

St. Waleran's Demesne Masterplan

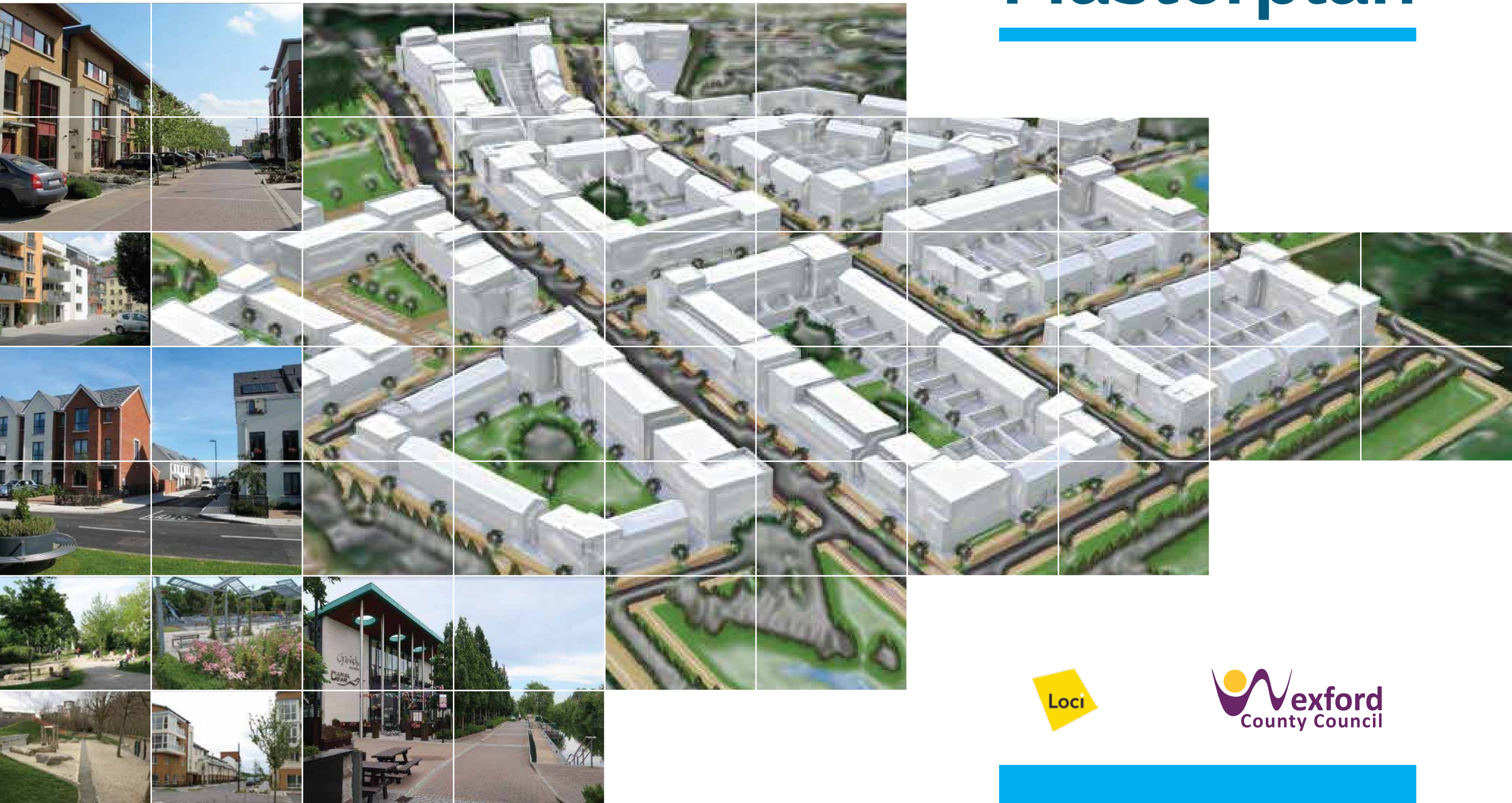


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This masterplan was prepared by Loci for
Wexford County Council with the support of:

Atkins Consulting
Michael Cregan MILI
Minogue and Associates
IAC Ltd.



1.1 Masterplan studies

A number of desktop and site studies were carried out to support the preparation of this masterplan. They were:

- Urban planning and development – led by Loci;
- Transport and mobility, services and water – led by Atkins Consulting;
- Landscape and green infrastructure – led by Michael Cregan MILI;
- SEA and AA screening and Preliminary Ecological Assessment Report – led by Minogue and Associates; and
- Archaeology and built heritage – led by IAC Ltd;

1.2 Objectives

Masterplans are prepared to secure important objectives for new places. The objectives of this masterplan are:

- To provide a clear understanding of the lands and to establish relevant constraints and opportunities to their development;
- To set out a longer-term vision for the development of the lands;
- To provide a robust framework for development of the lands;
- To provide a set of guidelines to inform later planning and design stages; and
- To facilitate phased and parcelled delivery of key infrastructure and development.

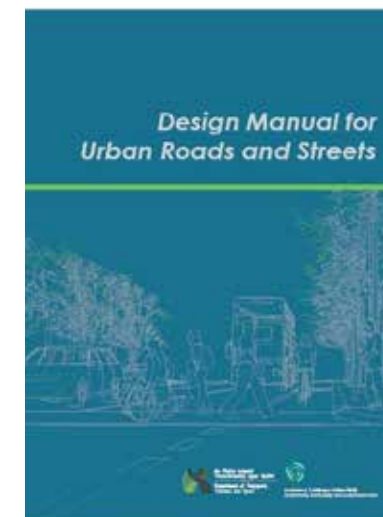
1.3 Planning and development context

The masterplan is nested within the existing statutory planning framework at national, regional and local level.

Planning guidelines

Planning guidelines are issued by the Minister and have application to Local Authorities, Regional Assemblies and, where appropriate, An Bord Pleanála. The following planning guidelines are of greatest relevance to the masterplanning of the lands:

- Design Manual for Urban Roads and Streets (DTTS and DECLG, 2013, updated 2019), which includes guidance on route networks, street typologies and street design.
- Best Practice Urban Design Manual (DECLG, 2009), which covers a range of good urban design practice for residential development at building, site and area level.
- Design Standards for New Apartments: Guidelines for Planning Authorities (DHPLG, 2018), which set out new planning standards and recommendations for apartment development (notably relating to aspects of apartment mix, minimum sizes and aspect).
- Urban Development and Building Height: Planning Guidelines for Planning Authorities (DHPLG, 2018), which require place-based consideration of building height with particular emphasis on achieving compact growth and sustainable densities. The guidelines encourage consideration of increased building scale (generally 3-4 storey building height) in suburban contexts such as St. Waleran's.
- Childcare Facilities: Guidelines for Planning Authorities (2001), which set out minimum provisions and standards for childcare in new development (notably, 1 space per 75 dwellings in new residential development). These guidelines are under review, and the provision for St Waleran's will be responsive to local context and development potential.



