



**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

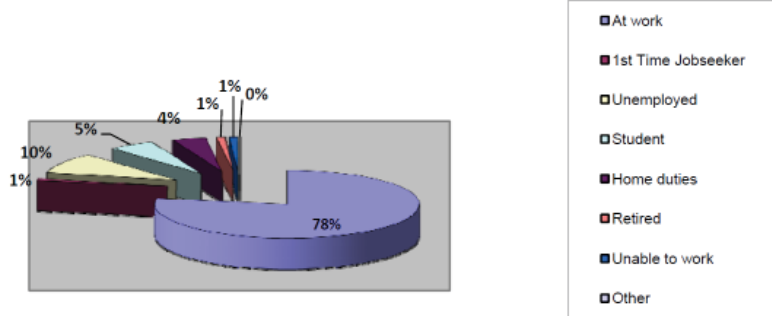
The Ormond factory site, originally not part of the AAP area is now included within the LAP boundary. It is zoned Z6 in the city development plan, which reads 'to provide for the creation and protection of enterprise and facilitate opportunities for employment creation'. Vacant for some time, this site 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.

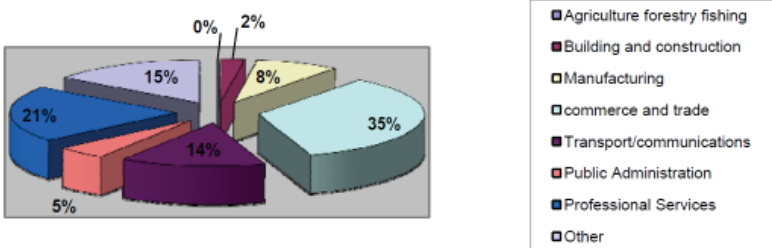


Of the total 2447 persons employed, the majority were working either in professional services, commerce and trade, transport and communications, or 'other' forms of employment.

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

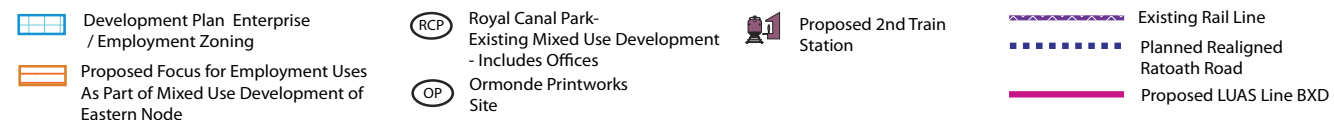
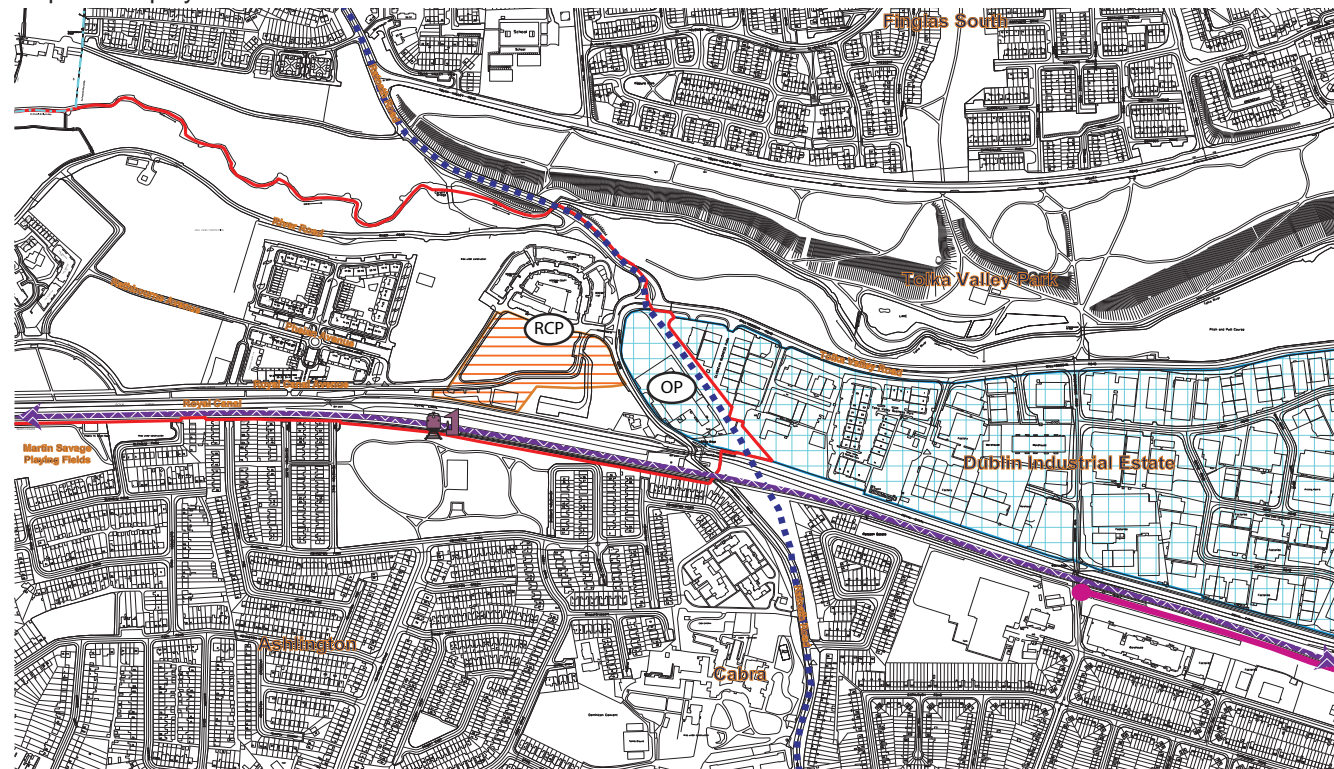
Having regard to the extent of economic development to date in the plan area, and taking into account the above analysis and the current economic climate, it is considered appropriate to take a modest approach to future economic development and to focus mainly on employment associated with services that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

