sports pitches , which will be available to the local community, on the site immediately south of the school site. In time, it is expected that there will be beneficial synergy between school activities and community uses in this centrally positioned site. The school hall will be community-focused and publicly available for a range of uses. In addition to the above, the provision of outdoor adult gym equipment is recommended in tandem with new development at selected locations indicated on map 4.21. These locations are selected having regard to ease of access for those using the canal towpath and Tolka Park. In addition, and benefitting from the newly enhanced routes in the Tolka Valley Park, there is scope for an attractive 'sli na slainte' circular walking route, encompassing both the river valley, the canal towpath, and along attractive biodiverse routes interconnecting the two.

By planning for the above facilities in tandem with the more general expansion of walking and cycling routes and new infrastructure (including green infrastructure), a sustainable network of leisure and sporting facilities will be achieved, reducing reliance on travel to facilities outside the plan area.





Map 4.21 Community Facilities: Indicative Strategy



Community Infrastructure Policies

CI1. To ensure the provision of community, cultural and educational infrastructure in the Ashtown-Pelletstown plan area in line with the standards set out in Table 4.21 above and relevant development and design standards of the Dublin City Development Plan 2011 – 2017.

CI2. To facilitate the provision of educational facilities in the plan area by way of an integrated approach between the Department of Education and Skills, school authorities and Dublin City Council.

CI3. To support and facilitate the use of vacant commercial units and sites for publicly accessible cultural workspaces, performance venues, arts galleries etc on a temporary basis.

Community Infrastructure Objectives

CI01. To actively promote the development of a new primary school on the reserved school site, and seek to enter into partnership with the Department of Education and Skills to achieve the provision of a school hall as a community resource.

CI02. To provide one new larger size play facility adjacent to the canal at Royal Canal park as part of a new public open space ; and that smaller local play facilities are provided within developing areas.

CI03 To promote the area of the Royal Canal and Tolka Park as active community resources for leisure purposes, and to examine the possibility of (i) developing a sli na slainte circular route interconnecting both, and (ii) installing outdoor 'adult gym' facilities at appropriate locations as part of sport promotion.

CI04 The Council, in conjunction with the HSE will facilitate the development of a health care service within the LAP area.





4.11 Environmental Sustainability and Sustainable Design

4.11.1 Introduction

This LAP aims to reduce reliance on unsustainable energy by promoting green alternatives and ensuring sustainable principles and sustainable design are integral to the development process. Implementing best practice through innovative design will assist greatly towards meeting the aims contained in the Councils Climate Change Strategy.

Given that there are substantial areas of lands for development within the LAP boundary, generally in large plots, these are considered conducive to comprehensive implementation of green design and engineering measures.

This sustainable vision is promoted in this LAP through four policy approaches below:

1. Encouraging a mix of use types in the area, to support the development of sustainable residential communities.
2. Modern green building and block form design, with high BER ratings, maximising opportunities for both reducing energy consumption, exploiting sustainable energy options and conserving water. A Green Points System can assist significantly in this regard.
3. Encouraging high levels of use of sustainable modes of transport by promoting walking, cycling and public transport within the LAP area. Implementation of Green Infrastructure objectives can help make walking and cycling routes more attractive and biodiverse.
4. Promoting and supporting improvements in the public realm which reduce energy consumption, support SUDS, increased carbon sequestering and supporting CHP (combined heat and power) district schemes.

Through the promotion of a sustainable land-use strategy, new development should have an inherently low carbon footprint, and the proximity of local, well established amenities should lessen the transport needs in the area. This approach hence promotes sustainable transport given proximity to existing and proposed public transport options.

Given the extent of planned residential development, the type and design of housing units is an important consideration. New residential units should be designed with flexibility in mind, as sustainable communities should include the delivery of a housing mix with inbuilt adaptability to changing circumstances within a family's life-cycle. The inclusion of elements such as community gardens, both public and private open space (such as roof gardens and courtyards) and integrated amenities can increase the quality of life for residents in the area.

4.11.2 Sustainable Design

Sustainable design is promoted in this LAP by focusing on five elements

- (i) built fabric;
- (ii) design and layout of buildings;
- (iii) energy and
- (iv) carbon impact of construction, and
- (v) a Green Points System.

The LAP seeks to achieve development which utilises state of the art energy efficiency policies and best practice technologies to reduce resource consumption and promote environmental sustainability.

New developments within the LAP area should, where possible, seek to maximise energy efficiency through their location, design and/or make appropriate use of energy conservation techniques, and go beyond the current minimum building regulations requirements. Building design should maximise natural daylight and ventilation opportunities, incorporate grey water re-use and green roofs and/or walls where possible.

In combination with the materials chosen and physical attributes of building design, sustainability should also inform key urban design elements such as creating attractive micro climates in key public or private public spaces, maximising passive solar gain, reducing overshadowing and addressing wind tunnel impacts. A key part of sustainable building and reduced carbon footprint is the energy consumption of heat, light and power of a building. Opportunities to source these forms of energy from sustainable sources should be exploited.

Solar panels, geothermal and CHP are some of a number of options which provide renewable energy sources, and can also bring economic benefits. CHP (combined heat and power) on (or near) site production of heating, lighting and cooling has been shown to be very sustainable in terms of efficiency and is most efficient when there is a suitable mix of uses for energy centres. This and other renewable energy system options should be considered for larger sites and also longer term proofing of design to facilitate connection to district scale schemes.

In terms of sustained energy demand, the use of compatible uses such as day and night-time loads and cooling and heating – i.e. commercial and residential use respectively, lends itself to the use of energy centres of CHP. Carbon imbedded in buildings, through the materials, processing, delivery and construction impacts is significant. New buildings should be designed so that other types of uses can be accommodated in the future, ensuring that the building and the carbon invested in it will be fully used and be sustainable in the long term.

In compliance with the Dublin City Development Plan, developers are required to provide a sustainability statement to illustrate measures proposed to increase energy efficiency, reduce resource consumption and minimise waste generation.

4.11.3 Green Points System.

A 'Green Points System' has been adopted by a number of Local Authorities in Europe. It provides a method by which it can be ensured that a range of sustainable design features are integrated into new schemes by implementing measures to encourage a high level of biodiversity and reduced surface water runoff. When implemented, these measures also add to the general attractiveness and diversity of schemes.

Adapting the points system to the Ashtown/Pelletstown area, - based on and modified from the Swedish Green Points List, Dublin City Council will seek a range of measures to be implemented, yet provide considerable choice for developers in relation to the range of measures applicable. This recognizes the diversity of anticipated development forms and built contexts.

DCC will require a minimum of 7 items from the following list of Green Points Statements to be addressed in all proposed developments. These should be addressed in detail in any planning application. A number of bird boxes should also be provided within the overall scheme.





1. Biotope specified insect habitats are provided within courtyards or new landscaped areas.
2. Bat boxes are provided within courtyards and landscaped open space areas within housing schemes.
3. No surfaces in courtyards or driveways/front gardens are sealed, and all surfaces are permeable to water.
4. All non-paved surfaces within courtyards and rear gardens have sufficient soil depth and quality to grow vegetables.
5. The courtyards include a naturalized garden with varied elements.
6. The majority of walls are covered with climbing plants.
7. There is 1 sq metre of pond for every 5 sq m of hard surfaced area in the courtyard.
8. Vegetation in the courtyard or new pocket parks is selected to be nectar rich and provides a variety of food for butterflies.
9. There are no more than 5 trees or shrubs of the same species.
10. All stormwater flows for at least 10 metres on the surface of the ground before it is diverted into pipes.
11. The courtyard is green but contains no mowed lawns.
12. There are frog habitats within the courtyards or pocket parks as well as space for them to hibernate.
13. Conservatories/greenhouses are provided within courtyards.
14. There is food for birds throughout the year within the courtyard or in new landscaped areas and pocket parks in housing schemes.
15. Whole courtyard is used for cultivation of vegetables, fruit and berries.
16. Developers liaise with ecological experts.
17. Grey water is treated in the courtyard and re-used.
18. Biodegradable household and garden waste is composted.
19. At least half the courtyard area consists of water.
20. A section of the courtyard is left for natural succession.
21. All the buildings have green roofs and gardens.
22. Each new garden in new housing areas is provided with a native tree or fruit tree.
23. Tree species used for roadside verges are chosen to provide visual variety, and have a planted understorey/shrub layer to attract wildlife, providing a biodiversity corridor and replacing traditional grass verges.

Environmental Sustainability & Sustainable Design

Policies

ES1. To seek that new developments utilise state of the art energy efficiency techniques and best practice technologies to reduce resource consumption of the earth's resources and promote environmental sustainability.

ES2. Through design, to enable opportunities within the form, use mix and orientation of the buildings to maximise solar gain and minimise heat loss.

ES3. To promote the use of environmentally sustainable technologies and facilities within any development in the LAP area such as the inclusion of CHP (Combined heat and power) units on site, community recycling facilities, grey water collection facilities, green roofs and green walls.

ES4. To seek opportunities within larger block developments to create efficiency in energy consumption both in buildings, blocks and in use of public transport, with future-proofing of systems to facilitate district wide schemes in the future.

ES5. For larger schemes and larger/tall buildings, building design will give careful consideration to the design and arrangement of buildings on a site in relation to the development of a microclimate. New developments should be future-proofed to aid in the conservation of energy and maximize solar gain and renewable technologies.

ES6. All buildings including housing units should incorporate flexibility in form and internal design in terms of size and tenure. Building design and technology used should allow for adaptation and for change of use in the long term. A building should not become obsolete on cessation of an activity, but should be capable of facilitating new activities without onerous renovation, in order to conserve "embedded energy".

ES7. To promote the use of environmentally sustainable materials in the construction of any development in the LAP area.

Environmental Sustainability & Sustainable Design

Objectives

ESO1 To implement a 'green points system' for all new developments in order to meet environmental objectives and to ensure an attractive and biodiverse living and working environment.

ESO2 With the support of residents, to promote the development of a community garden in association with the development of a community plaza adjoining the entrance to the proposed train station.

ESO3 To seek that communal areas of buildings, including stairwells, corridors and foyers, are effectively designed to use low levels of energy in the form of lighting and heating, and minimising heat energy loss.





Chapter 5: Phasing & Implementation

5.1 Introduction

For Dublin City Council, the success of the LAP is dependent on the achievement of an active and integrated residential community, within a sustainable high quality built environment. This chapter seeks to set out the steps necessary to facilitate the delivery of this goal, and the identified policies and objectives of the LAP outlined in the previous chapters.

In recognising the challenging economic environment, and to address key concerns regarding vacant sites, this chapter identifies both the long term overall phasing and site plans for the remaining sites within the area; and also identifies a series of options and possibilities to achieve interim uses and improvements to improve the quality of the built environment and experience in the short and medium term.

5.2 Phasing & Sites Strategy

One of the challenges identified by the submissions received at the start of the process of preparing the LAP was the severance that exists across the LAP area. When this area commenced development it was not envisaged that the lands separating individual phases would remain vacant for any significant period of time. However due to the collapse of the housing market in 2008 all development ceased and sites were not progressed, leaving the existing estates separated by vacant lots. The aim of this phasing strategy is to set out a clear intent as to where development should commence and what facilities and connections should take place with each phase. By identifying this phasing strategy, development in each of the three main landholdings can progress within a structured approach and meet targets of housing mix and diversity, linking up existing communities, improve passive supervision of key walking and cycling routes and provide new facilities and infrastructure. While it is recognised that the scale of the sites in question are not large, it is also recognised that the pace of development in the immediate future will be slower than previously experienced. For this reason a clear phasing strategy was considered appropriate to include in the LAP.

Phases are identified as 1, 2 or 3 within each landholding; to reflect the fact that the timing of phases in each landholding will differ. In certain circumstances, Dublin City Council may allow a later phase proceed ahead of earlier phases where it is clearly shown by the applicant that the benefits of having this phase proceed earlier are significant, in that it addresses connectivity within the LAP area, resolves problems identified by the LAP or provides important physical or community infrastructure.

Each phase can be completed as a series of separate permissions within each phase or if appropriate, phase 1 and 2 can be combined as one permission. Permissions for later phases will not be considered until significant elements of the previous phase, including key infrastructural works are under way. Exceptions will be made to the phasing only where alternative arrangements also ensure that the specific infrastructure identified for each phase is delivered.

For all phase 3 sites shown in the LAP earlier applications in phase 1 must include proposals for the upgrading of these sites until development happens. As these sites are not likely to be developed in the immediate future, it is not considered appropriate that temporary hoardings remain on these sites as they are not active development sites. Proposals for improvement can involve levelling and grassing of the site, temporary planting such as meadows and if needed, new fencing that is visually pleasing. Options for other temporary uses will also be considered where they benefit the LAP area and do not negatively impact on the residential amenity of adjoining properties.

For all phase 1 applications, the documentation supplied shall demonstrate how this site will integrate with later phases as a minimum and for certain sites the inclusion of an overall masterplan layout will be necessary to provide a clear context for the application.

For each landholding and phase, principles for the design and built form are described; the character of development and the relevant infrastructure requirements for each.

5.2.1 Capel Site.

This is a rectangular site located on the western part of the LAP, extending for approximately 4 hectares bounded to the south by the canal towpath and by development undertaken by Castlethorn Developments to the east and north, now Rathbourne Village and Rathbourne Avenue.

The site has been visually improved recently, with the hoarding and building materials removed and the areas fenced and grassed.

The LAP seeks that this site is built out with a mix of residential units, with the density across the entire site to generally achieve densities in the range of 40-80 units per hectare; with the higher densities located closer to the Village centre and lower densities to the east and north of the site.



General Design Principles.

Development on this site must achieve a number of key design principles, and future applications for permission must incorporate these in the proposed layouts and design. The initial permissions shall include a site masterplan showing how the overall scheme is proposed to integrate with existing development surrounding the site and the proposed permission, and incorporate the design principles outlined below.

The design principles seek to provide a structure for integrating this site with surrounding developments, and to complete key urban design elements of the overall LAP where they impact on this site. They also seek to give legibility, permeability and coherence to future development.

