Naas Northwest Quadrant Masterplan 2007





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Foreword

This Masterplan document sets out a vision for the development of a new quarter in Naas - a 247 hectare strategic landbank in the Northwest Quadrant of Naas town. The Masterplan is an exemplar project, one of the first modern sustainable urban extensions being built in the Greater Dublin Area. This exemplary scheme has been masterplanned in close consultation with the Local Authority, key landowners and relevant stakeholders in the area. The Masterplan embraces the ideals of the National Development Plan, the National Spatial Strategy, the Regional Planning Guidelines for the Greater Dublin Area, Transport 21, the Naas IFPLUT and most importantly the Naas Town Development Plan 2005-2011.

As an identified primary growth centre it is essential that Naas continues to grow in a strategic manner that benefits from forward planning and an integrated approach to public and private investment. The Masterplan is designed in line with the principles of sustainable development which will enhance the self-sufficiency of Naas town, promote high standards of amenity, safety and convenience for all citizens and support the role of Naas as a designated Primary Development Centre in the Greater Dublin Area. The provision of a Public Transport Corridor linking Naas Town Centre, the employment centre at Millennium Park and the proposed Urban Village in the Northwest Quadrant to the national rail network is key to the expansion of this modern and vibrant town.

The Masterplan sets the context for further design and development by reinforcing the rationale behind the expansion of the town into the northwest quadrant of Naas. It provides developers and their designers with an understanding of what Naas Town Council aims to achieve, it inspires innovation in a work-life balance and provides instructions so that designers look to new solutions for sustainable development.

The expansion of Naas will meet the increasing demand for employment, educational facilities, local amenities and new housing by creating a sustainable community with a clear identity and sense of space which both enhances and respects the local character of the area. The Northwest Quadrant Masterplan will contribute to the urban renaissance through its role as a national example of best practice in sustainable growth and a model for the design of other urban extensions across the country. In this way Naas may continue to occupy a central strategic position in the County and the Greater Dublin area as a model location for quality living and future investment.

Maura McIvor

Town Clerk, Naas Town Council

August 2007



Section 1.0

- 1.1 Introduction
- 1.2 A Vision for the Northwest Quadrant
- 1.3 Guiding Principle of the Masterplan
- 1.4 Key Principles of Urban Design
- 1.5 Document Structure
- 1.6 Consultation



The Masterplan Process

The new quarter will be a destination and place
of quality and distinction where people will be proud
to call home, want to work and play in, have quality
services and facilities that are accessible to all,
where everyone can move freely and feel
safe and secure.



1.1 Introduction

- 1.1.1 The Northwest Quadrant of Naas is an area comprising some 299 hectares of mostly greenfield lands of which 247 hectares have been identified under the Naas Town Development Plan 2005-2011 for the preparation of a Masterplan. The Northwest Quadrant represents one of the last remaining undeveloped landbanks in close proximity to Naas Town Centre. The area has the potential to facilitate the sustainable long-term strategic expansion of the town, with particular emphasis on accommodating future employment activities in tandem with residential development and supporting services for the immediate area and for Naas as a whole.
- 1.1.2 The current Naas Town Development Plan identifies the Northwest Quadrant as the most appropriate location for the future expansion of the residential area of the town. It is an objective of the Plan to provide for a comprehensive Masterplan framework for the Northwest Quadrant prior to the granting of planning permission for any development in the area.
- 1.1.3 The Masterplan sets out the context, goals, objectives and structure for future development of the Northwest Quadrant, the controls to ensure that development occurs as envisaged in the Masterplan and implementation measures to deliver the objectives on the ground.
- 1.1.4 The Masterplan constitutes the logical realisation of the objectives and policies contained within the Naas Town Development Plan for this area. It translates the vision contained within the Development Plan into clear spatial proposals for the subject lands.
- 1.1.5 The primary aim of this Masterplan is to guide and inform the physical aspects of future development to bring about a high quality environment and sustainable forms of development that adopts the latest thinking behind sustainability and urban design.

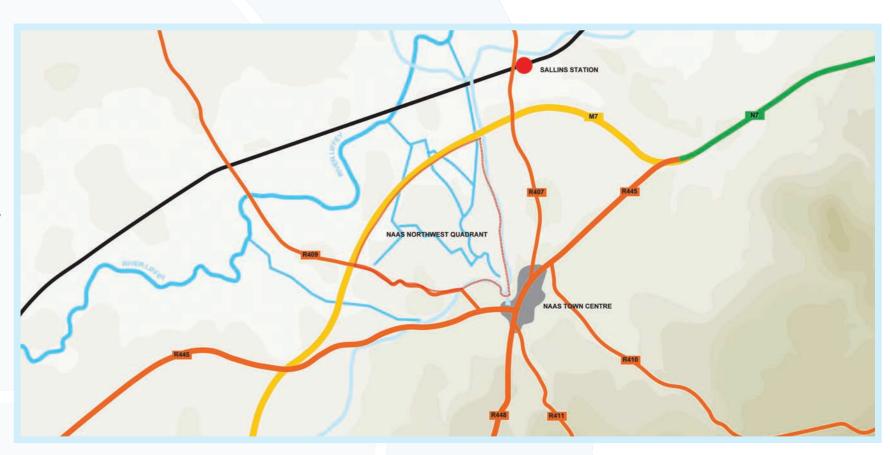


1.2 A Vision for the Northwest Quadrant

- 1.2.1 At the outset, a vision and a set of clear principles were established to guide the preparation of the Masterplan. The vision and principle objectives are carried through the document structure and are manifested in the physical implementation proposals contained in the Urban Design section.
- 1.2.2 The vision that lies at the heart of the Masterplan framework is;

To create a sustainable urban extension in the northwest quadrant of Naas that is well connected to the town centre and the adjoining neighbourhoods. The new quarter will be a destination and place of quality and distinction where people will be proud to call home, want to work and play in, have quality services and facilities that are accessible to all, where everyone can move freely and feel safe and secure.





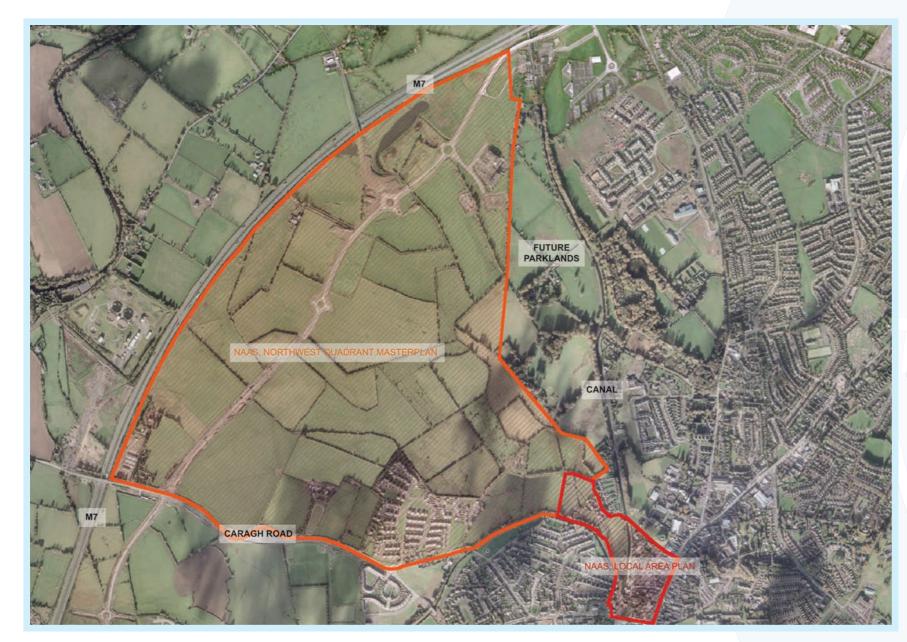


FIGURE 1.1: NAAS, NORTHWEST QUADRANT REGIONAL CONTEXT

1.3 Guiding Principle of the Masterplan

- 1.3.1 The Masterplan aims to create a new community for the Northwest Quadrant that is based on the principles of sustainability as they are embellished in national and regional policy guidance. A sustainable form of development will be achieved for the development of the Masterplan by a strong emphasis on the following three key aspects:
 - 1) The Integration of Land Use and Transport through
 - the location of homes and workplaces in close proximity to one another to reduce commuting,
 - a strong emphasis on Public Transport; and
 - the facilitation of Walking and Cycling.
 - 2) The Provision of an Integrated Community by
 - providing all important community facilities locally (education, recreation, retail, community, etc),
 - achieving a mix of uses; and
 - providing for a mix of dwelling types.
 - 3) The Promotion of Sustainable Building Standards through
 - energy-efficiency in buildings,
 - promotion of alternative sources of energy; and
 - passive and active solar design.

1.4 Key Principles of Urban Design

- **1.4.1** A set of key principles has been established which guide the urban design aspects of the Masterplan framework. These are based on best practice national and international standards.
- **1.4.2** The key principles of Urban Design that are manifested in the development of the Masterplan framework are as follows:

Character

To develop the Northwest Quadrant into a place with its own identity and character by responding to and reinforcing locally distinctive patterns of development and landscape.

Continuity and Enclosure

To develop the Northwest Quadrant into a place where public and private spaces are clearly distinguished and where the continuity of street frontages and the enclosure of space by the built form is achieved.

· Quality of the Public Realm

To promote public spaces and routes throughout the Northwest Quadrant that are attractive, safe, uncluttered and work effectively for all in society, including older people and people with mobility impairments.

· Ease of Movement

To develop the Northwest Quadrant into a place that is easy to get to and move through. To promote accessibility and local permeability by connecting the Northwest Quadrant with Naas Town Centre, Sallins Rail Station and adjoining areas and by putting people before traffic and integrating land uses and transport.

Legibility

To promote legibility in the Northwest Quadrant through development that provides recognisable routes, intersections and landmarks to help people find their way around.

Adaptability

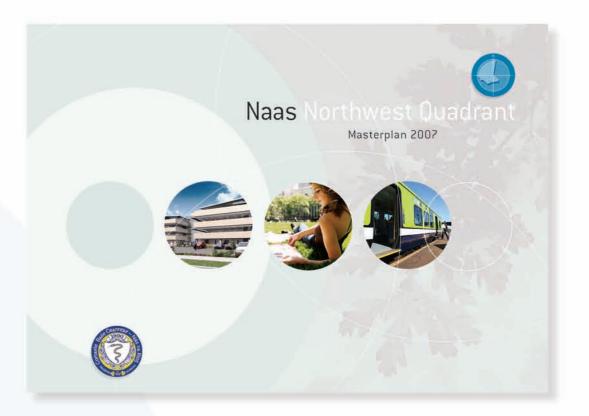
To develop the Northwest Quadrant into a place that can change easily and to promote adaptability through development that can respond to changing social, technological and economic conditions.

Diversity

To promote diversity and choice through a mix of compatible developments and uses that work together to ensure that the Northwest Quadrant will be a place that responds to local needs.

Document Structure

- **1.5.1** The structure of this Masterplan has been developed in a number of steps which can be summarised as follows:
 - The establishment of a vision and key principles.
 - · A detailed analysis of the planning policy context.
 - A detailed survey and analysis of the site context.
 - The translation of the key objectives and policy context into proposals for the type and quantum of development to be accommodated on the lands over the period of the Masterplan.
 - The establishment of an Urban Design framework that sets out the detailed layout, structure and other aspects of development form, taking into account the characteristics of the site context such as topography and existing vegetation.



1.5.2 This approach is reflected in the structure of the document. Section 2 sets out a profile of Naas in terms of the historical growth of the town and recent patterns of development. Section 3 provides a close analysis of the site context in terms of land ownership, current infrastructure provision and the character of the landscape. Section 4 sets out the national, regional and local planning policy context and Section 5 provides for an interpretation of the policy context in terms of setting out the overall proposed development. The detailed urban design framework and phasing arrangements for the implementation of the overall development are outlined in Section 6.

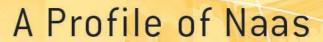
1.6 Consultation

1.6.1 A significant number of consultation meetings with key stakeholders were undertaken as part of the Masterplan exercise. Consultation meetings, including presentations and open days, took place between the project team and representatives from Naas Town Council and landowners in the area and/or their representatives.



Section 2.0

- 2.1 Introduction
- 2.2 Historic Growth
- 2.3 Recent Development Pattern
- 2.4 Existing Transport Infrastructure







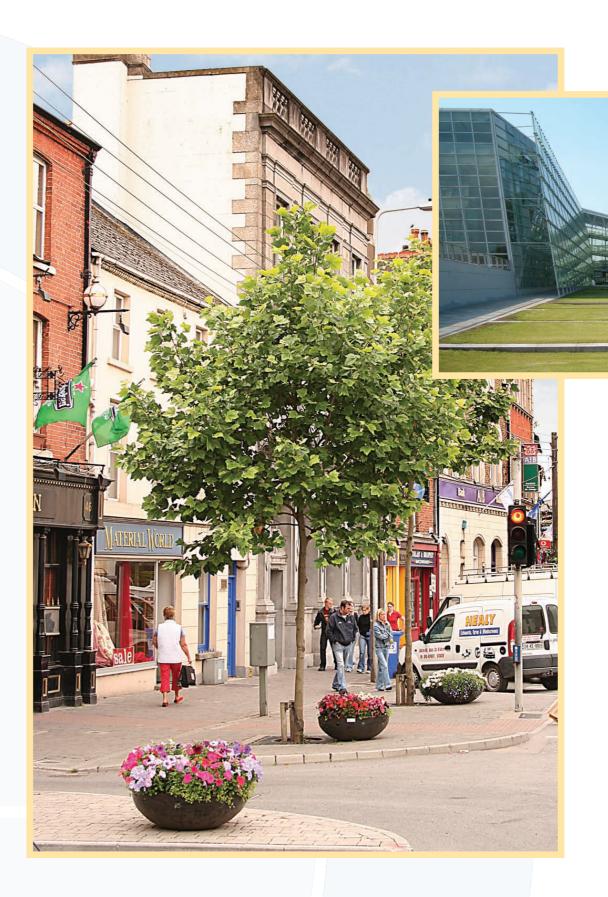
2.1 Introduction

- **2.1.1** Naas is the county town and administrative capital of County Kildare. The town also functions as a business and service centre. Naas is located approximately 17 miles to the south-west of Dublin and is well connected to the capital and other main centres by virtue of its location on the main Cork/Limerick and Waterford/Kilkenny Roads. The Dublin to Cork/Newbridge Road (N7/M7) and the Dublin to Waterford/Kilkenny Road (N9/M9), which have been constructed over the last fifteen years, by-pass the town. The rail station at Sallins also provides for good connectivity to Dublin and other regional centres by public transport.
- 2.1.2 Naas has historically developed as a market town and the layout of the historic town core is along a linear spine formed by Main Street and punctuated by Poplar Square and Main Square.
- 2.1.3 The population of Naas has grown considerably since the 1970s. Simultaneously, the household size for the town has steadily declined over the years in line with national trends. A full overview of population figures and household size for Naas is given in Table 2.1 below.

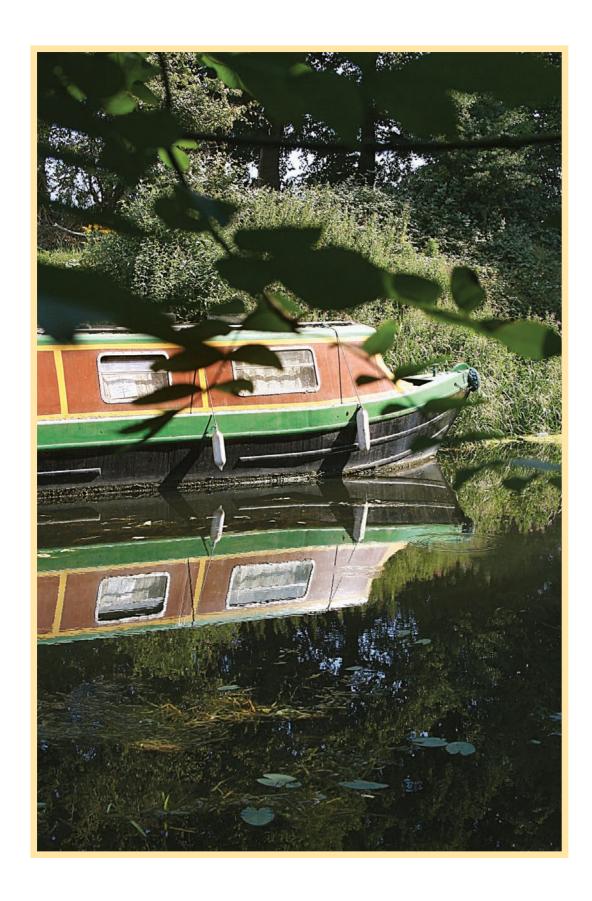
Table 2.1: Population Figures for Naas 1901-2006

Year	Households	Population	Household Size
1901	684	3,836	5.61
1911	710	3,842	5.41
1936	745	3,290	4.41
1946	766	3,774	4.93
1951	825	3,731	4.52
1961	911	3,752	4.11
1966	934	4,529	4.84
1971*	1,288	5,078	3.94
1979*	2,074	7,739	3.73
1981*	2,280	8,345	3.66
1986	2,611	10,017	3.84
1991	3,125	11,141	3.56
1996	4,391	14,074	3.21
2002	5,906	18,288	3.09
2006**	-	20,003	-

^{*}Number of Households based on Average National Household Size for these years Source: Census of Population Data (as contained in Naas Town Development Plan, 2005-2011)



^{**}Figure from the Preliminary Census 2006.

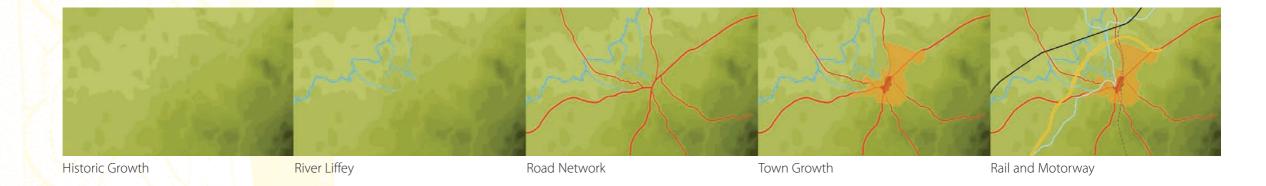




2.2 Historic Growth

- 2.2.1 The historic development of Naas from pre-medieval monastic settlement to its current format of a historic central core surrounded by significant areas, has been described in a number of studies - and is paralleled in the historic development of many Irish market and county towns.
- 2.2.2 Aspects of Naas' development and its unique urban structure have, however, particular significance to the consideration of the town and the extension of its urban core through the Northwest Quadrant Masterplan. These are:
 - The development of the town from the original settlement around the higher lands of St. David's Castle and the North Moat, which still form a focal point to the town.
 - The subsequent enlargement of the town as an enclosed settlement with an enclosure running west of the Main Street adjacent to the canal area, with significant archaeological remains to the west of Main Street including the various Dominican Friaries, and West Gate, which form a sensitive archaeological area.
 - The development of Abbey Street parallel to and to the west of Main Street, forming a compact and largely impenetrable urban structure on this side of the town.

- The historic development of mills on the Friary River and Millrace and the subsequent development of the area west of Sallins Road. Coupled with the development of ecclesiastical and institutional uses and land holdings to the west side of Main Street on the Sallins Road, this extended the impermeable structure west of Main Street further north.
- The establishment of the Old Town demense by Sir Thomas Burgh and the historic development of Old Town House, Knocks and Keredern as an 18th century estate landscape.
- The development of the 2 mile long Naas Branch of the Grand Canal from Sallins to the Canal Harbour and the development of the Harbour Area circa [date]. The specific engineering requirement to rise to 300 ft. above sea level [the highest part of the Grand Canal system] resulting in the 5 Locks from Sallins to Naas and the particular amenity of the resultant locks, bridges and canal associated architecture.
- The further extension of the canal in the Corbally Branch extending the canal environment to the west. The necessity to build an embankment from the Canal Harbour to Ploopluck, resulting in the particular landscape and fen like quality of the Abbey Lands area, the ground level being below the canal itself.



- The particular north/south orientation of the town, relating to the through routes, with no radiating routes to the west from the Caragh Road northwards to the Sallins Road, defining a full quadrant of the town that has remained impenetrable and undeveloped.
- The intact urban quality of the town centre and the fact that, notwithstanding the volume of traffic passing through the town in advance of the M7 bypass, no major interventions were made in its urban fabric to facilitate vehicular transport.
- The construction of the M7 defining an arc boundary to the Northwest Quadrant, differentiating the Northwest Quadrant from its hinterland to the north and west.
- 2.2.3 The historical qualities of the town and its resultant urban form, archaeological sensitivity and landscaped quality require to be carefully considered in the development of the Northwest Quadrant and in the Masterplan area's linkage with the historic centre of Naas Town.



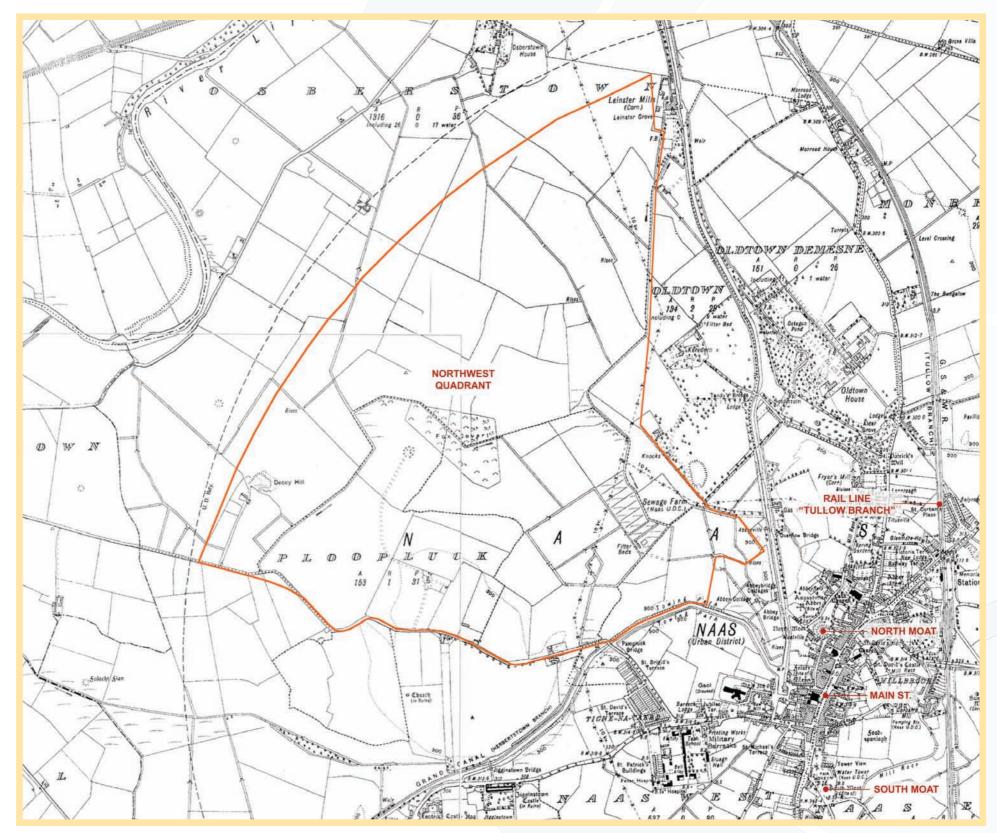


FIGURE 2.1: 1939 MAP OF NAAS

Recent Development Pattern

2.3.1 The town of Naas has grown considerably in size in recent decades. Much of the residential expansion of the town has taken place in a north-easterly direction towards the Monread Road. New business and commercial areas have grown around the new motorway interchanges. Development activity has also been strong in the small towns adjacent to Naas. The following gives a brief overview of the summarised planning history for Naas and immediate environs.

RESIDENTIAL DEVELOPMENT ACTIVITY

- 2.3.2 The 2006 preliminary Census of population revealed that the population of Naas had grown to 20,003 persons. Residential development activity has been strong throughout the 1990s. This is reflected in previous Census figures for Naas (see Section 2.1 above). The population of the town increased by 2,933 persons between 1991 and 1996 and by 4,214 persons between 1996 and 2002.
- 2.3.3 From an evaluation of the most up-to-date data on new residential units that were granted planning permission from 2003 to 2005, it appears that development activity in Naas has been somewhat slower than previous years. Information supplied by Naas Town Council reveals that a total of 414 residential units were granted planning permission in the period 2003-2005. This is also reflected in the preliminary Census figures for 2006.





EMPLOYMENT AREAS

2.3.4 Currently, commercial and industrial activity in Naas is primarily centred around the Maudlins/Naas Industrial Estate and IDA Park to the northeast of the town and the M7 and Tougher Business Parks (and other lands around the Newhall Interchange) to the southwest of the town. Both areas are on lands within and outside the Naas Town Council boundary and located in proximity to the respective Motorway Interchanges. Millennium Park in the northwest of the town is a newly emerging business park.

North-East Area (Maudlins Interchange)

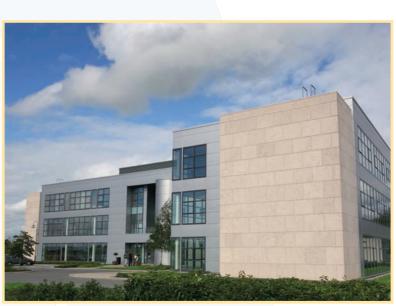
- 2.3.5 A number of recent applications relate to the extension or construction of new industrial units in the Naas Industrial Estate. These further consolidate the role of this area as a main employment generator for the town. A number of application for large scale office developments were also granted in 1999 and 2000 and an application for a three storey office building was granted in 2002.
- 2.3.6 Permissions for a retail warehousing park comprising 9 retail warehousing units and a concurrent application for a new roundabout and vehicular access from Monread Road were granted by the Planning Authority in 2003 and 2004 respectively. Also off the Monread Road, an application for a 2.58-hectare site for industrial development was granted in 2000.

RETAIL PROVISION

- **2.3.9** The Draft County Kildare Retail Strategy published in January 2005 noted that Naas underperformed against other centres at the same level in the GDA retail hierarchy. However, since the publication of the Draft Strategy, the retail provision in Naas has increased by a substantial level and is set to increase even further with a substantial amount of retail developments anticipated to come on stream in the near future. The current gross retail floorspace for convenience and comparison shopping in Naas is approximately 53,000 sqm. A further estimated 46,000 sqm of gross floorspace is currently going through the planning system and could thereby potentially almost double the existing retail floorspace in Naas.
- 2.3.10 This would indicate that the recommendations of the Retail Strategy are being addressed and the perceived retail deficit of the town is being reversed. In particular, the recommendations from the Retail Strategy for additional town centre retail off Corban's Lane and the provision of retail parks are now being addressed through the provision of the Globe and Newhall retail parks and Corban's Lane Shopping Centre. Further to this, a town centre development for Sallins was recently granted permission by the Planning Authority.
- 2.3.11 The increased provision of retail offer in Naas means that the substantial increase in population of the town over the last number of years is increasingly being matched by appropriate retail provision.

South-West Area (Newhall Interchange)

2.3.7 There are a number of areas zoned for Industry/ Warehousing around the Newhall Interchange and along the Newbridge Road (R445). There has been some new retail activity in this area as well as a new distribution centre for a major food retailer. Further to this, the Tougher Business Park is located along the R445 route at the townland of Ladytown. The business park consists mainly of light industrial and warehousing units with a restaurant and petrol station fronting onto the road.