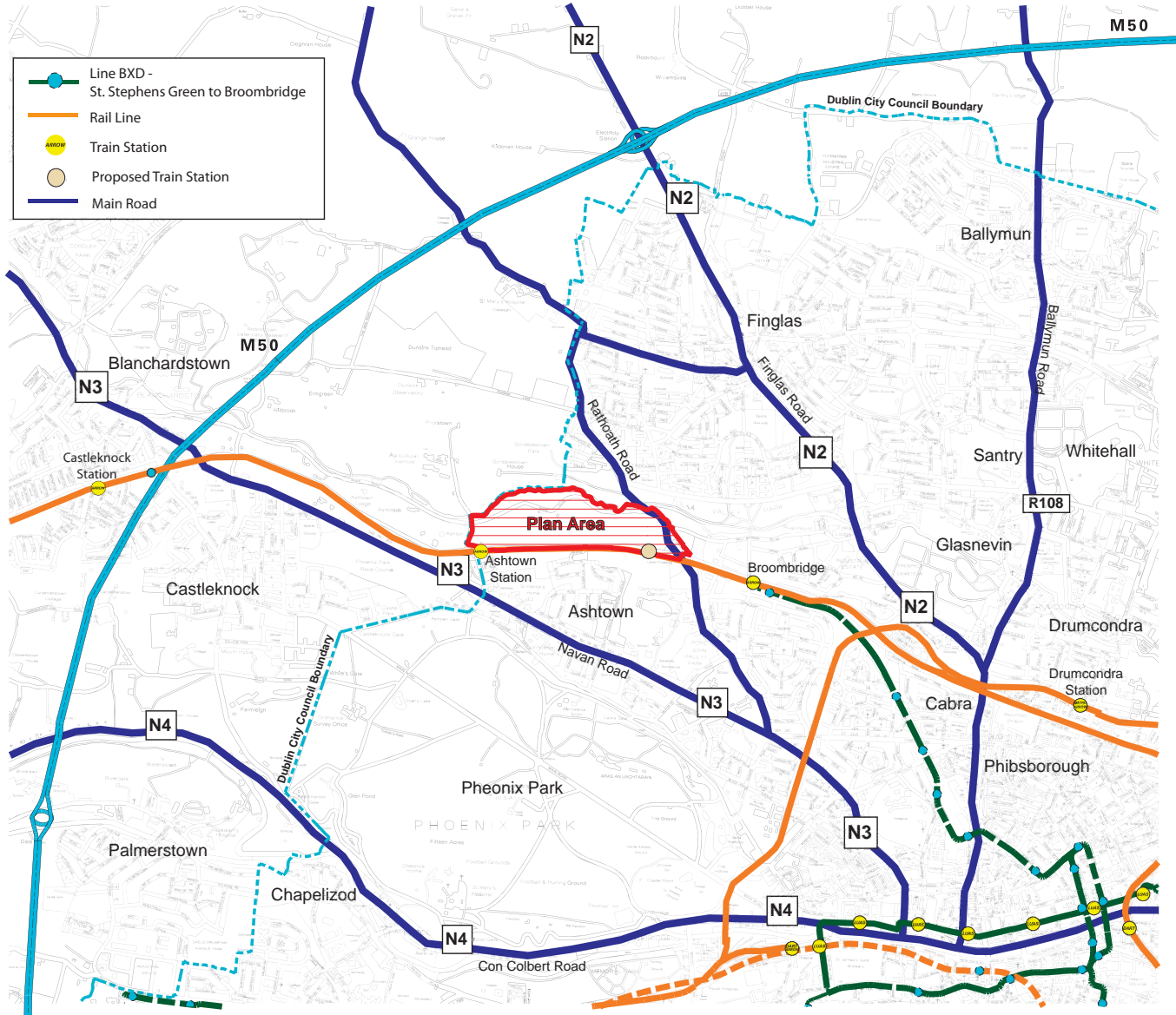
**4.4.2 Pelletstown Action Area Plan 2000 and progress to date**

**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)







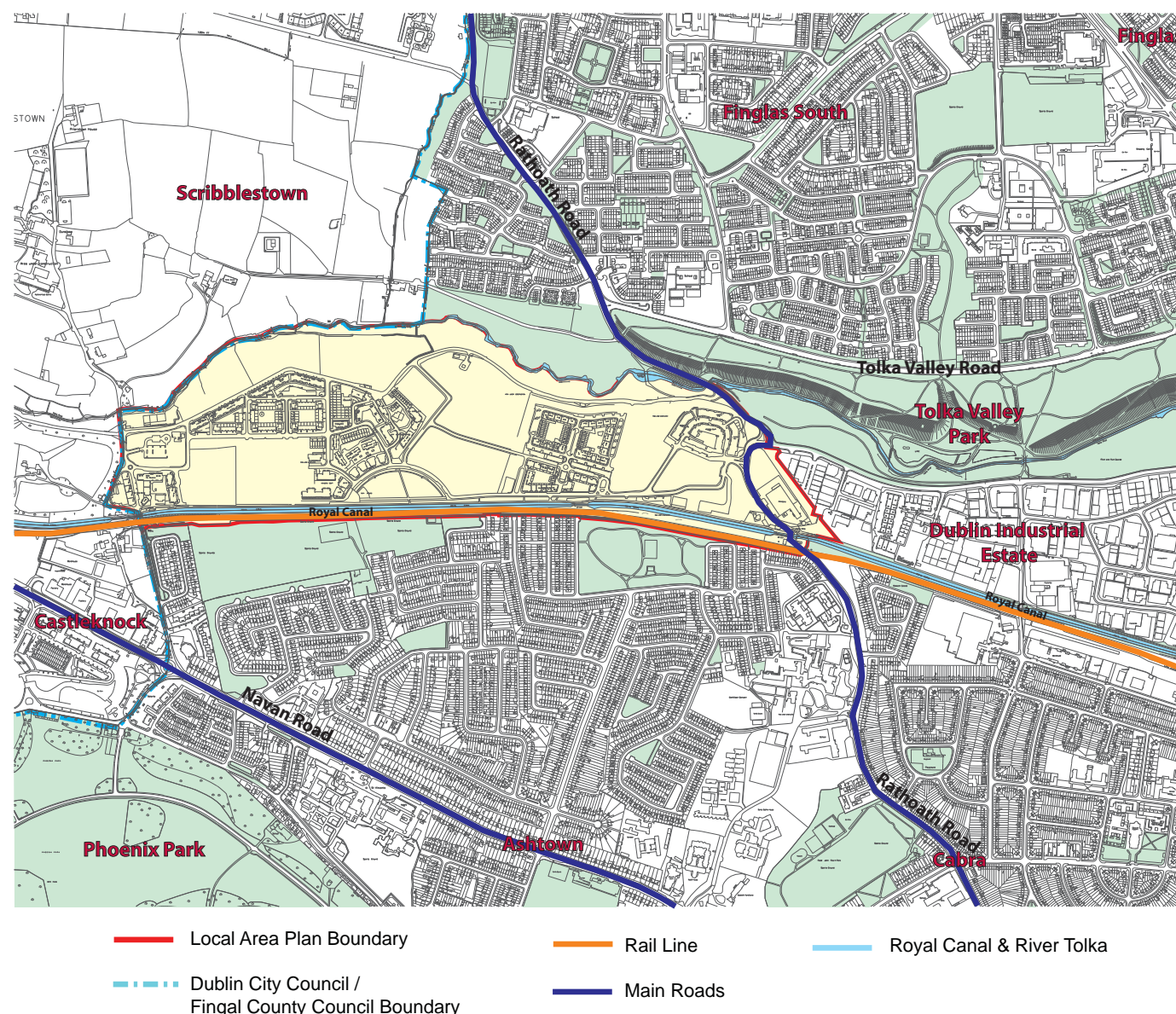
#### 4.4.2.2 Road network;

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.