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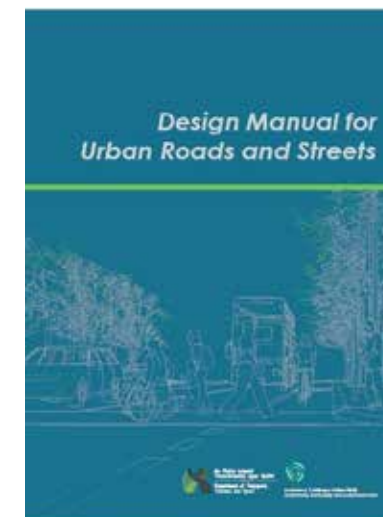
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National and Regional-level planning

The National Planning Framework (NPF) sets out National Planning Objectives, around sustainable development, balanced regional development and compact growth. It sets out the broad parameters for the Regional Spatial and Economic Strategies (RSES). The RSES was completed for the Southern Region in 2019. Gorey is one of 14 'Key Towns' in the Southern Regional Assembly Area. The regional objective for Gorey is to grow the town in tandem with eight similar centres that are geographically spread throughout the region in order to strengthen the regional settlement structure. Local Authorities are supported in targeting more than 30% of growth in the 14 Key Towns, subject to capacity analysis and sustainability criteria. St. Waleran's will make a significant contribution to the achievement of targeted growth in Gorey to 2031 and beyond.

Wexford County Development Plan, 2013-2019

The current County Wexford Development Plan, 2013-2019, is under review. The Draft Wexford County Development Plan (2021-2027) is currently in the preparation process. The new County Development Plan will nest all relevant policies and objectives for the County within the hierarchy of the NPF and RSES and the National Planning Guidelines.

The current Wexford County core strategy designates Gorey as one of the primary urban centres in the settlement hierarchy. The Wexford settlement hierarchy centres on developing the role of Wexford Town as the hub, supported by the county's other 3 larger towns of New Ross, Enniscorthy and Gorey. The County Development Plan allocates a population of 11,883 persons to Gorey to 2022.