- Provide for a series of urban blocks to shape the pattern of development, providing housing frontage directly onto each boundary road and strong permeability with new east west and north south connections through the site.
- Provide for a strong visual presence addressing the tow path, to integrate visually with existing development and to provide strong passive supervision to the canal. Development facing the towpath on the southern boundary shall be generally 4 storeys, interspersed with 3 storeys and can comprise of duplex units, apartments or terraced houses. Height along the canal should step up to 5 storey adjacent to Rathborne Village to achieve visual integration with the existing developments.
- Provide for a linear park as part of the towpath, at a minimum of 10m width to integrate with the existing linear park provided to the east.
- That the urban blocks immediately adjoining Rathbourne village deliver a higher density form to integrate visually with the Village both in height and built form, rising up to 5-6 storeys in south west quadrant.
- Provide for a new pocket park, centrally located within the site to serve the housing, with active play facilities and adjoining a new a green link/avenue connecting to Tolka Valley park along Rathbourne Way and out to the Canal towpath.
- Provide for a minimum of 2 new access points onto the towpath along the southern boundary to improve accessibility and safety on the towpath.





Phasing

This site is divided into three phases, shown in Figure 5.1. Each phase can be completed as a series of separate permissions. Exceptions will be made to the phasing only where revised arrangements also ensure that the specific infrastructure identified for each phase is delivered.

Phase 1 will provide for a greater proportion of family housing and provide overlooking of the road and integration between Rathborne Village and the existing housing at Rathborne. Densities in the range of 40-50 units per hectare will be provided.

Phase 2 will also provide for a greater proportion of family housing. The inclusion in this phase of the area addressing the Canal is critical as it will provide for increased levels of passive supervision and activity along the route. Required of this phase will be the completion of the towpath and associated linear park on the southern side of the Phase 2 site, so that greater connectivity and activity is provided alongside the canal. Densities are sought in the order of 50-70 units per hectare.

Phase 3 will provide for a more mixed typology of units, with apartments, duplex and townhouses sought. This phase shall complete the pocket park and green route running north south through the site. Densities are sought above 70+ units per hectare.

5.2.2 Castlethorn Lands

This holding involves two separate parcels of land separated by completed developments by Castlethorn. One site is centrally located within the LAP area, and is approximately 6 hectares and the second site is located on the north west corner of the LAP, and is approximately 1.2 hectares. Both sites are currently hoarded, with the smaller containing the former sales unit and associated car park.

For these lands the LAP seeks to preserve two key elements of the 2000 Action Area Plan, namely the reservation of the school site within the central site and a differentiation in densities and house types across the LAP so that the higher densities are located proximate to Ashtown (and second proposed) train station and the moderately lower densities are located centrally within the LAP.

General Design Principles.

- Complete the built edge to the crescent on the 6 ha site on the southern boundary to give enclosure and presence for the half moon park, using a building height that equates with the existing housing developments completed on the crescent and using a high quality design to complement existing buildings and create visual interest.
- Provide for a greater percentage of family size housing in the central 6 ha site with local pocket parks integrated with housing.

- Provide for strong permeability through the larger site, incorporating the opening of the east west link road centrally within the site and a series of smaller connections attractive to pedestrians and cyclists north south to connect Tolka Valley Park through to the crescent park and the Canal towpath.
- That the smaller site provide for a high quality residential scheme, with the option of some limited mixed use, with a more urban character and form, complementing the existing Village and recognising its proximity to the train station. The design of the buildings should define and address Ashtown Road and River Road and provide a high quality frontage, recognising its prominent location marking the entrance to the LAP area.

Phasing

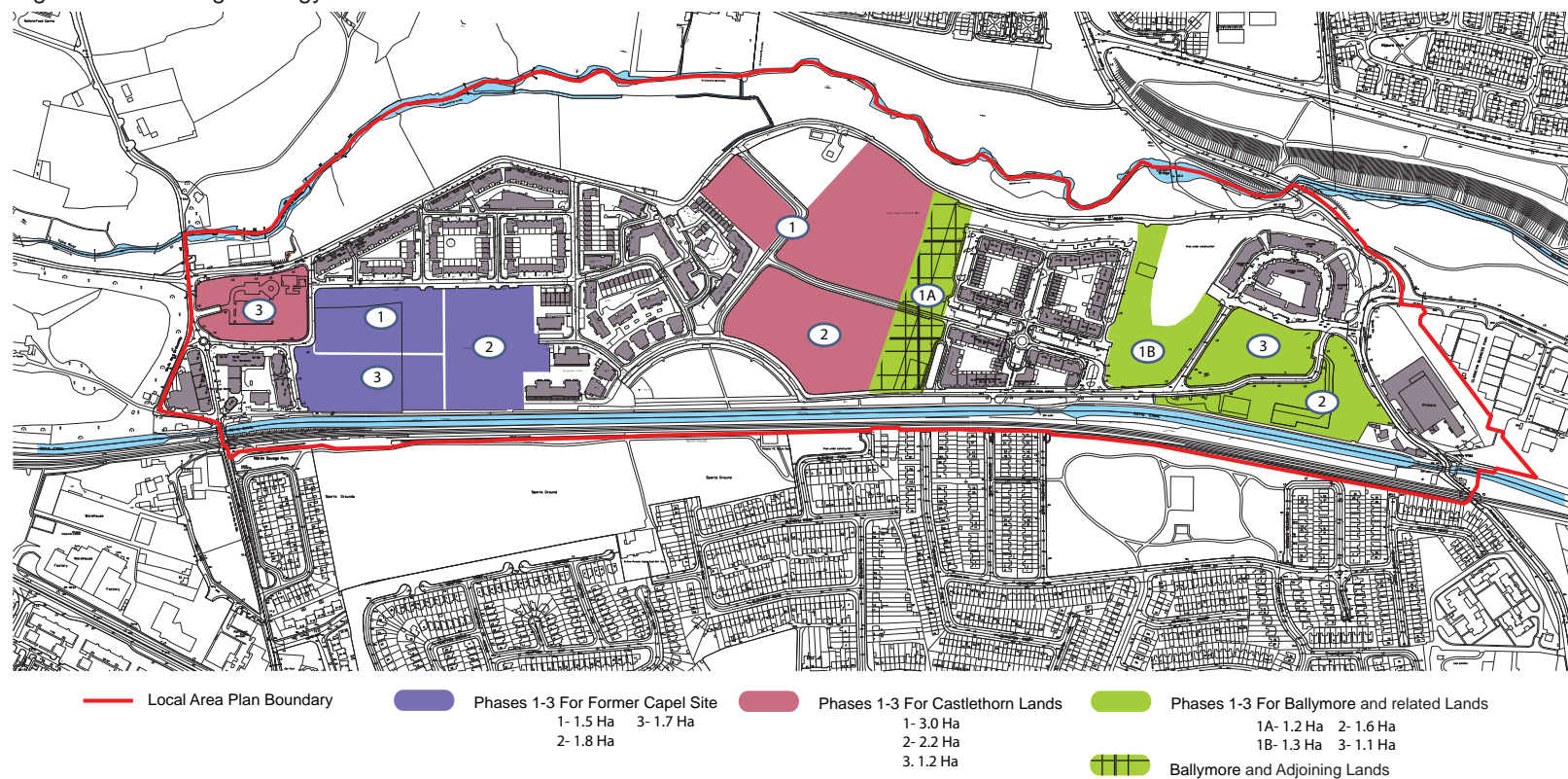
This site is divided into three phases, show in Figure 5.1.

Phase 1 will consist of predominately family style housing, and will provide for new connections to integrate this phase with the existing built housing by opening two access roads (one on the western edge leading into the area and the second east west, eventually connecting to Phelan Avenue), and new amenities including a pocket park and an all weather playing pitch adjacent to the reserved primary school site. Densities provided will be between 40-60 units per hectare

Phase 2 will also provide a good mix of family housing, but with densities slightly increased and typologies more mixed, and also providing for completion of the crescent by developing a housing form of minimum 4 storeys in height to fully complete this design feature of the LAP. Densities provided will be approximately 50-70 units per hectare.

Phase 3 is the individual site located adjacent to the Village. This site will provide for a denser typology of housing, with the option of some limited commercial, community or retail uses, as an expansion of the existing Village centre. Building heights need to be in keeping with the established heights to the south and to the east; with a graded height profile to allow for optimum integration, balanced with providing for maximum light penetration within the development for the residential units and also providing strong passive supervision overlooking Tolka Valley Park. Densities for this phase shall be 80 or above units per hectare. In relation to public bus services, the developer shall liaise with Dublin Bus at design stage in regard to providing a bus stop/terminus, appropriately integrated into the layout/design for this phase. This should be positioned on the site so as (i) to facilitate ease of public access from the area generally, - including access to the rail station, and (ii) to mitigate any potentially negative impact on the amenities of existing or future residents in the area.

Figure: 5.1 Phasing Strategy





5.2.3 Ballymore and Adjoining Lands

This holding involves four parcels of land interspersed by completed developments built by Ballymore. One site is centrally located within the LAP area, and is approximately 2 hectares, with the second three sites adjoining each other located on the western side of the LAP of 5.2 ha, and separated by two access roads running east west, one of which is open and in use. Some sites are currently hoarded. One site contains a large water retention feature designed as a series of interlinked descending small reservoirs.

The land parcels in question will present challenges from an urban design perspective due to their shape and the routes of services and roads already provided, particularly in accommodating development at a lower scale than previously proposed. They also are important for the LAP in that they frame the entrance to the LAP area from the east, and will frame the entrance to the new train station along the Royal Canal.

General Design Principles.

- Provide for a high quality urban edge built form on all sites addressing the main access road.
- Provide an attractive new public space to frame the access route to the train station, including a new pocket park with play equipment and community garden to the benefit of the new and existing housing and to provide a visual break and a green connection from Tolka Valley park to the Canal.
- Complete the tree lined boulevard route to the Ratoath Road junction from the community park and towpath and a second green link from the water feature to the community park.
- Provide for strong overlooking, appropriate heights and activity along the Canal towpath.
- Ensure that the entrance from Ratoath Road provides a high quality built form that balances with the existing completed development.
- For the 2 ha site layout, density and form should complement and integrate with the existing and proposed development to the east and west, and provide for an increased percentage of family housing, to balance up the existing mix of units.
- The plot containing the water retention feature will provide for overlooking of the feature to visually benefit from this green asset.
- Ensure that the building line and heights addressing Meridian Court adequately frame the road.
- Provide for housing to address the (old) Ratoath Road, providing activity in the cul-de-sac created by the new over bridge, and allowing for integration of the adjoining site (Campbell's Garage and associated property) if in the future it comes forward for redevelopment.

Phasing:

This holding is divided into three phases, shown in Figure 5.1.

Phase 1 shall provide for increased family-type housing units, forming an important link between two existing developed areas.

For site 1a, a 2 ha rectangular plot located between phase 1 & 2 of Castlethorn, and the existing Royal Canal Park, the development of this site will allow for the complete integration of the two sides of the LAP, provided both developments proceed. The site, at the most central location with the LAP and most removed from the station will provide housing at a slightly lower density than other locations, allowing for a greater percentage of family housing, to balance the high number of apartments provided to the east. Building heights will generally be between 2 to 4 storeys within the site, with the higher elements addressing Royal Canal Park to allow for integration between developments surrounding. Corner buildings can be up to 6 storeys. This phase will also deliver a key internal connecting road linking Phelan Avenue through towards Pelletstown House, increasing internal connectivity and providing an attractive walking and cycling route, which will connect Royal Canal Park more directly to the all weather pitch, the proposed primary school location, and access routes to Tolka Valley Park. Densities to be provided on this site will be generally be approximately 40-60 units per hectare.

Site 1b is the development area surrounding the water attenuation site. This site shall also provide for a larger proportion of family and larger housing styles, with frontage to both the road and the new park to be created using the attenuation feature. The site will provide for housing of an appropriate height (3+) on the southern part where it will be visible and provide overlooking to the towpath park. This phase shall deliver the new park, with an entrance and open aspect to the eastern boundary of the site, providing the opportunity for visual and biodiversity linkage between the Tolka valley and the Canal. Densities shall generally be within 50-70 units per hectare.

For this holding, Phases 2 and 3 can be interchanged, or sections of each completed in tandem, reflecting the mix of units and uses sought and the angular nature of the sites in question.

Phase 2- is an reverse "L" shaped site, of approximately 1.6 ha, and is transversed by a watermain, which will need to be protected from development. The site is bound by the Ratoath road to the east, the canal towpath to the south, and by a curving internal road, already complete, to the north and west. Critical to this site is the need to provide frontage development to the canal towpath and the Ratoath Road; as well as a high quality entrance to work well visually with the existing "gateway" style buildings into the LAP area.

In developing this site, the area south of the watermain can be treated as a separate development phase. For this part, the LAP seeks the provision of a mix of housing types, with a strong visual presence using height and design addressing the towpath and associated linear park (3-4 storeys). Housing should extend out onto the Ratoath road. At the western end of this site, a new public space to frame the access route to the new train station shall be provided to create a centring element to this part of the LAP. This space shall incorporate some urban space as part of the approach route for the station, adjoining a new pocket park providing play equipment and a community garden. An option as part of the development is providing a small retail/café element either within this site or Phase 3 addressing the new public space. Critical to the success in shaping this space is the building line and overlooking provided. Strong buildings lines, either terraces or blocks will be sought to frame the space. Due to the greater proximity of these lands to the new train station, densities sought will be in the order of 60+ units per hectare.

The northern portion of the site above the watermain is an important location as part the entrance to the LAP. This site has potential in the longer term to provide an attractive building complimenting the existing gateway buildings, with the possibility of higher density residential, mixed use or commercial uses, with the option of retail at ground floor level. Where this area of the site is not proceeded with in the short term, this site should be landscaped so that the entrance to the LAP area is attractive and inviting.