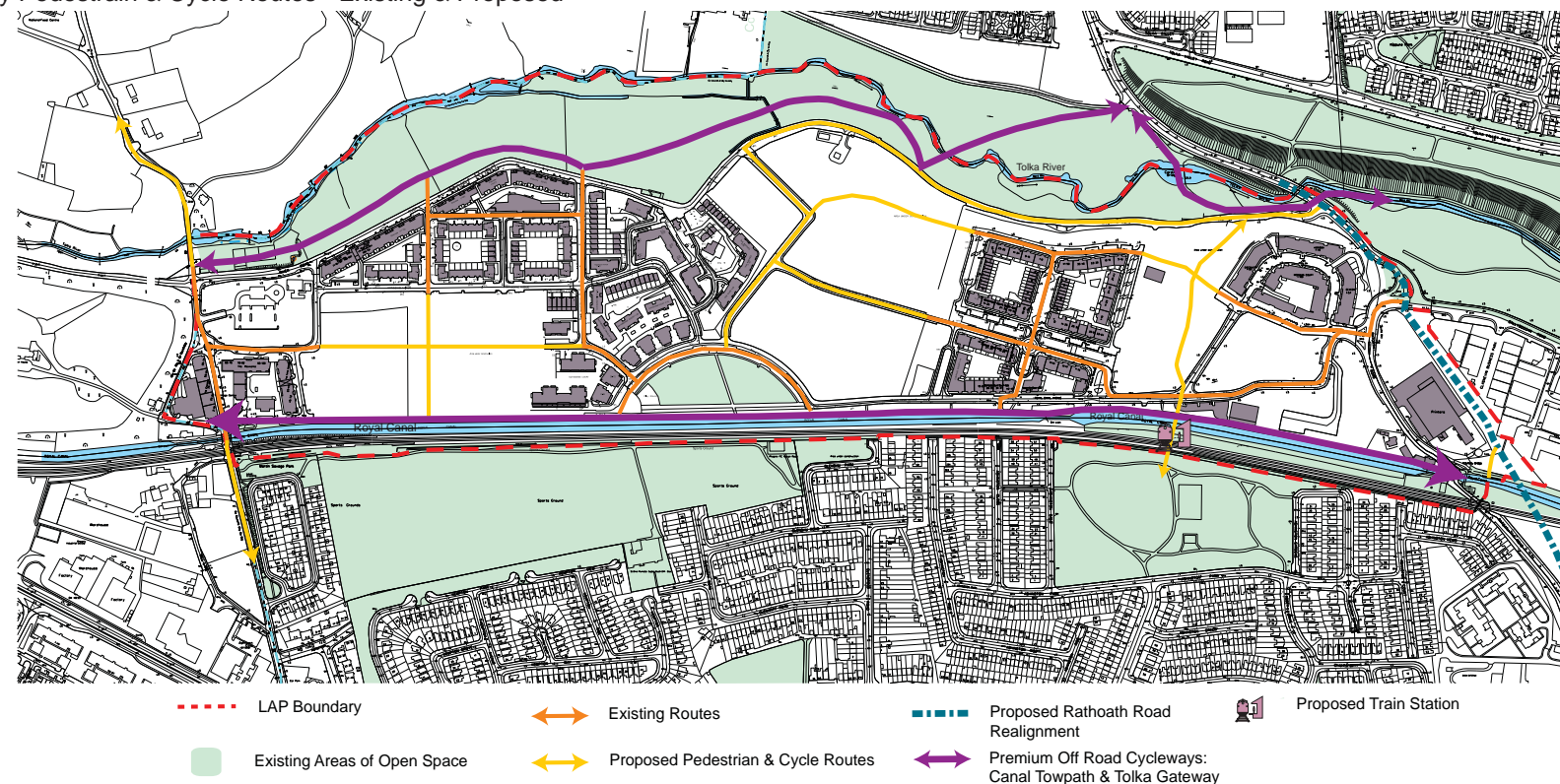




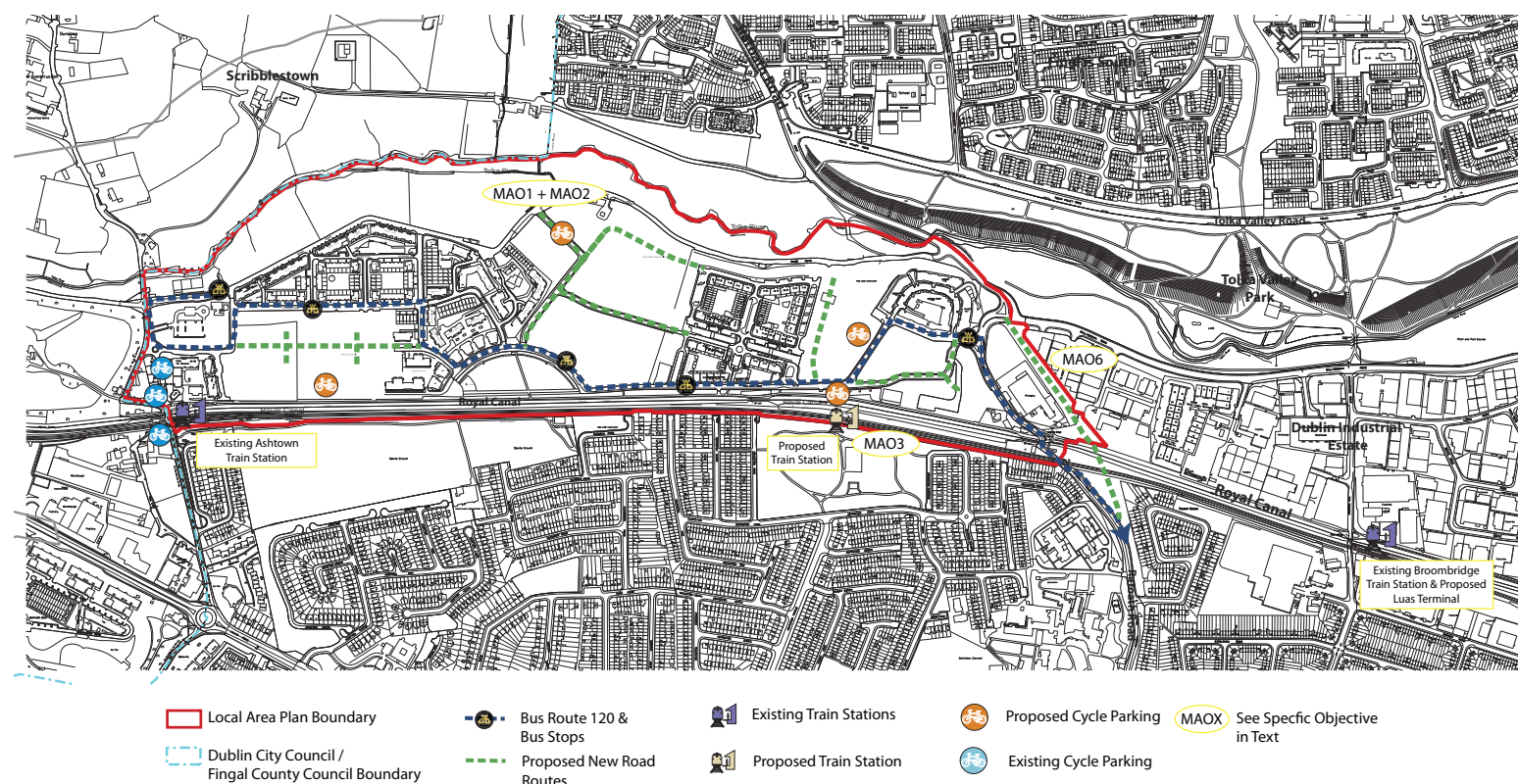


- The implementation of the Ratoath Road Realignment scheme and associated rail overbridge. At present, vehicular traffic travelling on the Ratoath Road must wait at a manual level crossing at Reillys Bridge at a point where the road alignment is poor. As this rail line is an important commuter service, 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.