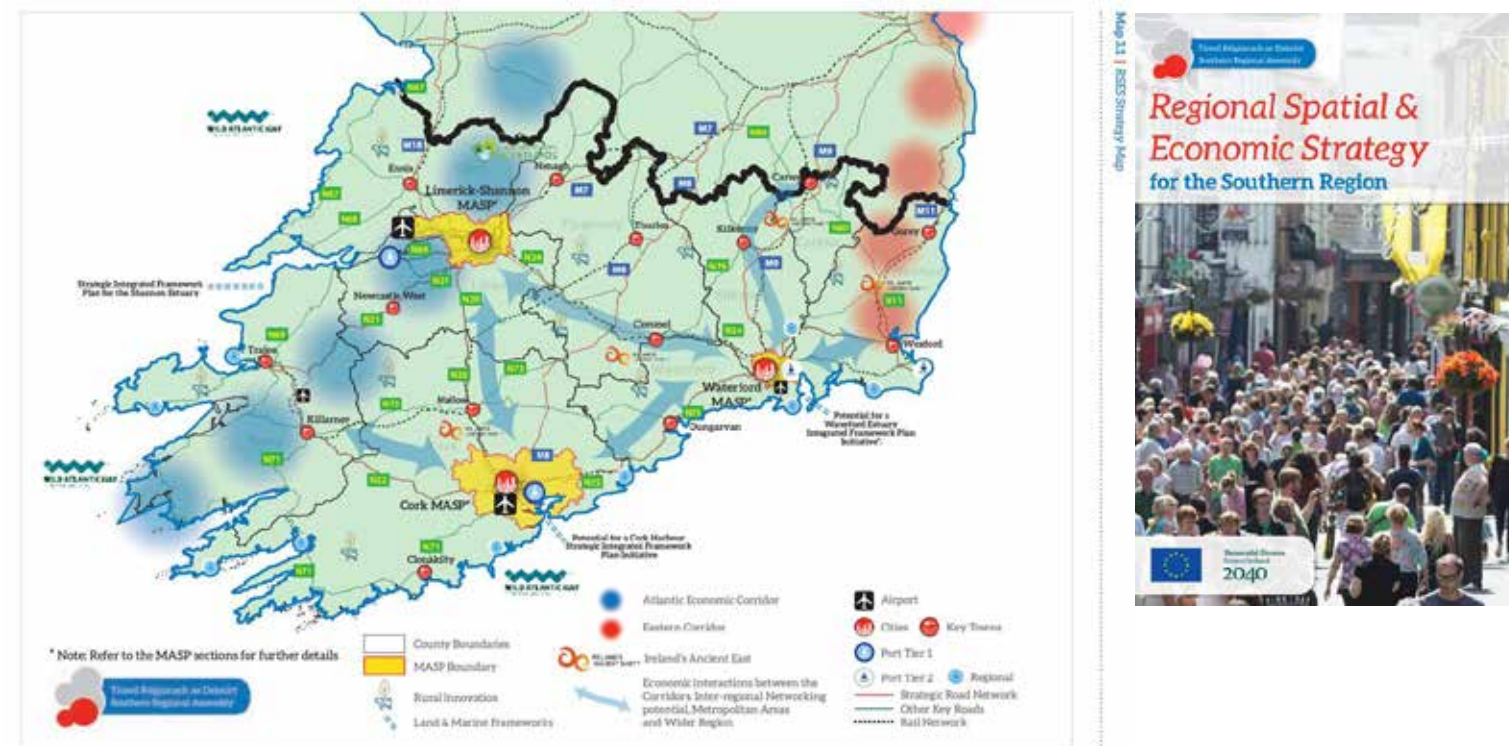


Figure 3: Regional Strategy of the RSES

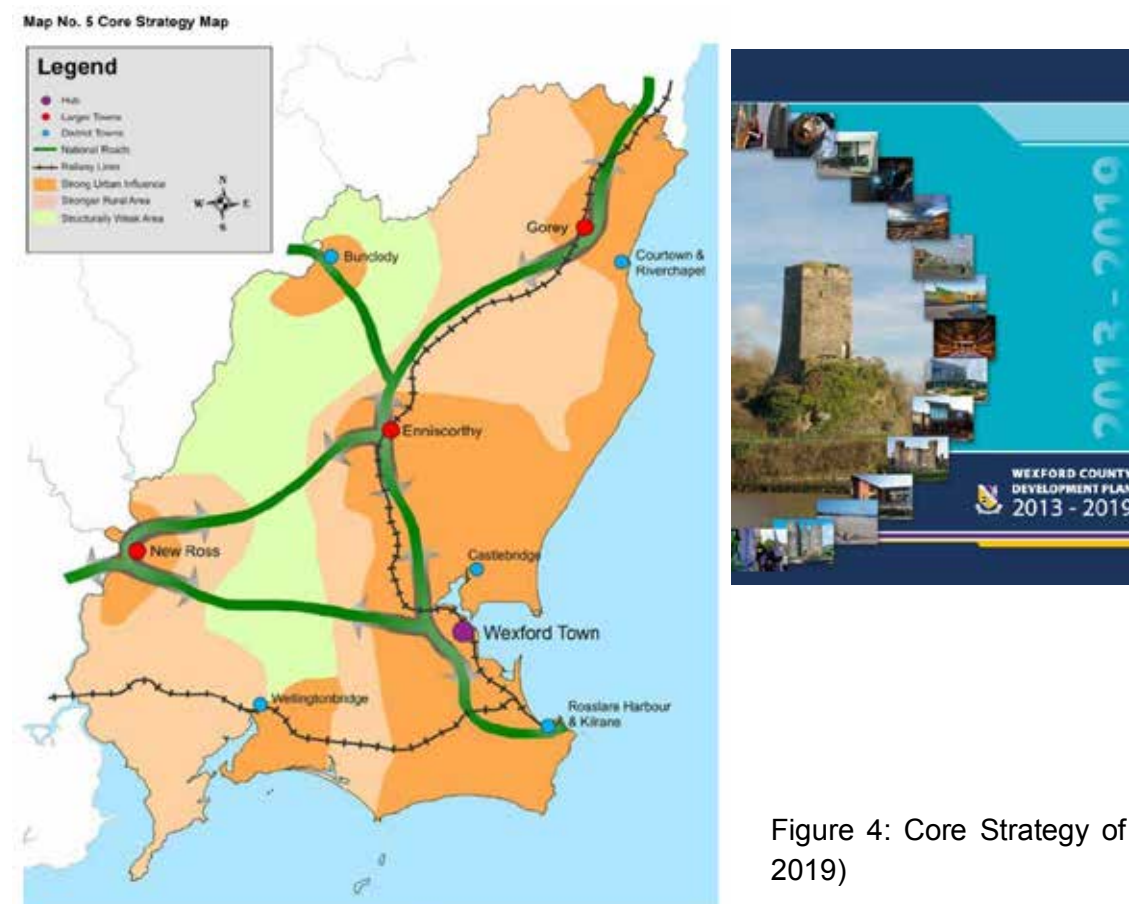


Figure 4: Core Strategy of the County Development Plan (2013-2019)

Gorey Local Area Plan, 2017-2023

The Local Area Plan sets out the broad vision and principles for the Town to 2023. It articulates these using seven broad frameworks, including housing, urban design, access and movement, economic development, natural and built heritage and amenity, and sustainable development and climate action.

The LAP sets out a range of objectives relating to housing needs, social housing, sustainable neighbourhoods, housing mix, tenure and typology and size, sustainable densities, phasing and sequential development (HO1-HO6). The LAP also includes important objectives around the delivery of social and community infrastructure in new development. Notably, Objective AUD01 addresses accessibility for all and universal design in Gorey. The Urban Design Strategy sets out an overview of the urban structure and character of the town. It sets out town-wide place, route and landscape concepts, which provide a broad spatial framework for the development of the town. Ballytegan is included as a discrete place in the town, for which an indicative Neighbourhood Framework Plan is included.

The Neighbourhood Framework Plan provides a broad description, analysis and approach to development for the lands. It also sets out a broad development capacity, key objectives and components, including key elements of social and physical infrastructure. These elements are shown in the place, route and landscape concepts for the new neighbourhood. Of significance to St Waleran's is; a new avenue, a new bridge connection with Clonattin, a community and recreation space, a permeable and robust route and urban block network, and enhanced landscape and green infrastructure. The NFP also requires SuDS provision across the area.

The LAP also sets out key principles for urban design in Gorey as follows:

- Character
- Coherence
- Connectivity and permeability
- Continuity and enclosure
- Scale
- Landscape
- Adaptability
- Diversity

The urban design guidelines address building style and materials, urban blocks, road and street design. They deal with the general approach to avenues and country roads, local streets. These street typologies are present in St Waleran's.

The access and movement strategy designates Ballytegan Road at St Waleran's as a country road/green route with improved landscape coherence and structure. The LAP also provides for new cycle infrastructure along the new avenue, and new footpaths along the new avenue and Ballytegan Road.

The LAP sets out objectives to address climate action through management of flood risk, protection and enhancement of the Green Infrastructure and appropriate environmental management measures.

The St. Waleran's masterplan area is included in the zoned lands of the LAP, which include objectives for:

- Residential use (generally north and east of St Waleran's House);
- Open Space and Amenity use (curtilage and west of St.Waleran's House);
- Community and education use (adjacent to St. Waleran's House);
- Tourism and Leisure use (including St. Waleran's House and eastern curtilage);
- Long/term residential and open space (not to be developed in this plan period; eastern portion of lands); and
- Strategic reserve (it should be noted that the use of the eastern portion of lands has not a yet been designated).

General requirement for 15% public open space is required as part of residential development in the area (which can include the Neighbourhood Park).



Figure 5: Gorey Zoning Map (Excerpt, Gorey LAP 2017-2013)

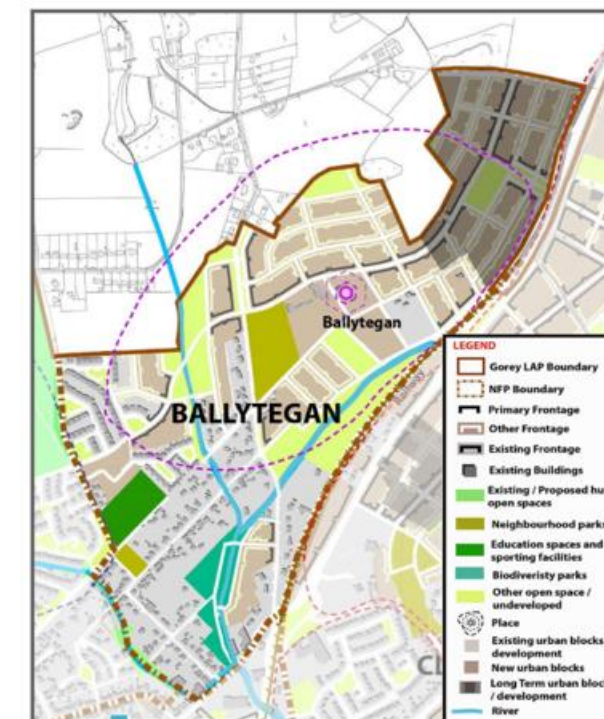


Figure 6: Place concept (Gorey LAP 2017-2013)

2 Urban analysis

The urban analysis for this masterplan was underpinned by a series of site and desktop studies. It was also informed by consultation with local officials and other service providers. The urban analysis for this masterplan establishes the larger planning and development context and the main constraints and opportunities affecting the planning and development of the lands.

2.1 Urban context

St. Waleran's comprises lands of just over 30 hectares in area. The lands are located on the north-eastern, suburban edge of Gorey at the interface with the surrounding countryside. At their closest the lands are located approximately 600m from the eastern end of the Main Street.

The southern boundary of the lands adjoin the Gleann an Ghairdín development (under construction in 2021) and a large, detached house (currently in use as a bed and breakfast). The western boundary is provided by Ballytegan Road. Beyond this lies undeveloped, privately-owned lands between Ballytegan Road and the Woodlands Manor development. Further west is the neighbourhood of Creagh.

Also on the eastern boundary, along the western side of Ballytegan Road, is established ribbon development comprising detached houses. Further west is the Baile Eoghan residential development and the Garden City, which provides connections to the north side of the town centre. The northern boundary of the lands is formed by farmland in the townland of Ballytegan. The eastern boundary of the lands is provided by the railway and the Arklow Road (now R722). Further to the east is the neighbourhood of Clonattin.