DEVELOPMENT ACTIVITY CLOSE TO NAAS

- 2.3.12 There has also been some considerable development activity in the surrounding villages of Sallins, Johnstown/ Palmerstown and Kill. This mostly relates to new residential developments.
- 2.3.13 Retail provision in Newbridge has increased substantially with the opening of the new Whitewater Shopping Centre in the town centre adding some 28,000sqm of retail floorspace.

Millennium Park

2.3.8 Two areas of the Millennium Park lands have recently been developed. Lands located to the east of the canal, provide for 6 office blocks and a crèche. The other area is located within the Masterplan lands, where extensive development is proposed. Two office blocks have been constructed to date.

Existing Transport Infrastructure

ROAD NETWORK

- 2.4.1 Naas has grown within the apex of the M7 and M9 Motorways. These major transport corridors connect Dublin with other major cities within the country; Waterford, Cork and Limerick. The M7 diverts the majority of through traffic away from Naas Town Centre. While this major corridor bypasses Naas, the town centre still experiences a high level of congestion. This is due to its radial road structure and its large volume of town centre generated traffic. The main radial routes which allow the Northwest Quadrant to be connected to Naas Town Centre and onwards include;
 - the R445 Dublin Road to Dublin and the east of the country;
 - the R407 Sallins Road to the north of the county and Sallins train station;
 - the R445 Newbridge Road to the west of the country and the R409 Caragh Road to the west of the county;
 - the Rathasker Road and the Kilcullen Road to the south of the county and;
 - the Blessington Road to the south east of the county.
- 2.4.2 Analysis of survey data from the Naas Integrated Framework Plan for Land Use and Transportation show the following vehicle traffic pattern for the AM peak period:
 - 36% of traffic had both origin and destination within the town,
 - 24% of traffic originating in the town had destinations outside the town,
 - 30% of traffic had destinations within the town that originated outside the town, and only
 - 10% of traffic travelling through Naas had both origin and destination outside the town.
- 2.4.3 The key travel desire lines through the Northwest Quadrant of Naas are from the Caragh direction connecting to the Newbridge desire line to Naas Town Centre, and from Naas Town Centre to Sallins train station.
- **2.4.4** The sections of the R407 and the R409 that border the Northwest Ouadrant are described in more detail below.



FIGURE 2.2: EXISTING ROAD NETWORK

- 2.4.5 The R407 Sallins Road is outside the Northwest Quadrant boundary; however it enables direct connection to Sallins Train Station and to a number of trip generating facilities. The R407 is a good quality wide single carriageway road. Sallins Train Station which is on the R407 is heavily used by commuters to Dublin City. The road is also flanked by a large number of residential developments, commercial developments and the recently re-located Naas GAA club. The Millennium Park Industrial Park is located off the roundabout on the Sallins Road immediately before the motorway overpass. The R407 road experiences a high volume of traffic during peak hours largely due to commuters accessing the train station in Sallins. Bus stops are located along the Sallins Road for local and regional services including larnród Éireann's free shuttle bus from Naas Town Centre to the train station. However this service is under utilised and most bus services are not co-ordinated with the train timetables.
- 2.4.6 The R409 Caragh Road is the only radial route which passes through the Northwest Quadrant to the town centre in Naas. This route progresses through a built up residential area where traffic calming measures are in place to restrict vehicle speeds. The Rapid Bus link provides a service along this road.

PUBLIC TRANSPORT – EXISTING CONDITIONS

2.4.7 There is little interaction between the different modes of transport. larnród Éireann operates a free bus service connecting Naas Town Centre with Sallins Rail Station. However this service is not widely used or publicised within the community. In addition, the service does not operate during the evening period.

BUS

2.4.8 Naas Town Centre has no designated bus interchange (or public transport interchange) although all services pass through Main Street and stop adjacent to the Town Hall. Interaction of services can occur, though bus timetables have not been co-ordinated to do so.

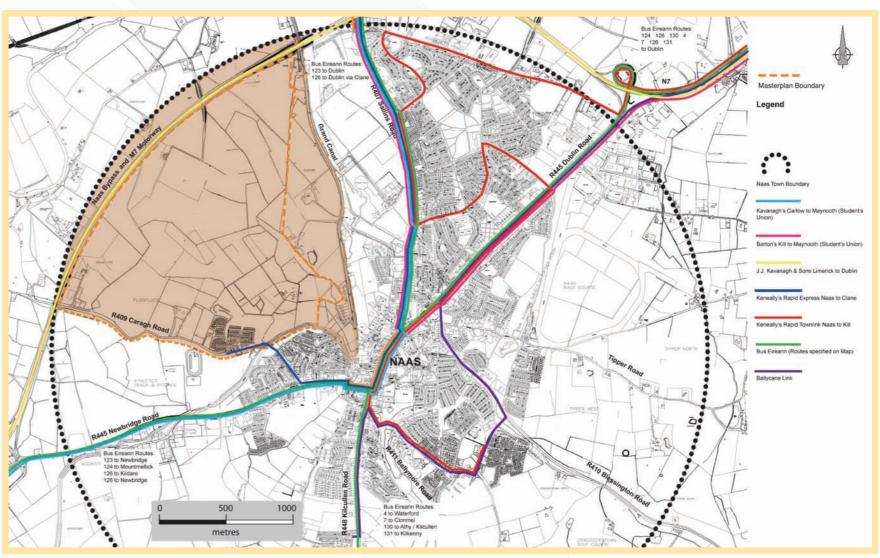
Table 2.2 Bus Routes Servicing Naas

Route	No. of services per day
Dublin – Waterford	6
Dublin - Clonmel	5
Naas – Dublin	1
Dublin – Mount Mellick	1
Johnstown — Dublin	44
Dublin – Kilcullen	10
	Dublin – Waterford Dublin – Clonmel Naas – Dublin Dublin – Mount Mellick Johnstown – Dublin

- **2.4.9** Seven private bus operators serve Naas. The majority of these operators conduct private chartered journeys only. Tom Clancy Coaches operate two school runs which serve St. Corbans CBS and the Convent of Mercy Primary School in Naas. J.J. Kavanagh & Sons operate three routes that serve Naas: Clane – Naas, which runs 10 times a day; Waterford - Dublin, which runs 9 times a day; and Kilkenny – Dublin, which runs 3 times a day. Keneallys Rapid Express operates half hourly services from Naas to Clane and also a service to Kill (Rapid Town Link) which travels through Monread. Few rural towns in the County have local bus services.
- 2.4.10 Offaly and Kildare Community Transport Group operates a bus service that delivers patients in the Naas area to the "Care of the Aged" community group Monday to Friday.

2.4.11 The 123, 124 and the 126 Bus Éireann bus routes which currently service Naas Town Centre travel on the perimeter fringes of the Northwest Quadrant as does Bartons' Kill to Maynooth service. Keneally's Rapid Express to Clane has a pick-up location near the Ploopluck Bridge on the R409 Caragh Road and is presently the only service within the Northwest Quadrant.

FIGURE 2.3: EXISTING BUS ROUTE NETWORK



RAIL

- 2.4.12 Naas is adequately serviced by rail transportation. Although there is no train station located within the town, Sallins Train Station is within close proximity. Sallins is approximately 4km from Naas Town Centre and is served by the Arrow rail service which connects commuters to Heuston Station in Dublin. It is also serviced by intercity and suburban trains. The ARROW rail service is heavily used by commuters to and from Dublin in the AM and PM peak hours. However in off peak hours trains travelling in the opposite direction to the AM and PM peak flow do not carry significant numbers of passengers. Commuter rail travel time to Dublin from Sallins takes on average 30 minutes.
- 2.4.13 The following Arrow route serves Sallins Train Station approximately 15 times a day with a matching number of return journeys:
 - Sallins Dublin via Hazelhatch and Celbridge, Clondalkin, Cherry Orchard
- 2.4.14 There are 5 (InterCity and Suburban) trains daily from Sallins to Portarlington
 - Sallins Portlaoise via Newbridge, Kildare, Monasterevan, Portarlington
- 2.4.15 A mini-bus service is provided between Sallins Train Station and Naas Town Centre to connect passengers with incoming trains. However, this does not run during the evening and is deemed to be underutilised. The Rapid Town Link bus service also passes the station, but the bus and rail timetables are not co-ordinated and the bus does not enter the station. This is not an attractive alternative to using a car. There is a car park either side of the railway that is well used by commuters. The car park is usually at capacity during weekdays. The design of the car park's northern approach access is inadequate and results in blockages due to south bound vehicles having difficulty in turning without conflicting with northbound traffic.

PEDESTRIAN

- 2.4.16 Although there are few specific facilities for pedestrians, much of the built-up area of Naas and the new housing estates in particular, allow pedestrians easy and direct routes for their journeys. There are some key points where connectivity is limited by the absence of pedestrian crossing facilities, particularly where pedestrian desire lines cross major roads.
- 2.4.17 A circular amenity walk has been marked out following Sallins Road, continuing over the motorway and returning alongside the Grand Canal. This has been introduced as a family healthy living initiative.
- 2.4.18 The Northwest Quadrant presently has limited pedestrian crossing facilities or footpaths, excluding the Caragh Road connection to the Newbridge Road.

CYCLE

2.4.19 There are no dedicated cycleways or cycle crossing facilities in Naas. This results in cycling not forming a significant proportion of the modes of transport within the town either during the peak hour or throughout the day. Sallins Train Station is within a 20-minute cycling catchment for a significant proportion of the existing and future population of the Northwest Quadrant of Naas. There are roofed cycle storage shelters at the Sallins station with space for up to 20 bicycles. However this is under utilised with approximately 5 cyclists availing of this facility on a typical weekday.

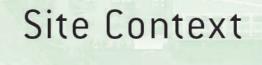






Section 3.0

- 3.1 Introduction
- 3.2 Land Ownership
- 3.3 Existing Infrastructure Provision
- 3.4 Heritage and Amenity







3.1 Introduction

- **3.1.1** The Northwest Quadrant has been identified by the Naas Town Development Plan as the most appropriate location for the future expansion of the residential area of the town. The Masterplan boundary incorporates the entire Northwest Quadrant bounded by the M7 to the north-west, the future parklands adjoining the canal to the east and the Caragh Road to the south. The boundary of the Masterplan area is clearly indicated on Figure 3.1.
- 3.1.2 A close analysis of the Northwest Quadrant area was carried out as part of the Masterplan exercise. This included a survey of the site characteristics in terms of contours, vegetation and watercourses and the existing built form and physical infrastructure in the area as well as current land ownership.

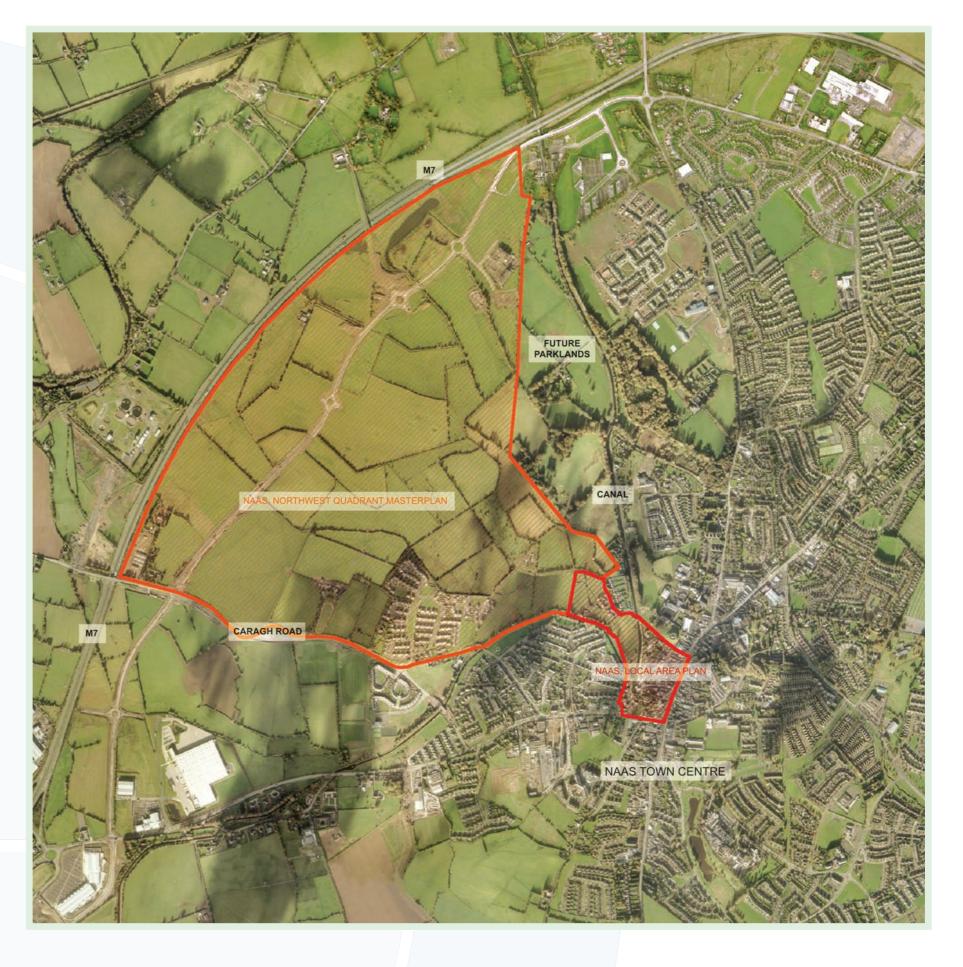
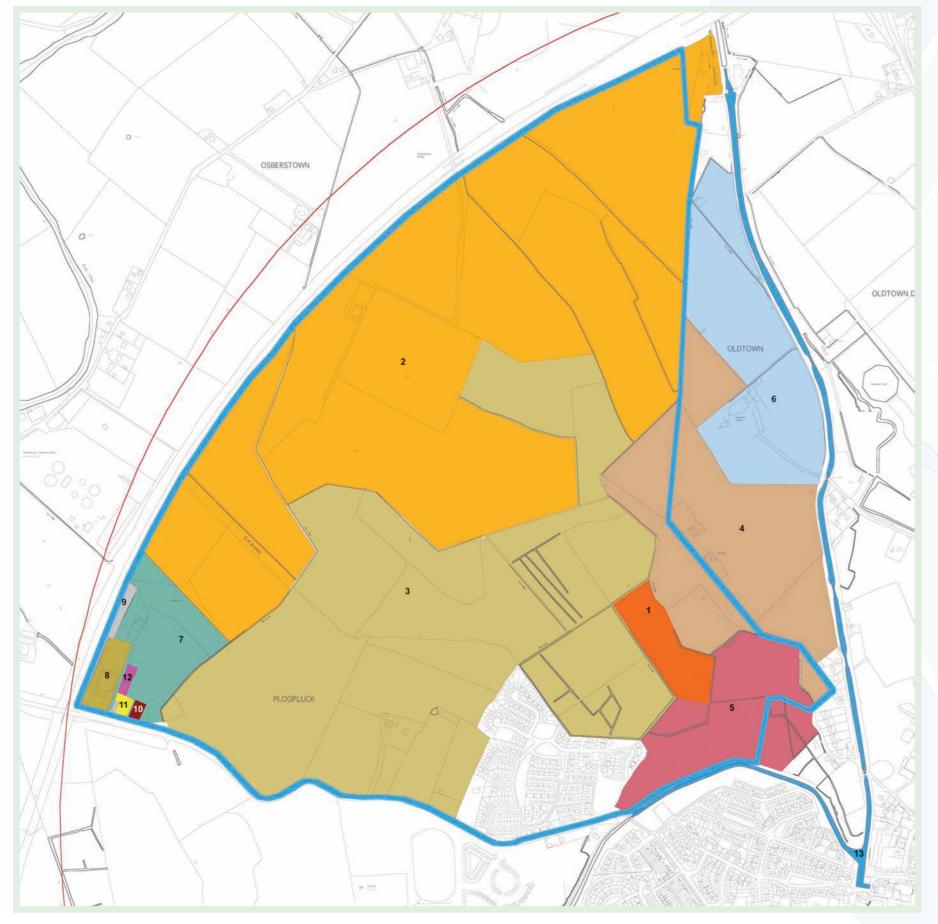


FIGURE 3.1: NORTHWEST QUADRANT SITE OUTLINE



3.2 Land Ownership

- **3.2.1** The various landowners of the Northwest Quadrant are indicated on Figure 3.2. At the date of drafting the Masterplan there were 13 landowners in the area as follows:
 - 1 Naas Urban District Council
 - 2 Osberstown Developments Limited
 - 3 Private Ownership
 - 4 Private Ownership
 - 5 Private Ownership
 - 6 Private Ownership
 - 7 Private Ownership
 - 8 Naas Livestock Mart Limited
 - 9 Private Ownership
 - 10 Private Ownership
 - 11 Private Ownership
 - 12 Private Ownership
 - 13 Waterways Ireland

FIGURE 3.2: OWNERSHIPS MAP

Existing Infrastructure Provision

ROAD NETWORK

3.3.1 A new distributor road was opened in late 2006 in the Northwest Quadrant including a bridge across the canal parallel to the M7 Motorway. The distributor road forms an integral part of the public road network and provides a link to the Newbridge Road while incorporating the Monread Road as part of this corridor. (See Appendix C.1 Road Infrastructure)

STORM DRAINAGE

- 3.3.2 To date, the Northwest Quadrant is primarily used for agricultural purposes. However, with the target of significant job creation in mind, it is intended to develop extensive industrial, commercial, retail and residential space within this area.
- 3.3.3 In the segment of Millennium Park developed to date, an attenuation lake has been provided to cater for storm water runoff (See Appendix C.3 Watercourses). This helps integrate the development into the surrounding landscape through the use of a sustainable drainage design. It is envisaged that Sustainable Urban Drainage Systems will continue to form an integral part of the quadrant drainage and landscaping strategy with particular attention paid to the requirements of the recently published Greater Dublin Strategic Drainage Study.

FOUL DRAINAGE

- **3.3.4** The foul drainage constructed to date in Millennium Park was developed with significant future development in mind. In the course of developing the Masterplan a study of this infrastructure was undertaken with a view to examining its potential future suitability to serve the adjacent area of the Quadrant.
- **3.3.5** It is evident from the study that the existing foul sewerage infrastructure has sufficient hydraulic capacity for the zoning of the lands as specified in the Naas Town Development Plan, including the "White Lands".

WATER

3.3.6 As part of the development of the distributor road in Millennium Park and the Naas Western Link Road, a 300mm trunk water supply has been provided in tandem with the road construction to cater for the current & future demand. A 200mm local main has been installed alongside the 300mm trunk main for purposes of supplying the needs of Millennium Park. Future water demand for industrial, commercial, retail and residential usages in the Northwest Quadrant will be adequately served.

TELECOMMUNICATIONS

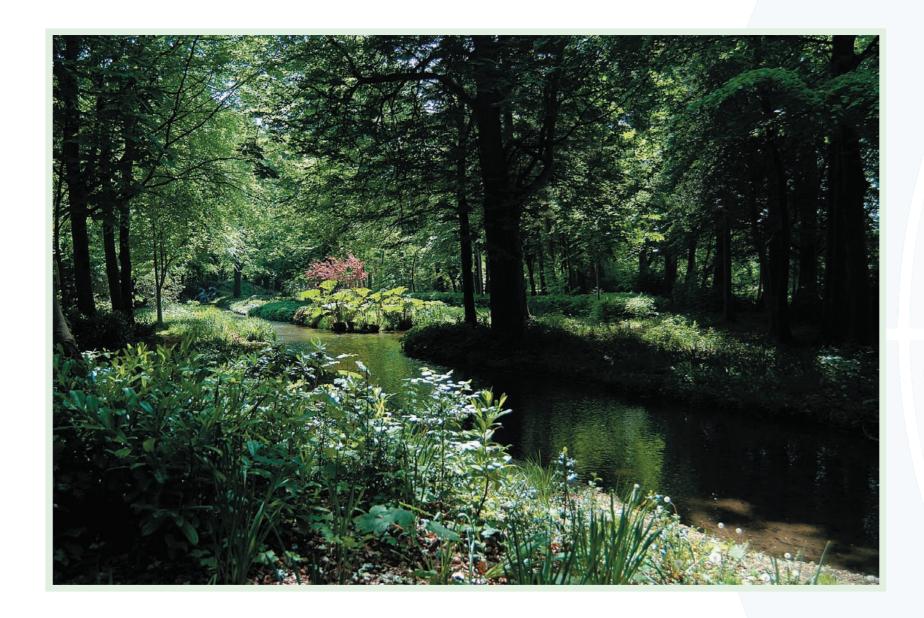
3.3.7 With the development of Millennium Park, 14-way telecommunications ducting was provided on each side of the distributor road to cater for significant future demand on the telecom network. This telecom network caters for both Eircom and Esat along with specific ducting for Millennium Park internal communications & CCTV with a further 6 ducts for future network providers. Considering the extent of the telecom network, it is clear that this network is capable of providing a resilient, diverse, secure, multi-user telecommunications infrastructure to the Northwest Quadrant.

POWER SUPPLY

3.3.8 At present, a 110kV overhead ESB supply runs directly through the Northwest Ouadrant. Furthermore, the construction of the distributor road within Millennium Park and the Naas Western Link Road facilitated the development of a power supply network on either side of the road. Considering the proximity of the sub-station adjacent to the Monread Road and the extent of ESB network already in the area, adequate resources are available to serve the area.

GAS

3.3.9 At present, a 200mm gas supply is provided through Millennium Park. This has the capacity to serve extensive development throughout Millennium Park and the remainder of the Northwest Quadrant. As part of the Naas Western Link Road contract, a duct/sleeve has been provided to cater for future gas supply from the Newbridge Road. Therefore, adequate provision has been made to allow for an adequate and resilient supply of gas into the Quadrant.



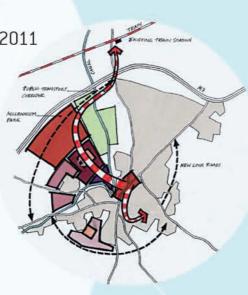
3.4 Heritage and Amenity

- 3.4.1 The area of the Northwest Quadrant, due to its location being severed by the Royal Canal from the town centre of Naas, has remained largely undeveloped. As a result, the landscape is largely intact and there are a number of features that are listed as worthy of protection in the Naas Town Development Plan. These include a number of Protected Structures and the Grand Canal system which is a proposed Natural Heritage Area and proposed Architectural Conservation Area.
- 3.4.2 A full list of all features protected under the Naas Town Development Plan is provided in Section 4.
- 3.4.3 The Masterplan framework has taken full account of the intrinsic landscape characteristics and heritage features of the Northwest Quadrant.



Section 4.0

- 4.1 National Spatial Strategy, 2002 2020
- 4.2 Dublin Transportation Office: A Platform for Change
- 4.3 Regional Planning Guidelines Greater Dublin Area
- 4.4 Kildare County Council Development Plan 2005 2011
- 4.5 Naas Integrated Framework Plan (IFPLUT)
- 4.6 Naas Town Development Plan 2005 2011



Policy Context



4.1 National Spatial Strategy, 2002-2020

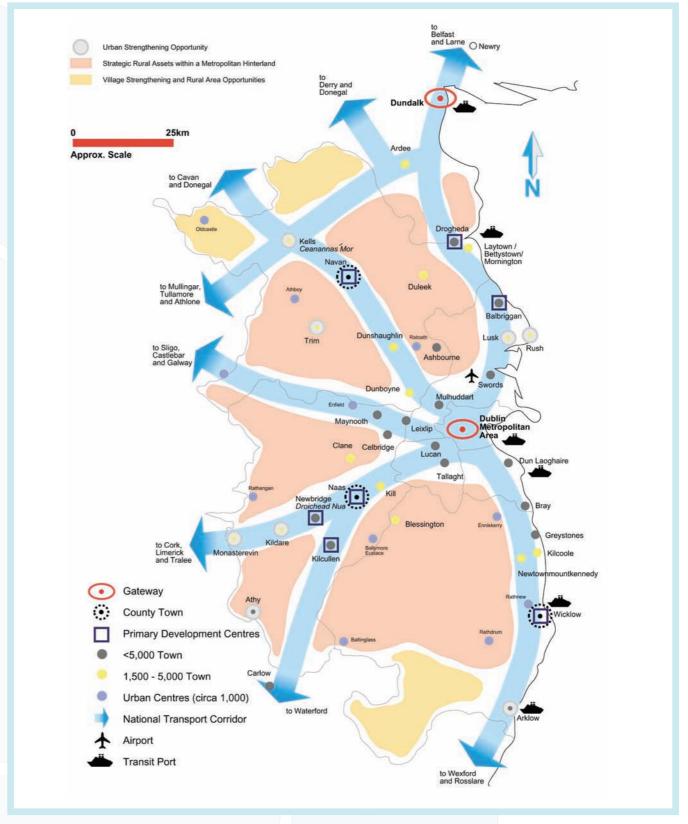
- 4.1.1 The National Spatial Strategy (NSS), published in 2002, sets out a twenty year planning framework which is designed to achieve a better balance of social, economic and physical development and population growth between regions.
- **4.1.2** A key goal of the NSS is the consolidation of Dublin. The NSS states that actions for the Dublin Hinterland area include to "concentrate" development in strong towns with capacity for growth on wellserved public transport corridors, such as Navan, Naas, Newbridge, Kilcullen, Arklow, Drogheda and Balbriggan."
- 4.1.3 Section 4.3 of the NSS sets out detailed policies for the Dublin and Mid-East Region. These can be summarised as follows:
 - Enhancing the competitiveness of the Greater Dublin Area
 - Physical consolidation of the Metropolitan Area
 - Concentration of development in the hinterland in strategically placed, strong and dynamic urban centres
- 4.1.4 With regard to the 'Primary Development Centres' of Navan, Balbriggan, Naas/Newbridge/Kilcullen and Wicklow the NSS further notes that

"the Primary Development Centres need to aim at a population level that supports self sustaining growth, but which does not undermine the promotion of critical mass in other regions. This suggests an ultimate population horizon of up to 40,000 people for the primary development centres."

4.1.5 The joint designation of Naas, Newbridge and Kilcullen as a Primary Development Centre has been further interpreted under the Regional Planning Guidelines for the Greater Dublin Area (for full detail see below).

In summary, the key issues for Naas contained in the NSS are as follows:

- Designation of Naas as a 'joint' Primary Development Centre (with Newbridge and Kilcullen);
- Promotion of self-sustaining growth and a move away from the dependence on Dublin (particularly for employment);
- A population horizon of 40,000 for the Primary Development Centre.