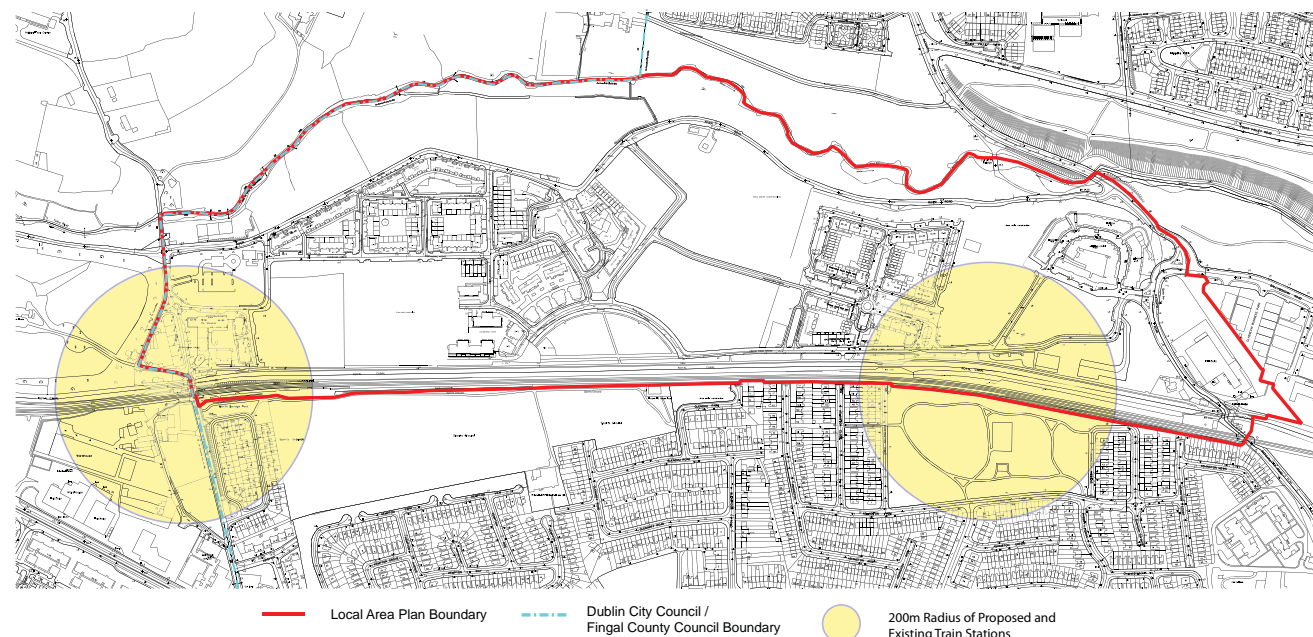
In addition to the above, and to allow for some anticipated excess, visitor parking spaces may be provided at the rate of one for every 10 units for sites within the 200m radius and one for every 5 outside it. The table below summarises the approach ;

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:

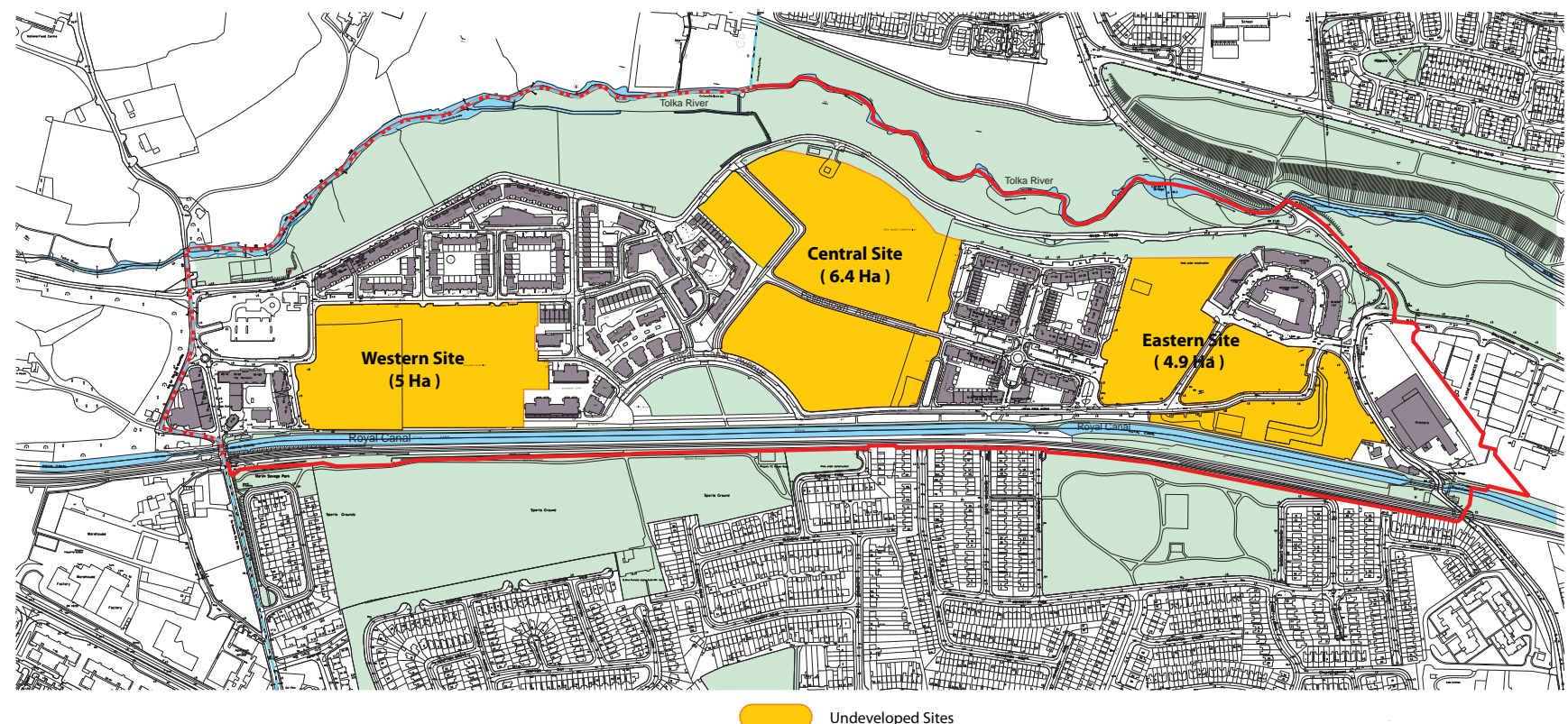
- 1- Two new public spaces located at either end of the LAP area
- 2- Central park bounded by the Canal and with a crescent of villa housing
- 3- Tree lined canalside boulevard running into the new public space
- 4- North-south secondary routes connecting the canal to the river valley

- 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.

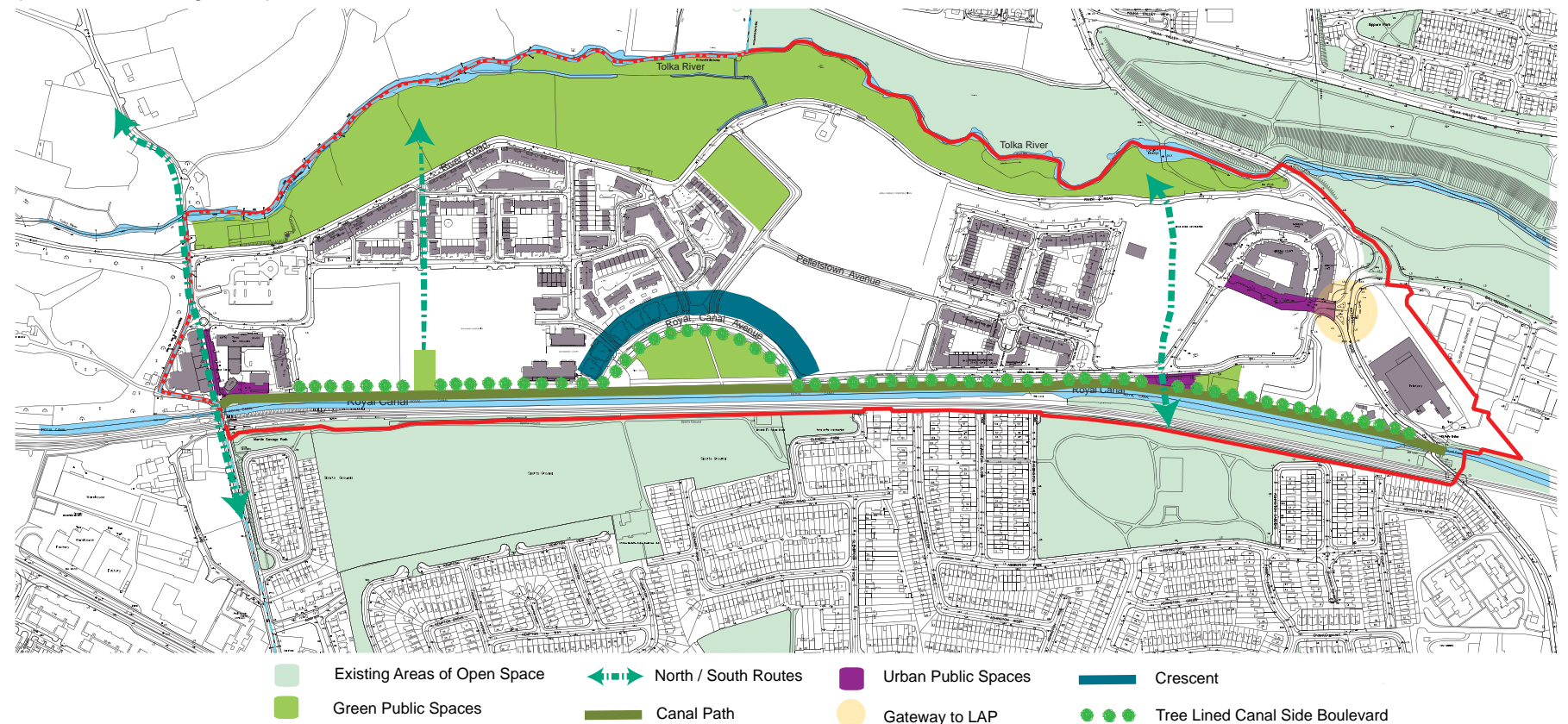
To increase accessibility and safety, new stretches of the linear park shall provide new gate entrances to link with existing and proposed north-south routes and provide direct and easy access to the towpath for residents in the vicinity.