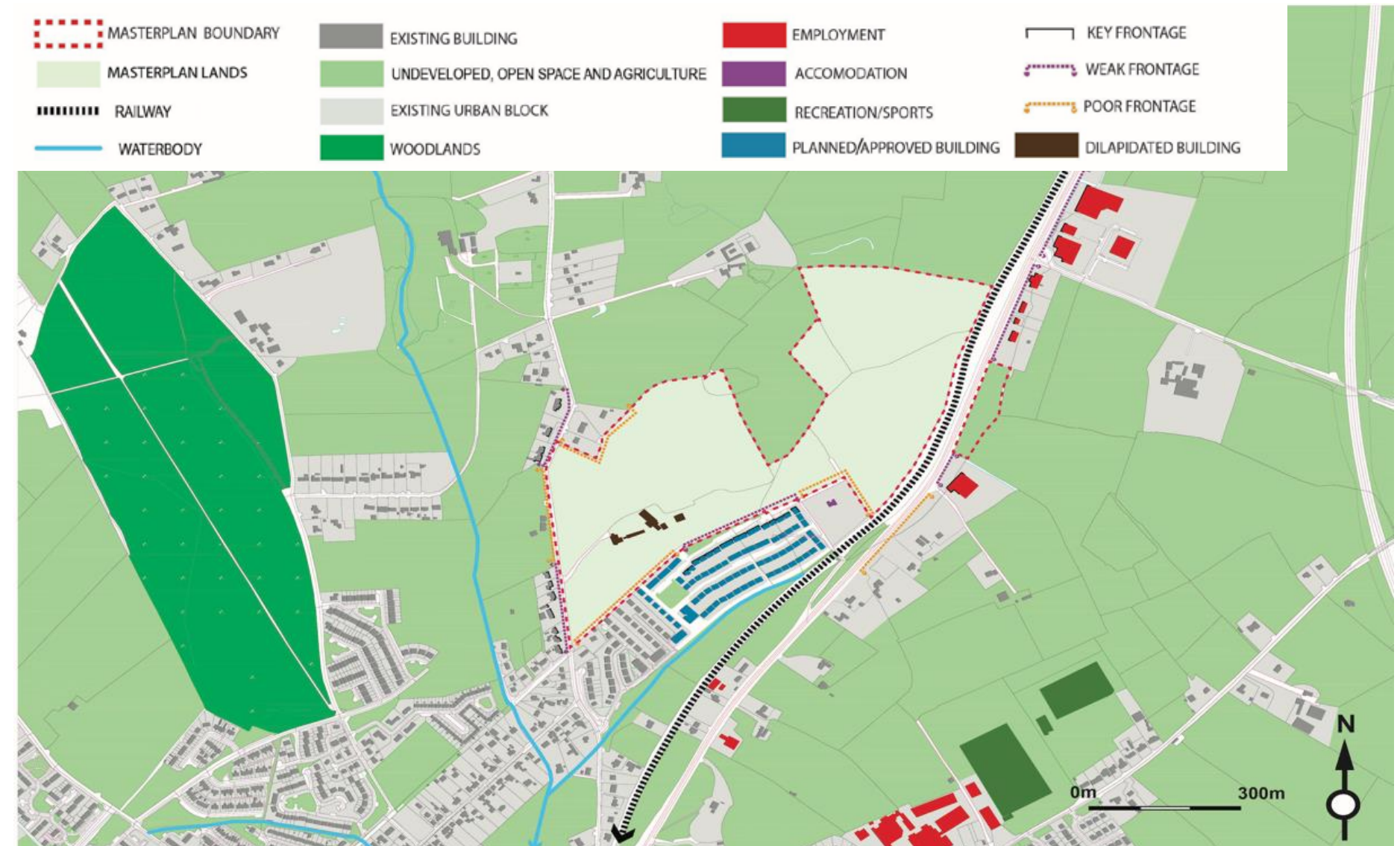


Figure 7: Urban context



2.2 Topography and landscape

2.2.1 Topography

The topography of the lands could be described as gently undulating, with some areas of steeper ground. There is a notable difference in local gradient changes between the areas currently zoned for development (western portion of the lands) and the areas reserved for longer-term development (outside current plan period).

The western (zoned) portion of the lands falls generally to the west and south-west, with higher lands located adjacent to the longer-term reserved development area. The local topography reflects general falls to the River Banoge to west and the tributary of the Banoge to the south and east.

The lands are more undulating in the reserved, longer-term development area. A small valley cuts across the lands and connects with the lower-lying corridor of the railway and Arklow Road. Some areas of steeper gradient in this location will be challenging in terms of development. These areas will require a landscape-sensitive approach to development and will be more appropriately included as part of the strategic green infrastructure for the area.

At the southern boundary, the Gleann na Ghairdín development has cut into the local topography, resulting in a noticeable step in levels (supported by a retaining wall). This step in levels will need to be addressed when making local pedestrian and cycle connections.

2.2.2 Landscape

St. Waleran's is surrounded by important, strategic green spaces and corridors, such as the River Banoge, the Banoge tributary and associated corridors and the main rural roads and boreens (including Ballytegan Road).

St. Waleran's House and grounds (former demesne) is the key feature of the local landscape. This comprises a lawn, a garden/orchard, a tree-lined driveway, surrounding fields, with boundary planting and carefully-planted, individual specimen trees (mainly oak and beech).

The larger, historic field system is largely intact, and comprises enclosed paddocks, lined with hedgerow and in some areas water ditches. There are many individual trees and tree groups of amenity value (this has been established by the landscape survey for this masterplan, carried out in early 2021).

The study confirms the importance of the landscape to the future development of the area, with the potential to substantially enhance the landscape as a part of a green infrastructure for the lands and surrounding areas.

The study suggests that hedgerows, where retained, could be enhanced and improved. In addition, the study highlighted the potential to increase and improve the arboreal footprint.