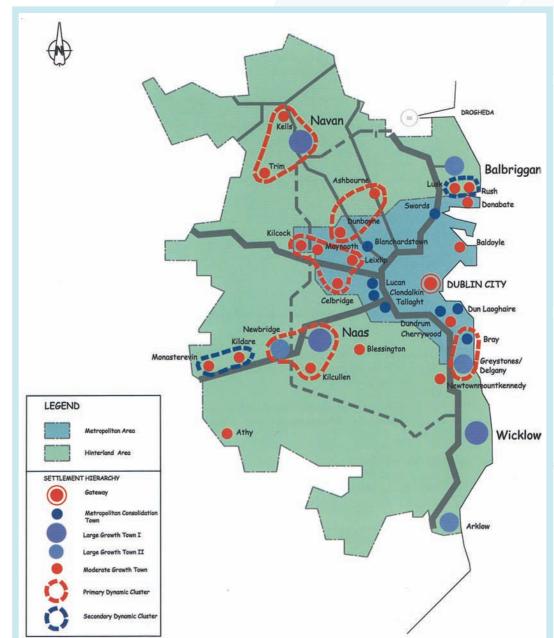


NATIONAL SPATIAL STRATEGY, 2002 - 2020



Dublin Transportation Office: A Platform For Change

- **4.2.1** The DTO Strategy provides the transport planning framework for the Greater Dublin Area to the year 2016. The Strategy has two independent variables which are to be implemented in a coherent and integrated way:
 - Infrastructure and Service Improvements: to increase the supply of transport, including a substantial expansion of the public transport network, some strategic road construction and traffic management.
 - Demand Management: to reduce the growth in travel through the application of land use and other policies while maintaining economic progress. This is designed to encourage a transfer of trips, especially at peak periods, from the private car to sustainable modes of transport (such as public transport, cycling and walking).
- **4.2.2** The DTO Strategy seeks to transform the transportation system in the Greater Dublin Area. It envisages, an extensive, high-quality, fully accessible, integrated network for DART, suburban rail, LUAS, METRO, bus, roads, cycling and walking. The DTO strategy makes specific recommendations with reference to the Kildare rail line:
 - Upgraded signalling on the Dundalk, Maynooth and Kildare lines to allow a substantial increase in the number of peak hour trains;
 - Lengthening of platforms to allow the operation of 8-car DART and Arrow trains:
 - The removal of restrictions on the use of level crossings on the DART and suburban rail lines;
 - The segregation of intercity services from suburban services on the Dundalk and Kildare lines. This requires three- or four-tracking from Connolly Station to north of Howth Junction and fourtracking from Cherry Orchard to Sallins.
- **4.2.3** Some more specific elements of the programme include the Kildare suburban line upgrade project, the electrification of the Sallins rail lines for suburban services, the construction of extra tracks west of Hazelhatch to Sallins and an Interconnector Tunnel from Heuston via Pearse to the Dublin Docklands area.
- **4.2.4** Irish Rail are currently progressing the Kildare Route Project which will result in the capacity of the Kildare railway line being significantly upgraded and increased between Heuston Station and Sallins Co. Kildare.



REGIONAL PLANNING GUIDELINES FOR THE GREATER DUBLIN AREA, 2004 - 2016

Regional Planning Guidelines for the Greater Dublin Area

GENERAL

4.3.1 The Regional Planning Guidelines for the Greater Dublin Area, 2004-2016 (RPGs) supersede the previously prepared Strategic Planning Guidelines for the Greater Dublin Area and incorporate the rationale and analysis of these and of the NSS.

- **4.3.2** The RPGs divide the overall Greater Dublin Area (GDA)¹ into a Metropolitan Area and a Hinterland Area. The strategy for the Hinterland Area is to channel development into a number of self-sufficient growth towns, separated by areas of Green Belt with only limited commuting to Dublin in the long term.
- **4.3.3** In setting out the principal elements of the strategy, the Guidelines also refer to Navan, Naas and Wicklow as towns that should be on both orbital and radial transport routes. In relation to Naas, the Guidelines note that "this could be developed as an integrated entity with Kilcullen and Newbridge". It is a further objective of the Guidelines to implement the Dublin Outer Orbital Route (DOOR) as proposed by the DTO's Platform for Change which would connect the satellite towns together, following the alignment Drogheda-Navan-Trim-Maynooth-Naas.
- **4.3.4** The overall emphasis of the strategy is to boost the residential output of the Metropolitan Area while at the same time moderating that of the Hinterland Area. Additionally, the strategy aims at enhancing the employment potential of the development centres in the Hinterland Area. This is done with a view to redressing the current imbalance between residential and employment location throughout the area and thus reducing the current unsustainable trend of long distance commuting. The ultimate aim of the Guidelines is to create an integrated polycentric city region.

¹ The Greater Dublin Area (GDA) consists of the following counties: Dublin City, Dun Laoghaire Rathdown, South Dublin, Fingal, Meath, Kildare and Wicklow.

SETTLEMENT TYPOLOGY

- **4.3.5** The settlement typology contained in the RPGs sets out a hierarchy of different settlement types for the Metropolitan and Hinterland areas. Within the Hinterland area, the RPGs further designate some settlements as Primary and Secondary Development Clusters to identify the urban dynamism and relationship between these towns. Naas, Newbridge and Kilcullen have been identified as such a Primary Dynamic Cluster. The settlement typology for the towns within the Primary Dynamic Cluster designates Naas as a Large Growth Town I with a population horizon of up to 40,000 persons by 2016, Newbridge as a Large Growth Town II with a population of 15,000 to 25,00 persons and Kilcullen as a Moderate Growth Town with a population of 5,000 to 15,000 persons.
- 4.3.6 According to the RPGs, Large Growth Towns I and II are most likely to be successful in attracting a concentration of major employmentgenerating investment. They should have good accessibility/ connectivity and should be economically self-sustaining, with a population, including its catchment, which is able to support facilities such as a high quality secondary education service, a small hospital or polyclinic-type facility of sufficient size to provide nonspecialised medical care, and a comparison retail centre.

POPULATION AND HOUSEHOLD PROJECTIONS.

- **4.3.7** The population projections set out under the Guidelines predict that the overall population of the Greater Dublin Area will rise to just under 1.7 million. The majority of this population will be accommodated in the Dublin Region with the remainder being distributed throughout the Mid East Region. The population projections for County Kildare predict the population to rise to 181,053 persons by 2010. The Guidelines further translate the overall population projections into future demand for households. For the period 2003 to 2010, the Guidelines set out a housing unit allocation for Kildare of 16,950 units. This includes a considerable 'excess factor', i.e. allowing for units to be built above the number strictly needed under the population projections.
- 4.3.8 With regard to the provision of an adequate zoned landbank, the RPGs further note that "local authorities will need to zone land for housing in excess of that strictly needed to cater for their allocated number of housing units. This "headroom" is required to ensure that an adequate supply of land becomes available for housing and that the market provides a locational choice to both consumers and the house-building sector."

EMPLOYMENT OBJECTIVES

- **4.3.9** A key objective of the Guidelines is to increase employment in the strategic growth centres in the Hinterland Area while at the same time increasing housing output in the Metropolitan Area. This is seen as a necessity to reduce the average distance between home and work throughout the Greater Dublin Area. To this end jobs ratios, i.e. the relation between jobs and resident labour force in an area, are set to increase for the three local authorities in the Hinterland area. The majority of new employment is envisaged for the Primary Growth towns. The jobs ratio for Kildare was 0.67 in 2002 and this is set to increase to 0.69 by 2010.
- 4.3.10 The overall target set out by the Guidelines states that by the year 2020 all local authorities in the Hinterland area should have a jobs ratio not below 0.7. However, this target is only broadly indicative. The Guidelines particularly note in this regard in relation to Kildare that should a significant proportion of the jobs in the area be filled by non-residents, then the ratio would have to be set at a higher level than 0.7 to ensure the increased availability of jobs to local people.

TRANSPORT OBJECTIVES

- 4.3.11 The Guidelines emphasise the need for continued improvement of the accessibility and connectivity of the Greater Dublin Area. In this regard, they are broadly supportive of the policies set out under the DTO's Platform for Change strategy. They set out a number of projects that should be prioritised and implemented in the short term. This includes the quadrupling of the railway track on the Kildare line with the section between Heuston and Adamstown as a first phase.
- **4.3.12** In terms of strategic national roads projects, the Guidelines recommend the widening of the N7 between Rathcoole and Naas and the construction of the Naas Road Kingswood Interchange (under construction). A further objective is the implementation of a Dublin Outer Orbital Route (DOOR) from Drogheda to Navan and Naas

4.4 Kildare County Council Development Plan, 2005-2011

SETTLEMENT STRUCTURE

- **4.4.1** The strategic development vision for County Kildare as set out in the Kildare County Development Plan, 2005 is firmly based within the framework set by the National Spatial Strategy and Regional Planning Guidelines for the Greater Dublin Area.
- **4.4.2** The settlement structure for the towns and villages in the County is based on the designations contained in the Regional Planning Guidelines. In this regard, Naas is designated as a Large Growth Town Type 1 ('satellite town' with population target of 25,000 to 40,000), Newbridge is a Large Growth Town Type 2 (population target 15,000 to 25,000) and Kilcullen is designated a Moderate Growth Town (population target 5,000 to 15,000).

HOUSING PROJECTIONS

4.4.3 The Development Plan sets out housing projections which were derived from the framework set by the Regional Planning Guidelines. The overall number of dwellings to be constructed in the county in the period 2002 to 2011 is 22,564. These construction targets are shared out between different areas of the County. The Primary Dynamic Cluster of Naas-Newbridge-Kilcullen forms part of the Central Growth Area. The construction targets are outlined in Table 4.1 below²:

Table 4.1 Indicative Construction Targets (2002-2011) for the Central Area (extract from Development Plan)

Sub-County Area	Town	Population 2002	Housing Construction target 2002- 2011	Aggregate Housing Construction Target for Cluster
0 1 1 4	NAAO	40.000	0.005	
Central Area	NAAS	18,288	3, 225	
(Including the	NEWBRIDGE	15,749	3,200	
Hinterland Area	KILCULLEN	1,483	875	7,300
Primary Dynamic				
Cluster)				

² The Development Plan notes: The distribution shown (in the table) is indicative only and may change, having regard to the level of development proposed in any particular area and the availability of services required to facilitate this development. The targets are not intended to be a governing constraint since commitments have already been made in terms of land previously zoned. The pace of development will depend on provision of social and physical infrastructure, including public transport.

4.4.4 The growth target for Sallins and Kill are set out in Table 4.2 below:

Table 4.2 Indicative Construction Targets (2002-2011) for Other Settlements (extract from Development Plan)

Sub-County Area	Town	Population 2002	Housing Construction target 2002- 2011
Other Settlements	Sallins	2,922	260
	Kill	2,246	405

ZONED LANDBANK

4.4.5 The Development Plan gives an overview of the zoned landbank for different towns and settlements in the county. An overview of the key land use zonings for the settlements forming part of the Primary Dynamic Cluster and those for Kill and Sallins are set out in Table 4.3 below:

Table 4.3 Key Land Use Zonings for settlements in the primary Dynamic Cluster (all areas in hectares)

Local Area Plan/ Development Plan	Town Centre	Amenity & Open Space	Institutional & Educational	Industry & Warehousing	Office Based Industry	Light Industry	New Residential
Newbridge	45.2	99.8	30	268	N/a	N/a	203.4
DP Sep 2003							
Kilcullen LAP	16.9	16.2	11.5	25.9	N/a	N/a	13
Dec 2001							
Sallins LAP	21.6	22.1	0	N/a	24.1	N/a	8.2
Dec 2001							
Kill DP	8.6	8	3.9	30.7	N/a	N/a	23.1
Feb 2002							

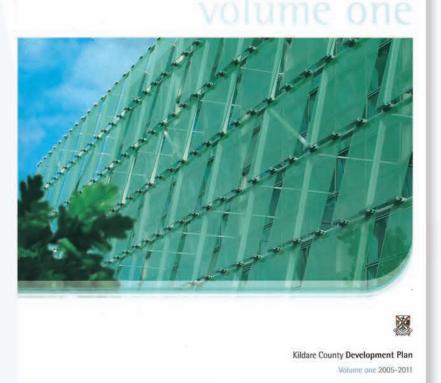
4.4.6 Some lands have also been zoned in the Environs of Naas under the Kildare Development Plan. These are lands that are outside the Naas Town Council Boundary. All the lands within the town boundary are covered under the Naas Town Development Plan (for full discussion see below). The zoned landbank for the Naas Environs is summarised in the Development Plan and shown in Table 4.4 below:

Table 4.4 Key Land Ue Zonings for Naas Environs (all areas in hectares)

	Integrated Tourism	Retail/ Commercial	Educational	Industry (various incl. SME, Warehousing, etc)	Residential	Utilities
Naas Environs	104	21	9	176	20	10

ECONOMIC DEVELOPMENT

4.4.7 The Development Plan proposes a number of policies to promote economic development within the County. These include a range of objectives in terms of the provision of adequate transport, communication and energy infrastructure as well as objectives to promote access to employment, Small and Medium Enterprises, educational infrastructure and a number of specific programmes. In terms of transport, it is the objective of the County Development Pan to support the implementation of the Integrated Framework Plans for Naas (adopted) and Newbridge/Kilcullen (at draft stage).



KILDARE COUNTY COUNCIL DEVELOPMENT PLAN, 2005 - 2011

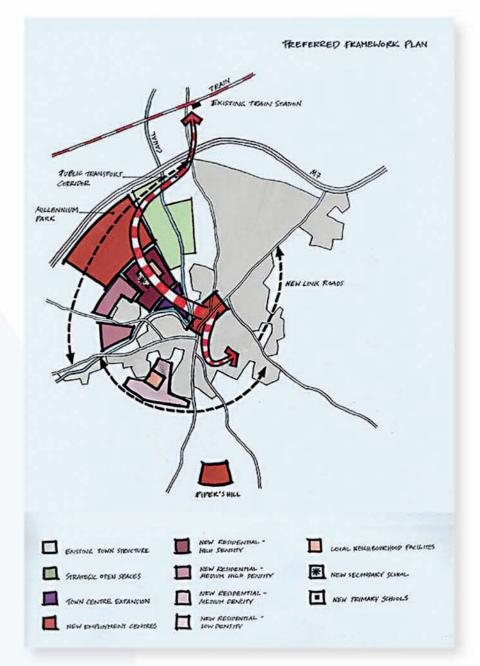
Naas Integrated Framework Plan (IFPLUT)

4.5.1 The Naas Integrated Framework Plan for Land Use and Transportation (IFPLUT) is the realisation of an objective of the National Spatial Strategy to provide for framework plans for the main development centres identified under the Strategy. The IFPLUT provides for a broad vision for the future development of Naas to the year 2016. The principle objective of the Plan is

"to promote and encourage the development and growth of Naas in line with the principles of sustainable development. To promote an appropriate balance of employment, residential and service facilities (schools, retail, community facilities etc) and land uses that will increase the self-sufficiency of the town and support its role as a key part of a designated Primary Development Centre in the Greater Dublin Area."

- **4.5.2** The IFPLUT report contains the following set of parameters for the future development of Naas:
 - an expanded population of 30,000
 - 4,800 additional houses
 - the creation of 8,000 jobs
 - maximum use of the canal corridor as a valuable public leisure and recreational facility

- **4.5.3** The strategy framework locates housing and other land uses in such a way that travel is reduced to a minimum and sustainable modes of transport are promoted. The key elements are:
 - Improvements to location, scale, form and character of future development
 - Targeted improvements to existing built up area
 - · Accommodation of higher density development
 - Good demarcation between urban and rural areas
 - · Promotion of high standards of amenity, safety and convenience
- **4.5.4** The Specific Objectives contained in the IFPLUT framework have a direct impact on the Masterplan lands. These are as follows:
 - Expansion of the town centre
 - Public transport corridor from Hospital area through the town centre to Millennium Park and Sallins Rail Station
 - Employment to be concentrated in the town centre and at Millennium Park
 - New walking and cycling routes



NAAS INTEGRATED FRAMEWORK PLAN [IFPLUT]

Naas Town Development Plan 2005-2011

INTRODUCTION

4.6.1 The Naas Town Development Plan, 2005-2011 (NTDP) is the statutory Development Plan for the area of Naas Town Council and sets out the vision and policies that will guide development in the town. The Development Plan is firmly based within the wider planning policy context provided by the Regional Planning Guidelines, DTO strategy, IFPLUT and Kildare County Development Plan (as set out above). The Development Plan further provides detailed objectives with regard to the development of the Northwest Quadrant of Naas.

POPULATION PROJECTIONS

- **4.6.2** According to the Census, the population of Naas stood at some 18,288 persons in 2002. The Plan estimates a population for 2005 of around 21,000 persons. The Plan contends that it is reasonable to assume that within the period of the plan the population will rise to around 27,000 persons by 2011.
- **4.6.3** The housing construction targets for the period 2002 to 2011 are to provide for an additional 3,225 dwellings in Naas. A total of 133 hectares of land have been zoned to accommodate the projected housing units allowing for additional 'headroom'.

FUTURE ECONOMIC STRATEGY

- **4.6.4** The Plan notes that an increase in the population of the town and the associated increase in the labour force could result in a comparative advantage in attracting inward, employment creating enterprises. It is noted that this will require the creation of employment opportunities. The regional employment role of Naas as envisaged in the RPG's, will require significant job creation during the lifetime of the Plan and beyond. Measures to assist economic development which will be pursued by the Planning Authority include:
 - The provision of an adequate and efficient transportation system.
 - The zoning of sufficient and appropriately located lands for industrial and commercial development.
 - The provision of sanitary services and other urban infrastructure.
 - The provision, in conjunction with other agencies, of enterprise centre provision and training infrastructure related to small and medium sized enterprises (SME).
 - The zoning of adequate residentially zoned lands and the creation of an attractive urban environment to facilitate residency of the projected labour force.
 - Developing the public realm and amenities of Naas so that the quality of life of employees and residents can be improved.

4.6.5 It is the policy of the Council

"to encourage the integration of employment locations with other land uses and the transportation network, and in particular, ensure that the location of employment intensive land uses are located in proximity to existing and planned strategic routes, where public transport is viable."

TRANSPORTATION OBJECTIVES

- **4.6.6** The proposed development of a strategic corridor that will link Sallins Station southwards through Millennium Park, serving the zoned residential development in the Northwest Quadrant, the extended town centre and other residential neighbourhoods with a 'loop' service is endorsed in the Plan. The Plan further encourages and promotes improved pedestrian and cycle networks. In particular, the construction of cycleways in new residential developments is an objective.
- 4.6.7 There are also a number of specific roads objectives contained in the Plan. The objectives directly relating to the Masterplan lands include the provision of a new motorway interchange, a high quality public transport corridor and a link from this to the Caragh Road, the possibility of a link from the proposed Sallins Bypass to the town and the new distributor road between Millennium Park and the Newbridge road.

RETAIL PROVISION

4.6.8 Chapter 5 of the Plan sets out the retail strategy for the town. The Plan notes that Naas is a Level 2 Tier 3 Centre in the national retail hierarchy and as such has a difficulty competing with other centres in the Greater Dublin Area. Naas needs to grow into a centre of greater regional importance. The Plan further notes that a recent survey by Kildare County Council indicated that there was substantial expenditure capacity for both new convenience and comparison floorspace, including retail warehousing. Naas is seen as an important location for the creation of additional floorspace.

COMMUNITY FACILITIES

4.6.9 The Plan notes that the rapid growth of population in the town over the recent past has put increased pressure on Naas' educational infrastructure to meet demand and future population projections. It is a policy of the Council to promote a third level facility within the town. It is also Council policy to promote childcare facilities at appropriate locations.

HERITAGE AND AMENITY

4.6.10 Chapter 8 of the Plan sets out the policies and objectives in relation to heritage, tourism and environment. With regard to the Masterplan lands the following objectives are of particular relevance:

• Tree and Hedgerow Preservation

It is generally a policy of the Council to preserve trees and hedgerows where possible. A detailed tree survey will generally be required for any large scale development applications. Tree preservation orders as they apply to the area are listed in Section 8.2.3 of the Plan.

Grand Canal System

The Plan notes that the Grand Canal System is a proposed Natural Heritage Area (pNHA) and thereby protected by national legislation. It is a key objective of the Plan to develop the amenity potential of the canal for recreation and to keep the canal free from any development that would adversely affect its conservation value.

Archaeological Heritage

It is Council policy that all developments that may have implications for archaeological heritage will be subject to an archaeological assessment.

Architectural Heritage

In terms of the architectural heritage, Naas Town Council maintain a Record of Protected Structures. There are a number of protected structures on the Masterplan lands, these are set out below:

KCC Reference	Building Address	Description
NS19-053	The Knocks, Oldtown	Walled Farmyard
NS19-085	Knocks House, Oldtown	House
NS19-086	Keredern, Oldtown	Building
NS 19-092	Decoy Hill, Osberstown	Earthwork Site
NS19-093	Cemetery Mound	Cemetery
NS19-112	Ploopluck House Caragh Rd.	Building

There are some protected structures adjoining the site boundary. There is also an earthworks which is a listed site on the Record of Monuments and Places at Osberstown (Reference Number RMP19-016).

Architectural Conservation Areas

Architectural Conservation Areas (ACAs) are proposed for the town centre of Naas and also for the Grand Canal Area. Details for the proposed Grand Canal ACA are contained within section 8.8 of the Plan. A number of relevant objectives and future policies are set out in this section, these include the following:

Protected Views and Prospects

Map No. 2 of the Development Plan also indicates a number of views and prospects that need to be protected. These relate primarily to the Grand Canal Corridor but there are also some on the Caragh Road at the southern boundary of the Masterplan lands.

Green Belt/Future Park

The area to either side of the Grand Canal is also zoned as "M - Green Belt/Future Park' with the objective "To protect the setting, character and environmental quality of areas of high natural beauty and safeguard their environmental, archaeological and ecological amenities".

The Plan further notes that

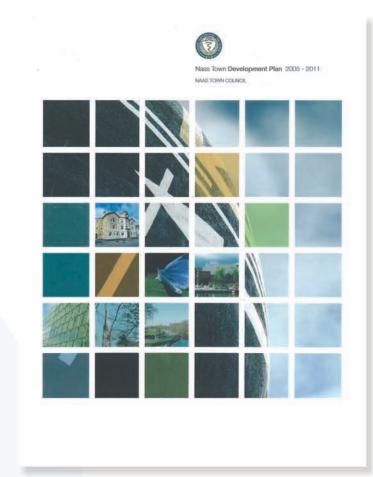
"In zone M, it is intended to establish greenbelts/future parks to preserve the Canal Environs and Jigginstown Castle from development and provide a visual and environmental buffer of amenity importance to the town as a whole. It is envisaged that in the long term, these greenbelts will develop into a quality park for the residents of Naas. The Council will not permit development that would detract from the visual amenity of this area. Existing uses in this zone will continue to be permitted, and reasonable development proposals in relation to this use will be considered on their merits. It should be noted that lands zoned under this category cannot be used as providing the open space provision for housing development adjoining them."

LOCAL AREA PLAN OBJECTIVE

- 4.6.11 There is an objective in the Naas Town Development Plan to prepare a Local Area Plan (LAP) on lands directly south of the Masterplan lands. The area includes lands west of the Canal and the 'Abbey Block' which is linked to the Main Street. The main objectives for the LAP area contain in summary the following:
 - Provision of an expansion to the town centre.
 - Provision of a future park ('Town Park' of approximately 5 acres).
 - Provision of a link between the historic town centre and future development in Northwest Naas.
 - · Provision of amenities, services and facilities for the community.
- **4.6.12** The Plan also states that the proposed LAP should investigate the following:
 - · Future uses, including office based activity, residential and retail.
 - · The potential to accommodate a cinema.
 - The feasibility of a transportation corridor through the LAP boundary.
- 4.6.13 It is an objective of the Council to prepare this Local Area Plan within twelve months of the formal adoption of the Naas Town Development Plan.

MASTERPLAN OBJECTIVE

4.6.14 The Development Plan provides detailed objectives with regard to the development of the Northwest Quadrant of Naas (see textbox). Further to this, the lands within the Masterplan area are zoned for varying uses. The Masterplan has taken full account of these objectives. A more detailed analysis of the Masterplan objectives and the application of these is provided in Section 5 of this report.



NAAS TOWN DEVELOPMENT PLAN, 2005 - 2011

Specific Objective for the Masterplan for the Northwest Quadrant (quote from Section 7.2.3 to 7.2.4 of the Naas Town Council **Development Plan)**

7.2.3 Masterplan for the Northwest Quadrant

The Northwest Quadrant has been identified as being the most appropriate location for the future expansion of the residential area of the town. The Masterplan boundary incorporates the entire Northwest Quadrant bordered by the M7 to the Northwest, the green/future parklands west of the Grand Canal to the East and the Caragh Road to the South. The Council recognises that the development of these lands represents a major opportunity to achieve the co-ordinated and comprehensive development of housing and associated recreational, commercial, educational and community facilities in Naas. While not all the lands have been zoned for development in the current review of the Naas Development Plan, it is envisaged that over time lands presently W, White Lands may be developed in accordance with an overall strategy for the area.

Therefore a Masterplan will be required prior to the grant of planning permission setting out an overall urban design framework for the development of the urban village, residential and institutional zoned lands adjacent, as well as scenarios for the future development of a strategic land bank in lands zoned W. The Masterplan shall be prepared by the applicant(s), in consultation with the Planning Authority and shall be agreed by the Planning Authority prior to grant of permission.

In general the zoning boundaries should be reflected in any application submitted to the Town Council. The Masterplan shall be required to identify the precise zoning boundaries for the various types of use within the area. Notwithstanding the fact that the lands have been zoned in this plan no planning permissions will be granted for development on newly zoned lands until the Masterplan has been finalized and agreed by the planning authority.

The design process of the Masterplan shall address the following matters:

- The Masterplan should contain written statement and a plan or series of plans (in digital 3D or otherwise) indicating the objectives in such detail, as may be determined by the Planning Authority for the proper planning and sustainable development of the area to which it applies to include inter alia the following details:
- Proposals in relation to the overall design of the proposed development including heights, external finishes of structures and the general appearance and design, including that of the public realm;
- Include plans for the likely phasing of development. The recreational and amenity facilities, physical and community infrastructure (crèche, schools etc.) should be developed in association with each phase of development and should be identified
- Proposals in relation to the overall design of the proposed Urban Village which will be a key nodal point within the overall context of the quadrant and contain a mixture of uses such as office based activity, residential and retail;
- · Show how development links with the town centre;
- A comprehensive mobility management plan with proposals in relation to transportation including public transportation and non motorised modes, vehicular roads layout and access arrangements, loading/unloading provision, the provision of parking spaces and traffic management;

- The types and extent of any proposed development indicating how these uses integrate with surrounding development and land uses;
- Proposals in relation to the provision of services in the area including the provision of waste and wastewater facilities and water, electricity and telecommunications services, oil and gas pipelines, including storage facilities for oil and gas;
- Facilitate public access to the proposed amenity areas located within the Masterplan boundary and beyond.
- Illustrate how the area establishes links and relates to the amenity of the Grand Canal
- Consult with the residents of the town and specifically with the relevant landowners will be required prior to drawing up the plan.

No development shall take place on the newly zoned land until such plan has been submitted to, and approved by the Planning Authority. Any development thereafter shall accord with the Masterplan.

7.2.4 Masterplan Objective

It is an objective of Naas Town Council to prepare a detailed Masterplan for the Northwest Ouadrant in accordance with section 7.2.3 of this Plan.



Section 5.0

- 5.1 Introduction
- 5.2 Zoning Objectives for the Northwest Quadrant
- 5.3 Development of the Masterplan Lands
- 5.4 Current Zoned Landbank
- 5.5 Community Facilities
- 5.6 White Lands
- 5.7 Future Transport Infrastructure



Proposals for Development-Type and Extent



5.1 Introduction

- **5.1.1** The Northwest Quadrant is set to expand the town of Naas by providing for new employment and residential areas as well as a new Urban Village Centre and associated educational and community facilities. Integrated into the new development will be areas of open space and amenity.
- **5.1.2** The Naas Town Development Plan sets out the overall objectives for the Masterplan (see textbox at Section 4.6 above). The Plan further provides specific zoning objectives for all parcels of land in the Northwest Quadrant (see Table 5.1). The type and extent of development is therefore clearly defined by the Plan for much of the Masterplan area.
- **5.1.3** This section of the report therefore sets out a development strategy based on statutory planning objectives and the application of these to the Masterplan development.
- **5.1.4** Some of the areas of the Masterplan have been zoned 'W-White Lands' and are not given any specific land-use allocation in the Naas Town Development Plan. In effect they have not yet been zoned for development by the Council. However, it is considered prudent to examine their future potential at this stage in order to facilitate the proper planning of future infrastructure and services requirements, in association with the preparation of this Masterplan. It must be emphasised that notwithstanding such considerations in the Masterplan, all decisions regarding the future use of the "White Lands" are ultimately a matter for determination by the planning authority.