### 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.

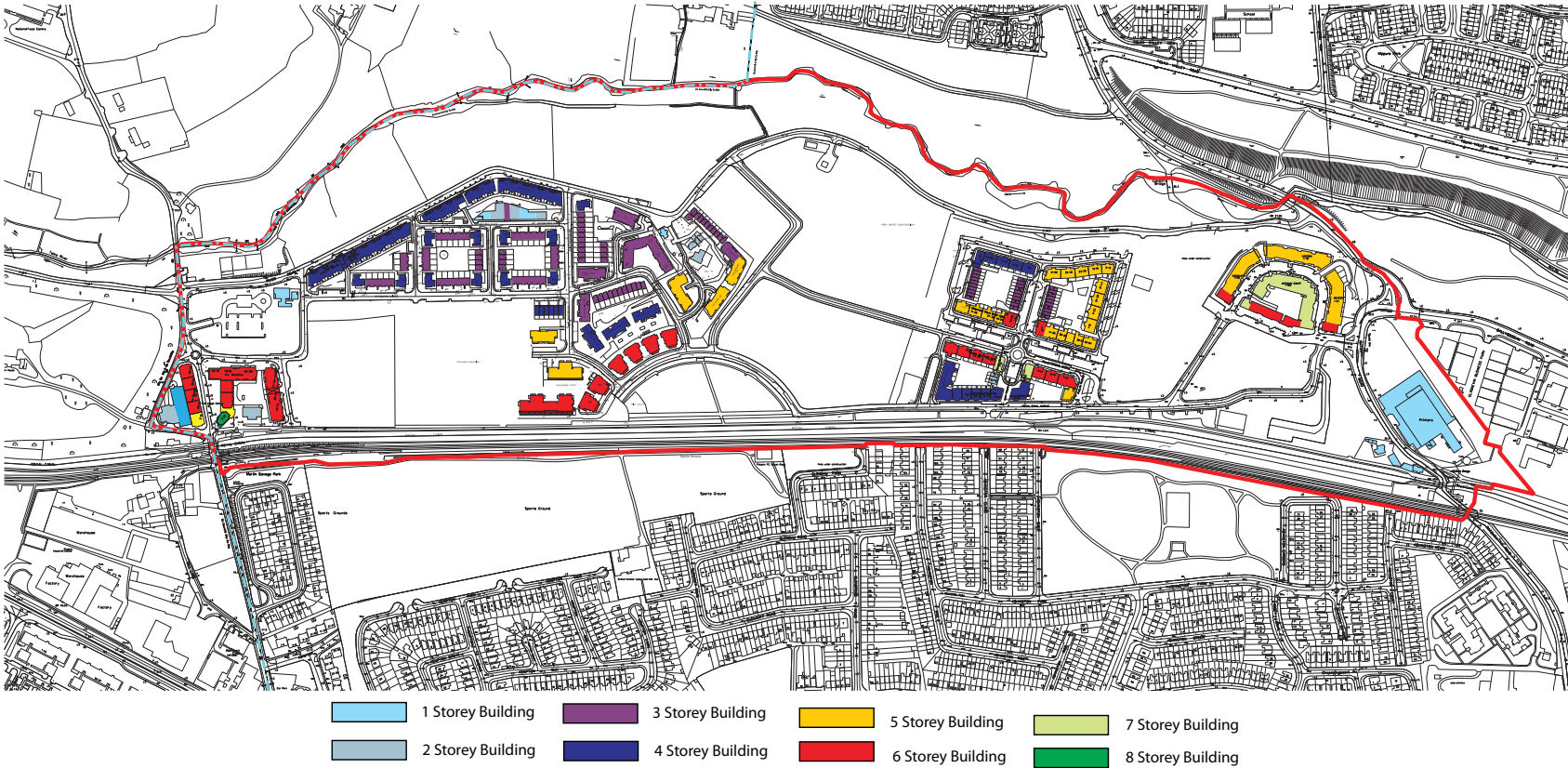
**Secondary North/South Routes**

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.

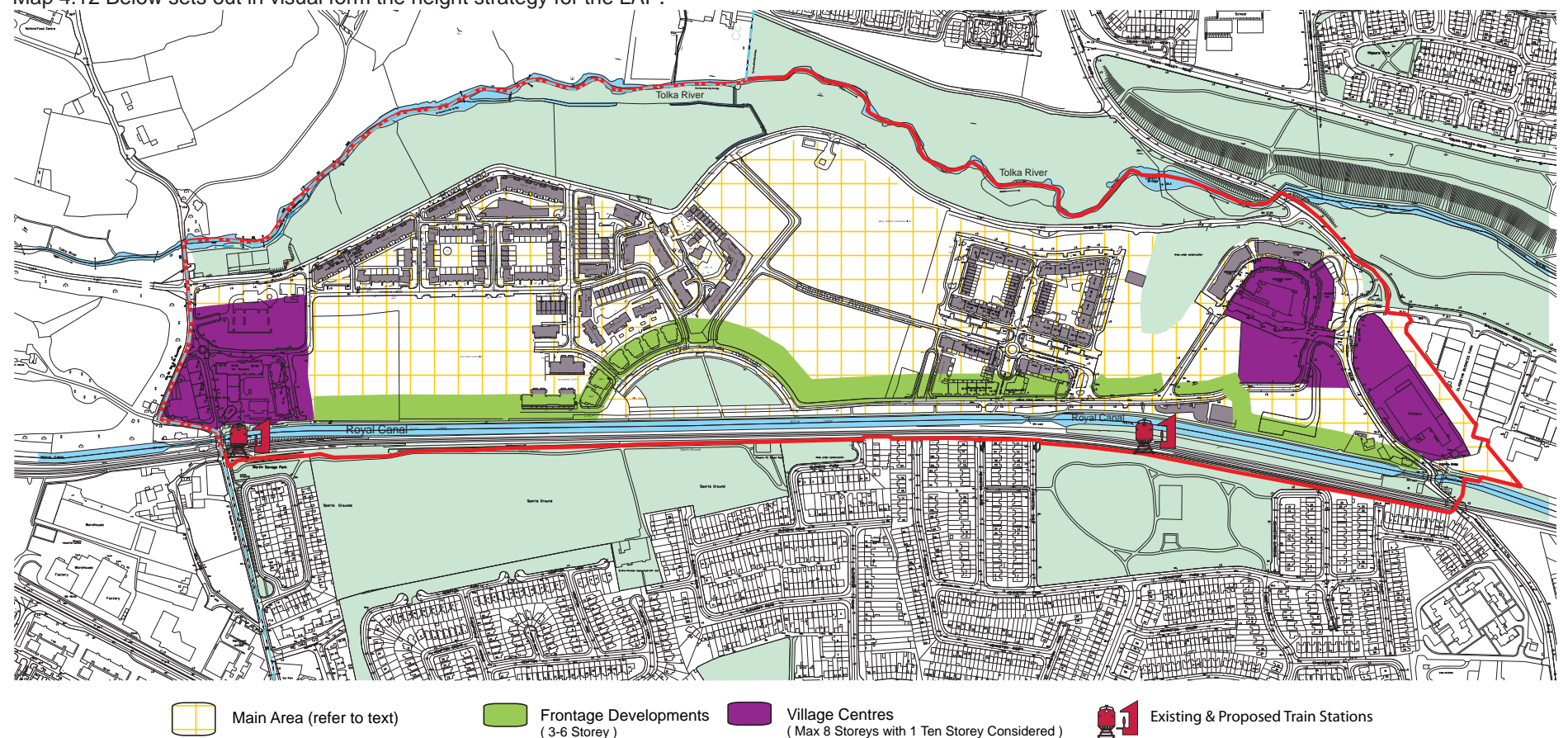
For addressing the canal, the need for strong visual presence to provide vitality, natural supervision and interest heights of buildings will range from a minimum of 3 up to 5 storeys (in the central area) up to between 5 and 6 storeys closer to the village locations.