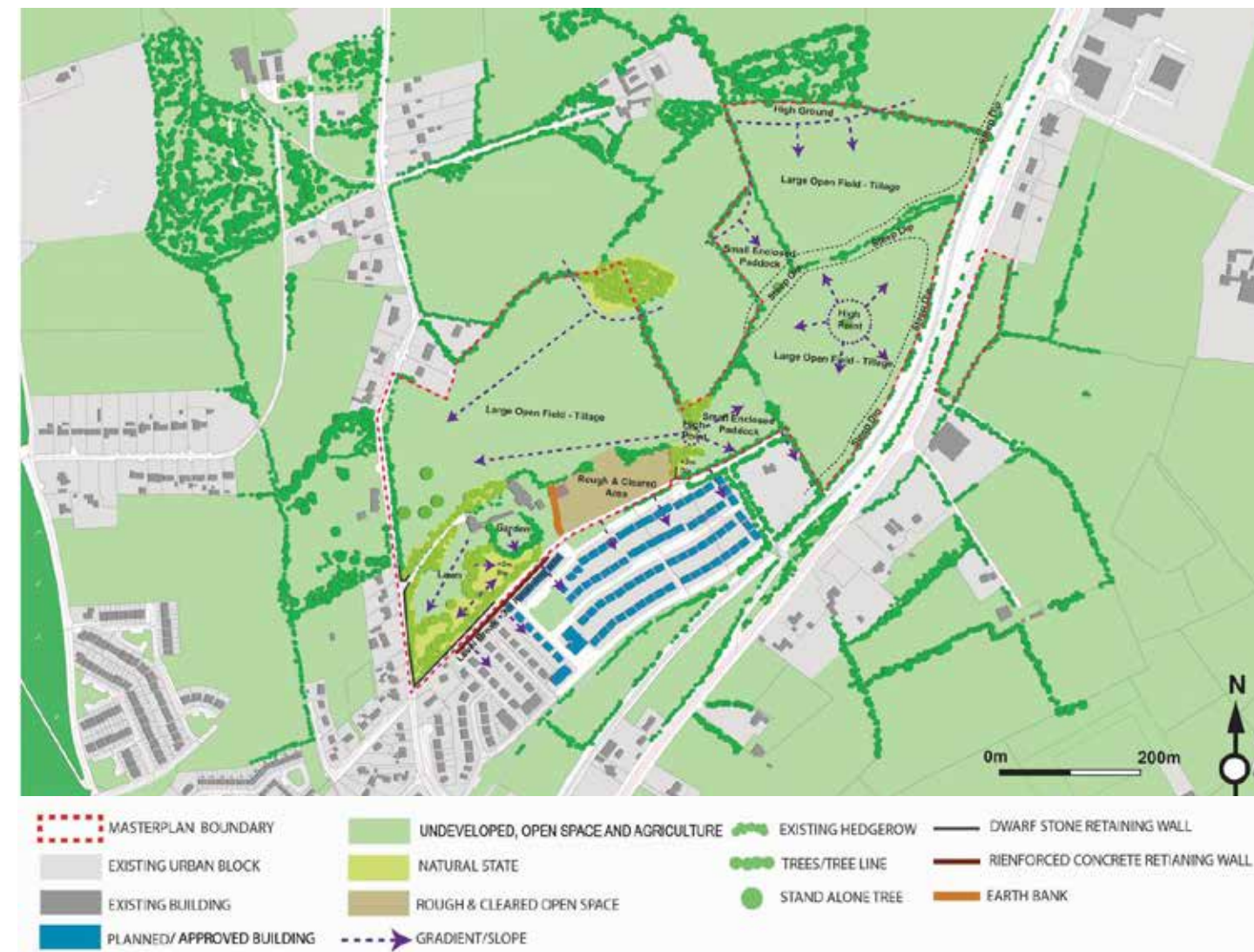


Figure 8: Landscape Analysis



2.3 Natural heritage

A Preliminary Ecological Appraisal Report (PEAR) was carried out for this masterplan. The PEAR identified the potential ecological constraints and enhancement opportunities for the masterplan. It identified where further survey work is required and makes recommendations to avoid or mitigate any potential negative impacts on protected and priority habitats and species.

The field survey identified the parkland habitats, with mature specimen trees, and hedgerows/treelines are of most ecological significance. Some of the older buildings on site, as well mature trees, particularly those with dense ivy had moderate to high potential for roosting, foraging and commuting habitats for bats, and nesting birds. The survey was undertaken outside the suitable season and seasonal constraints apply.

There were no apparent field signs for otter, but the watercourses outside the site offer potential commuting routes. The survey also found that standing water bodies offered potential habitat for frogs and invertebrates. No invasive, non-native plant species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011 S.I. No. 477/2011 were recorded during the survey.

Given the survey work was undertaken outside the optimum season for several species and flora; it is recommended that additional surveys be undertaken in particular for bats and breeding birds and hedgerow appraisal surveys as appropriate.

The report also identifies opportunities to link with, and enhance, the local green infrastructure, notably by developing links with local streams and the local boreens. The report highlights the potential for 'rewilding' and the use of waterlogged areas (potentially SuDS features) for enhanced biodiversity.



Figure 9: Phase 1 Habitat Survey

2.4 Built heritage and archaeology

The masterplan area is located in the townland of Ballytegan in the parish of Kilcavan and the barony of Gorey, Co. Wexford. The demesne associated with the former Woodlands House, now St. Waleran's, is a protected structure (NIAH Reg.: 15700713, RPS WCC0714) and lies within the western quarter of the masterplan area. This small demesne is contiguous with, and possibly a part of, the much larger demesne associated with Ramsfort House (NIAH Reg.: 15700711, RPS CC0567), c. 465m to the north-northwest. St. Waleran's was extensively damaged by fire in 2018, to the extent that restoration of the house is not feasible, although the 19th century outbuildings may be refurbished (Nolan, 2019). Aside from the former orchard and the lawn area being overgrown, the disappearance of the pond and the replacement of the eastern outbuildings with modern sheds, St. Waleran's and its curtilage is largely as it appears on the 1839 and 1900 OS mapping. Notably, the main entrance drive survives along with a large portion of the ornamental planting. The eastern boundary of the demesne has been removed. An early 19th century farmhouse, Ballytegan House (NIAH Reg.: 15700712, RPS WCC1010), lies c. 135m west of the northern corner of the masterplan area.

There are two archaeological sites within a 250m radius of the masterplan area within the townlands of Ballytegan and Ballyteganpark, both of which are recorded monuments. The closest recorded monument is a corn-drying kiln (WX007-091), c. 39m southeast of the main parcel of the masterplan area. A review of the Excavations Bulletin (1970–2020) has revealed a single archaeological investigation within 250m of the masterplan area: a programme of archaeological monitoring at Ballyteganpark (Bennett 2007:1939, Licence Ref.: 07E0080), which did not reveal anything of archaeological significance. In addition to this, although not yet entered on the Excavations Bulletin, archaeological testing was carried out over a large area immediately south of the masterplan area in 2020 under Licence 20E0638, during which the corn-drying kiln (WX007-091) was recorded, along with a slot-trench and at least two post holes (McLoughlin, 2020).

No previously unrecorded sites or structures of archaeological or built heritage potential were identified during the course of the field inspection.

Whilst no previously unrecorded features or structures of archaeological or architectural significance were identified during the course of the field assessment, the size of the masterplan area, along with its greenfield nature, means that it retains the potential to contain archaeological features that may survive with no surface expression. As such, the archaeological potential of the overall site is considered to be moderate to high.

Wexford County Development Plan (Policy numbers PS01 to PS11 and ACA01 and ACA02) and Gorey Local Area Plan (Policy numbers ARH01 and ARH02) both contain relevant objectives and policies for the protection of the built and archaeological heritage, and these have both direct and indirect relevance to the development of the lands.



Figure 10: Historic map (1839) showing the Woodlands demesne.