USE ZONING OBJECTIVE CODE	USE	USE ZONE OBJECTIVE	EXPLANATORY NOTE
С	New Residential	To provide for new residential development, residential services and community facilities	This zoning provides for new residential development and associated uses. While housing is the primary use in this zone, recreation, education, crèche/playschool, community buildings, sheltered housing and small corner shops will also be considered by the Council, subject to the preservation of neighbouring residential amenity in zones. Limited local shopping facilities will be considered to serve the local need of the residents. New residential areas should be developed in accordance with a comprehensive plan detailing the layout of services, roads, links to existing facilities and the landscaping of open space.
D	New Residential	To provide for low to medium density residential development (Suburban)	The zoning objective provides for new low-medium density residential development and must comply with measures set out for zoning objective C. Generally housing in the range of 20-35 dwellings per hectare will be acceptable in this zone. Particular sites have been identified for low-density residential development.
E	Community and Educational	To provide for and improve necessary community, ecclesiastical, recreational and educational facilities	This zoning of the lands zoned E in the Northwest Quadrant provides for local civic, religious, community, educational and other facilities ancillary to neighbourhood uses and services. The E1, E2 and E3 objectives have been identified to provide for necessary community, recreational, ecclesiastical and educational facilities for the town of Naas. The primary objective of E1 and E3 in the Northwest quadrant is to reserve sufficient lands for the development of integrated primary and post primary educational campus, in consultation with the relevant educational authorities. The site will form a key link to existing recreational facilities between the Caragh and Newbridge Road. It is envisaged that this zone will, over time, accommodate the population growth in the general vicinity. The E4 objective has been identified as the future cemetery and associated uses for Naas, based on its proximity and ease of access from the existing churches within the town. E5 zoning objective is to facilitate an educational campus. The E6 objective has been identified for the construction of a community facility.
F	Open Space and Amenity	To preserve, provide for and improve active and passive recreational public and private open space	The areas included in this zoning objective cover both private and public open space and are dispersed throughout the town. The Council will not normally permit development that would result in a loss of open space within the town.
G	Urban Village Centre	To provide for retailing, community and social facilities for the local population of the Northwest Quadrant of Naas and to support and complement the attractiveness of Millennium Park for major Foreign Direct Investment and international, national and local investment	The lands zoned 'G' have been identified for a new Urban Village Centre to serve the local population, support employment-based development within the Millennium Park and act as a key transport node for the town centre. The functions provided would include those identified under the Retail Planning Guidelines for district centres, however the urban form should be quite different to the purpose-built mall normally associated with district centres. The new urban village is intended to serve the needs of the community and complement but not compete with the established town centre. The focus within the urban village shall be to provide for convenience goods and local services, including post office, ATM, hairdresser, pharmacy, health centre etc. Appropriate scaled coffee shops; hotel, restaurant(s) or public house(s), while leisure and recreational based activities will also be considered. A Masterplan (section 7.2.2) will be required prior to the grant of planning permission setting out an overall urban design framework for the development of the urban village, residential and institutional zoned lands adjacent, as well as scenarios for the future development of the adjoining lands zoned for White Land. The Masterplan shall be prepared by the applicant(s), in consultation with the Planning Authority and shall be agreed by the Planning Authority prior to grant of permission.
Н	Industrial and Warehousing development	To provide for and improve industrial and warehousing development	This zoning provides for industrial and warehousing uses excluding retail warehousing. Other uses, ancillary or similar to industry and warehousing will be considered on the merits of each planning application and may be acceptable in this zone. Where employment is a high generator of traffic, the location of new employment at appropriate scale, density, type and location will be encouraged to reduce the demand for travel. The layout of new employment sites will have to have regard for alternative sustainable modes of transport. Site layout should emphasize the necessary connections to the wider local and strategic public transport, walking and cycling networks. Mobility Management Plans (MMPs) should also be incorporated in accordance with section 4.2.10. Residential or retail uses (including retail warehousing) or incinerators/thermal treatment plants will not be acceptable in this zone. Where any Industrial/Warehousing land adjoins other land uses, Naas Town Council will insist that a buffer zone (minimum 30 meters) is provided for and landscaped accordingly in accordance with section 8.10 in the Development Control Standards chapter of this plan.
I	Agricultural	To provide for continued agricultural development and associated uses	The purpose of this zoning is to retain the existing agricultural use. Ancillary uses that are not directly associated with agriculture are open for consideration. This includes limited housing for members of landowners' families or persons who can demonstrate a need to live in the agriculture zone, tourism related projects such as tourist caravan parks or campsites and amenity uses such as playing fields, or parks.
М	Greenbelt/ Future Park	To protect the setting, character and environmental quality of areas of high natural beauty and safeguard their environmental, archaeological and ecological amenities	In zone M, it is intended to establish greenbelts/future parks to preserve the Canal Environs and Jigginstown Castle from development and provide a visual and environmental buffer of amenity importance to the town as a whole. It is envisaged that in the long term, these greenbelt will develop into a quality park for the residents of Naas. The council will not permit development that would detract from the visual amenity of this area. Existing uses in this zone will continue to be permitted, and reasonable development proposals in relation to this use will be considered on their merits. It should be noted that lands zoned under this category cannot be used as providing the open space provision for housing development adjoining them.
W	White Land	To provide for White Lands to ensure the consolidation of future development outside the period of this plan	The purpose of this zoning is to outline the direction of future development within the Northwest Quadrant, South West of the Devoy Quarter and north of the distributor road through Millennium Park as growth concentration areas. It is envisaged that lands presently zoned W, will act as a strategic land reserve and develop in a sequential approach thereby consolidating development in future plans for Naas, pending the provision of sustainable infrastructural services in the area.

5.2 Zoning Objectives for the Northwest Quadrant

- **5.2.1** For the purpose of establishing the future type and extent of development for the Masterplan lands, the relevant zonings that will determine the future mix of uses have been closely analysed. These can be summarised as follows:
 - Employment Uses: Zoning 'H'- Industrial and Warehousing Development
 - Residential Uses: Zonings 'C' and 'D' New Residential
 - District Centre Uses: Zoning 'G' Urban Village Centre
 - Community and Educational Uses: Zoning 'E' Community & Educational
- **5.2.2** There are two areas of White Lands within the Masterplan area. One parcel of land is located adjacent to the Motorway and the 'H'-zoned lands in the north-west of the Masterplan area. The other parcel is located at the heart of the Masterplan area, between the residentially zoned lands adjacent to Naas Town Centre and the new Urban Village Centre.



FIGURE 5.1: ZONING PLAN

5.2.3 The specific wording of the zoning objectives is summarised in Table 5.2 below:

Table 5.2: Individual Zoning Objectives

Objective No.	Specific Zoning Objective	Approx Area (Ha)	Approx. Area (Acres)
C-1	High density residential development including a minimum 10 metre wide tree planted buffer along the eastern side of the site.	1.38	3.4
C-2	To provide for and facilitate medium/higher density residential development.	4	10
C-3	High density residential development.	3.84	9.5
C-4	Medium density residential development to include a mix of house types and sizes.	1.47	3.6
C-7	Medium density residential development.	2.5	6.1
C-8	Medium density residential development.	1.9	4.6
C-9	Medium/High density residential development that must show a detailed relationship to the proposed Canal Harbour LAP in terms of linkages and sustainable forms of transport. Include provision for a nursing home that relates to the Green Belt of the canal.		17
C-14	Medium density residential development.		6 (4.6 acres developable)
D-5	Low density residential development to include provision for social and affordable housing.	2.2	5
E1 & E3	Educational Campus & Playing Pitches.	9.2	22
Е	Community and Educational	9.97	24.6
E-2	Possible Ecclesiastical/Community Centre site.	9.47	23
H - 2	H2* The Council will encourage the location of Small-Medium Enterprise (SME) related industry in this zone.	1.7	4.2

5.3 Development of the Masterplan lands

- 5.3.1 The development of the Northwest Quadrant is anticipated to occur in three phases. The three phases are determined by the current status of the lands in terms of land use zoning under the Naas Town Development Plan.
- 5.3.2 Phase 1 and Phase 2 generally comprise the zoned lands within the Northwest Quadrant Masterplan area, including lands zoned for Employment Uses ('H'- Industrial and Warehousing Development), Residential Uses ('C' and 'D' New Residential), District Centre Uses ('G' Urban Village Centre) and Community and Educational Uses ('E' Community & Educational), together with a small element of White Lands.
- 5.3.3 The detailed provision of necessary infrastructure and community facilities has been calculated for the entire Phase 1 and Phase 2 lands.
- 5.3.4 Phase 3 comprises the White Lands, a substantial landbank within the Northwest Quadrant which is currently unzoned. Notwithstanding the fact that the future land use zoning of these lands is a matter for determination by the Local Authority, a likely scenario is assessed in terms of the resulting necessary infrastructure and community facilities.

Full details of the proposed phasing arrangements are set out in Section 6.

5.4 Current Zoned Landbank

URBAN VILLAGE CENTRE

5.4.1 The Urban Village Centre lies at the heart of the Masterplan lands. The purpose, form and function of the Village Centre is clearly defined within the Naas Town Council Development Plan. A total of 5.28 hectares are zoned 'G: Urban Village'. The zoning objective provides that the purpose of the Urban Village is to serve the local population, to support employment-based development within the Millennium Park and to act as a key transport node.

5.4.2 The plan further states that

"the functions provided would include those identified under the Retail Planning Guidelines for district centres, however the urban form should be quite different to the purpose-built mall normally associated with district centres. The new urban village is intended to serve the needs of the community and complement but not compete with the established town centre."

- **5.4.3** The main convenience goods and local services that should be provided in the village centre are listed in the Development Plan as follows:
 - · Post office,
 - ATM,
 - · Hairdresser,
 - Pharmacy,
 - · Health centre etc.
 - · Coffee shops,
 - Hotel,
 - Restaurant(s) or
 - Public house(s)
 - · Leisure and recreational based activities.

- **5.4.4** The main factors indicating the size of the Urban Village Centre can be summarised as follows:
 - a) The reference in the Development Plan to 'District Centre' status, which in turn is defined by the Retail Planning Guidelines to have in the region of 10,000 sqm retail floorspace.
 - b) The dual function of the Urban Village to provide for the needs of future residents and future employees of Millennium Park.
 - c) The need to support employment generation at Millennium Park through ancillary uses (e.g. a hotel and/or conference centre and other uses)
- **5.4.5** Taking these factors into consideration, the district centre should have in the region of 20,000 sqm overall gross commercial floorspace to provide critical mass at the heart of the Masterplan lands. This will be necessary to adequately serve the needs of the resident population and support employment-based development within Millennium Park. This floorspace allocation seems adequate to serve the needs of the community and complement but not compete with the established town centre.
- 5.4.6 The zoning of 5.28 hectares for the Urban Village could provide for approximately 66,000 sqm overall floorspace if a plot ratio of 1.25 was applied. It is considered that a mix of commercial and residential elements would be appropriate for the new centre. In this regard, the overall floorspace could be divided to provide for approximately 70% residential use and 30% commercial use. The resulting overall commercial element would be in the region of 20,000 sqm gross floor area.
- **5.4.7** It is anticipated that the mix of commercial floorspace should provide in the region of 10,000 square metres of retail floorspace given the substantial anticipated residential and employment population. An anchor store in the form of a convenience supermarket (4,000 sqm) should be provided in the village centre.

5.4.8 Table 5.3 below summarises the overall floorspace for the Urban Village Centre lands.

Table 5.3: Urban Village Centre Zoning – Future Residential Units

Parcel Ref.	Specific Zoning Objective	Area/ha	Use Mix	Plot Ratio	Floorspace	Residential Units (@ average unit size of 100/m² GFA)
G	Urban Village Centre	5.28	30% Commercial 70% Residential	1.25	20,000m² (Com.) 46,000m² (Resi.) TOTAL 66,000m²	460

5.4.9 The above figures are indicative only and will depend on the precise mix and density achieved over time. A degree of flexibility in implementation is important to allow for changes in market requirements and economic circumstances over the time period for full development of the Northwest Quadrant.

EMPLOYMENT PROVISION

- 5.4.10 The zoning for the Masterplan lands provides for a substantial amount of lands zoned 'H – Industrial and Warehousing'. Part of these lands are already committed to commercial developments as part of earlier planning permissions in Millennium Park.
- **5.4.11** A total of ca. 67.8 hectares of land within the Ouadrant are zoned 'H'. Subtracting the 5.8 hectares of land already committed in Millennium Park, a total of ca. 62 hectares remain within the Masterplan boundary. The area zoned 'H' represents a substantial landbank and will generate a very large employment area over time.
- **5.4.12** Analysis of the existing employment provision at Millennium Park would suggest that the additional landbank of H-zoned lands could potentially accommodate in the region of 6,000 employees, depending on the mix of employment uses and the plot ratio and site coverage of future development. Higher density, office park type development could potentially provide employment in excess of this figure.

FIGURE 5.2: URBAN VILLAGE CENTRE AND EMPLOYMENT PROVISION **ZONING LOCATION PLAN**



RESIDENTIAL UNITS

- 5.4.13 The potential future range of residential units that could be accommodated on the zoned lands within the Masterplan area has been calculated in accordance with the Naas Town Development Plan 2005-2011. Separate assessments are provided for lands zoned 'C New Residential' and 'D5 Low Density Residential'. An assessment of the potential of the Urban Village (zoning 'G') was also carried out.
- **5.4.14** The residentially zoned lands within the Masterplan area are allocated a density range under the specific zoning objectives of the Development Plan. The total number of units that could be provided on theses lands in accordance with the general Development Plan standards range from 949 to 1,254 units.

Table 5.4: Residential Zoning – Future Residential Units

Parcel Ref.	Area/ha	Density from DP	LOW Density	HIGH Density	MIN. UNITS	MAX. UNITS
C-1	1.38	>50	50	75	69	104
C-2	4	35-50	35	50	140	200
C-3	3.84	>50	50	75	192	288
C-4	1.47	35	35	35	51	51
C-7	2.5	35	35	35	88	88
C-8	1.9	35	35	35	67	67
C-9	6.9	35-50	35	50	242	345
C-14	1.9	35	35	35	67	67
D-5	2.2	15-20	15	20	33	44
TOTAL	26.09				949	1,254

- 5.4.15 As outlined above, the lands zoned 'G Urban Village Centre' are anticipated to provide for a mix of commercial and residential elements. A total of 5.28 hectares are zoned for Urban Village use. Applying a plot ratio of 1.25 and a residential element of approximately 70% of the overall floorspace, a total of 46,000 square metres could be provided. Taking an average allocation of 100sqm floorspace per unit, in the region of 460 units could be provided on the 'G' zoned lands.
- **5.4.16** The overall number of residential units that could be provided on the lands zoned for residential use and in the Urban Village therefore ranges between 1,409 and 1,714 units depending on densities. At an average household size of 2.9 persons per household these lands could accommodate a population of approximately 4,100 to 5,000 persons. Higher densities than shown above may be acceptable depending on design, and will be assessed by the Local Authority on their merits (as set out in the Naas Town Development Plan).

5.5 Community Facilities

THE NEED FOR COMMUNITY FACILITIES

- 5.5.1 The provision of appropriate community facilities is a prerequisite for any framework plan that aims to create a well-integrated, properly serviced and socially cohesive community. The provision of community facilities therefore needs to be firmly built into the roll-out of development in the Masterplan area.
- 5.5.2 Assessment of the required facilities for the new communities working and living within the area has taken into account international best practice standards, national policy requirements, the standards contained within the Naas Town Development Plan and feedback provided from representative bodies such as Kildare County Council, the Department of Education and other local sources.

SUMMARY OF NECESSARY COMMUNITY FACILITIES

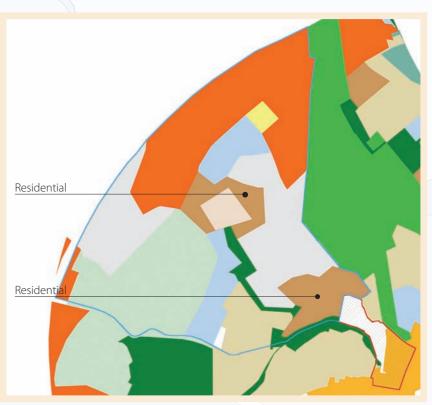
- 5.5.3 A cautious approach has been taken with regard to the assessment of future community facilities for the Northwest Quadrant in order to ensure adequate infrastructure provision. For the purpose of calculating service provision for the area, the upper end of the population horizon, i.e. in the region of 5,000 residents, has been assumed.
- 5.5.4 A further population breakdown has been provided according to different areas of the Masterplan, namely the Urban Village Centre, the residential area surrounding the Urban Village and the residentially zoned lands which abut the Local Area Plan. A summary of the provisions for each of these areas is contained in Table 5.5.
- **5.5.5** In the assessment of future community facilities full account is taken of the extensive research undertaken into the provision of existing facilities in Naas.

OPEN SPACE FOR RECREATION

- **5.5.6** The open space to be provided for both future residents and employees can be divided into three types as follows:
 - Informal/passive recreation space in the form of high amenity green areas
 - Active recreation space for outdoor sports and children's play area
 - Public Open Space in the form of formal parks and incorporated into residential estates
- 5.5.7 The informal recreation space which provides a 'green lung' for the new area and the town of Naas as a whole as well as providing an amenity area for walking and cycling will primarily be provided by the Canal Corridor and Lands zoned 'F Open Space and Amenity' and 'M Green Belt/Future Park'.

- 5.5.8 Active recreation space provides for outdoor sports activities in the form of playing pitches and other sports facilities for adults and playgrounds for children. In the UK, the National Playing Fields Association has developed the 'Six Acre Standard' which proposes that for every 1,000 population at least 6 acres (2.4 hectares) of 'Outdoor Playing Space' should be provided. In the case of the Masterplan, it is proposed that the outdoor sport facilities will primarily be provided on part of the lands zoned 'E1' and 'E3'. These zonings have a specific objective to provide for an 'Educational Campus and playing pitches'.
- 5.5.9 The third element of open space will be provided in the form of public open space incorporated into residential estates and also as a number of formally laid out parks. At least two playgrounds for children should be incorporated in the new open space. The Naas Town Development Plan requires a minimum of 15% public open space for new 'greenfield' residential developments. It is anticipated that this allocation will be provided as usable open space and as a series of fully planned out and landscaped parks including a new village park on the White Lands subject to appropriate zoning provisions or in an alternative location as determined by the planning authority (see Figure 6.13).

FIGURE 5.3: RESIDENTIAL ZONING LOCATION PLAN



CHILDCARE FACILITIES

- 5.5.10 It is essential that an appropriate amount of childcare facilities be provided on the Masterplan lands. These will need to be incorporated into the residential design as well as being incorporated into the employment area.
- **5.5.11** The Department of the Environment and Local Government has issued Ministerial Guidelines detailing the provision of childcare facilities in new residential areas. As a general standard, the Guidelines require one childcare facility (twenty place unit) for each 75 dwellings. In areas of major residential development the provision of larger units (catering for up to 30/40 children) is deemed adequate.
- 5.5.12 In accordance with these standards, a total of 23 facilities could be required for the residential element of the Masterplan area. A certain flexibility applies in the Guidelines in relation to the make up of the proposed residential area and taking into account adequacy of childcare provision in the wider area.
- 5.5.13 It is an objective of the Naas Town Development Plan to undertake an audit of childcare provision in Naas. This audit will help further determine the overall need for childcare facilities in Naas.

SCHOOLS - PRIMARY

- 5.5.14 There are currently 5 primary schools in Naas. Further to this, a new school on the Sallins Road providing for 16 classrooms is nearing completion. The Department of Education has no plans to provide for new primary schools in Naas in the near future. Notwithstanding this, the Masterplan will provide for a substantial addition in population and this will need to be catered for in terms of primary school provision.
- 5.5.15 The Department of Education calculate the number of school going children at Primary Level to be 11.3% of the overall population of an area. For a future population of approximately 5,000 people for the Masterplan area this would indicate that approximately 565 children would need to be catered for at Primary Level. At current classroom sizes of 30 pupils per class, a total provision of 19 classrooms would be required. This would require a reservation for one school site within the Masterplan lands. A site of 3 acres should be set aside for the school in accordance with general standards provided by the Department of Education. However, innovative design solutions might require a smaller area. Depending on the future development of the White Lands, a further primary school might have to be provided (for details see Section 5.6 below). Some of the schooling needs for the area might also be absorbed by the newly built primary school on the Sallins Road.

SCHOOLS - POST-PRIMARY

- 5.5.16 There are currently 3 post-primary schools in Naas and it is proposed to relocate the St. Patrick's Vocational School to a new site in the town. Naas also serves a wider catchment area extending into the hinterland in terms of post-primary school provision. The nearest other centres providing for post-primary schools are Newbridge and Rathcoole.
- 5.5.17 In calculating the numbers attending post-primary schools, the Department of Education generally calculates this as 8.5% of the overall population. In this regard, an overall expected population of 5,000 people for the Masterplan lands would need post-primary school provision for approximately 425 pupils.
- 5.5.18 In the short to medium term, this additional demand for postprimary school places will be absorbed by the existing schools in the area. However, depending on the future zoning and possible additional residential development on the White Lands, a new postprimary school is likely to be required.

HEALTHCARE

- **5.5.19** At least one GP/doctor's surgery should be provided within each neighbourhood to serve the needs of the immediate residential population.
- 5.5.20 Given the substantial number of residential and potential employment population, the need might arise for the provision of a health or medical centre to be provided in the Urban Village. This would address the potential need for dealing with a wider and more specialised range of healthcare needs. The viability of such a centre will be determined over time.

OTHER FACILITIES

- 5.5.21 Other services that need to be provided include a community centre, a number of neighbourhood/corner shops and a post office (if deemed necessary). Some of these elements will be provided as part of the overall commercial floorspace proposed for the Urban Village centre.
- 5.5.22 Standards for the provision of these services generally vary and will be determined by the commercial viability of these and/or the view taken by the responsible agencies.
- **5.5.23** The Naas Town Development Plan provides for substantial lands zoned for Community and Educational use in the Masterplan area. As outlined above, it is envisaged that the lands zoned E1, E2 and E3 (located adjacent to the agricultural lands at Ploopluck) will provide for the proposed schools (including possible 3rd level college) and associated recreational needs (playing pitches etc.). The large tract of 'E'-zoned lands adjacent to the Western Distributor Road is envisaged to provide for a broader range of community related uses which could include a recreation/leisure complex, hotel, cultural/ recreational uses or medical related facilities.

FIGURE 5.4: EDUCATIONAL / COMMUNITY ZONING LOCATION PLAN



¹ It is an objective of the Department of Education to reduce classroom size to 25 pupils in the near future. This might result in the need for additional classrooms.

FACILITY	STANDARDS	TOTAL MASTERPLAN AREA	VILLAGE CENTRE	'C' LANDS ADJACENT VILLAGE CENTRE	'C' LANDS ADJACENT LAP	
Population		Ca. 5,000	Ca. 1,350	Ca. 1,850	Ca. 1,750	
Parks/High Amenity Recreational Areas	Passive recreation space as opposed to active recreation space (see below)	This will primarily be provided by the Canal Corridor and Lands zoned "F (Open Space and Amenity)" and "M (Green Belt/Future Park)"				
Active Recreation Space/ "Outdoor Playing Space" ¹	2.4 ha/1,000 pop (NPFA "Six Acre Standard") of which 1.6ha/1000 pop for outdoor sports and 0.8 ha/1000 pop for children's play	Outdoor Sport (Pitches etc) to be provided as part of 'E1' & 'E3'-zoned lands (special objective for 'Educational Campus and Playing Pitches') and taking into account existing provision of extensive facilities in the vicinity (to the south of Caragh Road). Children's Play Area to be integrated into residential developments as public open space and playgrounds				
Public Open Space (Development Plan Standards) ²	Naas Town DP standard sets out Public Open Space (POS) requirements for residential developments on greenfield sites of 15% of overall area	15%	POS to be provided in the form of an Urban Square	A number of 'Pocket Parks' for this area and a new village park on the White Lands, subject to appropiate zoning provisions or in an alternative location as determined by the planning authority.	10-15% POS to be required as part of residential layout	
Playgrounds ³	'Playgrounds should be within 600 metre walking distance of homes'	2		1		
Childcare facilities (pre- school) ⁴	1 childcare facility per 75 dwellings (indicative – some flexibility depending on size of facility)	23	1	8		
Primary School ⁵	Primary level schools to cater for approximately 565 children	To be provided as part of the E1 and E3 zoned lands				
Secondary School⁵	Post-Primary provision for approx. 425 pupils maybe required.	(1) To be provided as part of the E1 and E3 zoned lands				
Public House ³	1:5 -7,000	1	1	-	-	
Corner Shop ³	1:2-5,000	2 (to 3)	(1)	1	1	
Post Office ³	1:5-10,000	(1)	(1)	-	-	
Doctors Surgery ³	1:2,500-3,000	3	1	1	1	
Health Centres ³	1:9-12,000	1	1	-	-	
Community Centre ³	1:7-15,000	1	Community Centre (possibly in conjunction with an Ecclesiastical Centre/Church) provided on 'E2' lands which include a special objective for 'Possible Ecclesiastical / Community Centre Site'			
Churches ³	1:9,000	(1)				

References:

³All standards from: Barton, H, Davies, G and Guise, R (1995) Sustainable Settlements – A Guide for Planners, Designers and Developers, University of the West of England and Local Government Management Board, Luton (UK).

FIGURE 5.5: OPEN SPACE / AMENITY ZONING LOCATION PLAN



¹National Playing Field Association (2001) The Six Acre Standard: Minimum Standards for Outdoor Playing Space, NPFA (UK).

²Naas Town Development Plan, 2005-2011; Chapter 10.4.10 'Public Open Space for Residential Development'.

⁴Department of the Environment and Local Government (2001) Childcare Facilities – Guidelines for Planning Authorities. Appendix 2 of the Guidelines outlines that the size of the childcare facility will depend on the residential mix, e.g. if 50% of dwellings are anticipated to require childcare in an area of 75 units that would equate to approx. 35 spaces. In this case a childcare facility providing a minimum of 20 spaces would be required.

⁵Children of school-going age are calculated by the Department of Education as 11.3% of the population for Primary level and 8.5% of the population for Post-Primary level. Classroom size is currently calculated at 30 pupils per class (it is however an objective to reduce classroom size to 25). Classrooms per school can range from between 16 to 24 (approximately).