Phase 3 consists of a central block of land, framed by the developing road network. This site is best suited for residential use, with the option of some commercial retail uses on the north eastern quarter, and the possibility of café/shop near the train station to the south west. As a large site located close to the train station this site is appropriate for a slightly denser form of housing development, able to take and adequately respond to the frontage of Royal Canal Park phase 2 and provide housing addressing all boundary roads. Densities sought will be in the range of 60+ units per hectare. As a later phase of development, the landscaping or greening of this site with an attractive boundary treatment will be a requirement of the Council, or the use of this site for suitable short term uses such as temporary allotments. The retention of hoarding around the perimeter for this site will not be accepted.





5.2.4 “Ormond” Site

This site is a single plot, currently zoned Z6 in the City Development Plan, extending over 1.4 ha. The site is not in use at present and contains an existing light industry single storey building and surface car park. The site has extensive road frontage on the existing Ratoath road approach to Reillys bridge; and will be bounded in the future to the east by the new Ratoath road over bridge. No phasing is proposed for this landholding due to it being one single plot.

General Design Principles.

- Seek development with a mixed use character, reflecting the site’s role on the boundary between to larger land use types, with housing and commercial uses provided.
- Provide good active and attractive frontage onto old Ratoath road (following completion of overpass) with a number of entrances to premises and residential units directly from the road to create activity on this new cul-de-sac.
- Layout and design of buildings facing the junction to complement the existing buildings to the west, helping to frame the entrance road into the LAP area.
- Height can be accommodated within the site to avoid the over bridge dominating the site.
- In the redevelopment of this site, an Environmental Management Plan should be drawn up, taking into account any potential on-site contaminated soils which may be identified

As an enterprise zoned site, the long term aim is for this is land to be developed for a mix of business and residential uses at medium densities, capitalising on the high level of connectivity available by the completion of Luas to Broombridge, giving this site strong accessibility by both Luas and heavy rail. As an edge zoning it is considered that the site can and should accommodate an element of mixed use, with some residential, and/or live-work units provided, and also limited retail (focussed on the northern part of the site, integrating with the existing “village centre” at Royal Canal park), incorporated into buildings rising 4-6 storeys.

In the short term, to encourage economic activity on the site, the potential of this site to develop as an enterprise centre using the existing buildings is recognised. As a large site there is scope to expand with additional structures; providing start up spaces for new business.

Table 5.1 Infrastructure required in relation to each phase

Landholding	Phase	Description	Required Infrastructure
Capel	Phase 1	Housing	Frontage to road network
	Phase 2	Housing	Canal towpath and linear park provided
	Phase 3	Housing	Green link and park connecting to towpath
Castlethorn	Phase 1	Housing	All weather pitches completed, link road east west opened, and route up to school site, pocket park
	Phase 2	Housing	Crescent completed, 2 nd pocket park.
	Phase 3	Housing	Completion of road and footpath network surrounding site
Ballymore	Phase 1	Housing	Link road between Castlethorn phase 1 and Phelan Ave opened, new biodiversity park at attenuation ponds.
	Phase 2	Housing & mixed use	Linear park on towpath, new community park
	Phase 3	Housing	Green link between canal and biodiversity park, and boulevard to Ratoath Road entrance

5.3 Short Term Priorities

During the consultation process for preparing this LAP, the issue of immediate and/or temporary actions to improve the quality of the local environment within the LAP area was consistently raised. Whilst the LAP sets out a strategy for completion of the various sites and a phasing plan for each major landholding, the timeline to full completion of all sites is significant and likely to extend beyond the life of the LAP. In recognition of this challenge, the LAP seeks to set out a number of interim priorities and priorities that impact on the phasing plan for the LAP area.

The priorities identified for phasing for the LAP are:-

- 1- Improved connectivity by completing key roads within the LAP
- 2- Improvement works to sites identified as later phases including removal of deteriorating hoardings and replacement with fencing, and tidying up of sites to visually improve the area and discourage anti-social behaviour.
- 3- Increased levels of activity and supervision of canal towpath and completion of lighting and appropriate landscaping to improve safety
- 4- Need to provide in early phases for increased percentage of family housing to encourage greater mix and stability within the LAP area.

Temporary Uses

Due to the current economic climate it is likely that later phases within the LAP area that are currently vacant may remain so in the short and medium term. Dublin City Council will adopt a dual approach of (1) ensuring vacant sites are managed properly so that sites are kept clear of debris, buildings secured and boundary treatments are attractive and maintained and (2) encourage temporary uses on these sites to bring activity and vitality to the area.

Temporary uses on vacant sites may include:

- Temporary school or other community structures
- ‘Greening’ to create a temporary park or biodiversity space
- Landscape screening and attractive railing/fencing to reduce negative visual impacts of vacant sites/rear elevations/exposed boundary walls
- Use of space for local events, projects or festivals
- Allotments or community gardens
- Start up business/innovation activities (where there is no detrimental impact on adjoining properties)
- Limited surface parking until sites are redeveloped
- Visual arts projects which enliven the public realm.

Possible Constraints to Development

The implementation of this Local Area Plan may be constrained by a number of elements. The most significant of these are the current economic climate and housing market, the business status of the landowners, possible changes of ownership as well as the delivery of key infrastructure by State agencies and Dublin City Council. The nature of local area plans is that they have no individual budget to deliver objectives and are dependent on delivery by a range of private and public bodies.

Key infrastructure identified in this LAP as essential to the success of the areas is the development and operation of the new train station and the development of a new primary school. Dublin City Council has been directly involved in seeking the delivery of the train station, and it is anticipated this will be completed either prior to or in tandem with phase 1 of development. However the funding and construction of the primary school is wholly the responsibility of the Department of Education & Skills.





The Council will actively work with the Department of Education & Skills and all other agencies to seek the delivery of key objectives of the LAP, including particularly the school.

Other agencies that will be targeted, to achieve full implementation of the LAP include, inter alia, the National Transport Authority, Department of Environment, Community and Local Government, Department of Transport, Irish Waterways and Irish Rail.

Development in the LAP lands is dependent on capacity being available in the Ringsend Wastewater Treatment Plant. Development can and will only be permitted in tandem with available water supply, waste water treatment and network capacity.



5.4 Implementation & Monitoring

Construction

Dublin City Council recognises the negative impacts, albeit short term, that large scale construction projects can have on local communities and businesses, in terms of dust, noise and other nuisances. All major planning applications will be required to be accompanied by a construction management plan to mitigate against adverse impacts on the local residents and businesses.

Taking in Charge

Dublin City Council is committed to taking in charge the public areas of new developments, including where appropriate, community and recreational facilities. In this regard clarity should be provided in applications for residential development regarding the extent and scale of management companies and the extent of areas to be taken in charge or not. Applicants should refer to Guidelines for Open Space Development and Taking in Charge (Parks & Landscape Services Division) 2009 and relevant taking in charge standards of both Roads & Traffic and Drainage Divisions of the Council. In relation to residential development, Dublin City Councils 'Policy for the taking in charge of Residential Developments' (2012) shall apply, and it should be noted that this updates Appendix 26 of the city development plan.

Monitoring & Review

The Ashtown Pelletstown LAP will have effect for a period of six years in accordance with the Planning & Development Acts 2000-2010. Thereafter the LAP may be reviewed or extended by resolution of the members of the City Council.

It is the role of Dublin City Council to put in place a structure for the continual monitoring and progress review of the LAP and its objectives.

In order to ensure that the development strategy outlined in this LAP is being delivered, Dublin City Council will, through its development management functions, monitor the implementation and phasing of this LAP. A mid-term review report of the LAP will be prepared to assess whether the objectives of the LAP are being met. The report will also provide updates on the monitoring programme as set out in Section 9 of the Environmental Report.

Levies

All development proposals within the LAP area are subject to general financial contribution levies as set out under the Dublin City Councils Development Contribution Scheme made under Section 48 of the Planning and Development Acts. These levies will contribute towards expenditure by Dublin City Council for works including road and transport projects, water and drainage schemes, open space, recreation, culture and arts projects and other amenities that facilitate and support development.





Appendices



Appendix 1: Flood Risk Assessment

Section 1: Flood Risk Identification

Introduction

This Flood Risk Assessment was prepared and informed by the DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW, 2009) on 'The Planning System and Flood Risk Management' (and Technical Appendices). The Guidelines state that planning authorities are requested to introduce flood risk assessment as an integral and leading element of their development plan functions. It sets out that development plans and local area plans, must establish the flood risk assessment requirements for their functional area.

A Strategic Flood Risk Assessment (SFRA) is an area wide assessment of the existing risks of flooding and the impact on those risks arising from proposed spatial planning decisions.

A staged approach was adopted in the preparation of this FRA. The Stage 1 approach has identified that the area is at risk of flooding, and the principle sources of flooding identified are pluvial and fluvial flooding. The Stage 2 Flood Risk Assessment will confirm sources of flooding that affect the plan area, and will involve the preparation of a flood zone map, based on best available information. This assessment will also detail flood management strategy for the plan area. Where a detailed Flood Risk Assessment is required to assess flood risk areas in sufficient detail and to provide quantitative appraisal of potential flood risk to a proposed or existing development a stage 3 flood risk assessment will be carried out.

The guidelines require the planning system at national, regional and local levels to:

- Avoid developments in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere.
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk, and incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

Brief Description of the Plan Area

The plan area (see Figure 1) is located approximately 4km north west of Dublin City and 2km from Finglas and Cabra, at a location where the City (Dublin) and County (Fingal) boundaries meet. These lands at Ashtown/Pelletstown which measure approximately 67 hectares are located at the north-western boundary of the Dublin City Councils functional area,

positioned immediately to the north of the suburb of Ashtown, east of Castleknock, and south of Finglas. The southern boundary is formed by the Royal Canal and railway line, which separates it from the Ashtown/Cabra residential areas, and the eastern and western boundaries are delineated by the Rathoath and Ashtown roads respectively. The selected eastern boundary rather than following the existing road route follows the route of the proposed realigned Ratoath Road – which is positioned east of the existing road. The northern boundary is formed by the River Tolka which is positioned within Tolka Valley Park at the boundary with Fingal County Councils administrative area.

The site is distinguished by the fact that it is located between two natural amenity areas, Tolka Valley Park, which is undergoing improvement works at present, and the Royal Canal on the southern side, which is a proposed Natural Heritage Area. Road access to the subject lands is generally from the N3 Dublin-Cavan National Primary route, positioned to the south, as well as from the more local road network comprising the Rathoath Road, Ballyboggan Road, Ashtown Road and River Road. The existing Ashtown rail station is located immediately south of the south-western corner of the plan area.

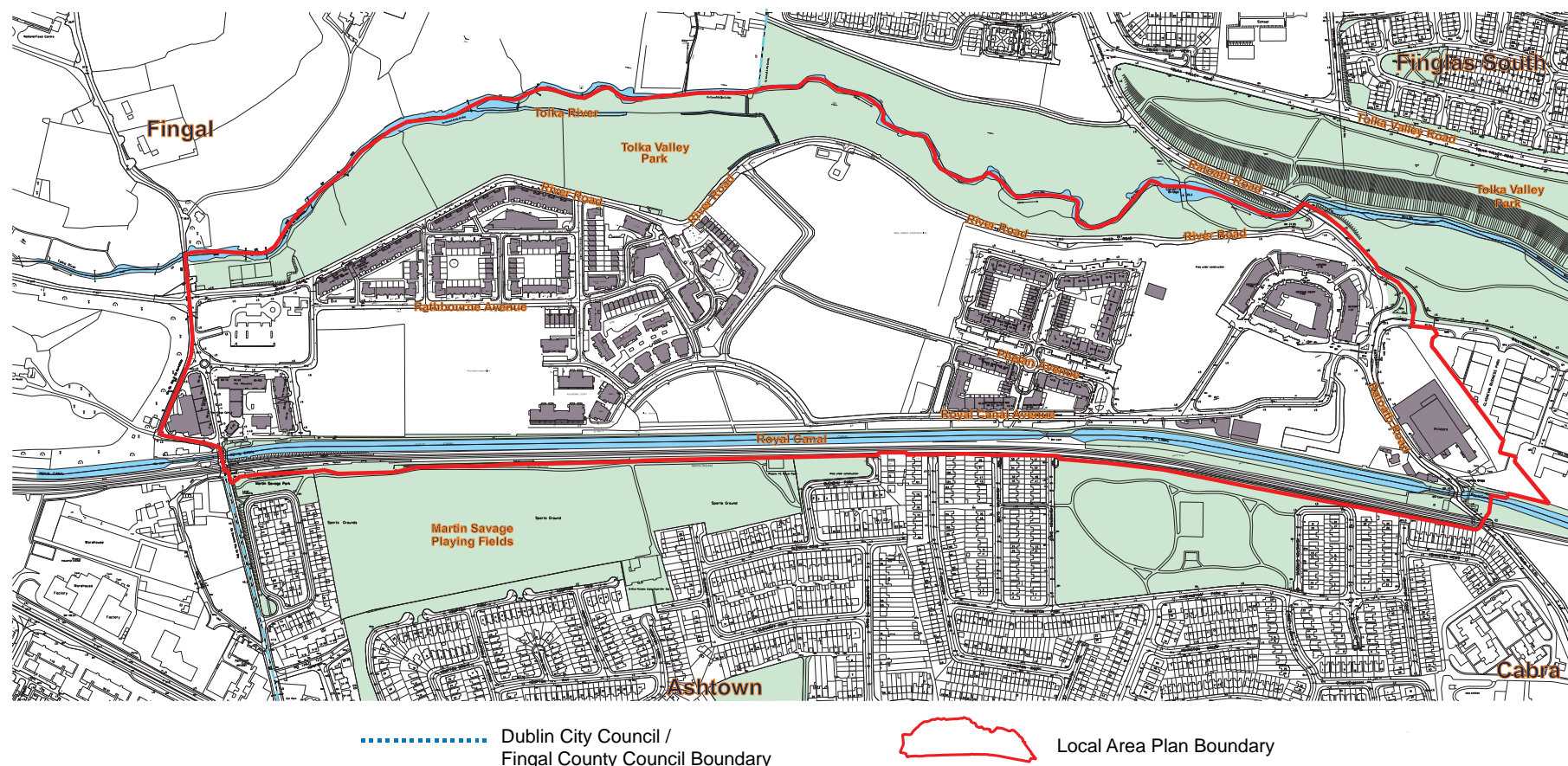
The Plan area is located within the Eastern River Basin District (ERBD) in Hydrometric Area 09. The Plan area is located in the Tolka Water Management Unit (WMU) in the Eastern River Basin District.