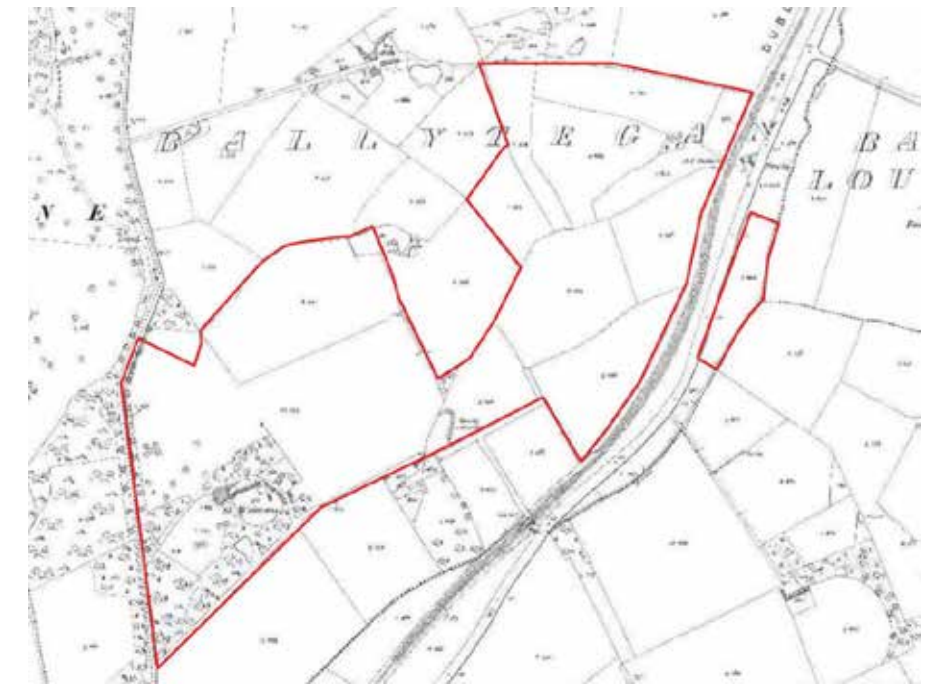


Figure 11: Historic map (1900) showing the demesne.

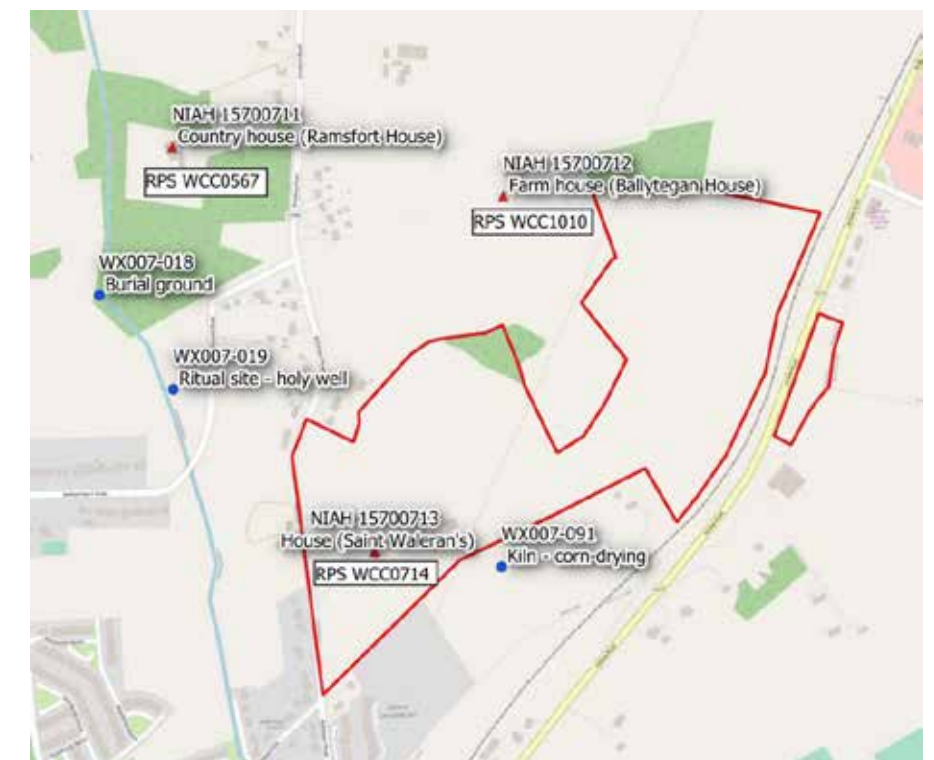


Figure 12: Location of Protected Structures and National Monuments

2.5 Transport and Connectivity

2.5.1 Larger Route Network and General Mobility

The transport network in Gorey is predominantly defined by the confluence of a number of regional roads which are fed by local county roads and residential access streets. Building upon that, the M11 motorway lies to the east of the town in a north south orientation, with the railway line following a similar north south orientation but running closer to the town centre.

There are a number of residential areas which surrounding the town predominantly to the north south and west in the townlands of Ramsfort, Creagh, Gorey Hill and Ramsgate Village with some areas to the east such as Clonattin.

The main transport attractors within and around the town include the town centre itself, schools to the west of the town and south and south-west of the town centre and retail and shopping centres to the south of the town. Figure 13 illustrates the main trip attractors within and around the town.

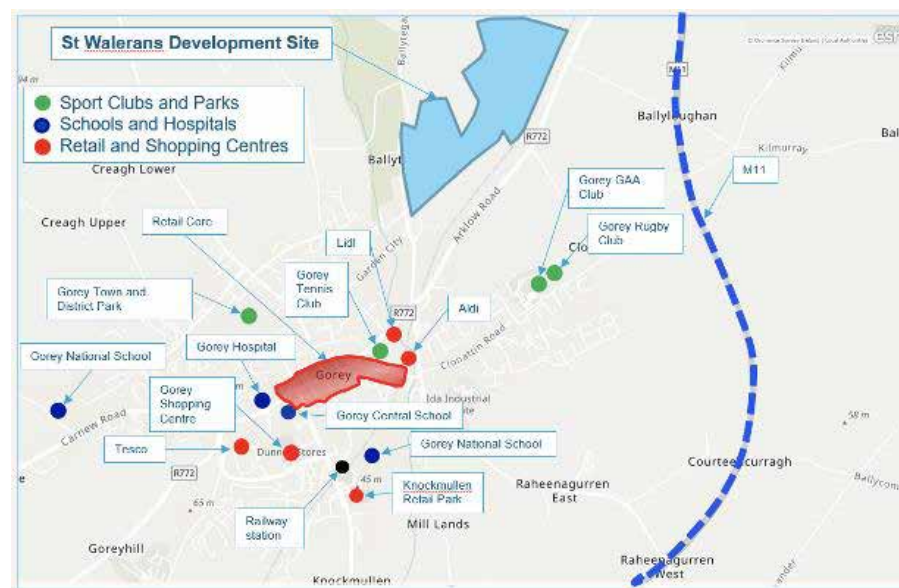


Figure 13 - Trip Attractors

There are a number of barriers to movement within and around the town of Gorey which are primarily linked to poor pedestrian and cycle facilities generally to the surrounding area and the town centre and a lack of connections between existing and future development areas.

Notwithstanding, Gorey is quite a compact town making it an ideal size for active travel. In relation to the masterplan site at St. Waleran's, most trip attractors are available within a 20-minute

walking journey, whilst a twenty-minute cycling journey will facilitate access to anywhere in the town and environs.

Walking and cycling isochrones (Figures 14 and 15) demonstrate the walking and cycling catchment in relation to the masterplan area.