5.6 White Lands

- 5.6.1 The Naas Town Development Plan states that the White Lands have been designated as a strategic landbank. The Plan further states that "it is envisaged that lands presently zoned W, will act as a strategic land reserve and develop in a sequential approach thereby consolidating development in future plans for Naas, pending the provision of sustainable infrastructural services in the area." The objective does not provide for any specific uses.
- **5.6.2** The wording of the objective for the White Lands determines that these lands will not be considered for development prior to the review of the Development Plan which will commence in 2009 and be completed in 2011. The future development of the White Lands therefore represents an in-built phasing to the overall rollout of the Masterplan for the Northwest Quadrant.
- **5.6.3** The future land use zoning of the White Lands is a matter for determination by the Planning Authority and it is therefore not proposed to give a definitive land use allocation under the current Masterplan but rather to make provision for their eventual development for a range of potential uses as determined by the Development Plan review.

LAND USE OPTIONS: WHITE LANDS

- **5.6.4** There are two parcels of White Lands within the Masterplan area. A number of different land uses could potentially be provided for on these lands.
- **5.6.5** The first parcel of land is located adjacent to the Motorway and the 'H'-zoned lands, to the north of the new distributor road. This area is approximately 21 hectares in size.
- **5.6.6** One of the main functions of the Masterplan lands is to provide for a substantial expansion of the employment base for the town of Naas. The White Lands adjacent to the Motorway could ultimately provide for an extension of the employment uses at Millennium Park. They would constitute a logical extension in a westerly direction of the existing employment lands.
- **5.6.7** The area of land currently zoned for employment already provides for a substantial landbank. The addition of this area should therefore more than adequately cater for any future employment needs. Potential future uses in this location could include offices, industry, warehousing, science and technology, research and development and mixed commercial (such as car showrooms, commercial leisure and own door office).
- **5.6.8** The second parcel of land is located at the heart of the Masterplan area between the residentially zoned lands adjacent the LAP/Town Centre and the new Urban Village/Residential precinct. This area measures approximately 34.21 hectares.

- 5.6.9 This area constitutes a substantial landbank and could provide for a wide range of different options. Should all of the lands be zoned for employment use, a considerable additional employment element could potentially be introduced to the area.
- 5.6.10 It is however anticipated that at least some of these lands will be developed for residential use. Should this happen, there is the potential of these lands to accommodate an additional approx. 3,000 persons, meaning that the total amount of residential land in the overall Masterplan area could yield a population of up to 8,000 residents². Such a level accords with the designation of Naas as a Primary Growth Centre under the Regional Planning Guidelines with a population horizon of up to 40,000 persons by 2016.
- 5.6.11 The different land-use options will need to be fully assessed by the Planning Authority at the time of the Development Plan review and the appropriate zoning determined when a clearer picture has emerged as to the needs for the overall area going forward. This will ultimately depend on an assessment of up-to-date Census data and a review of the planning context. Further to this, market demands and the overall uptake of landbanks for development will need to be assessed at this stage to determine whether there will be an additional need for further residential development or additional employment lands or a combination of these.

FIGURE 5.6: WHITE LANDS ZONING LOCATION PLAN



POTENTIAL ADDITIONAL NEED FOR COMMUNITY INFRASTRUCTURE

- 5.6.12 Should the Planning Authority decide to rezone the parcel of White Lands located at the heart of the Masterplan for residential use, as outlined as one potential option above, community facilities for an additional 3,000 residents (a total of 8,000 residents in the overall Northwest Quadrant) would need to be provided for.
- 5.6.13 The additional community facilities that might be required under such a scenario can be summarised as follows:
 - Open Space: in line with the recommendations set out in Section 5.5 above, all new residential developments would need to provide for a minimum of 15% public open space which should incorporate a children's playground.
 - Childcare: in line with the Guidelines on Childcare Provision³, a total of 14 additional childcare facilities could potentially be required.
 - Schools: an overall potential population of 8,000 persons would require primary school provision for approx. 900 children and post-primary provision for approx. 680 pupils. A total of two primary schools (with at least 15 classrooms each) and a postprimary school would therefore be required in the overall Masterplan area.
 - Healthcare: an additional GP/ Doctor's surgery would need to be provided.
 - Other: an additional population of 3,000 persons might provide for critical mass to make additional services viable (such as community centre, and neighbourhood or district retail facilities).

Department of the Environment and Local Government (2001) Childcare facilities: Guidelines for Planning Authorities.

² This is based on an additional provision of approx. 1,030 residential units (based on a density of 30 units per ha on 34.21 ha) and a household size of 2.9 persons per



FIGURE 5.7: PROPOSED AND EXISTING ROAD NETWORK

Future Transport Infrastructure

ROAD NETWORK

5.7.1 An extensive construction programme for a new infrastructure network for the Northwest Quadrant has been developed to accommodate the envisaged increased traffic volumes. This programme has commenced construction. The various major components of the road network improvements are discussed below and illustrated in Figure 5.7.

Western Link Road

5.7.2 The Western Link, which has recently been completed, acts as a ring road for the proposed developments, allowing traffic to circulate around the various land use components of the Northwest Quadrant. This Western Link Road connects the Newbridge Road to the Caragh Road, the proposed M7 Motorway Interchange and to the Sallins motorway overpass. The provision of this new segment of road network allows traffic generated from the Northwest Quadrant to bypass Naas Town Centre. This will enhance the urban environment and safety of those living within the Naas town district.

Caragh Road Upgrade

5.7.3 A significant road network improvement is the upgrading of the Caragh Road and its new southern link to the Newbridge road. This new link will remove traffic from the Paceli Road and surrounding residential estate roads. The removal of traffic from this residential estate will result in a safer environment for residents. The upgraded Caragh Road will support an additional link connecting the Caragh Road from the edge of the Caragh Court estate to the proposed new connector road. This will then allow connection between Naas Town Centre to both the residential zoned lands and the Village Centre within the Northwest Quadrant via a new bridge crossing over the Grand Canal. This scheme has recently been completed.

Naas Town Centre Connector

5.7.4 The objective of the Naas Town Centre Connector is to act as a local distributor road within the Northwest Quadrant and to provide a public transport link between Naas Town Centre and the proposed Urban Village Centre. A key aim of the link is to provide a fast and direct public transport connection between the future Northwest Quadrant urban village, residential areas, employment centres and the community/educational area and the existing Naas urban centre and the local/regional road network.

M7 Interchange

5.7.5 It is an objective of the Naas Town Development Plan to provide for the development of a new interchange on the M7 motorway. This will reduce congestion on the existing two interchanges and greatly improve the network and access to Naas Town Centre, Millennium Park and beyond.

Possible Future Link Road

5.7.6 Depending on the level and pattern of traffic movement and the progression of the M7 interchange, a new road may be required extending from the southern end of the village centre to connect with the Western Link Road. This will be subject to future discussions and agreements with the Roads and Planning Authority.

PUBLIC TRANSPORT

- **5.7.7** The public transport element of the Masterplan is focused on a number of central infrastructural projects, which follow both the Kildare County Development Plan and the Naas Integrated Framework Plan for Land Use and Transportation (IFPLUT): -
 - 1. Upgrading the Dublin (Heuston) Kildare railway line (which includes Sallins Station);
 - 2. An upgraded Public Transport Interchange in Naas Town centre;
 - 3. Developments located on sites accessible by a range of travel modes;
 - 4. Higher density developments in or close to town centres to increase viability of public transport routes, frequencies and facilities;
 - 5. Improvements to the safety and attractiveness of non-motorised travel:
 - 6. Introduction of school travel plans and mobility management plans
- **5.7.8** When the above concepts are applied they will result in a reduction in congestion in Naas Town Centre, which will have a 'knock-on' effect on the connecting road network. The transferring of trips from car to walking, cycling and bus travel will result in:
 - · Improved safety for pedestrians and cyclists;
 - Improved air quality;
 - Noise reduction;
 - Energy conservation;
 - · Improved journey times and reliability;
 - Better quality of life;
 - · Reduced traffic volumes; and
 - Financial savings.

New Bus Service (and/or Light Rail Link)

5.7.9 It is proposed that a new bus service (and / or light rail link) be provided for the Northwest Ouadrant. This new service will be routed from Naas Town Centre through to the proposed Urban Village Centre. The proposed service then joins the Western Link and connects to the Sallins Road/Millennium Park roundabout to continue along Sallins Road, terminating at Sallins Train Station. This service would connect the future residential and employment communities of the Northwest Quadrant to larnród Éireann services, public bus services and Naas Town Centre. The present route of this proposed link is an interim measure pending the



completion of the proposed M7 Interchange. With the opening of the Interchange, the proposed bus service will divert onto the Western Link to cross the M7 via the new Interchange and continue via local roads to terminate at Sallins Train Station.

- **5.7.10** To promote the development of high quality public transport it is intended to investigate the feasibility of constructing a light rail system between Naas Town Centre and Sallins Rail Station via the Northwest Quadrant lands and proposed Urban Village Centre. Options in this regard include provision of a ground level LUAS-type system or raised monorail, or combination thereof.
- 5.7.11 A detailed feasibility study will be carried out into the engineering and financial implications of the various system options.



Rail

- **5.7.12** The Kildare Route Project proposes to upgrade the 32 km rail network between Dublin's Heuston Station and Kildare Station to increase passenger capacity and allow larnród Éireann to deliver commuter and regional services at peak times. The project includes:
 - Double service frequency between Dublin and Sallins, Newbridge, and Kildare
 - Increased frequency on Intercity routes
- 5.7.13 The existing service has a total daily capacity per direction of 11,050 commuter passengers. The Kildare Route Project will increase passenger capacity to a potential capacity of 36,400 commuter passengers per day in both directions (Dublin - Sallins).
- **5.7.14** Sallins train services will be improved by an increase in carriages from three to eight. With this increase in capacity, the car park will need to be extended or re-located. Ideally, the restriction in car parking capacity would encourage passengers to use sustainable methods of transport to get to the station, such as walking, cycling and bus travel. However, this will only occur if a meaningful alternative to the use of the private car emerges.
- 5.7.15 larnród Éireann currently provides a free mini-bus service between Sallins train station and Naas town centre to connect passengers with incoming trains. The proposed new bus service via the Northwest Quadrant will complement this service.

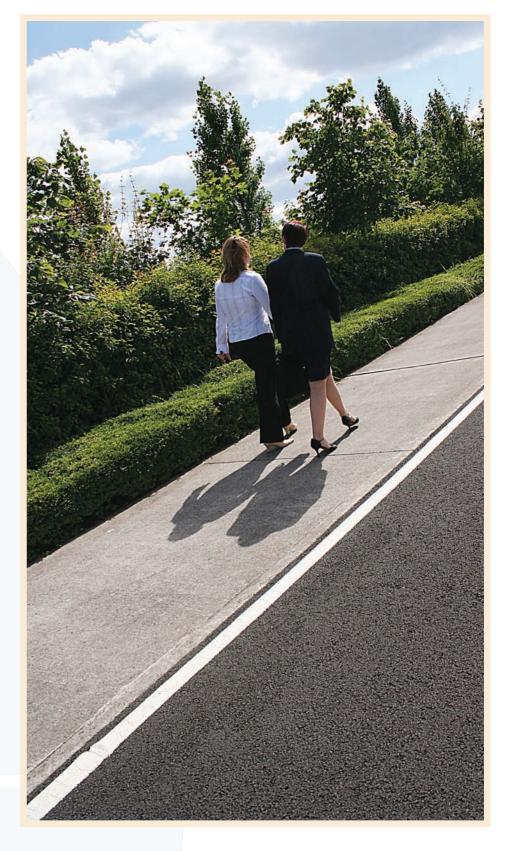
Transport Interchange

5.7.16 The IFPLUT strategy proposes an upgrading of the bus interchange on Main Street in Naas Town Centre. Such a public transport interchange, though outside the scope of the Northwest Quadrant Masterplan, would link two major public transport facilities and thus create a public transport hub allowing public transport connection for the residents and employees of Naas to the national road and rail network and the metropolitan areas of the country.

Walking and Cycling

- **5.7.17** Walking and cycling routes are an essential part of the transportation network. The Masterplan will provide for a network of safe, convenient and pleasant cycle and pedestrian routes between the Town/Village Centres, schools, recreational facilities, Sallins Railway Station, industrial and residential areas. An uninterrupted cycle network connecting the village centre to Sallins station should also be developed to enable commuters to avail of a direct and safe route.
- 5.7.18 Measures to make walking more practical and convenient are incorporated in the Masterplan to encourage the community to consider walking and cycling as a viable option to travel to work, shops, school and community centres. These could include dropped kerbs, controlled crossing points, pedestrian provision at junctions and footpath maintenance. Pedestrian and cyclist priority measures shall be provided at critical conflict points on the local road and pedestrian network.
- 5.7.19 Walking and cycling routes need not necessarily be separate from the overall road network. All significant destinations such as shops, schools, leisure, transport interchanges, residential and employment areas should be accessible via pavements and cycle lanes along the road corridors.

- 5.7.20 Where vehicle only access proposals result in a cul-de-sac on the local road network, pedestrian and cyclist through routes should be incorporated by design to ensure permeability and should be properly supervised by structured buildings. Laneways shall not be permitted.
- **5.7.21** Similarly, major barriers to pedestrian movement such as roundabouts and fenced-off components around individual developments shall not generally be permitted. As in most normal urban environments, defensible space shall be provided by buildings, which shall in turn provide passive supervision of the public realm.
- 5.7.22 At present a number of schools are located within a 20 minute walking band of the Northwest Quadrant and a further number are located within a 20 minute cycling band. As a result, designated school walking and cycling routes should be established. The highest level of congestion within Naas is during the AM and PM peak periods. The morning peak period includes people travelling to work and school. It is recommended that a "safer route to school" policy be implemented for all existing and proposed schools, to encourage children with their parent's consent to walk or cycle to school. This policy, if implemented effectively will significantly reduce congestion around school areas.









Car Parking

- 5.7.23 It is an objective that the Northwest Quadrant of Naas is designed to accommodate, but not be dominated by, the car. Car parking provision will be carefully integrated in terms of layout, surface treatment and screen planting. Shared on-street and communal car parking shall be optimised. The overall level of parking provision should encourage public transport use whilst making adequate allowance for essential users.
- **5.7.24** It is estimated that the Northwest Quadrant residents could generate up to 2,000 two-way vehicle trips during the AM and PM peak hours. A considerable reduction of vehicle trips is however possible due to centres of employment, education, shopping and recreational areas, being in close proximity to each other, thus enabling users to potentially walk or cycle. The dedicated bus service connecting to Naas Town Centre and Sallins Train Station will further reduce car trips and consequently the requirement for parking spaces.
- 5.7.25 Using the car parking standards stipulated in the Naas Town Development Plan the number of required commercial car parking spaces can be up to 1,250 spaces. However, as detailed above, it is envisaged that this number is excessive due to the likely reduction in private vehicle trips to the area consistent with the provision and operation of a high quality public transport alternative. Customers will be provided with alternative, convenient options of accessing the commercial units other than by private vehicle. The Northwest Quadrant bus routes will be in operation and will service the commercial zones at frequent intervals. In addition, the proposed residential areas of the Northwest Quadrant are within a ten-minute walking band of the Urban Village Centre.
- **5.7.26** Parking provision will be made for a limited number of car parking spaces for visitors availing of the Grand Canal walk and canal amenity.

Bicycle Parking

- 5.7.27 Secure bicycle parking will be provided in locations such as the community/educational area, Village Centre and at appropriate locations in the lands marked for commercial/employment development.
- 5.7.28 It is recommended that a minimum level of bicycle parking facilities be provided in association with new development. On lands for employment-generating activities, where the provision of bicycle parking facilities are intended for use by the staff of or visitors to that particular development, stands should be located within the immediate vicinity of the development to maximise convenience and to ensure security and supervision.



Section 6.0

- 6.1 Physical Features
- 6.2 Opportunities and Constraints
- 6.3 Urban Structure
- 6.4 Movement and Access
- 6.5 Visual Connections
- 6.6 Open Space and Amenity
- 6.7 Indicative Phasing
- 6.8 Character Areas Design Characteristics
- 6.9 Development Guide
 - for Sustainable Building Methods



Urban Design Framework



6.1 Physical Features

6.1.1 The subject lands for the Masterplan, bounded principally by the canal areas to the east and south, the Ploopluck lands and Caragh Road to the south and the M7 to the west and north, have been defined over time by historical forces, principally the development of the canal and the M7, which isolated the subject lands from Naas Town Centre, and the surrounding hinterland, as noted in section 2.2.

This now provides the opportunity to develop an integrated Masterplan bringing forward the development of the area as a sustainable extension to Naas in accordance with best practice taking into account the particular landscape, topography and physical features of the area.

6.1.2 Landscape Quality

The landscape quality of the Northwest Quadrant is characterised by the principally agricultural use of the lands that slope gradually towards the River Liffey - the residual foothills of the Wicklow Mountains to the east. This generalised slope is interrupted by local undulations both in the ridge that occupies the centre of the site and at Ploopluck Hill.

The boundaries of the area are defined on the east by the high amenity areas, mature woodlands and fields of the Knocks and Keredern House properties adjoining the canal from the 2nd to the 5th Lock.

To the south, the boundaries are defined and characterised by the embankment of the Canal Harbour and Corbally Branch extending from the Canal Harbour westwards to Ploopluck Bridge with mature amenity areas to the south side of the canal. The southern boundary is the rear of the residential development in this location, agricultural lands associated with Ploopluck House and the realigned Caragh Road [R409] extending to the M7.

To the west and north the M7 motorway, varying from being at grade with the adjoining lands in the southwest corner rising to a significant embankment at the Canal Bridge adjacent to Leinster Mills, defines a strong north-western boundary to the site.

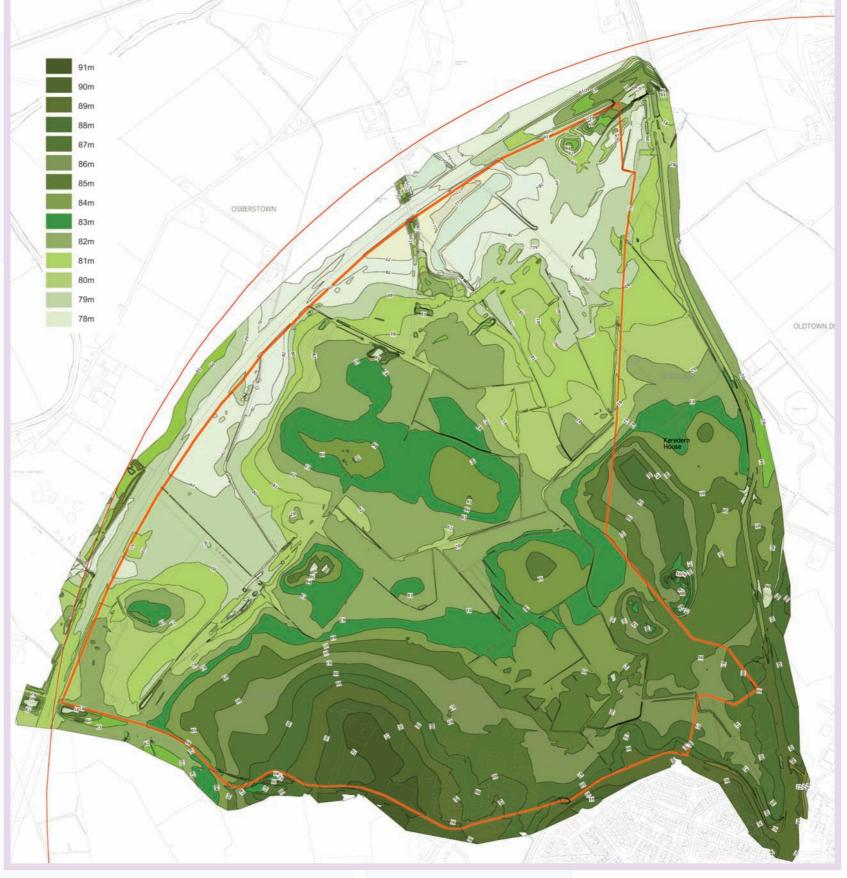


FIGURE 6.1: TOPOGRAPHY SURVEY

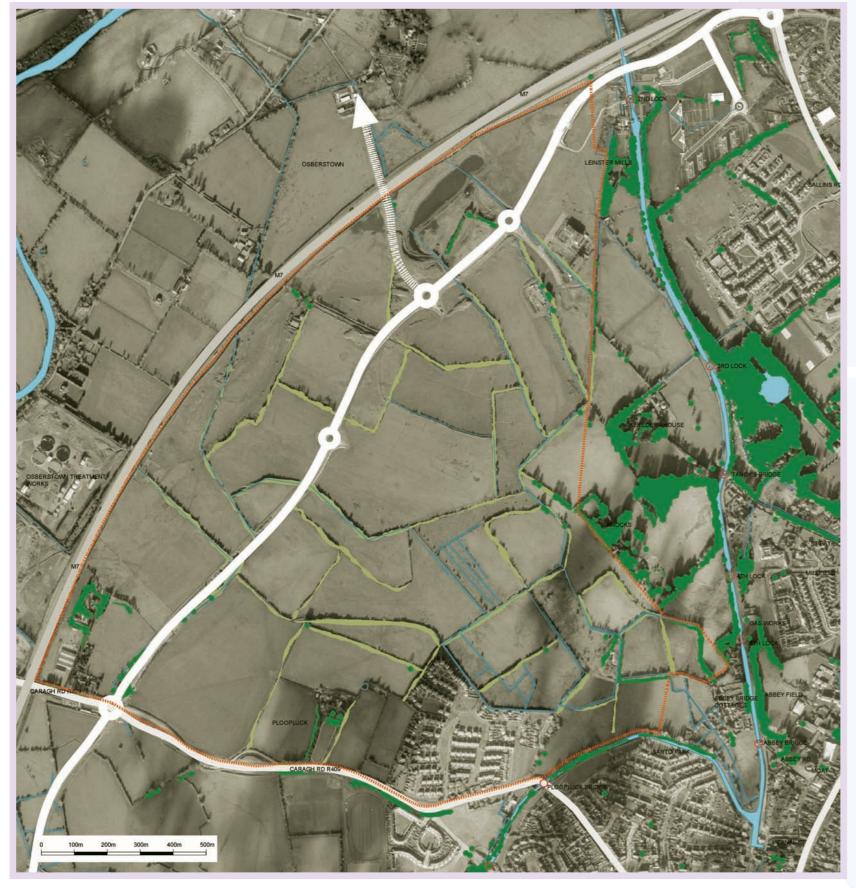


FIGURE 6.2: PHYSICAL FEATURES

6.1.3 Field Pattern and Watercourses

The field pattern of the area has developed over time with surprisingly few changes since the pattern shown on Ordnance Survey Map of 1939, the principal field divisions being coincident with the present configurations. Mature hedgerows define this field pattern at the centre of the site with some native species of mature trees within the hedgerows.

These hedgerows are coincident with open ditches and watercourses in two principal catchment areas. The majority of the site, occupying most of the central area and running from the canal area south and west, drains via the existing attenuation lake to Osberstown. A secondary catchment area exists to the southwest, separated from the principal catchment area by the central ridge of the site and also ultimately draining to the Liffey at Osberstown.

Figure 6.2 identifies the complex network of watercourses throughout the Northwest Quadrant. The masterplan recognises the importance of water as a theme in the historic development of Naas. Every effort shall be made as part of the design process to use water to enhance the identity of the area and to create area-specific wildlife habitats.

6.2 Opportunities and Constraints

6.2.1 Landscape Pattern and Development

The existing infrastructure of the Western Link and the landscape pattern of field divisions, hedgerows and water courses defines a series of principal geometries - reflected also in the zoning divisions in the Naas Town Development Plan - for the development of the Northwest Quadrant. These sometimes overlapping geometries provide a basic pattern for development which reflects and takes account of principal landscape features and constraints of the site.

They are:

1. The Western Link

Aligned to the varying geometry of the new distributor road.

2. The Urban Village

Aligned to a principal geometry of the field pattern.

3. Central Area

Related to the field pattern and watercourses of the central 'White Lands' area, defined in part by the original Naas Town Sewage Plant at this location.

4. Canal Harbour

Related to the hemispherical arc of the Canal, running from Ploopluck to the Canal Harbour.



PRINCIPAL GEOMETRIES

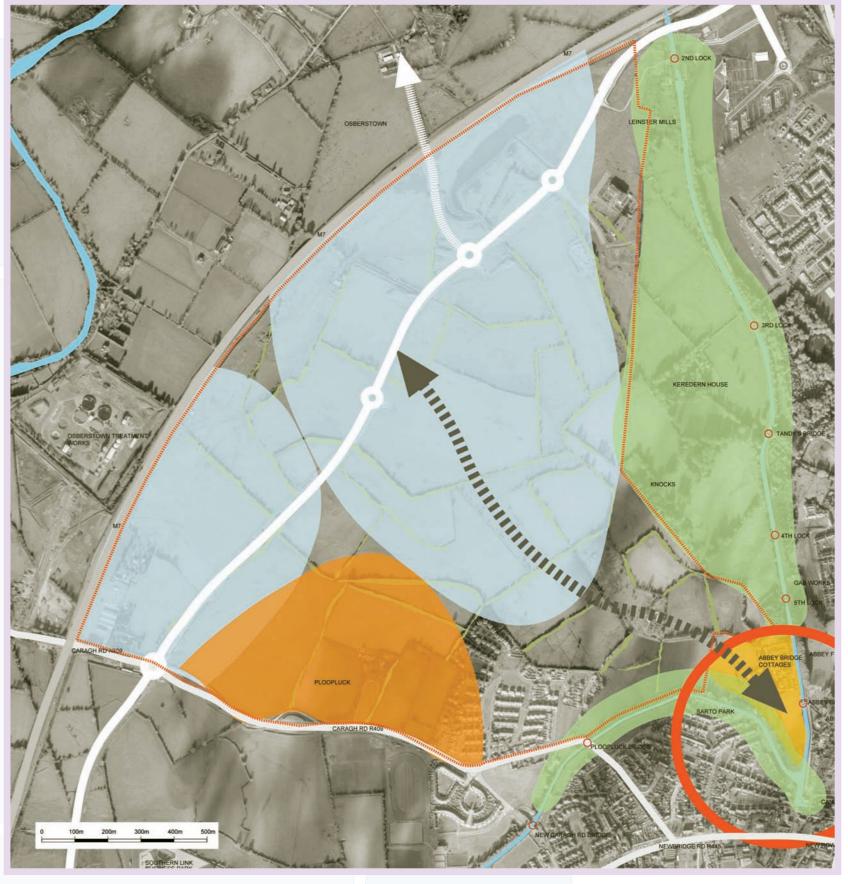


FIGURE 6.3: PHYSICAL CONSTRAINTS

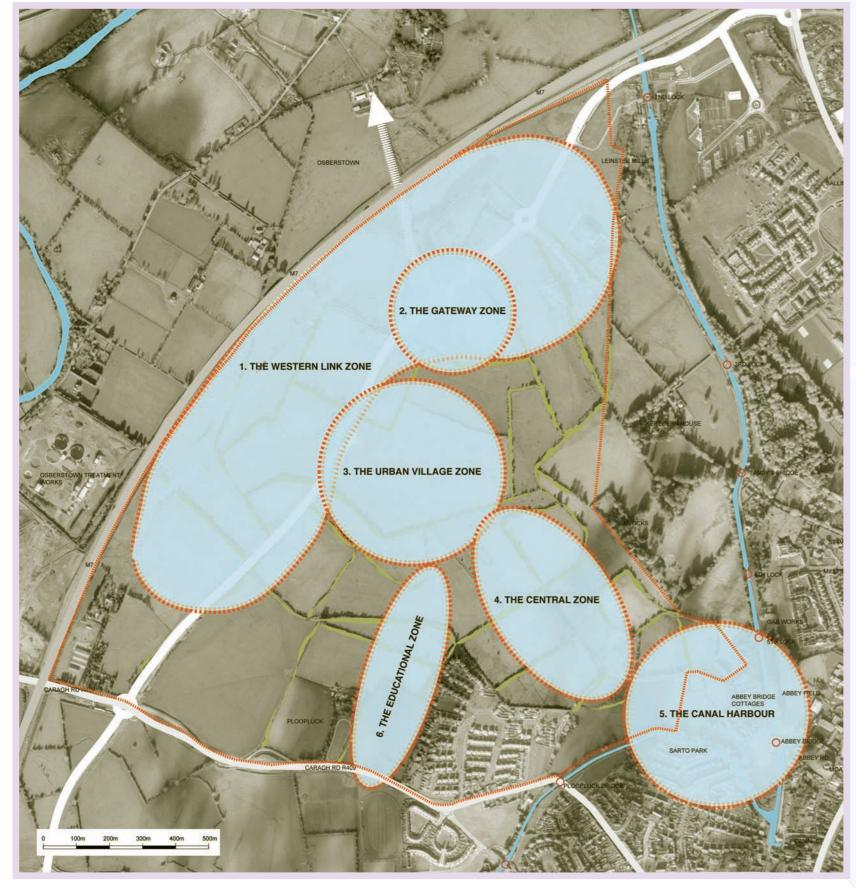


FIGURE 6.4: DEVELOPMENT ZONES

6.3 Urban Structure

6.3.1 Development Zones

Critical to the Northwest Quadrant Masterplan is the definition of an integrated urban structure that can allow for the development of the area over time in accordance with the provisions of the Naas Town Development Plan. This urban structure is required to be flexible and able to accommodate growth and change over an extended development period.