The River Basin Management Plan can be downloaded from the Water Framework Directive website www.wfdireland.ie. A WMU is a geographic area primarily defined by similar hydrology and topography. These groups of river and non-reportable lakes had been created so that multiple river segments or water bodies can be treated as one management unit. For coastal, transitional, groundwater and reportable lakes, a WMU represents a single water body.

The River Tolka flows through the study area through Scribblestown Bridge which acts as a hydraulic restriction during extreme flood events, causing the river to overtop Scribblestown Road. The river then proceeds through the study area north of River Road and is fed by Scribblestown Stream approximately 670m downstream of Scribblestown Bridge. At the eastern end of the plan area, the River discharges through Cardiff's Bridge. This bridge is also overtopped during extreme flood events.

The River Status in the Tolka Lower when it enters Dublin City is classified as 'Poor' in the Eastern River Basin District (ERBD). The main problems identified in this WMU are high nutrients (phosphorous and ammonia), oxygen demand, low ecological rating, and a heavily modified channel. In the Tolka catchment the principle pressures in the upper catchments are from agriculture and wastewater and industrial discharge.

Figure 1 – Local Area Plan Boundary





In the lower catchment, ie when it enters Dublin City Council and Fingal, the principle pressures are combined sewer overflows (wastewater discharge) and foul sewers from houses and business misconnected to rivers. In the programme of measures, it states that we must aim to achieve full implementation of the Programme of Measures (POM) before 2015. The WFD recognises that it may not be possible to achieve all core objectives by 2015, and in this water management unit, the main pressures preventing achievement of 'Good Status' by 2015 is diffuse agricultural and urban diffuse pollution. For the Tolka catchment, the target is to achieve 12% by 2009 and 100% by 2027.

The Royal Canal runs in an east west direction to the south of the plan area, which is a man made waterway linking the River Liffey at Dublin with Richmond Harbour on the River Shannon at Clodara in County Longford. The Royal Canal is under the jurisdiction of Waterways Ireland. The canal passes through Maynooth, Kilcock, Enfield, Mullingar and Ballymahon has a spur to Longford. The total length of the main navigation is 145km, with 46 locks, 10 of which are double chambered and there is also a sea lock where the canal joins the River Liffey in Dublin. At the Dublin end, the canal reaches the Liffey through a wide sequence of dock and locks at Spencer Dock, with a final sea lock to manage access to the river and sea.

Flood Risk Identification

The flood risk identification involved a desk top study to identify whether there may be any flooding or surface water management issues related to the proposed development of the LAP lands that may warrant further investigation.

The methodology used to prepare the flood risk identification is outlined as follows:

- Development Plan, policies and recent planning applications were studied.
- Responses from statutory bodies and other submissions during the consultation process were examined, with particular reference to concerns relating to flood risk
- All existing historical information on historic flood events, studies and surveys were examined, which are available from the Office of Public Works (OPW) flood hazard mapping website. The Preliminary Flood Risk Assessment and Management (PFRA) mapping developed as part of the National Catchment Flood Risk Assessment and Management (CFRAM) Programme and managed by OPW were also examined. The PFRA is available to view on the website www.cfram.ie.
- The available results from the River Tolka Flooding Study were assessed.
- The risk of flooding from groundwater sources was examined.
- Results for the pluvial maps were supplied from the Flood Resilient City Office (FRC)

Over the last few decades the risk of flooding has continued to increase in Ireland. Much of this has been attributed to climate change, resulting in increased & more intense rainfall, increased sea water levels, and also due to increasing levels of urbanisation. Coastal erosion can also increase the risk of flooding in some areas. The main types of flooding are from (i) coastal flooding which arises from the sea or estuaries,, (ii) fluvial flooding which arise from rivers or streams, (iii) pluvial or surface water flooding which arises directly from rainfall, (iv) groundwater flooding (v) dam breach and (vi) sewer/infrastructural failure.

The main flood risks identified in the Ashtown Pelletstown LAP area are from fluvial, pluvial and infrastructural overload or failure. It should be noted that the majority of the LAP lands zoned for development are located within Zone C (see figure 5 on page 71) which has a low probability of flooding, where the risk is less than 0.1% annually or 1 in 1000 years for both river and coastal flooding. The area to the north of the LAP lands, located within Tolka Valley Park, around the banks of the River Tolka, is located in Zones A which has a high probability of Flooding, greater than 1% annually or 1 in 100 for river flooding and 1 in 200 for coastal flooding. As there was periodic flooding around River Road, which is in close proximity to the recently constructed residential/commercial developments, it is recommended that a precautionary approach be adopted and that the Justification Test be carried out.

It should be noted that the area which is prone to flooding located to the north of the River Road, is primarily zoned Z9 to preserve, provide and improve recreational amenity and open space & green networks. As per the Flood Risk Guidelines, only water compatible uses would ever be permitted in Flood Zones A.'

The sequential approach to planning is the key tool in ensuring that development is first and foremost directed towards land which is at low risk of flooding. This is described in Fig 2 below

Sequential Approach & Justification Test

The key principles of the risk based sequential approach is managing flood risk in the preparation of plans as set out in Chapter 3 of the DEHLG Flood Guidelines and these principles will be followed in the LAP.

This is the key tool in the decision making process of preparing plans to ensure that development is first and foremost directed towards land that is at low risk of flooding. This approach makes use of existing flood risk assessments (FRA's) and other data identifying flood zones for rivers, coastal and pluvial flooding and the classification of the vulnerability of flooding of different types of development.

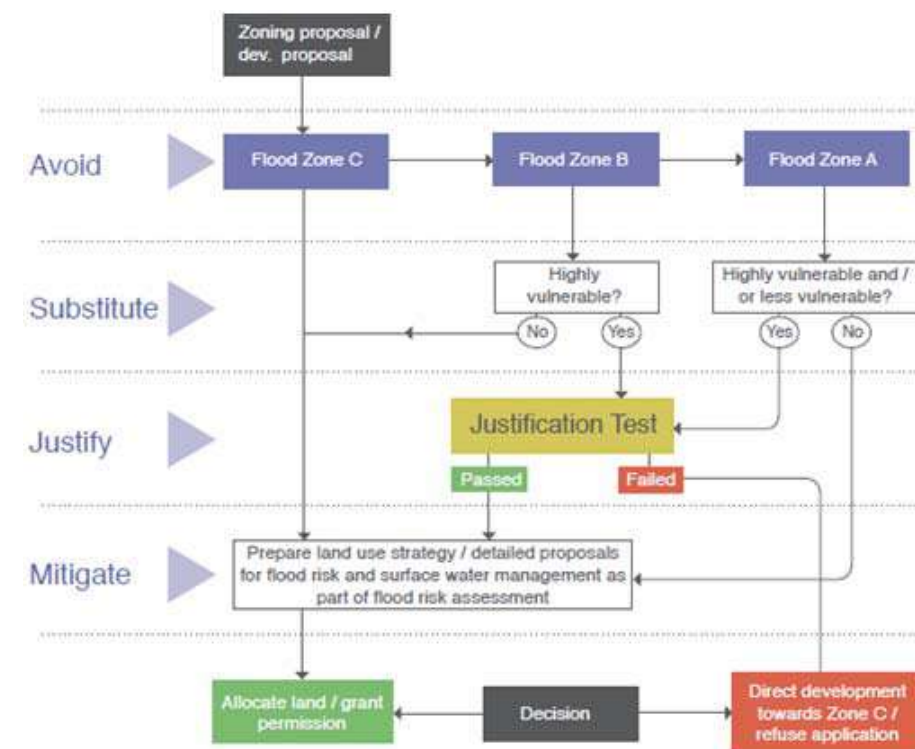
The sequential approach in terms of flood risk is based on the following principles:

The primary objective of the sequential approach is that development is primarily directed towards land that is at low risk of flooding (AVOID).

- The next stage is to ensure that the type of development proposed is not especially vulnerable to the adverse impacts of flooding (SUBSTITUTION).
- The Justification Test is designed to rigorously assess the appropriateness, or otherwise, of particular developments that, for various reasons, are being considered in areas of moderate or high flood risk (JUSTIFICATION).
- The test is comprised of two processes, namely The Plan-Making Justification Test and the Development Management Justification Test.

Figure 2
Sequential Approach Mechanism in the Planning Process

(source 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities' November 2009)





Justification Test for Ashtown - Pelletstown LAP

The flood risk assessment carried out for the purposes of the LAP for Ashtown Pelletstown concluded that certain areas within the LAP boundary are within lands at risk of flooding.

In this context the designation satisfies the Justification Test, in that:

1. The urban settlement is targeted for growth under the National Spatial Strategy, Regional Planning Guidelines, statutory plans as defined above or under the planning guidelines or planning Directives of the Planning and Development Act, 2000 as amended.

The National Spatial strategy (NSS) recognises that Dublin, the Capital City, plays a vital national role and that the performance of its economy is essential to the success and competitiveness of the national economy. The NSS places particular emphases on the physical consolidation of the metropolitan area, which incorporates the entire functional area of Dublin City Council. The Regional Planning Guidelines (RPG) for the Greater Dublin Area 2010 – 2022 translate the national strategy to the Regional Level with an emphasis on Dublin as the driver of national development and the need to physically consolidate the growth of the metropolitan area.

The RPGs recognise that “the settlement hierarchy selected by the Guidelines takes account of the fact that while a number of key towns and the City which are vulnerable to two key sources of flooding, fluvial and coastal, effective management of flood risk coupled to wider environmental, sustainability and economic considerations mean that it is possible to facilitate the continued consolidation of the existing urban structure of the GDA. In line with the sequential and justification criteria set out in the Department’s Guidelines on ‘The Planning System and Flood Risk Management’ it is considered that these locations should be encouraged to continue to consolidate and to grow in order to bring about a more compact and sustainable urban development form while at the same time managing flood risk appropriately”.

The Dublin City Development Plan 2011-2017 has been prepared in accordance with the requirements of the Planning and Development Act, 2000, (as amended) the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and Article 5 of the Habitats Directive 92/43/EEC.

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

i) ...to facilitate regeneration and/or expansion of the centre of the urban settlement.

The plan area is located approximately 4km north west of Dublin City and 2km from Finglas and Cabra. In 2000 a non statutory plan was made for the area entitled ‘Pelletstown Action Area Plan’. The current Dublin City Development Plan 2011- 2017 sets out a core strategy which sets out over-arching principles relating to development including the delivery of statutory LAPs. These LAP’s which include the Ashtown/Pelletstown LAP is crucial to the delivery of the core strategy. The area is designated as one

of the nine Key Developing Areas (KDSs) under the development plan core strategy. The Key Development Areas represent significant areas of the inner and outer city with substantial development capacity and the potential to deliver the residential, employment and recreational needs of the city.

Pelletstown has also been designated as one of 14 Strategic Development Regeneration Areas (SDRAs) dedicated to comprehensive development or regeneration.

ii) ...comprise significant previously developed or underutilised lands.

A number of sites in the Plan area have been completed to date generally following the design and layout envisaged in the 2000 Action Area Plan, with blocks of development connected by thoroughfares. The dominant form of existing development is now residential, mainly in the form of apartments. Approximately 2,121 residential units have been built to date, housing a population of 3,777 people. Mixed uses are generally at service centres where there are retail outlets and services mainly at ground floor level. Tolka Valley park and the centrally positioned crescent park now provide natural amenity resources and the linear routes of the canal and its associated towpath, is now a well recognised amenity for cycling and walking. There are a number of large undeveloped sites however, mainly earmarked for residential uses, and some of these have live permission that have not commenced due to economic circumstances.

Map 4.9 of the LAP shows the undeveloped sites. In total there are 9 sites remaining, covering an area of approximately 17.05 hectares. By applying indicative density ranges to the remaining sites, there would be additional capacity for between approximately 920 - 1,270 residential units, and an estimated population of range of approximately of between 2490 and 3410. When added to the existing population of 3,777 there would be a total population range of approximately 6,267 -7,187. For purposes of the LAP a population of 7200 is planned for based on 920-1270 new units. The total number of units in the plan area, where the LAP area is fully built out would then calculate at approximately 3,040 – 3,400.

iii) ...will be essential in achieving compact and sustainable urban growth.

The redevelopment of the undeveloped sites will ensure the efficient use of public investment in infrastructure to date including strategic transport and will also ensure the effective implementation and phasing of the continued regeneration of the LAP area.

iv) ...there are no sustainable alternative lands for the particular use or development type in areas of lower risk.

This area has already been substantially developed with a large number of units, which were built mainly under the 2000 Action Area Plan. However there are a number of undeveloped sites which are essential to deliver the core strategy of the Dublin City Development Plan.

Dublin City lies entirely within the metropolitan area and the RPGs give direction to Dublin City as the ‘gateway core’ for high intensity clusters, Brownfield development, urban renewal and regeneration. The National Spatial Strategy designates Dublin as the pre-eminent gateway in Ireland, as the key international gateway of the State.

Gateways are strategically located and have a key role to play nationally and relative to their surrounding areas by virtue of their existing economic and social attributes. A core element of the RPGs is the importance of integration of land use, employment and transport. Within the City, as the national hub of employment and transport, it is critical that the policy of encouraging high quality new housing within the core of the gateway continues.