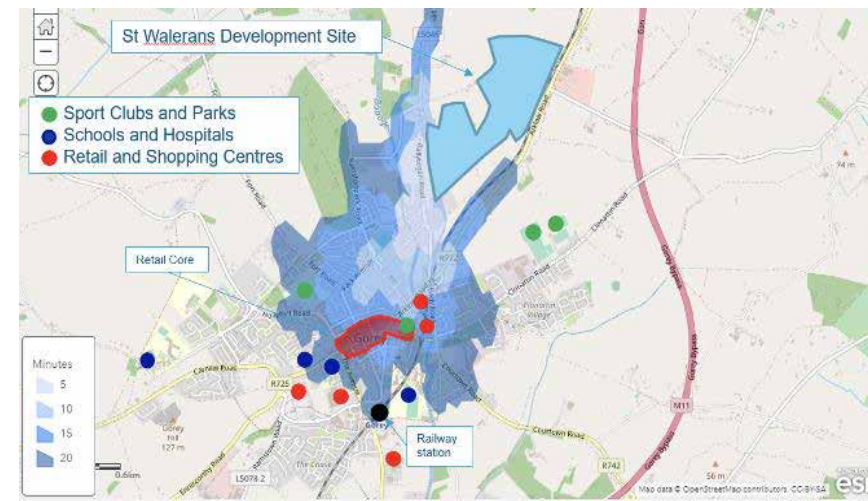


Figure 14 - Walking Isochrones

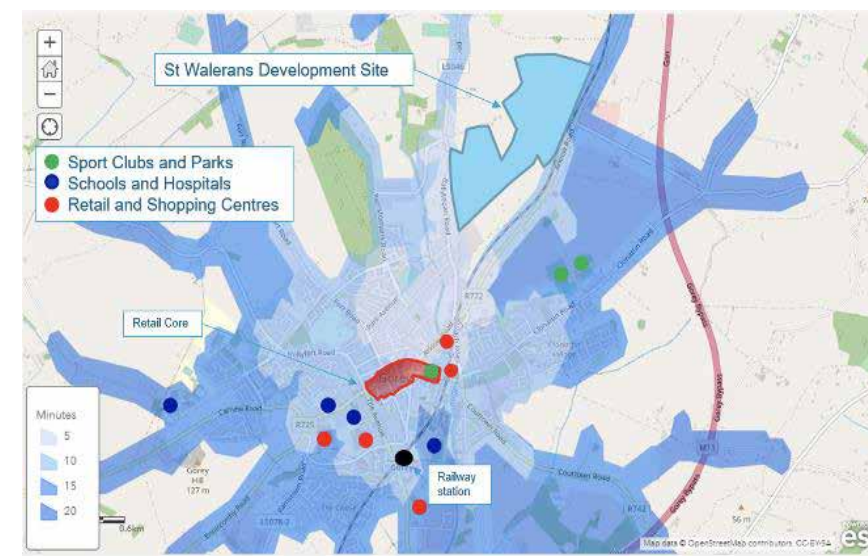


Figure 15 - Cycling Isochrones

2.5.2 Local street connections to the town centre

In the context of St. Waleran's, the walking and cycling connection is poor at present. The primary route towards the town centre is and will be Ballytegan Road to Arklow Road and then progressing on to Main Street. The pedestrian facilities, consisting of footpaths, public lighting and crossings, are somewhat narrow, discontinuous and incomplete with no dedicated cycle facilities.

Figures 16 and 17 illustrate the current road and walking network.

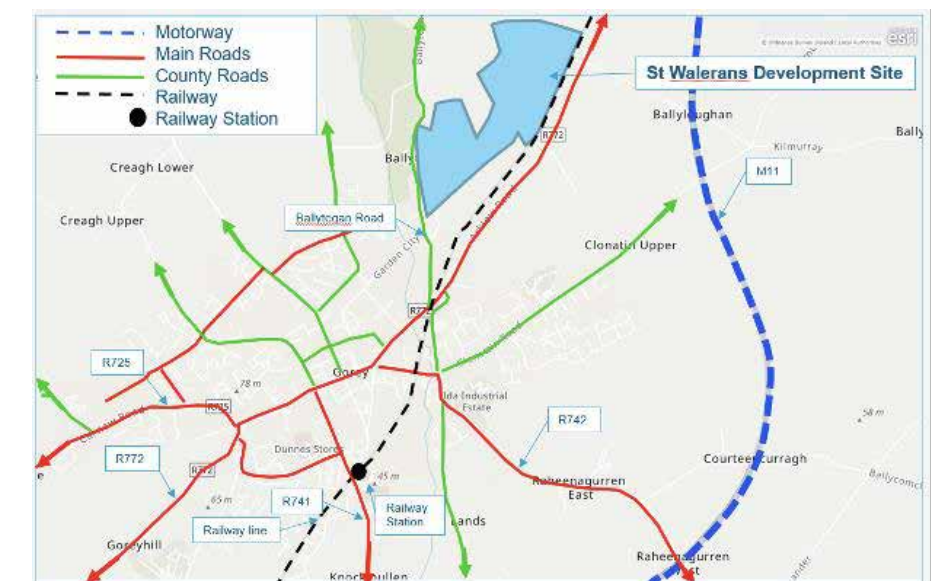


Figure 16 - Existing Road Network



Figure 17 - Existing Walking Network

2.5.3 Ballytegan Road

As noted, the site is bounded to the west by the Ballytegan Road. This is a narrow local county road connecting rural areas to the north with the town centre. It is the main connection to the masterplan area at present. It varies between 5 and 6m in width with a speed limit of 50kph. It is bounded by mature trees to the eastern, masterplan side, and caters for a number of one-off dwellings on its western side.

There are a number of speed cushions installed in recent years in an attempt to calm traffic speeds along the road on approach to the Arklow Road.

On the approach to the Arklow Road, the carriageway widens out to some degree and incorporates footpath and lighting provision on the western side of the road.

The road has the potential to cater for the movement requirements for early phases of the development of the lands. However, there will be a need to address poor cycle and pedestrian facilities and speeds along the road.

2.5.4 Arklow Road

The Arklow Road is the old national road which has been reclassified to a regional road. It is a single carriageway road ranging from 7 to 8m width with hard strips and a 100kph speed limit reducing to 60kph on approach to the town. It does not encompass any pedestrian or cycle facilities until its approach to the junction with Ballytegan Road. It is worth noting that there is a small access road off the Arklow Road which routes under the Railway Line via an underpass and into the development lands to the south of the masterplan Site. This link has the potential to improve pedestrian and cyclist permeability between the site and the external road network.

2.5.5 Garden City

Other roads and streets of note, are the Garden City, which is a low traffic volume residential street of circa 5m width, incorporating some discontinuous footpath provision and public lighting. It intersects the Ballybetagh Road approximately 400m north of the Arklow Road junction. This route has potential to facilitate good pedestrian and cyclist connectivity into the town centre. This potential is further discussed below.