Through the interrelationships between the zoning diagram of the Naas Town Development Plan, the existing Western Link with future critical transport connections to the M7 and the existing landscape pattern a series of zones - relating to use, location and geometry provide the basis for the proposed urban structure.

These zones are:

1. The Western Link Zone

Attached to the Millennium Park Distributor Road as extended through the Western Link incorporating existing employment developments within Millennium Park.

2. The Gateway Zone

A portion of the Western Link Zone at the proposed entrance to the Northwest Quadrant from the proposed M7 interchange.

3. Urban Village Zone

A district centre, as envisaged in the Naas Town Development Plan, linking employment, educational and residential areas around it.

4. The Central Zone

A linear zone relating to the Naas Town Centre Connector - the public transport corridor linking to Naas Town Centre.

5. The Canal Harbour Zone

Relating to the canal and harbour area linking the Northwest Quadrant to Naas town. Only a small portion of this area is within the masterplan lands.

6. The Educational Zone

Relating to existing and proposed educational and leisure uses, linking from the Urban Village southwards to the Caragh Road.

6.3.2 Urban Structure

The development framework, incorporating the land use and transportation elements of the development zones and the urban structure for the Northwest Quadrant, describes a hierarchy of roads, streets, urban centres and amenity areas, establishes proposed character areas and defines the development density and mix of uses.

The urban structure is based on the objective of securing an integrated and sustainable development combining a series of linked environments as an exemplary urban extension to the existing town.

The principal elements of the proposed urban structure are:

- 1. The adoption of the Western Link Road as the major orbital distributor of the town and providing access to this previously unconnected large land resource for the extension of the town. The specific importance of a major new access point to the M7 is also recognised.
- 2. The creation of a Gateway condition for the M7/Western Link junction, defining - and signifying - the new urban quarter.
- 3. The development of the Urban Village Centre and associated residential areas as a high-density focus to the Northwest Quadrant defining a district centre for the area.
- 4. The development, subject to development demand and the zoning of White Lands, of significant residential and local services in the central Avenue Area. This develops a spatial and urban form for the Northwest Quadrant / Naas Town Centre Connector public transportation corridor as noted in Section 5.7.
- 5. Subject to the Local Area Plan the creation of an extension to the existing town at the Canal/Harbour areas, developing the unique environment of the canal and amenity areas from Ploopluck Bridge to the Abbey Bridge/5th Lock.
- 6. The development, over time, of the Educational Zone into a significant area including sport and leisure uses as an active/participatory area of the quadrant.

The urban design characteristics of each of these principal elements and development areas are defined by the interrelationship of spatial structure, urban form, block size and building height, density and mix of uses and the relationship to the existing landscape.

Detailed design codes with typical block plans and digital 3D models will be prepared for each of the four character areas; The Gateway, The Urban Village, The Central Area and The Harbour Area. The design codes will be prepared in advance of the submission of planning applications for the character areas, unless otherwise agreed with the planning authority. Diversity of architectural expression shall also be required. No single design practise should be responsible for greater than 25% of the total built area within the Urban Village, the Cental Area or the Harbour Area, or 50% of the Gateway area.

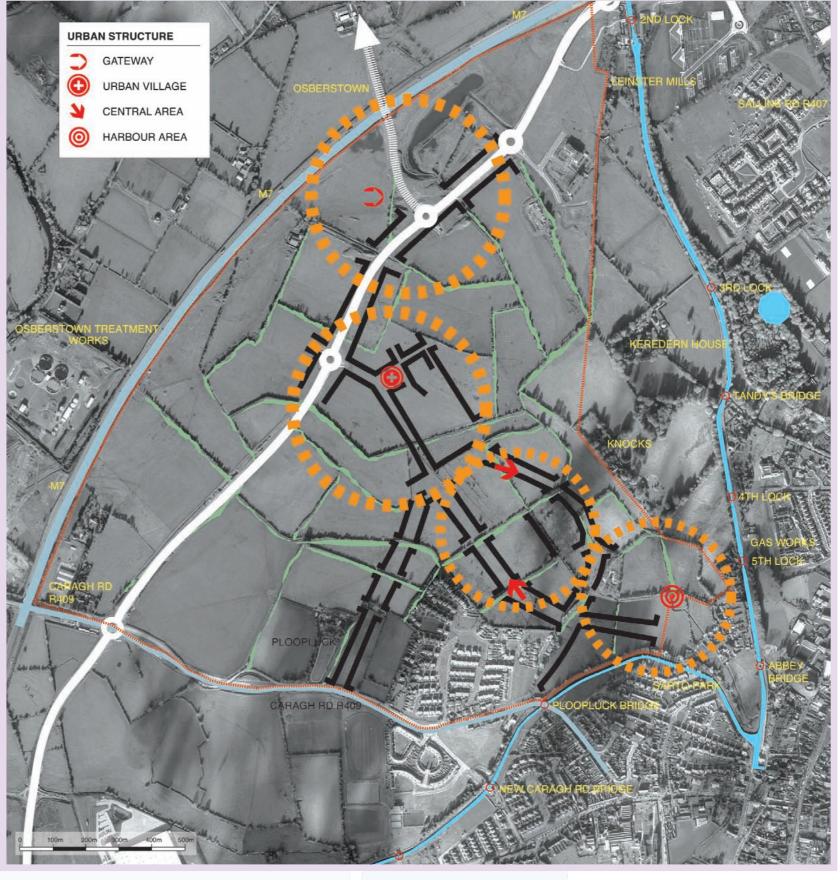


FIGURE 6.5: URBAN STRUCTURE

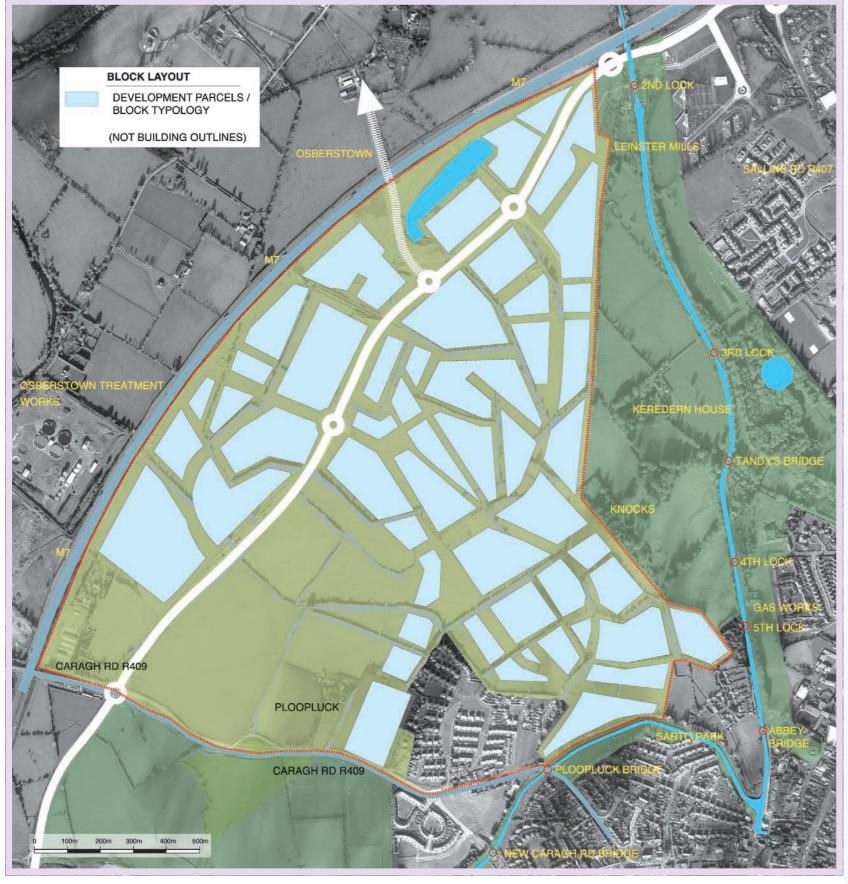


FIGURE 6.6: BLOCK LAYOUT

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES.

6.3.3 Development Parcels/Block Typology

The block layout proposes a series of sub-divisions of the development zones, reflecting the urban structure and identifying a series of coherent development parcels. Of necessity, these are indicative only, and ultimately their size and shape will reflect detailed design and market considerations.

These development parcels incorporate:

- Retained landscape features of hedgerows with mature trees wherever possible
- Watercourses in the catchment area running from the canal harbour northwards to the existing attenuation lake and onwards to the Liffey at Osberstown.
- The principal site geometries as defined above.
- The public and open space strategy and pedestrian and cycle networks linking open spaces of varying size and types.
- The hierarchical road network from access distributor to local access roads - the degree of block sub-division of larger parcels being dependent upon road layout and building type.
- The generalised zonings and objectives of the Naas Town Development Plan.

The block typology within the parcels will vary according to the specific location within the overall structure, use development density and relationship to landscape. Indicative tissue studies suggest:

- A more open, landscape orientated block structure in the Western Link Zone relating to employment uses with a particular opportunity for building height at the Gateway location.
- Denser, urban nodes with definite perimeter blocks at the Urban Village and Canal Harbour Zones, with a high degree of enclosure and definition of urban space.
- A block typology in the Central Zone varying from defined frontage to a looser form
- An open structure in the Educational Zone allowing for larger institutional type buildings - primary and secondary schools with associated playing fields, open areas and landscape.

6.3.4 Building Height Zones

The proposed building heights derive from the overall urban structure, the definition of specific character areas and the imperative to define a clear urban form to identify the principal elements of the Northwest Quadrant.

A generalised 4 - 6 storey height is proposed to define the principal urban spaces of the Masterplan - the edge to the Western Link, the Urban Village and surrounding areas. They link south eastwards to Naas Town via the Avenue and the Canal/Harbour Area.

A series of specific locations for taller landmark structures that define specific locations. These are located at the Gateway, defining arrival in the Northwest Quadrant from the M7. A further set of specific conditions define the principal arrival points and spaces of the Urban Village.

In other residential areas a generalised 2 - 4 storey height, with allowance for localised increased heights at significant locations, defines a form of development relating to open spaces and amenity areas.

Subject to the agreement of the planning authority, higher buildings of exceptional architectural and design quality may be acceptable in the above zones in certain locations.

Whilst the White Lands have been identified for development for the purposes of the building height diagram, this does not dictate the re-zoning of these lands. Only over time and with the development of the Northwest Quadrant can a more detailed assessment of these lands take place and a view emerge as to the requirements of Naas and its Northwest Quadrant.

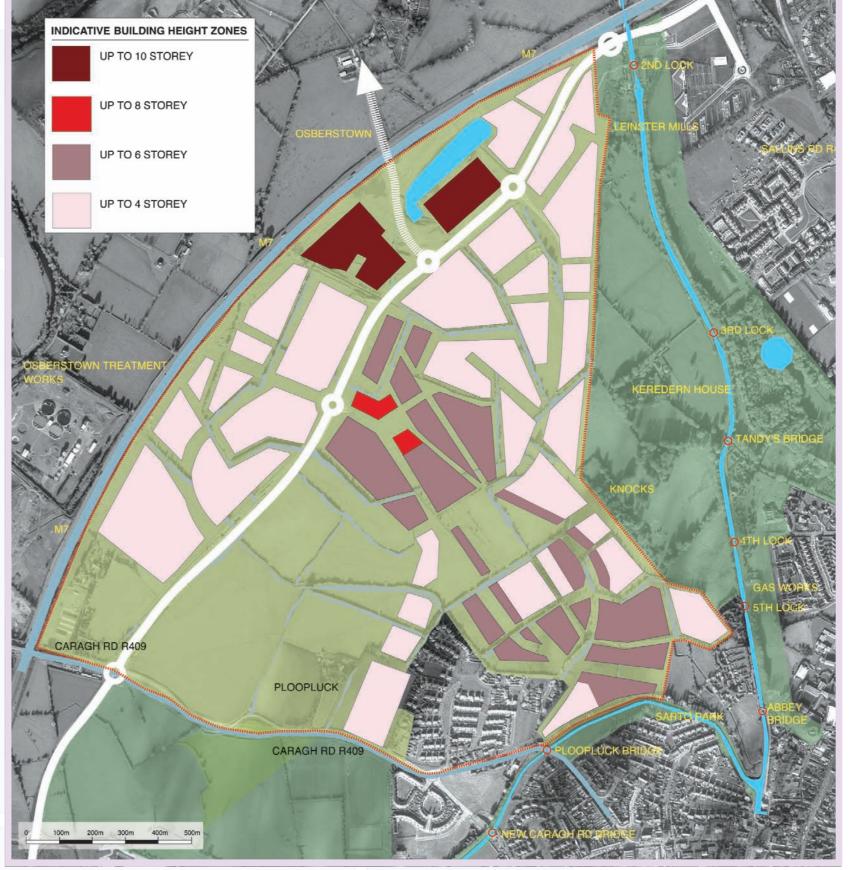


FIGURE 6.7: BUILDING HEIGHT ZONES

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

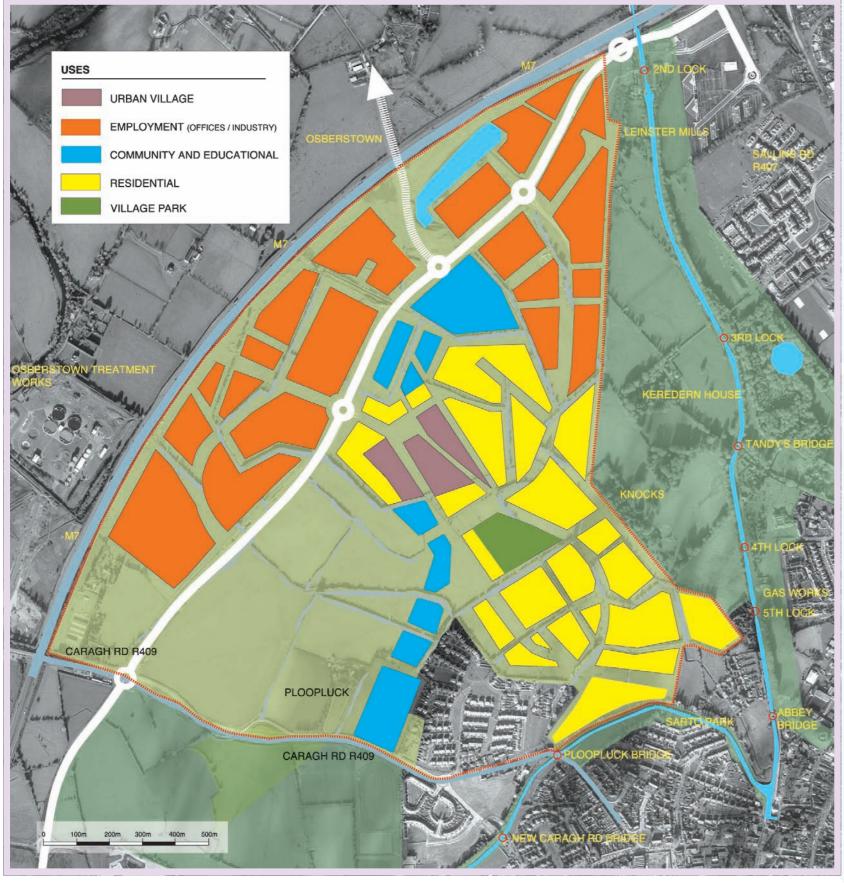


FIGURE 6.8: USES

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

6.3.5 Uses

Specific uses are in keeping with the general Zoning Objectives for the Northwest Quadrant of The Naas Town Development Plan [see Section 5.2].

Whilst the centrally zoned White Lands have generally been identified for residential and parkland use and the western White Lands for employment use for the purpose of the uses diagram, this does not dictate the re-zoning of these lands. Only over time and with the development of the Northwest Quadrant can a more detailed assessment of these lands take place and a view emerge as to the requirements of Naas and its Northwest Quadrant.

6.4 Movement and Access

6.4.1 Objective

A key objective of the Northwest Quadrant Masterplan is the development of an extension to Naas that is less reliant upon car usage and places emphasis upon the creation of a diverse environment and services capable of being accessed on foot and/or bicycle.

6.4.2 Pedestrian Movement

To this end the Masterplan provides for a rich and permeable urban realm, with appropriate provision for pedestrians at all levels. As the walk bands demonstrate the majority of the Masterplan area is within a ten-minute/800 metre walk of the Urban Village Centre, allowing for ease of access from residential and employment areas to retail and other services. Major pedestrian connectors are seen as 'Green corridors' where retained landscape features, hedgerows and watercourses characterise the environment.

6.4.3 Cycle Provision

The Masterplan provides an integrated network of defined cycle paths and routes at an approximate 200-metre interval, linking the Northwest Quadrant with Naas centre and educational facilities towards the Caragh Road. These networks extend north and eastwards to the Grand Canal and Sallins Road, linking the Masterplan Area to the main line commuter rail network at Sallins Station. The development of the M7 interchange and new route to Sallins Road will provide further opportunities for cycle and rail integration.

The cycle networks linking diverse uses within the Northwest Quadrant have the potential to contribute to a "Safer Route to School" policy as noted in Section 5.7.

The cycle routes are in two principal forms differentiating between primary direct and service orientated routes which are defined cycle ways and paths along the principal road network. A secondary network for more casual landscape and amenity orientated routes is also proposed.

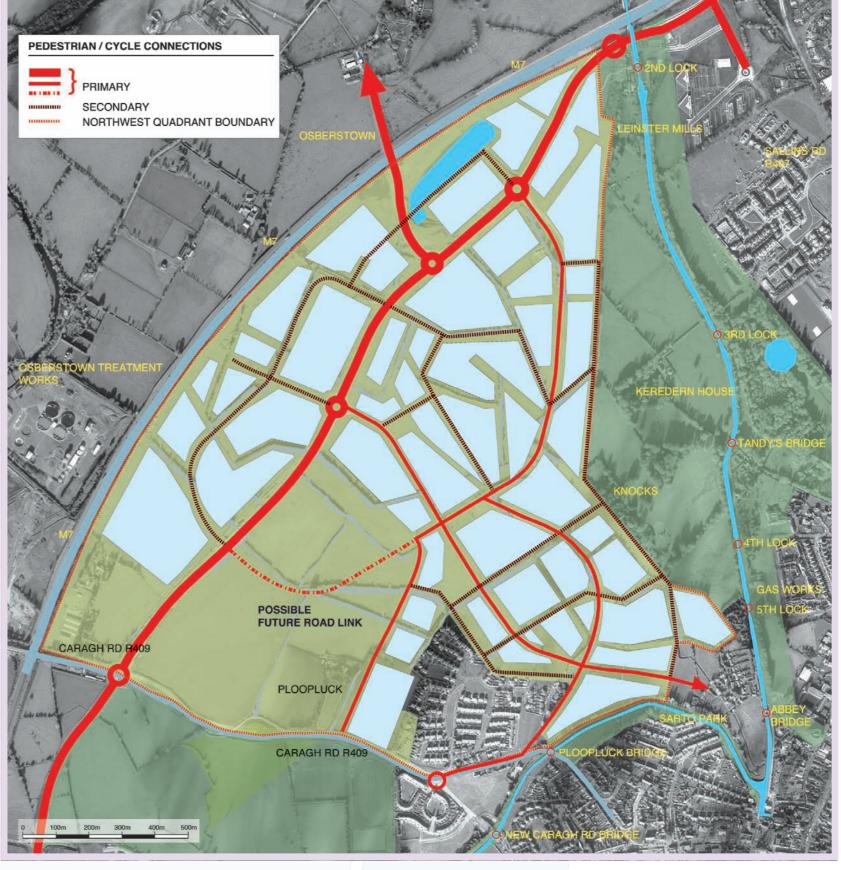


FIGURE 6.9: PEDESTRIAN / CYCLE CONNECTIONS

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

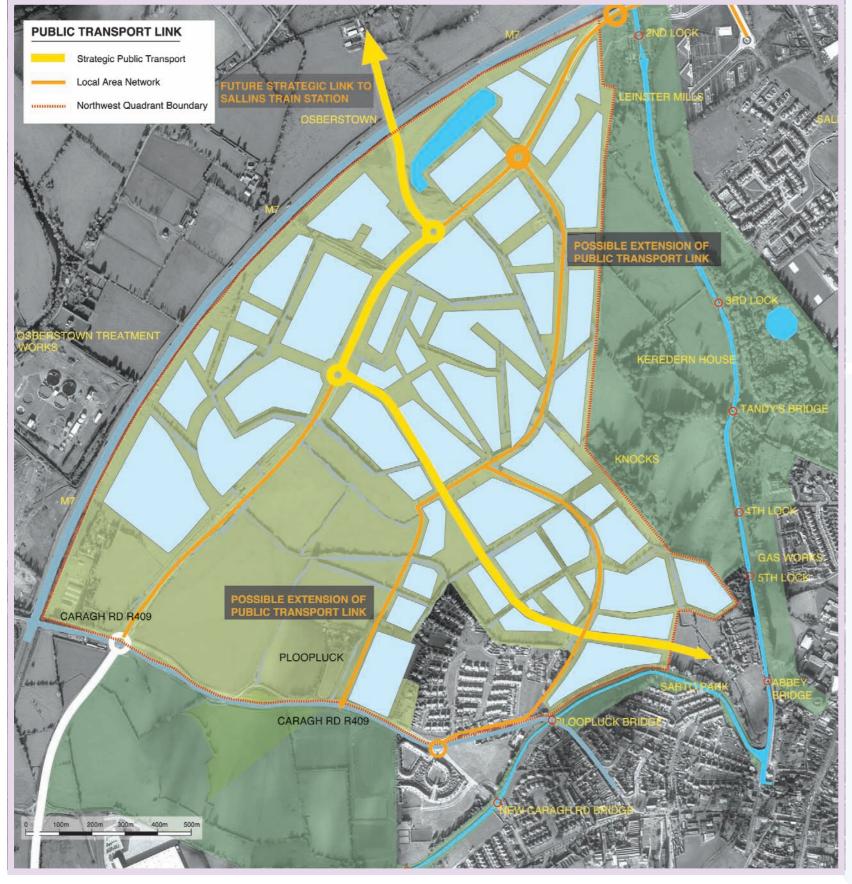


FIGURE 6.10: PUBLIC TRANSPORT CONNECTIONS

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES.

6.4.4 Public Transport Connections

The objective of reducing the reliance on private vehicular transport within the Masterplan Area will be encouraged through attractive strategic public transport connections both to Naas Town Centre and to the railway network at Sallins.

The Masterplan aims to link Naas Town Centre and the Northwest Quadrant via a public transport, pedestrian and cycle route. A strategic public transport link, in the form of a dedicated bus and/or light rail corridor, will be provided to serve the masterplan area. The corridor will extend from Naas Town Centre and provide a direct link, via the proposed village centre, to the railway network at Sallins as indicated on Figure 6.10. The provision of a direct route is critical to the sustainability of the Northwest Quadrant as an integrated extension to the town.

A connection to the R409/Caragh Road through the educational lands has also been identified and will act as an extension of the public transport connection and link into the existing bus routes currently servicing Naas [see Section 2].

Linking Sallins Station to the Northwest Quadrant will initially be accommodated via the connection of Sallins Road and the new Western Link distributor road constructed within the Northwest Quadrant. It is envisaged that upon construction of the M7 interchange this will act as the strategic route for the proposed public transport link.

The public transport link will access all character areas within the Masterplan and has a direct connection with the core of the Urban Village.

6.4.5 Vehicular Connections

The Masterplan structures the land use and transportation requirements for the Northwest Quadrant in accordance with the provisions of the Naas IFPLUT and the Naas Town Development Plan, placing an appropriate emphasis on public and other transport modes.

The Masterplan equally recognises the necessity for connectivity into the wider road network and a clear hierarchy of vehicular routes within the Northwest Ouadrant area.

The primary route structure links the Northwest Quadrant to the Western Link Road as a key orbital route for Naas linking the lands to the wider road network. With the provision of the M7 Interchange, the Western Link will connect directly with the national road network.

Within the Northwest Quadrant the primary road structure connects the principal areas of the Masterplan, providing a vehicular access from the Western Link Road and Caragh Road into the Masterplan area. Because of access limitations, as noted in Section 5.7, the south eastern lands of the Central Area and the Canal Harbour do not have vehicular access over the canal, this being reserved for public transport and cycle and pedestrian movement only. Vehicular access to these areas will be via the link to the Caragh Road and to the Western Link Road.

The secondary route structure provides access to individual parcels and blocks, which, particularly in the residential areas, can be further subdivided by tertiary routes according to use, density and preferred building type. A tertiary route is also defined linking secondary routes along the future parkland areas and amenity lands to the northeast and southwest.

Depending on the level and pattern of traffic movement and the progression of the M7 interchange, a new road may be required extending from the southern end of the village centre to connect with the Western Link Road. This will be subject to future discussions and agreements with the Roads and Planning Authority.