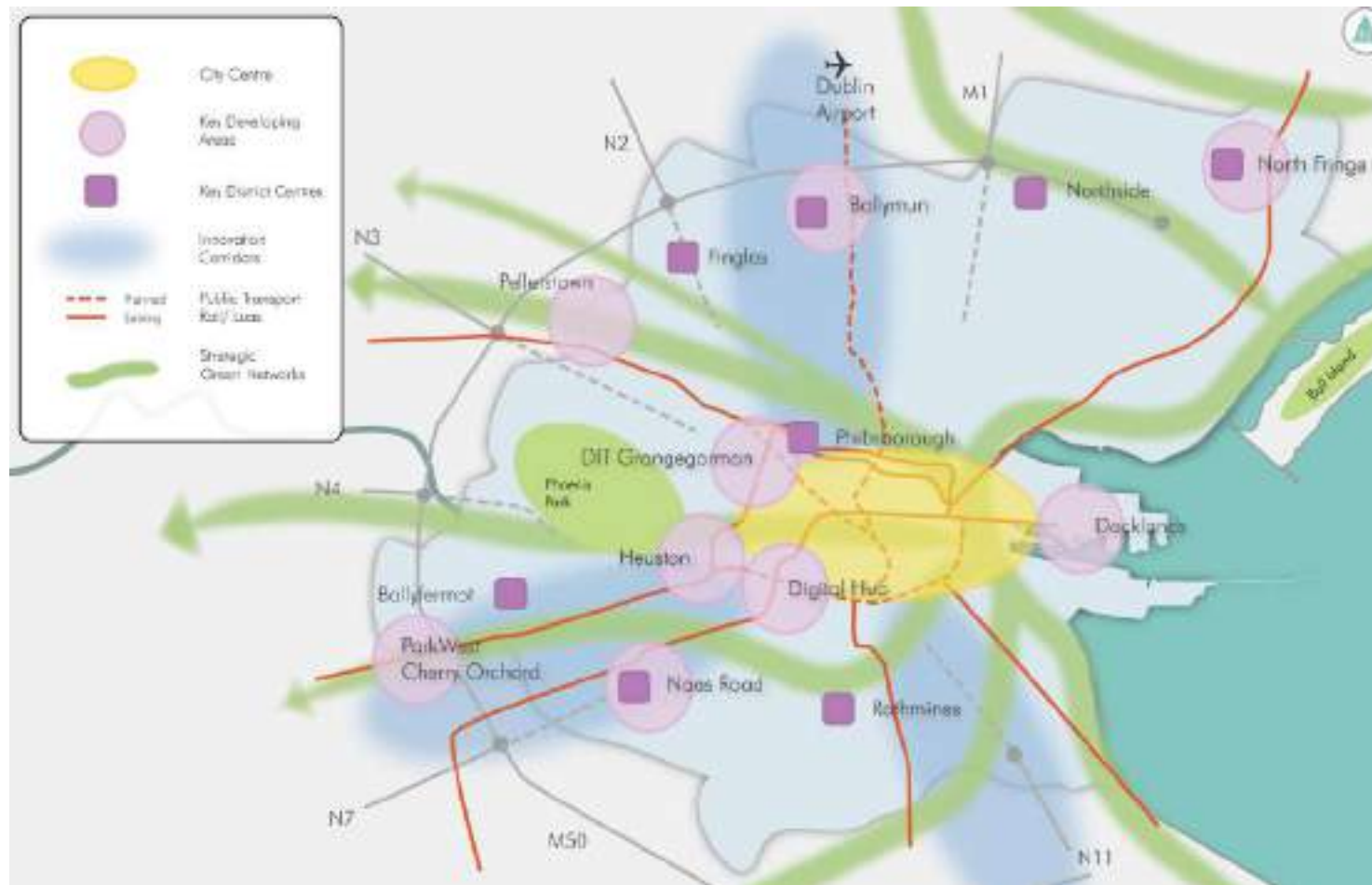
The RPGs also takes account that while a number of key towns and the City which are vulnerable to two key sources of flooding – fluvial and coastal – effective management of flood risk coupled to wider environmental, sustainability and economic considerations mean that it is possible to facilitate the continued consolidation of the existing urban structure of the GDA. In line with the sequential and justification criteria set out in the Department’s Guidelines on the Planning System and Flood Risk Management’

The LAP for Ashtown Pelletstown will facilitate the future development of the area in a consolidated manner.





Dublin City Development Plan Core Strategy



The Development Plan's Core Strategy (See figure 3 above taken from the DCC Development Plan 2011 – 2017) designates the Ashtown - Pelletstown area as a Key Developing Area (KDA) and a Strategic Development Regeneration Area (SDRA).

The Regional Planning Guidelines Settlement Strategy for the metropolitan area includes a strong policy emphasis on the need to gain maximum benefit from existing assets, such as public transport and social infrastructure, through the continuation and consolidation and increasing densities within the existing footprint of the city. It should be noted that there is only circa 503 Ha of available zoned residential land which is capable of meeting the RPGs housing unit allocation of 42,400 for the period 2006 – 2016.

Ashtown- Pelletstown area is one of 9 Key Developing Areas, (in addition to the inner City), which represent significant areas of the overall city with substantial development capacity and the potential to deliver the residential, employment and recreational needs of the city, along with the North Fringe, and Naas Road lands, whilst several will support the economic or cultural specialism's essential for the growth and diversification of the city's economy, namely, the Docklands, Digital Hub/Liberties, Grangegorman and Heuston. The table below is from the Dublin City Development Plan Table 3.3 and shows the estimated capacity of key developing areas.

Figure 3 – Core Strategy

Table 3.3 Estimated capacities of Key Developing Areas (DCDP 2011 – 2017)

KDAs	Housing Units (Estimated)	Zoned Commercial/ Employment Lands (Estimated)
1. Inner City	6,340	475 Ha
2. North Fringe	4,000	170 Ha
3. Ballymun	3,950	60 Ha
4. Pelletstown	1,800	41 Ha
5. Park West/Cherryorchard	2,000	121 Ha
6. Naas Road Lands	2,100	63 Ha
7. Docklands	1,950	207 Ha
8. Digital Hub / Liberties	1,200	59 Ha
9. Heuston	1,200	49 Ha
10. Grangegorman/ Phibsborough	800	34 Ha
Rest of City	6,340	350 Ha
Total	31,680	1,629 Ha

The LAP area is also designated a Strategic Development & Regeneration Area, which are areas with the potential to deliver a significant quantum of residential development and ancillary commercial and service development.

The Development Plan sets out a series of Guiding Principles in Chapter 16 for the Ashtown – Pelletstown SDRAs. The core strategy of the Development Plan is to achieve the vision in a manner that is consistent with the guidance, strategies and policies at national and regional levels. In particular, the National Spatial Strategy 2002- 2020 (NSS), The Regional Planning guidelines for the Greater Dublin Areas 2010 – 2022 (RPGs) and the governments' Smarter Travel – A Sustainable Transport Future 2009 – 2020, all guide and direct the fundamentals of the City Council housing Strategies which in turn are integrated into the overall development plan vision and core strategy for 2011 – 2017.

A flood risk assessment to an appropriate level of detail has been carried out as part of the SEA which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

Flood risk was considered as an issue in the screening process for the Strategic Environmental Assessment that was undertaken for the Dublin City Development Plan 2011 -2017. The LAP plan was screened in line with implementation of SEA Directive (2001/42/EC), Assessment of Certain Plans and Programmes on the Environment – Guidelines for Planning Authorities to determine whether or not a full Environmental Report would nevertheless be appropriate. It was determined that a full Environmental Report was required. A flood Risk assessment has been carried out to an appropriate level of detail. It is recognised that Dublin City is vulnerable to flooding. The majority of the lands in the LAP would be prone to occasional flooding and would be at risk mainly from fluvial and pluvial flooding, however Dublin City Council are undertaking a number of projects to improve the defences of Dublin City.

Sources of Flooding

The main flood risks identified in the LAP area are from fluvial, pluvial and infrastructural overload or failure.

The OPW, as part of the National Flood Risk Management Policy has developed a number of information resources for the public. These resources provide information through a number of websites: (www.floodmaps.ie, www.opw.ie/hydro, www.flooding.ie)

The Preliminary Flood Risk Assessment for the Republic of Ireland was published in late 2011. This was a requirement of the EU Floods Directive (2007/60/EC). The objective was to develop a method to indicatively assess potential future flood risk to enable the identification of 'Areas of Potentially Significant Flood Risk (APSRs) using available data. These APSRs will form the focus of the more detailed Catchment Bases Flood Risk





Catchment Flood Risk Assessment and Management Studies.

A CFRAMS is a Catchment Flood Risk Assessment and Management Study and its purpose is to manage flood risk to the area being studied. CFRAMS are to be carried out for the whole of Ireland, for larger rivers and streams and all coastal areas.

The OPW commissioned RPS to undertake the Eastern Catchment Flood Risk Assessment and Management Study (Eastern CFRAM) in June 2011. The study covers four units of Management including HA09 (Liffey-Dublin Bay). The principle river in HA09 is the River Liffey which rises in the Wicklow Mountains and flows initially towards Newbridge, then turn north east towards Lucan and finally flows eastward through Dublin City, directly to Dublin Bay. The Dodder CFRAMS is one of four pilot studies in Ireland and is the first comprehensive study undertaken with a view to producing a single flood risk management strategy for the whole of the Dodder catchment.

Within HA09 there are 16 discrete Areas for Further Assessment (AFA) in addition to Dublin City under the Eastern CFRAM study. Dublin City AFA is defined by four High Priority Watercourses (HPW), the Liffey, Camac, Poddle and Santry Rivers (as well as the Dodder and Tolka from previous studies). The principal source of flood risk within HA09 is fluvial flooding at 12 of the 16 AFAs. Tidal Flood risk influences one AFA (Sutton and Howth North) with 3 other AFAs within HA09 (Sutton & Baldoyle, Clontarf and Sandymount) considered to have some element of combined fluvial/coastal flood risk.

Dublin City with its specified High Priority Watercourse (HPWs) is also subject to combined fluvial/tidal flood risk; however the finalisation of watercourses within the Dublin area to be included in the Eastern CFRAM Study is ongoing at this time. Many of the watercourses within the Greater Dublin Area were previously studied as part of the Greater Strategic Drainage Study (GSDSDS).

Fluvial Flooding

The principal river that runs to the north of the plan area is the River Tolka. The River Tolka is the second largest river entering Dublin City in terms of its length and catchment area, after the Liffey. It rises in County Meath and serves a catchment which is roughly divided in three parts between a generally rural area in County Meath, a developing area in Fingal and a substantially developed area in Dublin City Council. In terms of flooding the river floods infrequently but with occasional severity. It is not typically flashy like the Dodder but builds up over a period. Notable floods on the River occurred in October 1880, December 1954, November 1965, August 1986 (Hurricane Charlie), November 2000, November 2002, January and April 2005, August 2008 and October 2011. The floods in 1954 and 2002 were the most severe. In November 2002 flooding caused extensive damage to residential areas along the Tolka banks. Work has been carried out to strengthen the river's flood defences, and following heavy flooding in 2005, major works were done to deepen and widen the river on a number of stretches, at Glasnevin Woods and at Drumcondra Bridge.

In 2001 Dublin City Council commissioned the Greater Dublin Strategic Drainage Study (GSDSDS) to look at the strategic drainage requirement for the Greater Dublin area. A full study of the Tolka was not included in the GSDSDS, however in view of the November 2002 flood event, the OPW requested that it be included. The Tolka Flooding Study identifies that substantial areas of urban development in the study area are at risk of repeat flooding from the River Tolka. The separate Dublin Coastal Flood Risk Assessment Study (DCFRAS) examined the issue of tidal flooding of the coastal areas.

As part of the Tolka Flooding Study, flood extent maps were produced showing the November 2002 flood event. The map produced was roughly a 100 year flood event. Also as an extension to the Tolka Flooding Study RPS produced a floodplain map showing the 1000 year flood event. See Appendix A Flood Map Section, Figure 6 & 7. Figure 8 shows the 0.1% AEP flood event.

Future development in the LAP area should be dependent on historic flood events and design consideration should respond effectively to these challenges as well as introducing new opportunities to the area. The Integrated Constructed Wetland (ICW) at Tolka Valley Park in Finglas, Dublin, was created in 1999 to address the treatment of domestic wastewater and hard surface run off which was having a large impact on pollution of the Finglaswood Stream which then fed into the River Tolka.

It should be noted that the area that was prone to flooding is to the north of River Road, in the Tolka Valley Park is zoned Z9 in the Dublin City Development Plan 2011-2017, which is 'to preserve, provide and improve recreational amenity and open space & green networks.' This area is not planned for any development under the LAP. Parks and Landscape Division have done extension work in this Park to construct an Integrated Constructed Wetlands to mitigate flooding in this area.

Groundwater Flooding

Groundwater flooding is usually a result of water rising up from the underlying rocks or from water flowing from abnormal springs. This tends to occur after much longer periods of sustained rainfall or very high tides. Higher rainfall means that water will infiltrate into the ground, and causing the water table to rise. Groundwater flooding tends to occur in low lying areas, where with additional groundwater flowing towards these areas, the water table can rise to the surface causing groundwater flooding.

Information on aquifer vulnerability can be obtained from the www.GSI.ie website (Geographical Survey of Ireland). From their maps it is noted that most of the LAP lands have moderate vulnerability. There have been no reports received on groundwater flooding in the LAP area.

Pluvial Flood Risk

Pluvial Flooding results when heavy often sudden rainfall, causes flooding before it can infiltrate the ground, or enter a natural or man-made drainage system or watercourse or enter a conveyance system because the system is already full to capacity. Pluvial flooding is associated with Surface Water flooding which is a combination of true pluvial flooding, sewer flooding (due to heavy rainfall) groundwater flooding and flooding from urban watercourses.

An Extract Pluvial Type 1 Flood Depth Map, 1% AEP Event 3 hour Duration, is given in Appendix A, Flood Map see Figure 4.

Dublin City Council is in the process of implementing the Flood Resilient City Project and within this a Flood Risk Management Strategy. This strategy will provide further guidance in spatial planning and appropriate flood measures, if required in accordance with the requirement of the EU Floods Directive (2007/60/EC) the Office of Public Works (OPW) is currently responsible for co-ordinating the development of Flood Risk Management Plans (FRMPs) across Ireland.