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).

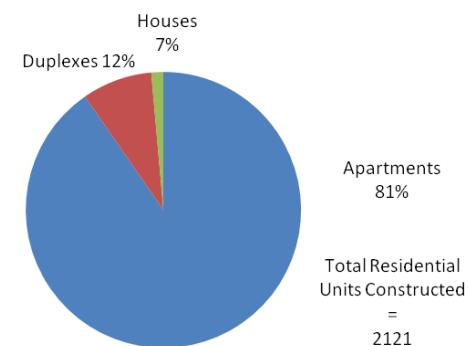
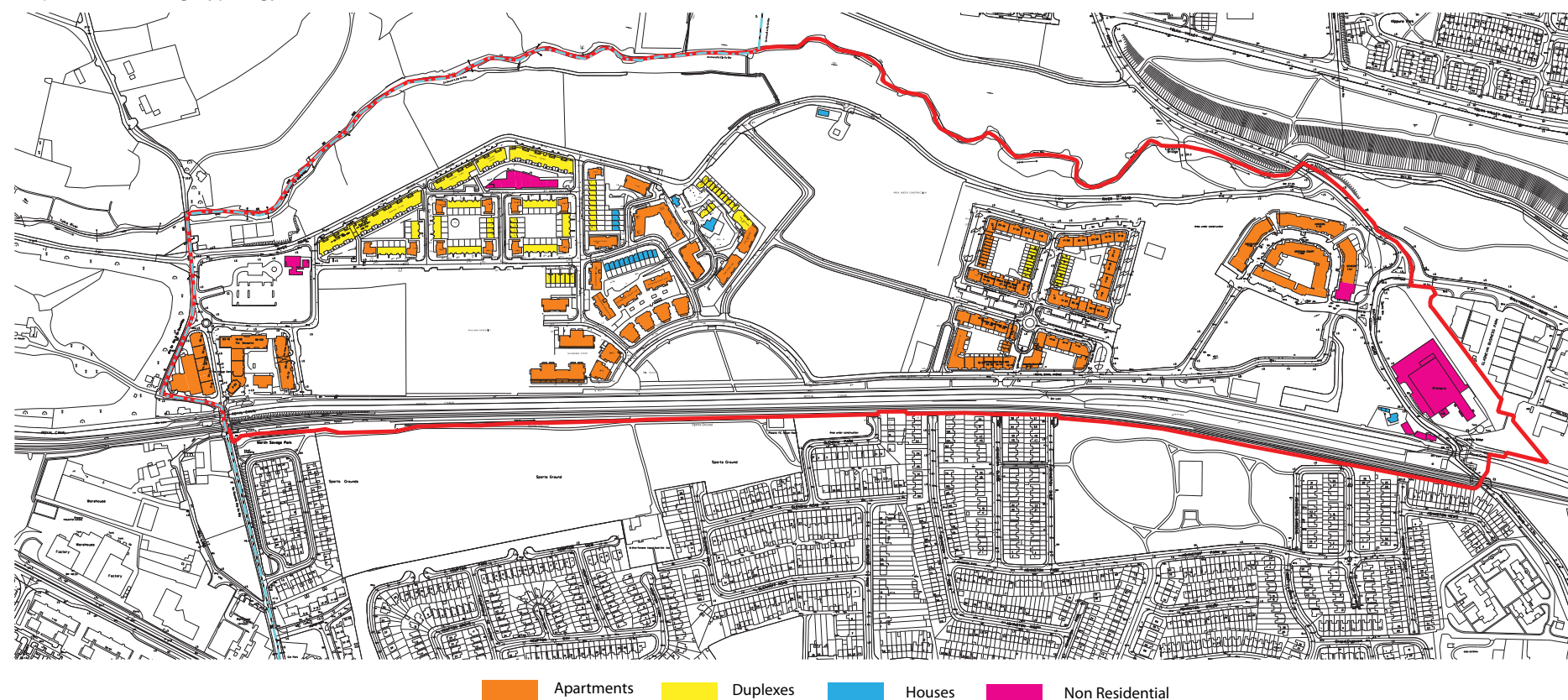


Chart 4.6.1 Units developed to date ; Breakdown by percentage of unit types.

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
<b>Apartments</b>	1	392	23	<b>81%</b>
	2	1011	58	
	3	252	15	
	4+	70	4	
	<b>Total</b>	<b>1725</b>	<b>100</b>	
<b>Duplexes</b>	1	30	12	<b>12%</b>
	2	97	41	
	3	110	46	
	4+	2	1	
	<b>Total</b>	<b>239</b>	<b>100</b>	
<b>Houses</b>	1	1	0	<b>7%</b>
	2	97	62	
	3	50	32	
	4+	9	6	
	<b>Total</b>	<b>157</b>	<b>100</b>	
<b>Overall total</b>		<b>2121</b>		<b>100%</b>

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





### 4.6.3 Residential Density.

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%	<b>50% minimum</b>
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.