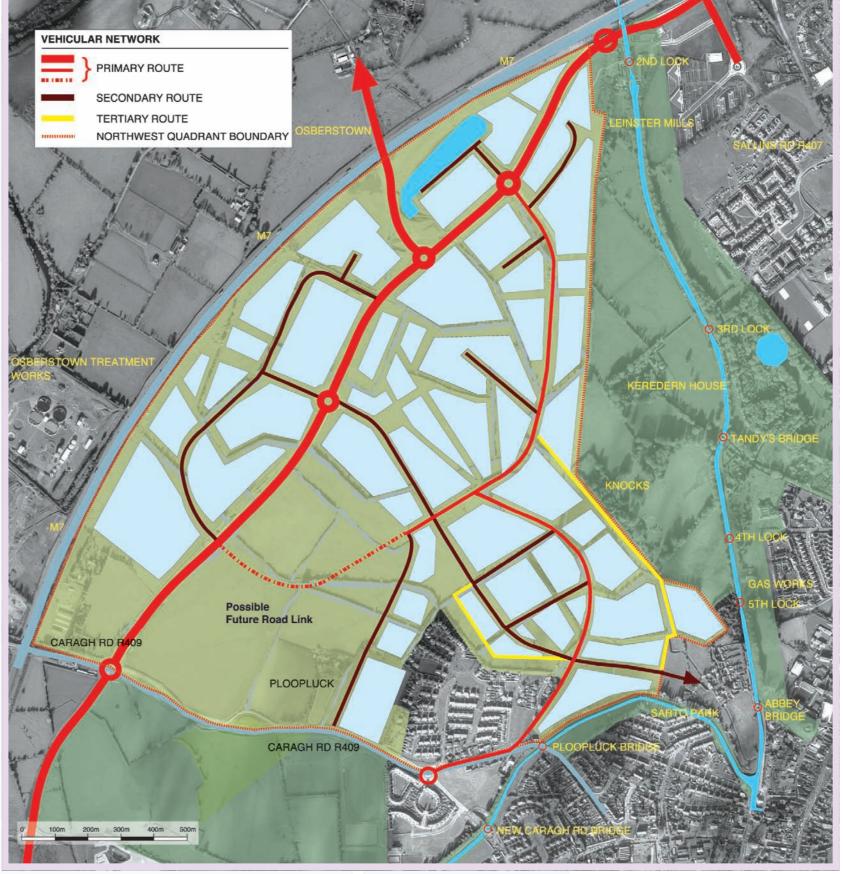


FIGURE 6.11: VEHICULAR CONNECTIONS

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

6.4.6 Car Parking, Access and Loading

The objective of the Masterplan is to define a public space network which is not dominated by private vehicular transport and resultant car parking. To this end vehicular access and car parking is related to the hierarchy road network, development density and use of individual parcels and blocks.

Within the employment uses of the Western Link Zone car parking will generally be surface car parking within the curtilage of individual blocks and buildings. These should be designed as landscaped car parks integrated with the typology of a continuous open landscaped area.

The higher density Urban Village will have limited on street surface car parking for short-term access. Longer term parking is to be accommodated in underground car parking spaces and by multi storey car parking. Subject to detail design the multi storey car parking can be surrounded by an external envelope of inhabited spaces.

Surface provision for access and loading within the Urban Village will address the mixed use requirements of this area, recognising a balance between the service and access requirements for larger scale retail/commercial uses and the maintenance of the residential amenity to encourage a diversity of uses.

This balance can be achieved through designation of specific service access routes and entrances coupled with traffic access management policies as mitigation measures.

Within residential areas, on secondary or tertiary routes, car parking will be either on street or in lower density areas, off-street/within curtilage car parking for individual dwellings.



Visual Connections

6.5.1 A key element of the Masterplan is the creation of a coherent spatial structure that establishes a clear and legible urban form integrated with the surrounding context and landscape.

6.5.2 Key Urban Sequence

The key urban sequence linking the Gateway, Urban Village and Canal Harbour areas establishes a primary set of visual connections with landmark structures or uses providing spatial legibility and focus in specific locations.

The Gateway [1] provides a strong visual address for the Northwest Quadrant on the M7 and establishes a connection between the Western Link Road and the M7 route

The Urban Village [2] is defined by it's clear orthogonal geometry with a number of key points marking changes in direction or approach being defined by landmark locations.

Due to critical boundary dimensions the alignment of the route, linking the Urban Village with the Canal Harbour area, is offset from the principal street of the Urban Village, the visual connections associated with it [3] being emphasised by landmark structures.

The Canal Harbour area is linked to the existing town by general views [4] to the East focusing, in particular, on Saint Davids Church and the Moat over the Abbey Bridge.

This series of views establishes a principal urban sequence linking the major elements of the Masterplan and providing a legible urban structure for the Northwest Quadrant.

6.5.3 Key Landscape & Amenity Connections

A series of views to the landscape and amenity areas defined in the Masterplan is proposed which complements the urban sequence as noted above. These can be characterised in three broad types - visual connections and linkages with amenity and open space within the Northwest Quadrant [5], connections and orientation to future parklands [6] and views to retained agricultural/open space areas [3].

The landscaped green spaces within the Masterplan, as noted in Section 5.5, are in a series of different typologies, relating to their place within the urban structure, use and landscape type. In the case of open landscaped spaces in the Employment Use area between the Western Link and the M7 - these are seen as rolling parkland spaces within which buildings sit, visually linked to the scale of movement along the Western Link Road and the M7.

Open space and amenity facilities are within the Urban Village and residential areas in the form of more defined and formally laid out parks, while individual pocket parks in residential areas relate, at a more local level, to specific locations and uses.

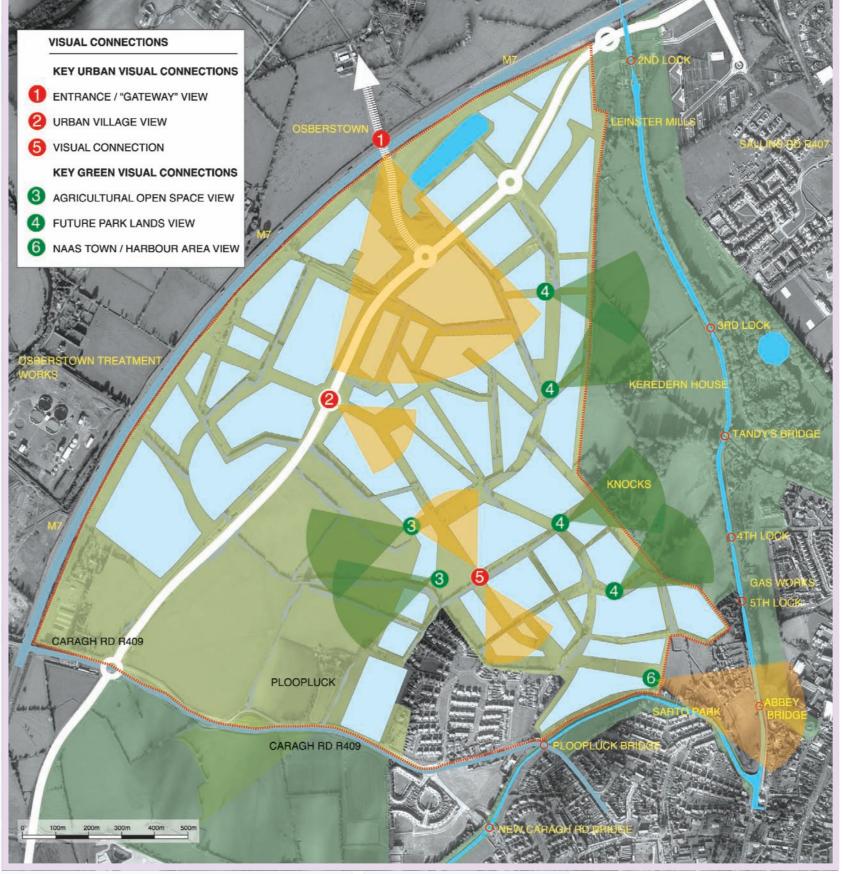


FIGURE 6.12: VISUAL CONNECTIONS

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

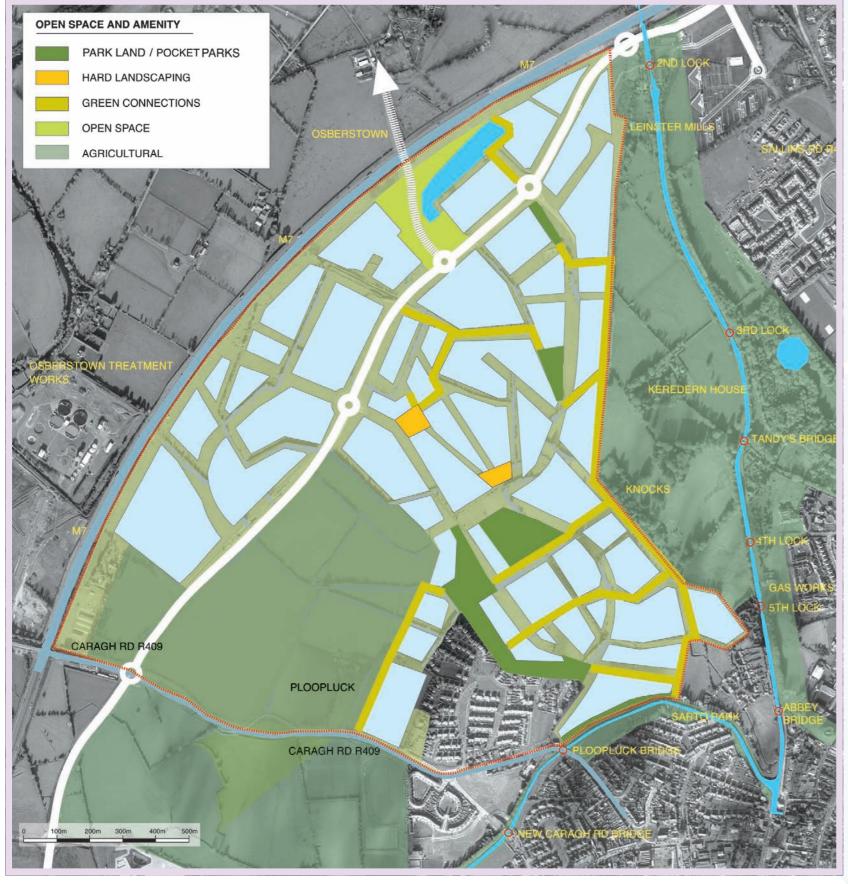


FIGURE 6.13: OPEN SPACE AND AMENITY

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

6.6 Open Space & Amenity

A key objective of the Masterplan is the establishment of a quality public realm as part of an exemplary and sustainable urban environment. The provision of a hierarchy of integrated open space and amenity areas is fundamental to this objective and the Masterplan provides for a range of open space types as noted in Section 5.5.

The major open space amenities adjoining and within the Quadrant, the Future Park (zoned M) to the east, the Canal Corridor to the south and southeast greenbelt (zoned F) are integrated into the Masterplan's Urban Structure as informal recreation space. Public access and connectivity to these areas, in particular the amenity of the canal, is a major aim of the Masterplan.

Complementing these major open spaces are a network of linear green connections allowing ease of access to all areas of the Quadrant and beyond. These key green connections retain their original physical features, such as hedgerows and watercourses. In retaining these features, wherever possible, future development of the lands will adapt to the quadrant and integrate with the existing landscape. The green connections are augmented by pocket parks in key areas along these routes. These pocket parks can have a multitude of uses specific to the adjoining character areas such as playgrounds and landscaped parks.

Specific locations have also been identified as hard landscape and urban spaces, mainly within the Urban Village, which will allow for the future development of public urban squares and plazas and ensure a different aspect of space for the Quadrant.

The green connections also link to open spaces for active recreation and outdoor sports, generally to be located in the lands Zoned E1 and E3, associated with education facilities and linking southwards to the existing facilities south of the Caragh Road.



Hard Landscaping

Pocket Parks

Green Connections



Green Connection/ Boulevards

Green Canal Belt

Agricultural

Indicative Phasing

6.7.1 Principal of Integration

The guiding principal for the Masterplan aims to create a new community for the Northwest Quadrant based on the principals of sustainability with a strong emphasis upon the integration of land use and transportation and the provision of an integrated community by providing all facilities locally and achieving a mix of uses.

This objective also guides the phasing of the proposed development, which aims to build upon the existing development demand in the area for employment, retail, commercial and residential uses. Market demand and the availability of zoned and masterplanned lands within the Northwest Quadrant will promote the development of the area in accordance with the Masterplan.

Detailed design codes with typical block plans and digital 3D models will be prepared for each of the four character areas; The Gateway, The Urban Village, The Central Area and The Harbour Area. The design codes will be prepared in advance of the submission of planning applications for the character areas.

6.7.2 Services Infrastructure

The subject lands, particularly in the northern area of the quadrant are already fully served with relevant infrastructure. However the services and road infrastructure will require to be extended to facilitate the development of the zoned lands in the Northwest Quadrant. The confirmation of the full alignment of the public transport corridor linking the Urban Village to the Naas Town Centre by the planning authority will be critical to facilitating this development. This services infrastructure will also provide for the further zoning and development of the White Lands in the Central area and in the southwestern area between the Western Link Road and the M7.

6.7.3 Ease of movement is a key principal of the Masterplan and will be attained through promoting accessibility from, and permeability through, Naas Town Centre and the Sallins Rail Station.

This will require, in the first instance, integration of transport infrastructure from the Northwest Quadrant to the lands which are the subject of the Canal Harbour Local Area Plan and the Naas Town Centre through the examination of the appropriate infrastructure for the strategic public transport link.

In the short term, using the present road infrastructure via the Western Link Road can accommodate the provision of a public transport link through the Northwest Quadrant to the Sallins Rail Station. In the medium term the development of the M7 interchange will facilitate this direct linkage to commuter rail.

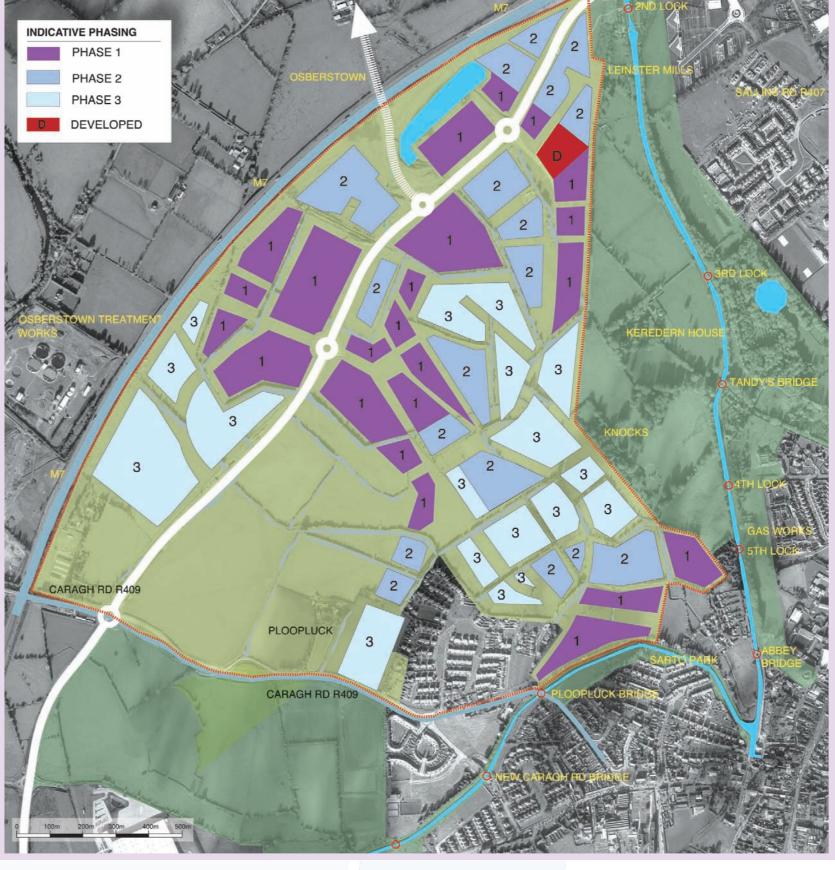


FIGURE 6.14: PHASING

NOTE: FIGURES ILLUSTRATE DEVELOPMENT PARCELS / BLOCK TYPOLOGY NOT BUILDING OUTLINES

6.7.4 Overall Phasing

The development of the Northwest Quadrant will occur in a series of phases. The purpose of phasing is to ensure that infrastructure, services, facilities and amenities are provided in tandem with development. To ensure flexibility, the proposed phasing schedule is sequential rather than time specific. The proposed schedule is based on the premise that the quantum of development that is applied for in each phase is dependent on a predetermined amount of supporting works to provide infrastructure, services, facilities and amenities.

Except in exceptional circumstances to facilitate important desired development, and in full agreement with the planning authority, development of lands which form part of a later phase will not be permitted until the pre-determined amount of supporting works required for the previous phase have been provided or are at an advanced stage of planning.

The development of the Northwest Quadrant is proposed to occur in three phases. The first two phases are determined by the current status of the lands in terms of land use zoning under the Naas Town Development Plan. Phase 1 and 2 comprise all zoned lands within the Masterplan area. Phase 3 relates to the White Lands. Given the current planning status of the White Lands it is not possible to provide for a detailed phasing arrangement. Such can only be prepared when the final designation of the lands is determined.

In order to secure the provision of services such as schools, public parks, playing pitches and other necessary facilities the planning authority will work in close association with all statutory agencies, key landowners and developers and will consider the use of compulsory purchase powers where necessary to ensure service provision. The phasing arrangements set out in this masterplan will be subject to ongoing monitoring and review to ensure that development can proceed in an orderly manner in line with market conditions while simultaneously ensuring that services are delivered to serve the new population of the quadrant.

The phasing arrangements are set out in Tables 6.1, 6.2 and 6.3 and on Figure 6.14

Table 6.1 Phase 1

This phase contains elements of the existing zoned lands, including lands zoned for employment uses (Zoned H – Industrial and Warehousing Development)

Urban Village (G Lands); Zoned Residential Lands (C Lands); Zoned Industrial & Community & Educational (E Lands) Development Permitted Complete Village Development (inclusive of 460 residential units) Development Permitted Built-out of 30 Ha (74 acres) as specified on Figure 6.14 Built-out of Lands as specified on Figure 6.14	Lands Designated fo	or Development in Phase	e 1 and Quantum of Dev	elopment Permitted		
Complete Village 600 Residential Units Built-out of 30 Ha Development (inclusive 600 Residential Units 600 Res			Warehousing (H & H2	Community & Educational (E Lands);		
Development (inclusive (74 acres) as specified as specified on	Development Permitted	elopment Permitted				
	Development (inclusive	600 Residential Units	(74 acres) as specified	as specified on		

Physical and Social Infrastructure/Services/Amenities required to be completed prior to commencement of Phase 2

- · Western Distributor Road
- District Distributor Roads to serve Phase 1*
 Service facilities in Urban Village
- · Amenity Lake/Attenuation Lake
- · Open Space/Parkland
- · Foul Sewer Network to serve Phase 1*
- Trunk Watermain to serve Phase 1*
- Primary School

- · Retail provision in Urban Village
- · Strategic Public Transport Corridor -Complete link from Harbour Area to Sallins Rail Station via proposed Urban
- * As agreed with the planning authority

Table 6.2 Phase 2

by the planning authority)

Lands Designated for Development in Phase 2					
Residential Zoned Lands (C Lands)	Zoned Industrial & Warehousing Lands (H Lands); Community & Educational (E Lands);				
Development Permitted: Completion of remainder of Development on Zoned lands as specified on Figure 6.14					
Physical and Social Infrastructure/Services/Amenities required to be completed prior to commencement of Phase 3					
 M7 Interchange and/or M7 Accommodation Bridge Distributor Road Link to Sallin Extension of District Distributor network as required Second Amenity/Attenuation I Public Park/Village Park (on V subject to appropriate zoning or in an alternative location as 	or Road • Water and Drainage Infrastructure to serve Phase 2 Lake • Provision of 3rd level/Outreach facility on community zoned lands if required by the planning authority				

Table 6.3 Phase 3

Lands Designated for Development in Phase 3

Development Permitted: Build-out of White Lands

Physical and Social Infrastructure/Services/Amenities which may be required for completion as part of Phase 3 development

- Provision of Secondary School if deemed
 Provision of Open Space in line with necessary in accordance with zoning provisions
- · Construction of Local Road Network
- · Construction of Local Water and Foul Sewer Network
- Development Plan requirements
- · Provision of Social Services and Amenities in accordance with Development Plan requirements dependent on re-zoning.

6.8 Character Areas - Design Characteristics

The vision for the Northwest quadrant derives from an understanding of the existing physical features of the quadrant, its history and the emerging character areas. An objective for the Masterplan is to retain many of the existing physical features within the quadrant, including hedgerows, watercourses and trees, and incorporate them into the future development of the quadrant. Detailed design codes with typical block plans and digital 3D models will be prepared for each of the four character areas; The Gateway, The Urban Village, The Central Area and The Harbour Area. The design codes will be prepared in advance of the submission of planning applications for the character areas, unless otherwise agreed with the planning authority. Diversity of architectural expression shall also be required. No single design practise should be responsible for greater than 25% of the total built area within the Urban Village, the Cental Area or the Harbour Area, or 50% of the Gateway area.

6.8.1 THE GATEWAY

- Naas Town Development Plan Zoning: H Industrial use lands/E – Educational Lands
- Entrance point and Gateway to Quadrant.
- Landmark buildings identify entrance to quadrant.
- Attenuation pond acting both as amenity and storm drainage.
- Orientation of landmark buildings to allow for maximum light gain.
- Permeable industrial development areas.
- · Connections to educational lands.
- Cultural, recreational and educational opportunities.
- Retain existing physical features.























EXEMPLARS: BLOCK TYPOLOGIES



6.8.2 URBAN VILLAGE ①

- Zoning: G Urban Village / C Residential
- Landmark buildings identify importance of Urban Village
- Local Urban Village Centre
- Central square and plaza
- Quality finishes and street furniture
- Active street frontage
- High density residential blocks
- Pedestrian and cycle connections
- Access to public transport link
- Opportunity for crèche location
- Connectivity to educational lands



















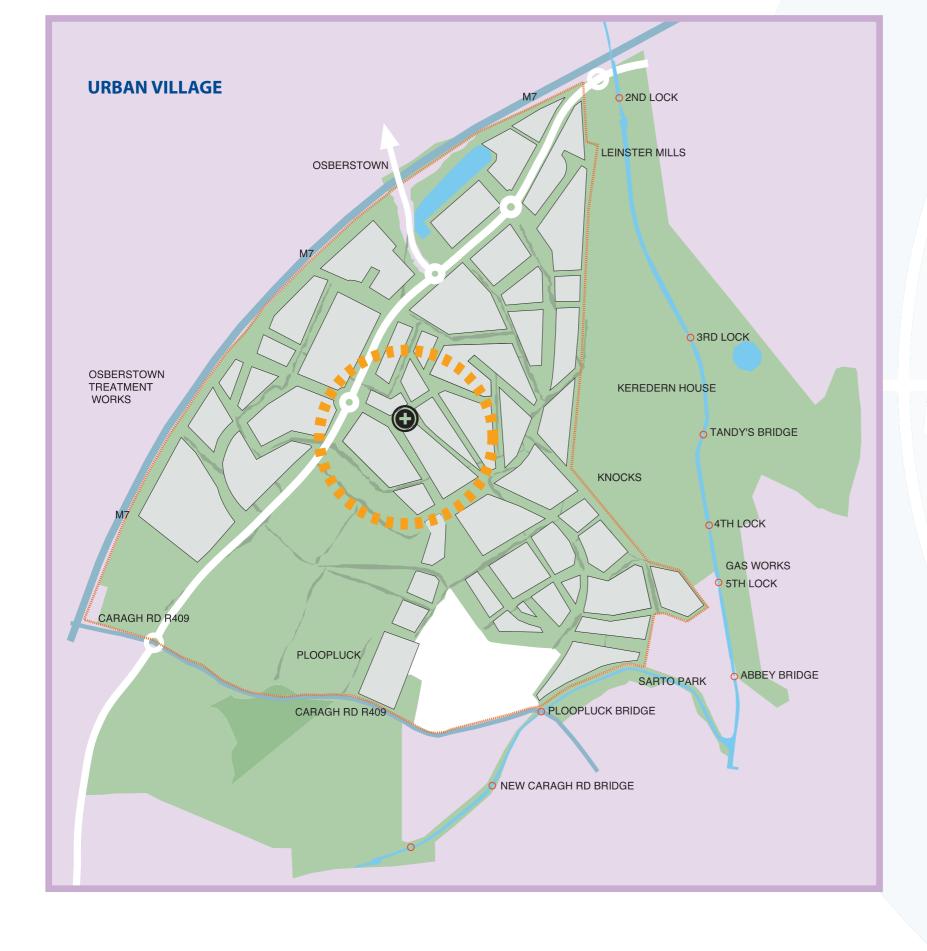








EXEMPLARS: PUBLIC URBAN SPACE



6.8.3 THE CENTRAL AREA

- Zoned: W White Lands
- Connection to Urban Village and Harbour Area
- Pedestrian and cycle connections
- Permeable developments
- Parks
- Strong edge treatment along main Avenues
- Good access to dedicated Bus Link
- Retain existing physical features



















EXEMPLARS: BOULEVARD TYPE GREEN CONNECTIONS









EXEMPLARS: GREEN OPEN SPACE / POCKET PARKS



6.8.4 HARBOUR AREA

- Zoned: C Residential Part of Area
- Harbour area acts as focus for area
- Public Transport Link to Naas Town Centre
- Pedestrian & Cycle link to Naas Town Centre
- Opportunity for crèche location
- Permeable housing developments to incorporate pedestrian and cycle links
- Mixture of Residential densities
- Soft landscaping child friendly zones



























EXEMPLARS: HARBOUR AREA GREEN OPEN SPACE / POCKET PARKS





6.9 Development Guide for Sustainable Building Methods

- **6.9.1** As outlined in Section 1 of this report, the guiding principle of future development on the Masterplan lands is to achieve sustainability through the integration of land use and transportation, the provision of an integrated community and the promotion of sustainable building standards.
- **6.9.2** In this regard, the Masterplan aims to encourage the promotion of energy conservation and energy efficiency in buildings including siting, layout and design of buildings, as well as waste management and disposal and sustainable urban drainage systems.
- **6.9.3** It is an objective of the Masterplan that all development on the Masterplan lands needs to comply with the general development control standards as set out in the Naas Town Development Plan. The policies contained in Chapter 8 of the Kildare County Development Plan, 2005-2011 in relation to Energy Efficiency and Renewable Energy also need to be considered. In addition to this, all development proposals within the Masterplan lands shall indicate how they intend to comply with the main relevant objectives and principles set out in this section.

6.9.4 Energy Conservation and Energy Efficiency in Buildings

This Masterplan aims to encourage methods of building design that conserve energy. Measures that promote energy conservation and efficiency in buildings include air tightness, appropriate use of glazing, high insulation standards and more efficient heating. Alternative forms of electricity and heat generation such as photovoltaic technology should also be considered. The various elements in relation to energy conservation and ecological building design are outlined below.









• Passive Solar Design

Passive Solar Design (PSD) techniques relate to the siting, layout, built form and landscaping of a development. The use of PSD techniques is cost effective, as it requires little or no cost to the developer and can amount to substantial savings on behalf of the owner/occupier. It also reduces the long-term use of fossil fuels and thereby reduces CO₂ production.

The main elements for the application of PSD with regards to design, siting and layout are as follows:

Orientation - To maximise solar access and its benefits the principle façade of a building should be orientated to be within 30 degrees of south (where feasible). A southerly orientation maximises solar gain in winter.

Openings - Large glazed surfaces should be located on the southern face of the building. These surfaces must be highly insulated through high performance glazing to prevent the loss of heat.

Internal planning - The internal layout of residential buildings should be designed by setting living spaces to the south and service spaces to the cooler north.

Avoidance of Overshadowing – where feasible, buildings should be carefully spaced to minimise the loss of solar gain due to overshadowing.

Objective:

The orientation, detailed design and specifications of buildings in the Masterplan lands shall maximise passive solar gain with a consequent reduction in overall energy requirements.