Most of the storm water from the Ashtown - Pelletstown Area goes in to the River Tolka. The storm water outfall to the Tolka River has been constructed and commissioned under the supervision of Dublin City Council Drainage Division. Attenuation tanks and ponds have been constructed to serve both the West and East development lands. These tanks and overflow basin were designed to attenuate excess surface water from the Ashtown Pelletstown lands prior to it discharging into the River Tolka. The trunk sewer which serves the Pelletstown Development has been constructed and commissioned under the supervision of Dublin City Council Drainage Division. This sewer system now serves the main road networks as well as Phase 1 and 2 developments west and east.

Flooding from the Royal Canal

The Royal Canal runs in an east west direction to the south of the plan area, which is a man made waterway linking the River Liffey at Dublin with Richmond Harbour on the River Shannon at Clodara in County Longford. There is no recorded history of flooding in the LAP lands from the Royal Canal. Historical records from the OPW do not provide evidence of flooding at the Royal Canal within the LAP boundary.

Indicative Flood Zone Map

In the absence of detailed CFRAM studies for the River Tolka, Dublin City Council are using the best information available. The indicative Flood Zone Map for fluvial flooding is based on information from the River Tolka Flooding Study, 2005. As part of the Tolka Flooding Study, flood extent maps were produced showing the 100 year flood event (or the equivalent of Zone A in the OPW classification). Also as part of the Tolka Flooding Study RPS produced a floodplain map showing the 1000 year flood event (this would be equivalent to Zone B in the OPW classification). Zone C would be anything outside of Zones A & B. (see Appendix A Flood Map Section, Figure 5).





Flood Zones

Flood Zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning. There are three types or levels of flood zones defined in the DECLG and OPW Guidelines on Flood Risk Management:

- Zone A – High probability of flooding – Where the average probability of flooding from rivers and sea is highest (greater than 1% annually or more frequent than 1 in 100 years for river flooding or 0.5% annually or more frequently than 1 in 200 years respectively for coastal flooding). Most forms of development are deemed to be inappropriate here, only water compatible development including essential infrastructure which cannot be located elsewhere, would normally be allowed.
- Zone B – Moderate probability of flooding – (Risk between 0.1% annually or 1 in 1000 and 1 % annually or 1 in 100 years for river flooding, and between 0.1% or 1 in a 1000 years and 0.5% annually or 1 in 200 years for coastal flooding) highly vulnerable development including hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure would generally be considered inappropriate unless the requirements of the justification test is met. Less vulnerable development such as retail, commercial and industrial uses, short term let for caravans, camping, and secondary strategic transport and utilities infrastructure might be considered appropriate in this zone. Less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will be adequately be managed.
- Zone C – Low probability of flooding – (Risk is less than 0.1% annually or 1 in 1000 years for both rivers and coastal flooding) Development is appropriate from a flood risk perspective (subject to flood hazard from sources other than rivers and coast meeting normal proper planning considerations).

Flood Risk Management Strategy

Dublin City Council has worked closely with the Office of Public Works (the lead agency for flood risk management in Ireland) in developing solutions to minimise the risk of flooding in the city.

Solutions are multi-layered and range from the strategic level, such as the Triton & Tidal Watch early warning systems which detects tidal surges out in Dublin bay and sends alarms to the relevant personnel, right through to the construction of sea wall defences such as the Dodder flood walls.

Planning policies also play a major part in minimising flood risk, Dublin City Council were the first Irish local authority to require storm water management from developers in 1998 and then subsequently implemented a Sustainable Drainage Systems (Suds) Policy in 2005. In essence these

planning policies require developers to reduce the storm water run-off from newly paved areas to what it was before the development took place. This will ensure that development can take place in a sustainable manner without increasing the risk of flooding.

The methodology for managing flood risk is set out in the OPW document “The Planning Risk and Flood Risk Management, Guidelines for Planning Authorities” dated November 2009. This document identifies the main types of flooding, viz, Coastal, Pluvial, Fluvial, Groundwater and Infrastructure Failure and sets out a sequential approach to minimising flood risk while also recognising explicitly ...“that many of the areas where people live and work are already subject to flood risk and that the needs for regeneration and growth can be reconciled, while taking due account of the need to minimise and mitigate such risks.”

Sustainable Drainage within Private Developments

In recent years in Ireland, there has been a move away from the traditionally designed hard-engineering drainage solutions such as concrete underground attenuation tanks and piped drainage systems in favour of multi-functional, sustainable solutions for the management of surface-water in urban environments. The use of SUDS (Sustainable Urban Drainage Systems) provides the additional benefits of improving the aesthetic character of the urban environment, enhancing biodiversity, and improving air quality. Sustainable drainage solutions that are visible to the public also allow for a stronger connection between the public and the natural environment, and therefore a greater awareness of water management issues.

A variety of sustainable drainage components, such as swales, retention ponds, constructed wetlands, permeable surfacing, green roofs, soak ways and rainwater harvesting systems, have successfully been incorporated into private development in the Dublin City Council area since the publications of the GSDSDS.

The following SUDS components should be considered for installation within the private area of all development :

- Green Roofs
- Rainwater Harvesting
- Permeable Surfacing
- Soak ways and Rain Gardens
- Rilles

Sustainable surface-water management designs should comply with current best-practice guidance and include a full maintenance package. In order to ensure their viability as sustainable solutions, the communication of maintenance requirements at handover or property transfer stage is of utmost importance.

Sustainable Drainage of Public Areas

In addition to the incorporation of sustainable surface-water management techniques within private development sites, particular emphasis will be placed on the incorporation of SUDS into public realm infrastructure. The

use of sustainable surface-water management in streetscapes ties in with Dublin City Council’s biodiversity and green infrastructure strategies and has proven to be very cost effective in cities in the US and Europe. The following surface-water management solutions should be considered for surface-water management of public spaces:

- Permeable Surfaces in Pedestrian Areas
- Bioretention Areas
- Rilles

Constructed Wetland in Tolka Valley Park

‘The Integrated Constructed Wetland (ICW) at Tolka Valley Park in Finglas, Dublin, was created in 1999 as a novel way of treating the polluted Finglaswood Stream that was polluted by misconnected domestic drains. This project was jointly initiated by Dublin City Council Parks and Landscape Services Division, Drainage Division and National Parks and Wildlife Service. Wastewater from dishwashers, showers, washing machines, kitchen waste, oils, car washings together with surface water runoff from roads and houses was flowing to an artificial pond in the park, via the now culverted Finglaswood Stream, before ultimately discharging into the nearby Tolka River. Pollutants from the surface water sewers were resulting in algal growths, floating greases and milky scum, foul odours, and a total loss of any amenity value that the pond may have had (Collins, 2007). Phosphates and Ammonia were also contributing to eutrophication, a term used to describe the excess application of nutrients, in the Tolka river. This phenomenon results in reduced oxygen concentrations in the river and accelerates ‘weedy’ plant and algal growth that blocks light and chokes streams – thereby creating a hostile environment for salmonid fish, including Salmon *Salmo salar* and Trout *Salmo trutta* (Giller, 1998)’¹

An ICW removes pollutants from water by physical, biological and chemical processes. Sedimentation and filtration are responsible for the removal of suspended solids, particulate nitrogen and heavy metals. Integrated Constructed Wetlands by their very nature require fairly large land areas and typical retention times are in the order of several days but as space was limited in the park a decision was made to send an absolute maximum flow of some 35 litres per second through the wetland and flows in excess of this would overflow at an overflow weir to the Tolka in wet weather/high flows. This would ensure that all the day to day pollutants are treated in the wetland.

To date the Tolka Valley wetland has been a complete success and with the enormous improvement in water quality in the pond it now supports a large bird population (mallards, water hens, coots, and swans) insect life (dragon flies) and diverse plant life.²

¹ Biodiversity Survey of the Integrated Constructed Wetland at Tolka Valley Park, Finglas, Co. Dublin for Dublin City Council, prepared by OPENFIELD Ecological Services, June 2008

² Integrated Constructed Wetland Tolka Valley Park, Dublin, John Collins, Don McEntee, Dublin City Council, February 2009





River Tolka Flood Alleviation Works

The River Tolka floodplain within Dublin City Council area has been heavily built up throughout its history. It is inevitable that significant flood alleviation and protection works are required over the river between the Finglas Bridge (N2) and Luke Kelly Bridge. Due to the scale of flooding experiences in the Dublin City Council area, the local Authority combined with the OPW in a fast tracked approach to implement flood alleviation measures which were identified in the interim report shortly after the flooding. No flood alleviation works were carried out in the LAP area itself but were carried out downstream.

Conclusions and Recommendations

Most of the existing zoned lands within the LAP are located within Zone C, (see Figure 5 'Indicative Flood Zone Map') which has a low probability of flooding, where the risk is less than 0.1% annually or 1 in 1000 years for both river and coastal flooding. Part of the lands to the north of the LAP boundary, which are located around the banks of the River Tolka within the Tolka Valley Park, are located within Flood Zone A, with a high probability of flooding, greater than 1% annually or 1 in 100 for river flooding and 1 in 200 for coastal flooding. The area immediately north of River Road was subject to occasional flooding and as this area is in proximity to the existing and future planned residential/commercial development it was considered prudent to carry out the Justification Test. The sequential approach has been adopted throughout the process by directing development towards land that is at low risk of flooding. The remaining sites to be developed within the LAP area are located within Zone C, where there is a low probability of flooding. The land that is located within Zone A and B is located within the Tolka Valley Park, which is zoned Z9 in the Dublin City Development Plan 2011- 2017. This reads 'to preserve provide and improve recreational amenity and open space & green networks'. Only water compatible development would be permissible in these areas as per the Guidelines on Flood Risk Management.

All Planning applications for proposed development within the LAP area will be required to submit a site specific flood risk assessment (FRA) addressing risks from all sources of flooding, and using the best available data. All new development will be required to comply with the Greater Dublin Strategic Drainage Study for surface-water management, with possible provision for the CFRAMS High End Future Scenario. This will ensure that there is no increase in flood risk to properties downstream as a result of future development. In addition, in order to mitigate against the effects of flooding to new development, floor levels should be set to recommended levels. It is anticipated that specific recommendations for floor levels may issue from the CFRAMS Study. In the meantime, a precautionary approach should be taken of the 100 year fluvial flood level plus a minimum of 10% increase in rainfall intensity plus 300mm freeboard.

An assessment of the effects of existing development within the plan area on flood risk to properties downstream will be undertaken, and where possible, recommendations made in relation to possible retrofitting of additional flood storage areas within the study area in order to bring existing development in line with current best practice flood management methods.

Flood Risk Management Objectives

IW04 To require all proposed developments to carry out a site specific flood risk assessment in accordance with the Departmental Guidelines on Flood Risk Management and Appendix 1 of this plan. The Flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation /adaption together with the measures to manage residual risk IW05 All planning applications shall be required to submit a surface water drainage plan, following the principles of Sustainable Urban Drainage Systems (SUDS) which will include proposals for the management of surface water within sites, protecting the water quality of the River Tolka.

'IW08 – The recommendations of the Eastern Catchment Flood Risk Assessment and Management Plan (CFRAM) study shall be incorporated into any future development of the area, upon its adoption'

Disclaimer

It is important to note that compliance with the requirements of *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*, 2009, and of the Floods Directive 2007 60/EC is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. In particular, the assessment and mapping of areas of flood risk awaits both the publication of Preliminary Flood Risk Assessments [PFRAs (currently in draft form)] and the publication of Catchment-Based Flood Risk Assessment and Management Plans [CFRAMP]. As a result, this guide for Flood Risk Assessment is based on best available information and may require revision as new information becomes available.

Accordingly, all information in relation to flood risk is provided for general policy guidance only. It may be substantially altered in light of future data and analysis. As a result, all landowners and developers are advised that Dublin City Council can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. It remains the principal responsibility of owners, users and developers to take all reasonable measures to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.

The indicative flood map does not show indicative flood hazard associated with any of the following:

- Extreme fluvial dominated combinations within the pluvial flows to the river
- Extreme pluvial events
- Blocked drains
- High ground water level conditions
- Other unforeseen events e.g. bridge/culvert collapse etc.

Dublin City Council makes no representations, warranties or undertakings about any of the information provided in this local area plan including, without limitation, on its accuracy, completeness, quality or fitness for any particular purpose. To the fullest extent permitted by applicable law neither Dublin City Council nor any of their members, officers, associates, consultants, employees, affiliates, servants, agents or other representatives shall be liable for loss or damage arising out of, or in connection with, the use of, or the inability to use, the information provided in this plan including, but not limited to, indirect or consequential loss or damages, loss of data, income, profit, or opportunity, loss of, or damage to, property and claims of third parties, even if Dublin City Council has been advised of the possibility of such loss or damages, or such loss or damages were reasonably foreseeable. Dublin City Council reserves the right to change the content and / or presentation of any of the information provided in this report at their sole discretion, including these notes and disclaimer. This disclaimer shall be governed by, and construed in accordance with, the laws of the Republic of Ireland. If any provision of this disclaimer shall be unlawful, void or for any reason unenforceable, that provision shall be deemed severable and shall not affect the validity and enforceability of the remaining provisions.

UNCERTAINTY

Although great care and modern widely-accepted methods have been used in the preparation of this plan there is inevitably a range of inherent uncertainties and assumptions made during the estimation of design flows and the construction of flood models.

Bibliography

Greater Dublin Strategic Drainage Study, Regional Drainage Policies, Technical Document (March 2005)

DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW), The Planning System and Flood Risk Management (2009)

Dublin Coastal Flooding Protection (April 2005)

Flood Emergency Plan – A sub-plan of Dublin City Council Major Emergency Plan, January 2013

Eastern Catchment Flood Risk Assessment Management Study (Eastern CFRAMS) (Ongoing)





OPW National Flood Hazard Mapping

Summary Local Area Report
 This Flood Report summarises all flood events within 2.5 kilometres of the map centre.
 The map centre is in:
 County: Dublin
 NGR: O 117 374

This Flood Report has been downloaded from the Web site www.floodmaps.ie. The users should take account of the restrictions and limitations relating to the content and use of this Web site that are explained in the Disclaimer box when entering the site. It is a condition of use of the Web site that you accept the User Declaration and the Disclaimer.