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



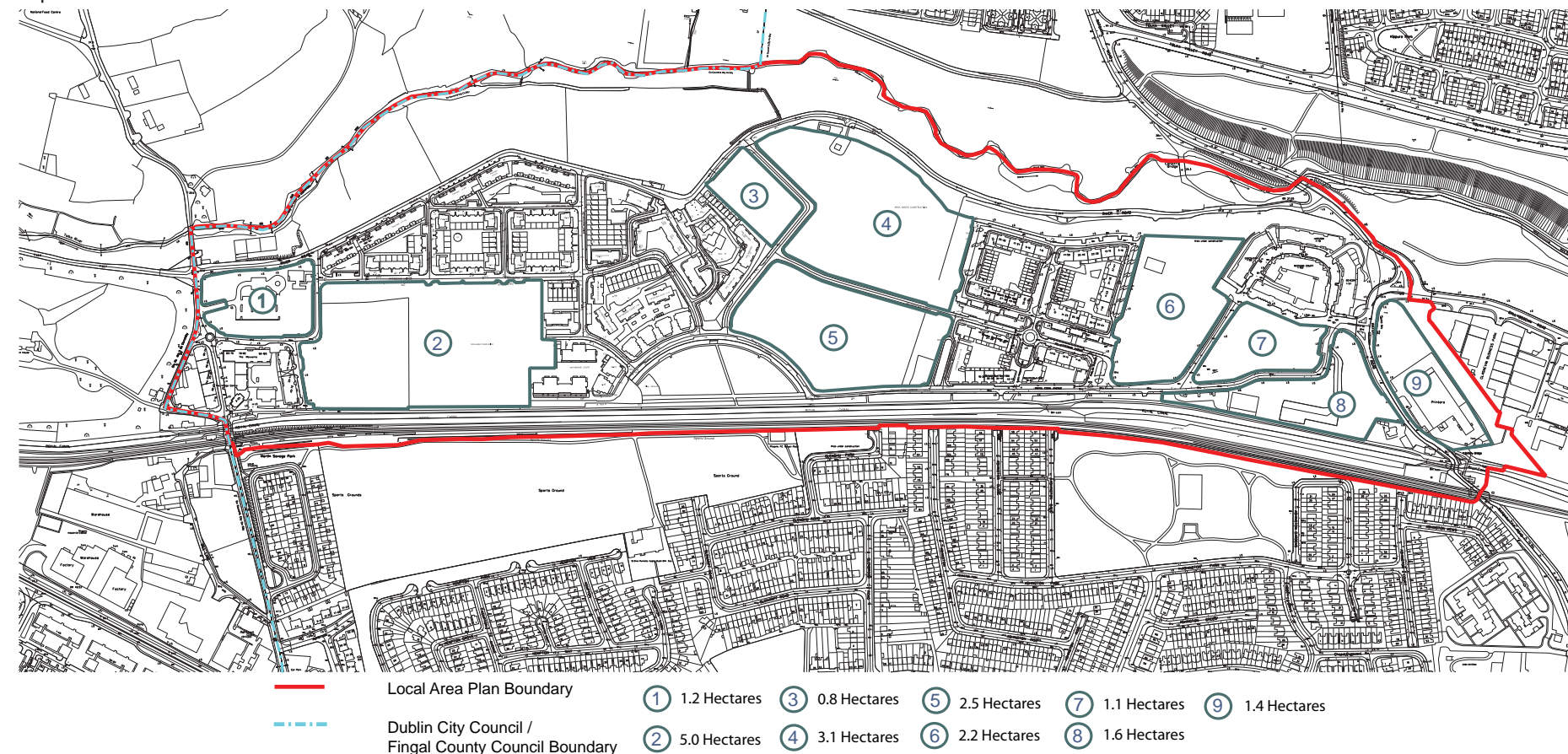
Rathborne Court - Average Density 80 uph

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+ bedroomed 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+ bedroomed 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 (2<sup>nd</sup> to the 7<sup>th</sup> 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.

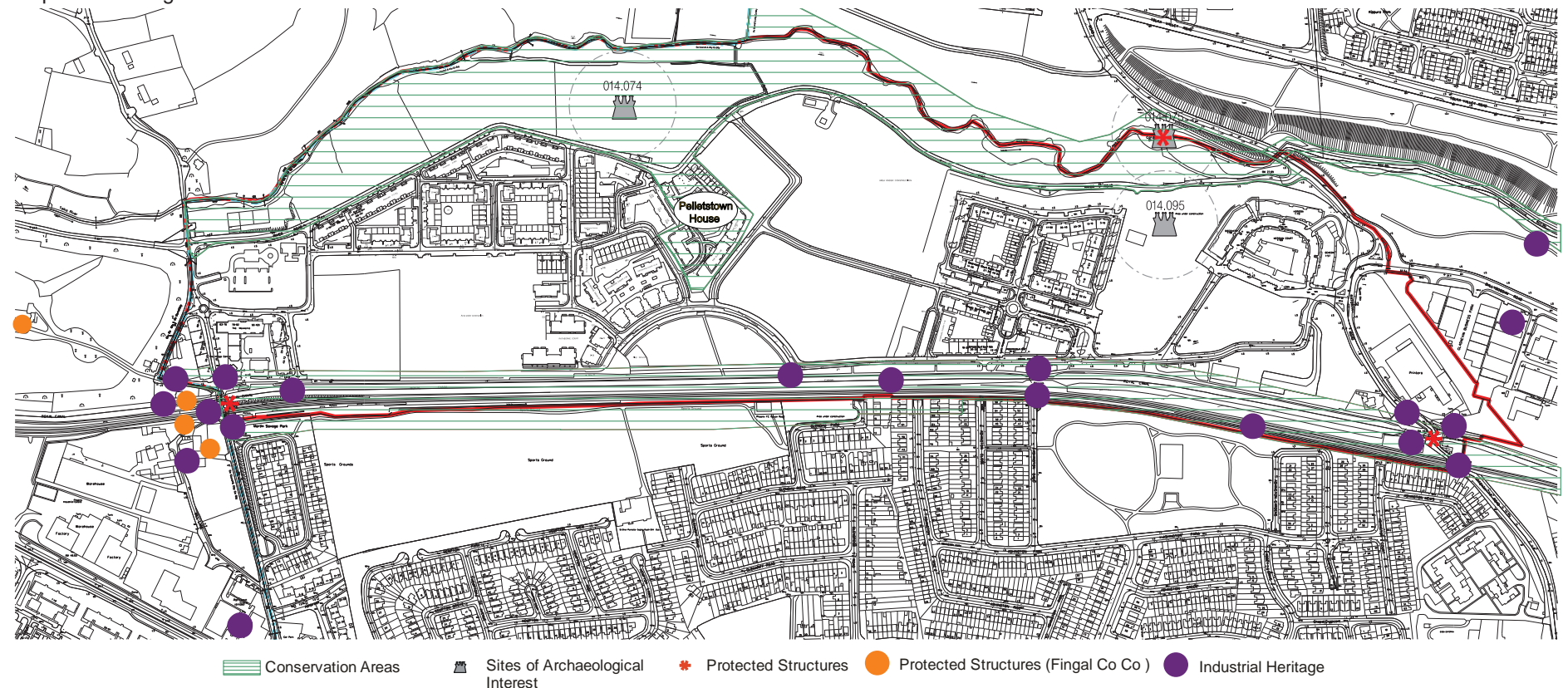
In recognition of the role of industry in the development of the city, the City Council commissioned a comprehensive survey of the industrial heritage of the city area – the Dublin City Industrial Heritage Record (DCIHR). In 2007, Phase 5 of the DCIHR project commenced. This stage focused on the area 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 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> 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, 8<sup>th</sup> and 9<sup>th</sup> 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) 8<sup>th</sup> Lock
- (iv) 9<sup>th</sup> 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](http://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 GSDS 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](http://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.