Active Solar Design and Photovoltaic Technology

Active solar systems can work in unison with passive systems and provide an alternative mechanism for harnessing solar energy. This system does not rely on site orientation or layout but can be incorporated into any building design to maximise energy efficiency. Large corporations and other institutions favour this form of solar system, as it is cost effective and can actively demonstrate environmental awareness. Active solar technology involves the installation of a solar collector device: this device absorbs the sun's heat to provide space or water heating. A correctly sized unit can provide around half of a household's water needs over a year; large buildings can introduce several systems to increase solar absorption.

Photovoltaic technology is an alternative method with which to harness solar energy to heat a building and provide electricity. Photovoltaic systems use semiconductor materials to convert sunlight to electricity. This type of system is very effectively used in large developments and as such should be actively encouraged particularly in the construction of public buildings in the Masterplan area such as schools, community centres, etc. Consideration should also be given to use photovoltaic technology in the design of largescale employment buildings such as office blocks.

Objective:

To encourage the use of active solar design methods and photovoltaic technology in the design of buildings, including public buildings and office blocks.

· Air Tightness and Insulation

Houses that are airtight and well insulated consume less energy. A leaky building loses a lot of heat, so the heating system has to work harder than necessary to keep the building at a comfortable temperature. This results in high heating bills and can be uncomfortable for occupants, with draughts and inconsistent temperatures. Leaky buildings cause increased emissions of carbon dioxide, the primary contributor to global warming. All buildings should therefore have good insulating systems including a combination of products and construction techniques that provide a home with thermal performance, protect it against air infiltration and control moisture.

Objective:

The design of the buildings and the materials used in the construction of buildings in the Masterplan area shall achieve a high level of air tightness and insulation increasing its energy efficiency.

· Protected Entrances and Protection from the Wind

Entrances such as conservatories, lobbies and porches can improve energy efficiency by creating a buffer effect that reduces heat loss. In addition they act as a solar pre-heat for incoming air. They also reduce unwanted infiltration by creating an 'air-lock' effect. They improve heat conduction within the house through walls and windows.

Further to this, buildings should be sheltered from cold northerly winds and from prevailing winds as these can cool the buildings and cause heat loss. Proper landscaping of the site and individual buildings provide shelter, enclosure and assist in the creation of micro-climates within the overall development.

Objective:

Protected entrances shall be incorporated where appropriate in the design of buildings on site. Consideration shall further be given to bio-climatic site design such as sheltering buildings from prevailing winds.

· Alternative Heating Systems

Approximately 80% of Ireland's energy consumption is used for heat production, making it the main contributor of CO2 emissions. Energy-Efficient Heating Systems such as wood pellet stoves and boilers and geothermal heat pumps can greatly help to reduce energy consumption.

Geothermal heat pumps (GHP) work by extracting heat energy from a low temperature source and upgrading it to a higher temperature so that it can be used for space and water heating. Heat pumps are very economical. For every unit of electricity used to power the heat pump, 3 to 4 units of heat are generated. They work best in conjunction with low temperature heat distribution systems e.g. underfloor heating.

Wood burning systems do emit carbon dioxide. However, as the wood fuel is cultivated, it absorbs the exact same amount of carbon dioxide as is released when burnt. As such it does not add to the carbon dioxide in the atmosphere. An eligible system can be used for heating a single room, hot water or a whole house.

Objective:

Sustainable Heating Systems such as wood pellet stoves and boilers and geothermal heat pumps shall be encouraged throughout the design process of new buildings.

Combined Heat and Power

Combined Heat and Power (CHP) is the simultaneous generation of useable heat and electricity in a single process. It makes use of the heat produced in electricity generation instead of releasing it into the atmosphere and has a less detrimental effect on the environment than if heat and power were produced independently. While CHP can run on biomass, the principal generating fuel is natural gas.

This system is favoured by large corporations, hotels and institutions to produce low cost electricity and secondary heat. It can provide a secure and highly efficient method of generating electricity and heat at the point of use. CHP can achieve a 35% reduction in primary energy usage compared to conventional power stations and heat only boilers. This can allow the CHP operator to make economic savings where there is suitable balance between the heat and power loads on the site. CHP can also be combined with a district heating system, which distributes heat from source to a number of buildings within one site. Therefore it may be suitable for a number of businesses or organisations to operate this type of system together.



6.9.5 Wind Energy

The use of wind turbines to provide a self-sufficient power source or to supply power in combination with other energy sources on the lands could be investigated. If possible, proposals to provide a limited number of small to medium sized wind turbines within the Masterplan lands will be considered favourably. An appropriate location might be the area of employment lands adjacent the

Motorway. Any proposals for wind turbines need to be subject to a detailed feasibility study taking into account wind speed and turbulence and including full visual analysis and sensitive siting of proposals. Full consideration



must be taken of the policies in relation to wind energy set out in Chapter 8 of the Kildare County Development Plan, 2005-2011

6.9.6 Construction Methods

The use of renewable building materials, for example wood from sustainable managed forests should be encouraged as part of the construction process. Other features of construction should also be considered such as off-site construction and prefabrication to minimise the impact of building on the site, reductions in levels of on-site waste and also minimising cost. The re-use of construction waste such as excavated material as topsoil should also be considered.

6.9.7 Waste Management And Disposal

All development on site should seek to minimise waste through reduction, re-use and recycling. Waste management and disposal shall be considered as part of the construction process and in the operation of the development when completed.

· Construction Waste

Construction-related waste accounts for about one-third of total land filled waste in Ireland. It is therefore an objective of the Masterplan to minimise construction waste for all new development on the lands. During the construction process measures should be implemented to minimise soil removal (as part of the scheme design process), properly manage construction waste and encourage off-site prefabrication where feasible.

Domestic Waste

Everyday domestic waste produced by future residents and businesses shall be minimised through reduction, re-use and recycling. All new development shall provide for waste separation facilities, recycling banks and compost units.

6.9.8 Sustainable Urban Drainage Systems

All future development on the Masterplan lands needs to incorporate the principles of Sustainable Urban Drainage Systems (SUDS) with particular attention paid to the requirements of the recently published Greater Dublin Strategic Drainage Study.

Sustainable Urban Drainage Systems are considered more sustainable than conventional drainage methods because water is either infiltrated or conveyed more slowly to watercourses via ponds, swales, filter drains, porous landscaping or other installations to try and closely mimic natural catchment drainage behaviour.

Objective:

All future development shall comply with the principles of Sustainable Urban Drainage Systems (SUDS) technology.

6.9.9 Financial Incentives for Homeowners

The government has recently announced financial incentives for renewable energy based heating systems under the 'Greener Homes' domestic grant scheme which is being administered by Sustainable Energy Ireland.

The grants will be provided to homeowners who invest in new renewable energy based heating systems in the following categories:

Solar Heating

- Solar hot water system and / or
- Solar space heating system

Heat Pumps

- · Horizontal ground collector
- · Vertical ground collector
- · Water (well) to water
- Air source

Wood Chip or Pellet Stoves – with or without back boiler Wood Chip or Pellet Boilers

Future homeowners should be encouraged to avail of these grants by ensuring that all new homes built on the Masterplan lands are easily adaptable to be upgraded for inclusion of these systems.



Appendix

Appendix - A Reference Documents

Appendix - B Figure List

Appendix - C Infrastructure Diagrams

Appendix - D Environmental Appraisal





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Appendix - C

INFRASTRUCTURE DIAGRAMS

- C.1 Road Infrastructure
- C.2 Road Cross Section



FIGURE C.1 ROAD INFRASTRUCTURE

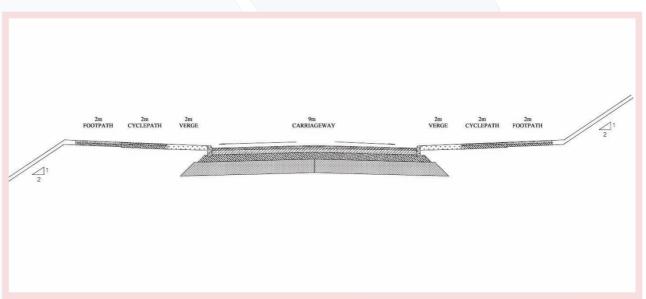


FIGURE C.2 ROAD CROSS SECTION

Appendix - C

INFRASTRUCTURE DIAGRAMS

C.3 Watercourses

C.4 Foul Infrastructure



FIGURE C.3 WATERCOURSES



FIGURE C.4 FOUL INFRASTRUCTURE

Appendix - D

ENVIRONMENTAL APPRAISAL

INTRODUCTION

This Environmental Appraisal was undertaken as part of the Masterplan exercise to assess the main likely significant impacts on the receiving environment of the development framework set out under the Masterplan.

The Environmental Appraisal generally follows the overall layout and structure of a Strategic Environmental Assessment. However, it is not a statutory requirement for the Masterplan to provide a full Strategic Environmental Assessment in line with the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 463 of 2004).

All proposals for substantial development on the Masterplan lands will be subject to Environmental Impact Assessment screening to determine and mitigate the detail of the environmental impact of each individual project.

METHODOLOGY OF ENVIRONMENTAL APPRAISAL

The overall methodology of the Environmental Appraisal is laid out as follows;

Section III summarises the main objectives of the Masterplan, in particular those contained in Section 5 and 6 of the Plan.

Section IV assesses how the Masterplan relates to the wider policy context provided by national and regional guidance and the statutory Development Plan context.

Section V assesses the Masterplan proposals against a set of Environmental Protection Objectives. This is done in the form of a matrix.

Section VI provides a summary of the likely significant effects the proposals will have on the receiving environment under the following headings:

- population
- · landscape, flora and fauna
- soil
- water
- air / climatic factors
- material assets
- · architectural and archaeological heritage
- the interrelationship between the above factors

III.0 SUMMARY OF KEY OBJECTIVES OF THE MASTERPLAN

|||**Guiding Principle**

The overall guiding principle of the Masterplan is to create a new urban guarter for the Northwest Quadrant that is based on the principles of sustainability as they are embellished in national and regional policy guidance. The key objectives are summarised in section 1.3 of the Plan as follows:

- 1) The Integration of Land Use and Transport through
- the location of homes and workplaces in close proximity to reduce commuting,
- a strong emphasis on Public Transport; and
- · the facilitation of Walking and Cycling.
- 2) The Provision of an Integrated Community by
- providing all necessary facilities locally (education, recreation, retail, community,etc),
- · achieving a mix of uses; and
- · providing for a mix of dwelling types.
- 3) The Promotion of Sustainable Building Standards through
- · energy-efficiency in buildings,
- promotion of alternative sources of energy; and
- passive and active solar design.

Key Objectives

There are a number of key objectives inherent in the Masterplan framework which are assessed as part of this Environmental Appraisal. The main objectives for the relevant sections of the Masterplan can be summarised as follows:

Section 5 – Proposals for Development (Type and Extent)

The main proposals for overall type and extent of development envisaged for the Masterplan are as follows:

- To provide employment on 62 hectares of land and to provide in the region of 6,000 jobs (and potentially above this figure depending on the type of employment).
- To provide between 1,409 and 1,714 residential units and in the region of 4,100 to 5,000 new residents (and potentially additional residential units on the 'White Lands' subject to the Development Plan review).
- To provide for a new Urban Village Centre incorporating 20,000 sgm commercial floorspace and 46,000 sgm residential floorspace (approx. 460 units).
- To provide for a range of community facilities including active recreation space, playgrounds, childcare facilities, schools and other essential community facilities.
- To provide for a new M7 Interchange.
- To provide for a new bus service between Naas Town Centre and Sallins Rail Station through the subject lands, connecting with the proposed Urban Village Centre.
- 5q) To provide an extension of the existing bus service to serve the new communities.
- **5h)** To provide for strategic walking and cycling routes (and also secure bicycle parking).

Section 6 – Urban Design Framework

The general framework objectives as contained in Section 6 of the Masterplan can be described as follows:

- 6a) The Urban Structure of the Masterplan to reflect existing constraints and opportunities of the site and to be divided accordingly into six development zones reflecting the setting and landscape character.
- **6b)** The Block Layout structure to reflect the retained landscape features (such as hedgerows with mature trees) and existing watercourses.
- 6c) Building Height to be reflective of location within the Masterplan framework with increased heights for the Urban Village and Gateway zones and height to be generally decreasing towards the edges of the urban framework.
- 6d) The Street Hierarchy to provide for permeability of movement throughout the Masterplan area.
- **6e)** The Street Typology to incorporate existing hedgerows and mature trees where feasible.
- **6f)** The Movement and Access Framework to prioritise easy accessibility of all areas by foot and bicycle.
- **6g)** The new Public Transport Link to ensure that all areas are linked to the Urban Village Centre (as well as Naas Town Centre and Sallins Rail Station).
- **6h)** Car Parking not to detract from the residential amenity and to be provided underground in multi-storey car parks in the higher density areas.
- **6i)** Visual Connections to provide a link with the surrounding landscape and amenity areas.

- **6j)** Open Space and Amenity to be provided through hard landscaping, pocket parks, green connections, green avenue, canal belt, future parklands and general open space.
 - The objectives set out above are a general summation of the Masterplan framework contained in Sections 1 to 6. The following are the objectives contained in Section 6.9 of the Masterplan ('Development Guide for Sustainable Building Methods').
- **6k)** The orientation, detailed design and specifications of buildings in the Masterplan Lands shall maximise passive solar gain with a consequent reduction in overall energy requirements.
- 6l) To encourage the use of active solar design methods and photovoltaic technology in the design of buildings, including public buildings and office blocks.
- **6m)** The design of the buildings and the materials used in the construction of buildings in the Masterplan area shall achieve a high level of air tightness and insulation increasing energy efficiency.
- **6n)** Protected entrances shall be incorporated where appropriate in the design of buildings on site. Consideration shall further be given to bio-climatic site design such as sheltering buildings from prevailing winds.
- Sustainable heating systems such as wood pellet stoves and boilers and geothermal heat pumps shall be encouraged throughout the design of new buildings.
- **6p)** All future development shall comply with the principles of Sustainable Urban Drainage Systems (SUDS) technology.

All of the above objectives are assessed against a set of Environmental Objectives in Section V of the Environmental Appraisal.

IV.0 RELATIONSHIP WITH OTHER PLANS AND POLICIES

Section 4 of the Masterplan sets out the detailed national and regional policy guidance for Naas and the statutory Development Plan context for the Masterplan Lands. The Masterplan is fully compliant with the objectives set out under the National Spatial Strategy, Regional Planning Guidelines for the Greater Dublin Area, the Kildare County Development Plan and Naas Town Development Plan.

In particular, the Masterplan will further progress the development of Naas which is designated a Primary Development Centre under the National Spatial Strategy and a Large Growth Town 1 under the Regional Planning Guidelines. The provision of extensive employment lands will help achieve the objective of providing self-sustaining growth for Naas and a move away from the dependence on Dublin (particularly for employment). The growth targets set out under the Regional Planning Guidelines are further reflected in the detailed settlement structure and housing allocation contained in the Kildare County Development Plan. In this regard, the Masterplan lands will play a key role in achieving the population targets set for Naas.

The detailed policies and zoning objectives contained in the Naas Town Development Plan for the Masterplan area (as set out in Section 7.2.3 of the Development Plan) are directly reflected in the development framework of the Masterplan.

V.0 ASSESSMENT OF MASTERPLAN PROPOSALS AGAINST **ENVIRONMENTAL PROTECTION OBJECTIVES**

The key objectives as set out in Section III.II above were appraised against a set of Environmental Protection Objectives, which are set out in Table V.1 below:

Table V.1 Environmental Protection Objectives

1 Population	Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns
2 Landscape, Flora and Fauna	Conserve and enhance valued natural and historic landscapes and conserve the diversity of habitats and protected species
3 Soil	Safeguard soil quality
4 Water	Safeguard water quality and mitigate the effects of floods and droughts
5 Air/Climatic Factors	Minimise emissions of greenhouse gases, reduce waste of energy and maximise use of renewable energy sources
6 Material Assets	Make best use of existing roads and infrastructure and integrate development with the natural environment
7 Architectural and Archaeological Heritage	Promote the protection and conservation of the architectural and archaeological heritage

Performance of the key objectives of the Masterplan against each of the above Environmental Protection Objectives was recorded as follows:

- √ Significant beneficial impact
- ? Uncertain impact
- X Significant adverse impact
- O No relationship, or insignificant impact

This is set out in Tables V.2 and V.3 below.

Table V.2 Assessment of Objectives contained in Section 5.0

Section 5.0 – Proposals for Development		Environmental Protection Objective								
Objective	1	2	3	4	5	6	7			
5a) To provide <i>employment</i> on 62 hectares of land	$\sqrt{}$	0	0	0	0	$\sqrt{}$	0			
5b) To provide between 1,409 and 1,714 <i>residential units</i> and in the region of 4,100 to 5,000 new residents.	√	0	0	0	0	$\sqrt{}$	0			
5c) To provide for a new <i>Urban Village Centre</i> incorporating 20,000 sqm commercial floorspace and 46,000 sqm residential floorspace.	√	0	0	0	0	√	0			
5d) To provide for a range of <i>community facilities</i> including active recreation space, playgrounds, childcare facilities, schools and other essential community facilities.	√	0	0	0	0	$\sqrt{}$	0			
5e) To provide for a new M7 Interchange.	$\sqrt{}$	0	0	0	0	$\sqrt{}$	0			
5f) To provide for a <i>new bus service</i> between Naas Town Centre and Sallins Rail Station through the subject lands.	√	0	0	0	$\sqrt{}$	$\sqrt{}$	0			
5g) To provide an extension of the <i>existing bus service</i> to service the new communities.	√	0	0	0	√	$\sqrt{}$	0			
5h) To provide for <i>strategic walking and cycling routes</i> (and also secure bicycle parking).	√	0	0	0	$\sqrt{}$	$\sqrt{}$	0			

Table V.3 Assessment of Objectives contained in Section 6.0

Section 6 – Urban Design Framework	Environmental Protection Objectiv							
Objective	1	2	3	4	5	6	7	
6a) The <i>Urban Structure</i> of the Masterplan to reflect existing constraints and opportunities of the site and to be divided accordingly into six development zones reflecting the setting and landscape character.	√	√	0	0	0	√	$\sqrt{}$	
6b) The <i>Block Layout</i> structure to reflect the retained landscape features (such as hedgerows with mature trees) and existing watercourses.	$\sqrt{}$	V	0	$\sqrt{}$	0	√	$\sqrt{}$	
6c) Building Height to be reflective of location within the Masterplan framework with increased heights for the Urban Village and Gateway zones and height to be generally decreasing towards the edges of the urban framework.	$\sqrt{}$	0	0	0	0	0	?	
6d) The <i>Street Hierarchy</i> to provide for a hierarchy of movement throughout the Masterplan area.	$\sqrt{}$	0	0	0	0	0	0	
6e) The <i>Street Typology</i> to incorporate exiting hedgerows and mature trees where feasible.	$\sqrt{}$	$\sqrt{}$	0	$\sqrt{}$	0	0	0	
6f) The <i>Movement and Access Framework</i> to prioritise easy accessibility of all areas by foot and bicycle.	$\sqrt{}$	0	0	0	$\sqrt{}$	0	0	
6g) The new <i>Public Transport Link</i> to ensure that all character areas are linked to the Urban Village Centre (as well as Naas Town Centre and Sallins Rail Station).	$\sqrt{}$	0	0	0	$\sqrt{}$	0	0	
6h) Car Parking not to detract from the residential amenity and to be provided underground and in multi storey carparks in the higher density areas.	√	0	0	0	0	0	0	
6i) <i>Visual Connections</i> to provide a link with the surrounding landscape and amenity areas.	$\sqrt{}$	0	0	0	0	$\sqrt{}$	0	
6j) Open Space and Amenity to be provided through hard landscaping, pocket parks, green connections, green avenue, green canal belt, future parklands and general open space.	$\sqrt{}$	$\sqrt{}$	0	0	0	0	0	
6k) The orientation, detailed design and specifications of buildings in the Masterplan Lands shall maximise passive solar gain with a consequent reduction in overall energy requirements.	$\sqrt{}$	0	0	0	√	0	0	
6l) To encourage the use of active solar design methods and photovoltaic technology in the design of buildings, including public buildings and office blocks.	$\sqrt{}$	0	0	0	$\sqrt{}$	0	0	
6m)The design of the buildings and the materials used in the construction of buildings in the Masterplan area shall achieve a high level of air tightness and insulation increasing its energy efficiency.	√	0	0	0	$\sqrt{}$	0	0	
6n) Protected entrances shall be incorporated where appropriate in the design of buildings on site. Consideration shall further be given to bio-climatic site design such as sheltering buildings from prevailing winds.		0	0	0	$\sqrt{}$	0	0	
6o) Sustainable Heating Systems such as wood pellet stoves and boilers and geothermal heat pumps shall be encouraged throughout the design process of new buildings.	√	0	0	0	$\sqrt{}$	0	0	
6p) All future development shall comply with the principles of Sustainable Urban Drainage Systems (SUDS) technology.	$\sqrt{}$		0		0	0	0	

VI.0 IMPACTS ON THE ENVIRONMENT

VI.I Population

The proposals set out under the Masterplan will provide for a mixeduse development for the overall Northwest Quadrant area catering for all daily human activity including living requirements, working, shopping, community facilities such as crèches, schools and recreational facilities.

The detailed proposals will provide for a substantial element of employment uses, up to 1,700 residential units (and potentially add. units on the 'White Lands') and a new Urban Village Centre which will provide for a wide range of commercial and community activities associated with district centres. Further to this, allocation is made for the provision of a wide range of community facilities including crèches, primary and post-primary schools and a community centre. Extensive open space requirements are set out under the Masterplan providing future residents and employees with ample recreational open space.

The overall effect of an integrated, mixed use community for the Northwest Quadrant will provide for a good quality of life for all future residents of the area by providing facilities locally. Accessibility to these local services and to Naas Town Centre will be provided through an integrated pedestrian and cycle network and public transport connectivity. Employees in the area will also benefit from the variety of uses and recreational assets provided for under the Masterplan framework.

VI.II Landscape, Fauna and Flora

Sections 3 and 6 of the Masterplan outline the intrinsic characteristics of the Masterplan area in terms of landscape, topography, watercourses and vegetation.

The current character of the area is mainly agricultural. The topography of the site is relatively flat with the lands sloping gradually towards the Liffey. This generalised slope is interrupted only by local undulations in the ridge that occupy the centre of the site and at Ploopluck Hill.

The landscape is characterised by the field pattern which is defined by mature hedgerows at the centre of the site with some native species of mature trees within. The majority of the site drains via the exiting attenuation lake at Osberstown towards the Liffey. A secondary catchment exists to the southwest, separated from the principal catchment area by the central ridge, which also drains to the Liffey.

As a result of the managed agricultural nature of the lands, the diversity of Fauna and Flora of the area is limited. The main habitats are provided by the existing hedgerows and groups of mature trees present in the area.

As with any development, a certain loss of habitats will occur through the proposals set out under the Masterplan. However, mitigation has been built into the urban design framework by retaining all significant trees and groups of trees and by integrating a large amount of hedgerows into the street typology. In addition, extensive open space in the form of parks and green corridors will be provided.

In addition to the retention of some significant hedgerows, the spatial structure of the urban design framework reflects and works with the existing landscape primarily through the incorporation of field patterns into the street layout.

VI.III Soil

The predominant soil types are grey-brown podzolics which are characteristic of the flat to undulating topography of the area. Inevitably, some agricultural land will be lost to development as part of the Masterplan proposals. As a mitigation measure, topsoil will be reused for landscaping where feasible; the details of this will be determined at application stage for any major proposals for development at the subject lands.

VI.IV Water

Surface water in the Northwest Quadrant generally drains towards the Liffey via a network of surface water drains which follows the line of ditches associated with field boundaries and hedgerows within the lands. Urban development has the potential to increase surface water run-off and thus increase the potential for flooding. In this regard, it is an objective of the Masterplan to mitigate negative effects on surface water runoff by incorporating Sustainable Urban Drainage Systems (SUDSs) into all new developments. Sustainable Urban Drainage Systems are considered more sustainable than conventional drainage methods because water is either infiltrated or conveyed more slowly to watercourses via ponds, swales, filter drains, porous landscaping or other installations and closely mimic natural catchment drainage behaviour. In the segment of Millennium Park developed to date, an attenuation lake has already been provided to cater for storm-water runoff.

The Aquifer Map of Ireland indicates that the Northwest Quadrant overlies a poor or minor aquifer. Groundwater will not be abstracted as part of the development proposals nor will there be any direct discharges into groundwater. Foul water generated by the proposed development will be discharged via the existing sewerage network to the Osberstown treatment plant. In terms of potable water supply, this will be primarily catered for by the 300mm trunk water supply which has been provided in tandem with the road construction of the Millennium Park/Western Link Road to cater for current and future demand.

VI.V Air/Climatic Factors

The air quality in the Northwest Quadrant is currently good due to the rural nature of the environment. The Masterplan has addressed the issue of future emissions by incorporating measures that will reduce air pollution significantly over more traditional suburban type development which is traditionally heavily dependant on car usage.

The integration of different type of uses within the overall Masterplan area can significantly reduce overall trip generation. Higher residential densities near the proposed Urban Village Centre and along the proposed Public Transport corridor will mean that trips can be made by the sustainable modes of walking, cycling, and public transport. The overall masterplan framework is therefore conducive to significantly reducing transport related emissions.

Section 6.9 of the Plan sets out the objectives in relation to promoting sustainable building design. Measures that promote energy conservation and efficiency in buildings promoted by the Masterplan include passive and active solar design, air tightness, appropriate use of glazing, high insulation standards and more efficient heating. Alternative forms of electricity and heat generation such as photovoltaic technology are also encouraged. These objectives will lead to reduction in energy consumption and consequent reduction in fossil fuel consumption and related emissions. Future development will therefore reduce the waste of energy and maximise the use of renewable energy sources.

Extensive green areas, planting and the retention of plants/trees envisaged as part of the Masterplan framework will further assist air purification in the area and have a positive effect on micro-climates within the overall Quadrant.

VI.VI Material Assets

This includes both natural and man-made assets. Natural assets such as existing hedgerows, mature tress and existing field patterns are worked into the design framework and layout of the Masterplan. Further to this, the Masterplan integrates and connects to adjacent areas such as the amenity provided by the Canal corridor and future parklands area.

Man made assets are provided by the existing road infrastructure in the form of the Millennium Park/Western Link Road. Other infrastructure in the area primarily consists of storm and foul drainage, water supply, telecommunications, and power and gas supply. As detailed in Section 3.3 of the Masterplan report, extensive infrastructure has already been supplied on the lands as part of the ongoing development at Millennium Park. The Masterplan proposals make full use of these existing assets. It is not proposed to demolish or otherwise interfere with any of the existing buildings/structures on the lands.

VI.VII Architectural and Archaeological Heritage

There are a number of protected structures in and adjacent to the Masterplan lands. These are listed in Section 4.6.10 of the Masterplan. Further to this, the Grand Canal running along the perimeter of the site is an Area of Special Character. It is further designated a proposed Natural Heritage Area (pNHA) under national legislation and a proposed Architectural Conservation Area (ACA) under the Naas Town Development Plan, 2005-2011.

The development framework takes full account of the architectural heritage in and adjacent to the Masterplan lands and proposes to integrate any architectural heritage on site and also to positively relate to the amenity of the Grand Canal.

Further to this, it is policy of Naas Town Council to require all developments that may have implications for archaeological heritage to be subject to an archaeological assessment. This will apply for all relevant development on the subject lands.

VI.VIII The interrelationship between the above factors

No likely significant impacts have been identified.

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