Map Legend

- Flood Points
- Multiple / Recurring Flood Points
- Areas Flooded
- Hydrometric Stations
- Rivers
- Lakes
- River Catchment Areas
- Land Commission *
- Drainage Districts *
- Benefiting Lands *

* Important: These maps do not indicate flood hazard or flood extent. Their purpose and scope is explained in the Glossary.

Map Scale: 1:10,401

7 Results

	1. Flooding at Glendhu Park, Cabra, Dublin 7 on 24th Oct 2011 County: Dublin Additional Information: Reports (1) More Mapped Information	Start Date: 24/Oct/2011 Flood Quality Code: 3
	2. Tolka November 2002 County: Meath, Dublin Additional Information: Photos (100) Reports (8) Videos (3) Press Archive (13) More Mapped Information	Start Date: 13/Nov/2002 Flood Quality Code: 1
	3. Tolka Ballydoogan Road Nov 2000 County: Dublin Additional Information: Reports (1) More Mapped Information	Start Date: 05/Nov/2000 Flood Quality Code: 3
	4. Tolka and Finglas Rivers August 1964 County: Dublin Additional Information: Reports (2) More Mapped Information	Start Date: 28/Aug/1964 Flood Quality Code: 1
	5. Flooding at Broombridge Railway Station on 24th October 2011 County: Dublin	Start Date: 24/Oct/2011 Flood Quality Code: 2
Report Produced: 15-Mar-2013 14:43		
	6. Flooding at Ballygall Crescent and Fairways Green, Finglas, Dublin 11 on 24th Oct 2011 County: Dublin Additional Information: Reports (1) More Mapped Information	Start Date: 24/Oct/2011 Flood Quality Code: 2
	7. Finglas November 1965 County: Dublin Additional Information: Reports (1) Press Archive (2) More Mapped Information	Start Date: 25/Nov/1965 Flood Quality Code: 4

Figure 4 – Type 1 Pluvial Flood Depth Map 1% AEP Event 3 Hour Duration Ashtown – Pelletstown LAP (see Disclaimer) Source: Flood Resilient City Office

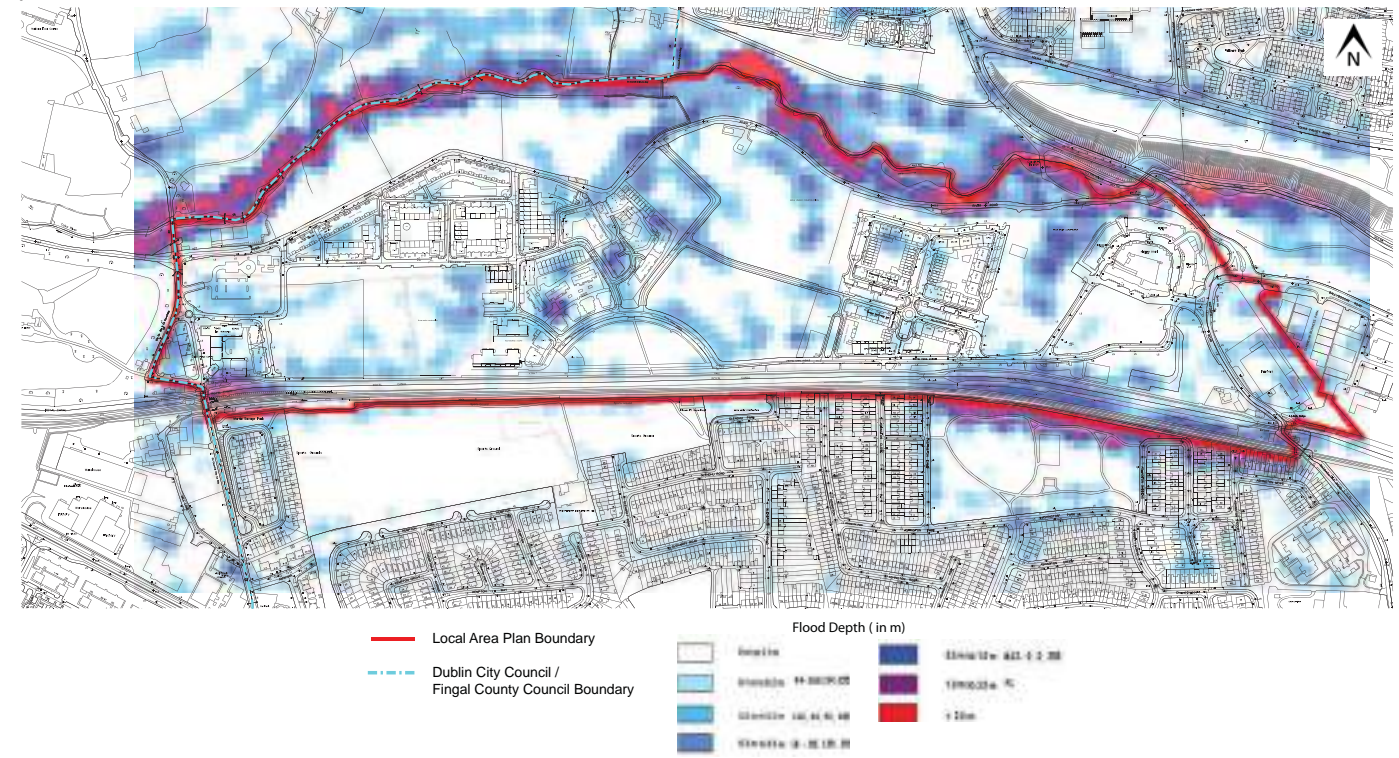


Figure 5- Indicative Flood Zone Map (see Disclaimer)

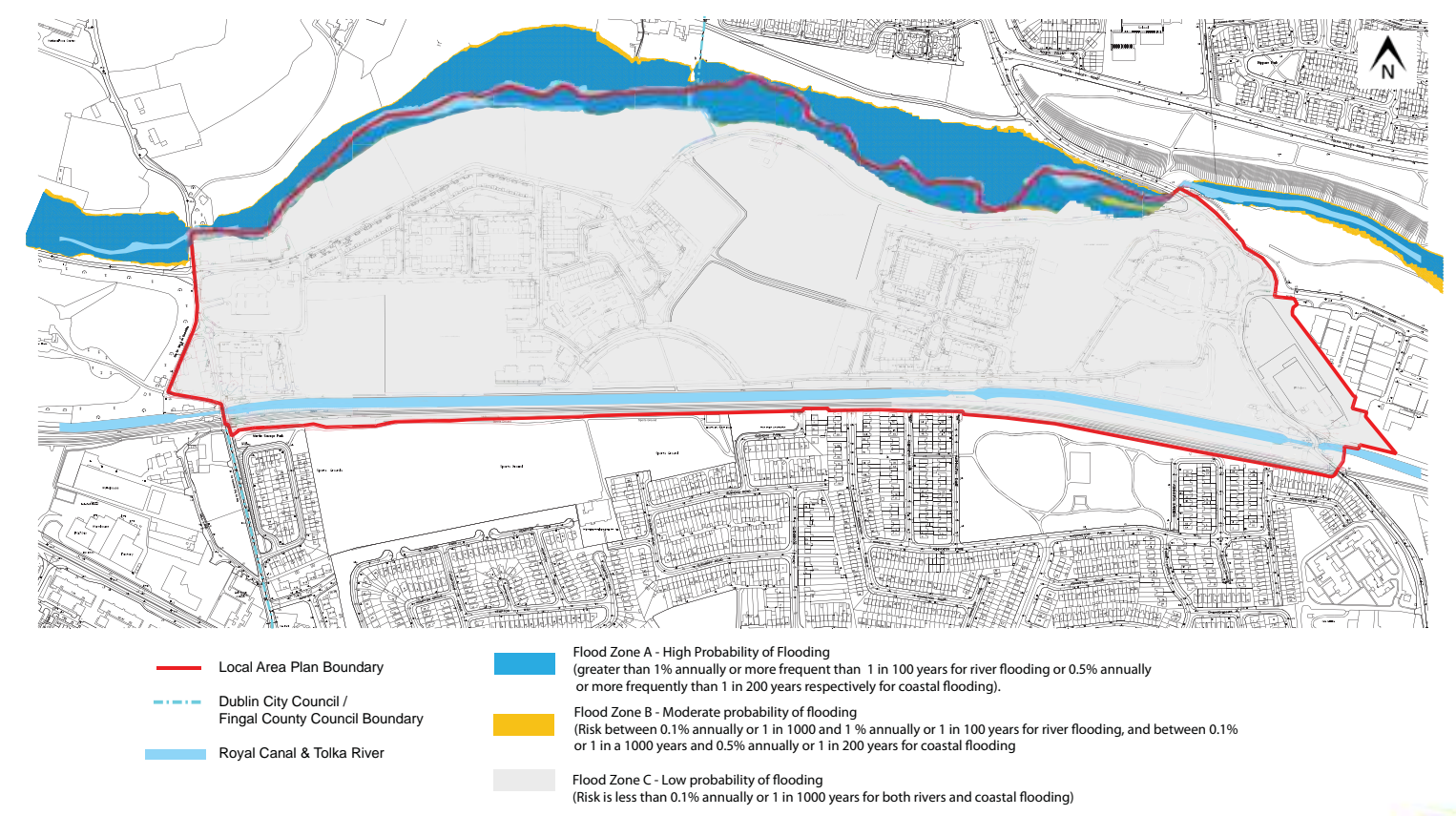




Figure 6 - River Tolka Flooding Study Historical Flooding Map (Frame 22)
(this shows roughly the 100 year event)

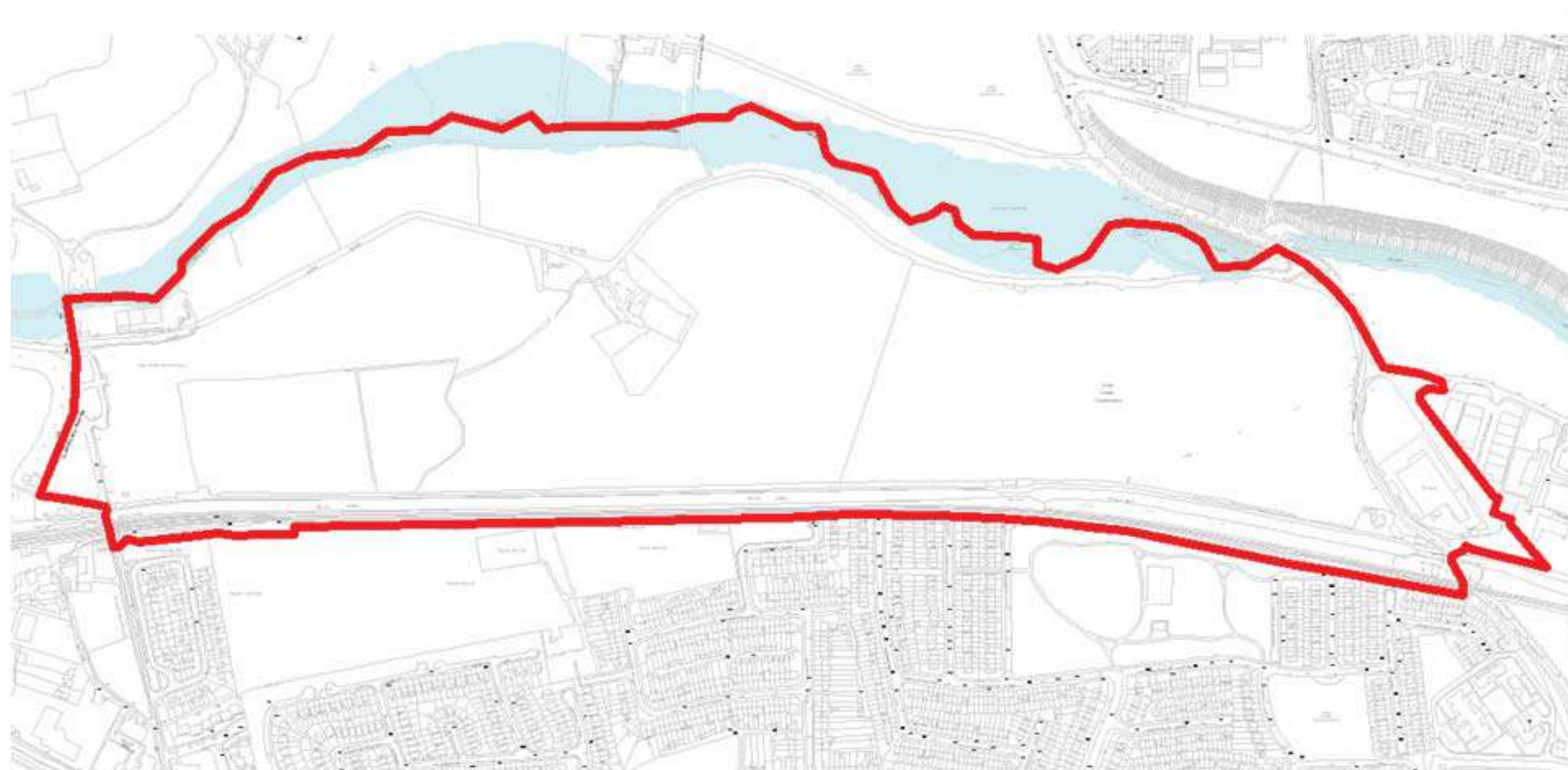


Figure 7 - River Tolka Flooding Study Historical Flooding Map (Frame 23)
(this shows roughly the 100 year event)





Figure 8 – Tolka River 0.1% AEP Extent Ashtown – Pelletstown LAP)





Appendix 2: Taking in Charge Standards, Open Space Design Guidance and SuDS Guidance

Section 1: Guidelines for Open Space Development and Taking In Charge

How open space areas are managed and maintained after their provision is an important consideration at the design stage, particularly to ensure that public open space can be taken into charge by Dublin City Council successfully.

It is also important that topsoil is recognised as an important on site resource for biodiversity and landscaping. Considering the extent of lands still to be completed for development in the LAP area, a successful open space strategy is dependant on high quality soil being retained and appropriately stored on site for future landscaping purposes.

The Culture, Recreation and Amenity Department of Dublin City Council have produced a set of guidelines called "Guidelines for Open Space Development and Taking in Charge" which provide important information for landscape designers of new public open space.

Some of the important guidance provided, which will benefit open space provision in the LAP area, includes the following:

- Tree surveys should be carried out by a qualified Arboriculturist.
- Landscape works are to be completed before occupation of the development or initial phase of development.
- A detailed survey should be made of existing hedgerows, trees and other natural site characteristics to evaluate their potential for protection and augmentation within landscape proposals.
- Based on the survey information, works proposed to existing hedgerows and trees must be agreed with DCC. Vegetation supporting nests may only be altered between the period of 1st September to the 1st February each year in the interest of protecting wildlife.
- A two stage consultation with the Parks and Landscape Division is advised. The first should set out the existing site survey and analysis with the concept plan prior to an application being lodged. The second consultation should include the detailed design (at planning stage).

- For any public open space/streetscape to be taken in charge by Dublin City Council, landscape submissions shall consider:
 - Landscape plans at an approved scale.
 - Location plan with areas intended to be taken in charge.
 - Sections / elevations.
 - Images
 - Specialist opinions.
 - Landscape maintenance specification.
- The principle of SuDS should be adopted in the treatment of surface water drainage.
- In general the developer will be responsible for the maintenance of the public open space for an 18 month period after the completion of works. At the end of the maintenance period Dublin City Council and landscape consultant will inspect the open space prior to taking in charge.
- As a general rule, areas designated for public open space purposes should be fenced off prior to the commencement of any development works on site and should not be used as site compounds etc.
- All development works should ideally be carried out during summer months under the supervision of the landscape consultant. In general all gradients in grassed areas shall not be greater than 1:4.
- Any excess top soil to be removed from the site is subject to agreement with the Dublin City Council. The developer shall store any top soil to be used in future public open space in accordance with the requirements of the Council. Existing topsoil is to be viewed as a resource to be valued and managed in accordance with Dublin City Council's Biodiversity Action Plan 2008 - 2012.
- Dublin City Council may require testing of material to be used as topsoil on any future public open spaces, at the cost to the developer, to ensure quality control. Any importation of topsoil will be subject to national legislation and Dublin City Council shall be informed of the source of any imported material.
- All areas to be grassed on public open space should be provided with an adequate layer of good quality top soil. A minimum depth of 150mm freely draining soil is required. The finished level of the topsoil shall remain 50mm above adjoining roads and footpaths to allow for settlement.
- All areas to be planted for trees and shrubs shall be provided with a minimum of 300mm depth of topsoil with a minimum depth of 300mm subsoil underneath.
- For street trees, a 600mm depth of topsoil, at a radius of 1m from the base of the tree, should be provided at all street tree planting positions. Street trees should not be planted under or within three metres of street lights.





Section 2: Private and Communal Open Space Design Guidance

Maximising the amenity value of homes and residential schemes is important for quality of life of the residents and in particular to encourage longer term residency.

The Dublin City Development Plan 2011-2017 provides important guidance for the design of homes and Section 17.9 in particular sets out important quality standards which must be met. Of note for residential developments are the following:

For Apartments

- Where balconies are provided, they should be functional, screened, have a sunny aspect, be wheelchair accessible and allow table and chair seating. The primary balcony should be located adjacent to the main living area.
- Communal open space may include sheltered roof gardens and communal landscaped areas at ground or podium level accessible to all the units it serves.
- The design of communal open space should take into account good passive surveillance, children's play, wheelchair access, good sunlight penetration, appropriate maintenance and management arrangements (including factors of storage and water supply).
- Outside the city centre area, combined private and communal open space provision shall be 12-15 sq.m per bedspace at a minimum.

For Houses

- A standard of 15 sq.m private open space per bedspace will normally be applied.
- At the rear of dwellings, there should be adequate separation (traditionally 22 metres between two storey houses with first floor opposing windows). This distance can be shorter if the design is such that the privacy of adjacent occupiers is preserved.
- The provision of defensible space behind the public footpath by means of a planting strip is important for housing units that address a street with own door access and ground floor windows. In particular, where on street parking is provided, a landscaped strip of 2 metres minimum depth should be provided.
- Rear gardens and private garden space should be screened from public areas, provide safe and secure play areas, be overlooked from a living or kitchen area, have robust boundaries and should not back onto roads or public open spaces.

Playgrounds and Children's Play Spaces

Incorporating opportunities for children's play and activity, inclusive of young children and teenagers, is an important consideration for open space design. In particular a network and sequence of different open space character areas can provide opportunities to provide amenities for different age groups. Providing safe routes between different character amenity areas can be very beneficial to encourage active use.

While all open space areas should incorporate flexible design principles to encourage recreation for all ages, making sure that children and teenagers have access to recreational facilities is important for the development of the community.

Section 17.16 of the Dublin City Development Plan 2011-2017 provides some valuable guidance on playgrounds and play spaces which is valuable for designers creating open space within the LAP area.

Some guiding principles include:

- Play spaces for small children (under 5s) should be close to residential dwellings, safe from traffic, overlooked with housing and frequented streets and footpaths, have both sunny and shaded parts, and be equipped with both natural play elements and also play equipment.
- Recreation facilities for older children and teenagers should take into account multi use game areas (MUGAs), teenage shelters, skate parks, meeting places (seating) etc. Such locations should be well positioned within the neighbourhood with good visual prominence and connections to the residential area.

Dublin City Council has published a Play Plan (2012-2017) which includes guidance on improving design of play spaces.



Section 3: SuDS Design Guidance

The following general guidance is provided to guide future developments within the LAP area:

Domestic Designs

SuDS measures can have effective outcomes on management of surface water drainage if implemented as part of domestic design. The design of individual houses should take into consideration design features including:

- Roof drainage could incorporate green roofs or drain to a soakaway, permeable paving area or mini detention basin.
- Permeable materials (especially for driveways)
- Cost savings could be made if surface water is recycled for domestic use.

See also section 4.11 'Environment Stainability and Sustainable Design', including green points system and advice on sustainable design.

Commercial/Office/Apartment Blocks

Larger schemes will have optimal opportunities to incorporate SuDS measures, particularly where they can be incorporated as part of the site masterplan features measures including infiltration systems, filtration systems, retention systems/swales and detention systems can all contribute towards sustainable drainage and storm water management. See section 4.8.5.1 for further details.

Such measures can have a significant positive effect on biodiversity and green infrastructure. See section 4.11 in regard to sustainable design and green points system.

Example of SuDS residential development





Appendix 3: Appropriate Assessment (AA) Conclusion Statement

Appropriate Assessment Overview

Appropriate Assessment (AA) is a detailed examination of the possible significant adverse effects of a plan or project on the environmental integrity of Natura 2000 sites. The term “Appropriate Assessment”, is set out in the EC Habitats Directive Article 6(3). In accordance with the procedures stated in the Department’s publication, *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (December 2009)*, all land use plans or strategies that are not directly related to the management of Natura 2000 designated sites, such as this LAP, must be examined to ensure that there will not be any significant adverse effects on such designated sites. These particular sites are of European importance and are part of the European Commission’s (EC) Natura 2000 network of sites in Ireland. The Irish Government and local planning authorities have a legal obligation to protect these sites.

Dublin City Council has adopted a pre-cautionary and comprehensive approach, undertaking an AA screening exercise of policies and objectives throughout the LAP process and inserting mitigation measures in the form of policies and objectives, to safeguard against any possible significant adverse effects from the implementation of the LAP. At each statutory consultative stage of the process, copies of the latest LAP, SEA and AA documents were forwarded to relevant prescribed government departments for their advice and comments.

There are two distinct stages of the Appropriate Assessment process:

Stage 1 – Screening

Stage 2 – Appropriate Assessment (Natura Impact Statement(s))

The first step is to look at the Plan in principle and to ascertain if there are likely to be significant adverse effects. This step is known as ‘Screening for Appropriate Assessment’. If the screening stage results in a judgement that significant adverse effects may occur or cannot be ruled out, as was the case with the Ashtown/Pelletstown LAP, then a more detailed ‘Appropriate Assessment’ (AA) is required. In this instance the Screening Stage determined that due to the nature of development that could arise as a result of implementing the Local Area Plan, significant adverse effects could not be ruled out, - in this instance, possible indirect effects arising from the LAP’s proximity to the Tolka River and Royal Canal, and their consequent linkage to Dublin Bay and Natura 2000 sites. Therefore the draft LAP required further assessment, that is, Stage 2 – Appropriate Assessment.

For the Ashtown/Pelletstown Local Area Plan (LAP) the AA process encompasses an initial Natura Impact Statement of the draft LAP, various interim Natura Impact Report (NIR) screenings on foot of changes made to the draft LAP after statutory consultation, and finally a ‘Conclusion Statement’ summarising the process. This is to ensure development will not compromise the environmental integrity of any Natura 2000 sites.

Summary of Appropriate Assessment Outcome and Integration of Findings into LAP

Stage 2 involved analysing the relationship between the proposed policies and objectives in the Local Area Plan and the Natura 2000 sites, as set out in the LAP ‘Policy and Objective Mitigation Matrix’ in the Natura Impact Statement. Where there was potential for a significant adverse effect to occur, mitigation was required. Mitigation was in the form of policies and objectives that could counteract any potential for significant adverse effects. This process was repeated for every Natura Impact Report produced on foot of alterations to the draft LAP. These mitigation measures were integrated into the LAP to ensure that plan implementation will not result in any significant adverse effect on Natura 2000 sites.

Relationship of Appropriate Assessment to Strategic Environmental Assessment

The Appropriate Assessment (AA) process specifically aims to ensure that the plan will not have any significant adverse effects on the integrity of any Natura 2000 sites, whereas Strategic Environmental Assessment (SEA) has a broader objective of ensuring land-use plans contribute to sustainable development by integrating social, environmental and economic considerations into plan preparation and incorporating the requirements of the SEA Directive (2001/42/EC). The preparation of an AA and SEA are complementary processes and each can inform the content of the other, dependent upon the type of plan, project or habitat involved.

Preparation of LAP and Consideration of Alternative Options

It is standard practice when devising an LAP that various ways of fulfilling its strategic vision are considered. Dublin City Council, as the plan-making authority, is obliged therefore to consider alternative ways of achieving this. The SEA Environmental Report (accompanying the LAP document) details the process and outlines the alternative options considered for the delivery of the strategic vision, in summary, there were three alternatives considered;

1. Reissue the existing Action Area Plan (2000)
2. Use the land use zoning objectives for the area to guide development
3. Prepare an LAP

The preparation of an LAP was deemed the most suitable option for achieving the strategic vision objective as it provided a co-ordinated approach for development in line with statutory requirements and advice from prescribed environmental bodies. The LAP provides an updated strategy on how the area should be developed and managed in line with best practice in sustainable urban planning, integrating environmental considerations such as ‘Green Infrastructure’ and ‘Sustainable Urban Drainage Systems’. It provides policies and mechanisms that would deliver necessary physical, social and environmental infrastructure in a nuanced, phased manner over a period of time.

Thus in tandem with, and cognisant of the SEA process and outcomes, the AA was prepared. The thoroughness of the SEA and AA process ensured there were no serious environmental issues arising from the LAP’s strategic vision, as articulated through policies and objectives in the various chapters. As a consequence the AA provided mitigation more as a precautionary measure, rather than in anticipation of significant adverse effects on Natura 2000 sites. Again, all relevant prescribed authorities were informed of the preparation of an LAP for the area.





Location of Natura 2000 Sites in relation to Ashtown/Pelletstown LAP

Area



- ① Rockabill to Dalkey Island SAC
- ② Baldoyle Bay SAC / SPA
- ③ North Dublin Bay SAC North Bull Island SPA
- ④ South Dublin Bay SAC / SPA
- ⑤ Dalkey Island SAC
- ⑥ Malahide Estuary SAC / Malahide Estuary SPA

Legend

- Dublin City Council Boundary
- 15 KM Buffer
- SACs
- SPAs

The relevant Natura 2000 sites are;

- North Bull Island SPA (IE004006)*
- South Dublin Bay & River Tolka Estuary SPA (IE004024)
- Baldoyle Bay SPA(IE004016)
- Dalkey Islands SPA (IE004172)
- Baldoyle Bay SAC (IE00199)
- North Dublin Bay SAC (IE00206)
- South Dublin Bay SAC (IE00210)
- Rockabill to Dalkey Island SAC (IE003000)
- Malahide Estuary SAC (IE000205)
- Malahide Estuary SPA (IE004025)

*The number in brackets is the National Parks and Wildlife Service site code.(www.npws.ie, 2013)

Declaration that the LAP will not significantly adversely effect Natura 2000 sites

The AA process identified those policies and objectives that may have potential to significantly adversely effect Natura 2000 sites. In response to this, policies and objectives were drawn up that mitigated against this possibility. The policies and objectives of the plan have been devised to anticipate and avoid the need for developments that would be likely to significantly adversely effect the integrity of any Natura 2000 sites. Furthermore, developments arising from the LAP shall be required to conform to the relevant regulatory provisions for the prevention of pollution, nuisance or other environmental effects likely to significantly and adversely effect the integrity of Natura 2000 sites. The direct influence of LAP policies and objectives upon Natura 2000 sites beyond the LAP area is limited, and mainly confined to Dublin Bay, as the receiver of impacts from the river Tolka and Royal Canal, which pass through the LAP area.

Note: This report forms part of the AA documentation of the LAP making process. It should be read in conjunction with the Natura Impact Statement and SEA.