2.5.6 Woodlands Manor

The Woodlands Manor link street is a residential access road of circa 6m width providing dedicated footpath provision and public lighting on both sides of the road. This street provides access to the adjacent Woodlands Manor and Woodlands Drive residential area. This route has the potential along with Scholars Walk to connect with the Ballybetagh Road at the location of the proposed access point to the masterplan area in combination with the masterplan route network to complete a relief road around Gorey. This potential is further discussed below.

2.5.7 Ballytegan Avenue and Incomplete Inner-Relief Road

The inner relief route is currently an incomplete orbital route intended to connect adjacent neighbourhoods of Gorey (Creagh, Ballytegan and Clonattin). There are missing connections between Woodlands Manor and Ballytegan Road and through the Masterplan Site towards the Arklow Road and beyond to Clonattin.

The LAP identifies a new spine route for the development of the St. Waleran's lands ('Ballytegan Avenue') between Ballytegan Road and the Arklow Road/Clonattin as part of the orbital route. This avenue is intended to accommodate pedestrians, cyclists and vehicular traffic, including local public transport.

While the development of the zoned lands at St Walerans can be serviced in the short term, and specifically the first or early phases of the Masterplan Site, by the existing Ballytegan Road access, it is considered that the strategic longer-term development area will require completion of this route to Woodlands Manor and to the Arklow Road. This is important as these wider connections will increase permeability with the external network for vehicles, cyclists and pedestrians and in doing so will reduce traffic capacity pressure on the Ballytegan Road and Arklow Road Junction and disperse these movements in a more balanced manner on the external transport network.

While it is expected that an avenue of similar design and function will extend from the Ballytegan Road / the new Ballytegan Avenue access junction to the Masterplan Site to Woodlands Manor, the nature of the connection with Arklow Road and the Clonattin area has yet to be confirmed and could range from full vehicular access to a filtered permeability arrangement for pedestrian, cycle and public transport modes.

2.5.8 Potential Active Travel Routes

A particularly important pedestrian and cycle (active travel) route that could be progressed before or in tandem with the masterplan area is one which would assist in linking with the Town Centre and to the Schools campus in Creagh.

This link would progress from the Ballytegan Road either via a new link road that together with the new Ballytegan Avenue and existing Woodlands Manor would complete the inner-relief road or via Garden City, before entering out onto and progressing along Ramsfort Avenue / Park Avenue.

From here the route would enter onto Fort Road and divide into two with one route heading north along Fort Road before diverting west along Scholars Walk and Pearsons Brook towards the Schools Campus at Creagh. This route would also pick up community facilities provided at Gorey Park.

The second route would progress the short distance south along Fort Road to the Main Street in the Town Centre.

While these connections are outside of the plan area, it will be important to provide further study of these routes, with a view to addressing these deficits.

2.5.9 Public Transport

There are several bus services serving Gorey as follows:

- Bus Éireann route 002 links the town with Dublin Airport and Rosslare Harbour, while route 006 links Gorey with Dublin and Waterford.
- Wexford Bus operates a service linking Gorey with Dublin Airport.
- Gorey Bus Links linking Gorey with Ballycanew, Ballygarrett and Courtown, with another linking the town with Ballymoney, Castletown and Inch.
- Ardavan also operate a daily service linking Gorey with Dublin.

The main Bus Stops are located within the town centre on Main Street, located within 1.5km of the Masterplan Site. Bus routes such as those to Dublin do route along the Arklow Road and thus there is potential for future bus stops in closer proximity to the Masterplan Site.

In addition, rail services are as follows:

- The Irish Rail service runs five trains a day Monday to Friday including an early morning service, four trains on Saturdays and three trains on Sundays through Gorey with the station located within walking distance of the town centre.

The rail station is within 1.7km of the masterplan area. The primary route towards the rail station is and will be Ballytegan Road to Arklow Road and then progressing on to St Michaels Road towards the rail station. Improvement to the pedestrian and cycling facilities will be required to this route to ensure good connectivity with the masterplan area. Again, while these connections are outside of the plan area, it will be important to provide further study of these routes, with a view to addressing these deficits.

2.6 Water, services and infrastructure Flooding

The Office of Public Works (OPW) Flood Hazard Mapping website indicates that the closest historical recurring flood event occurred in the Garden City area, approx. 200m south-west of the site, where houses were affected and the road was impassable. However, there are no recorded incidents within the masterplan area. The OPW flood zone maps indicate that fluvial flooding is not predicted to occur within the masterplan site from the River Banoge to the west or from the tributary of the Banoge to the south. In accordance with 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities' DOEHLG November 2009, the masterplan lands are, therefore, categorised as being located within Flood Zone C – low probability of flooding. A small section of the site to the east of the Arklow Road, which is to facilitate a future bridge connection to the lands, is potentially at risk of flooding from the tributary of the Banoge. It is recommended that a full Site-Specific Flood Risk Assessment is undertaken in conjunction with the developed design to review all potential sources of flood risk to the lands.

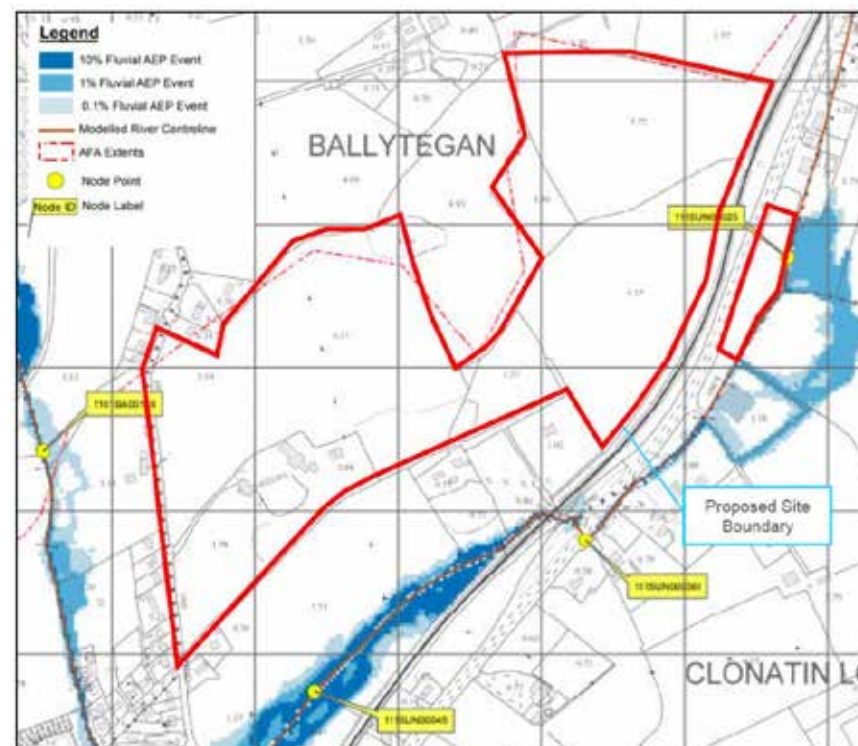


Figure 18 – Existing Fluvial flooding map. (Source: OPW)

Electricity

A 38kV overhead line traverses the lands in a north eastly direction (ESB Reference: Garden City – Tinahask 38kV line). This line can be undergrounded through the lands as part of their development, subject to appropriate routing, ducting and termination structures. Other high voltage lines traversing the lands can be incorporated into the development supply.

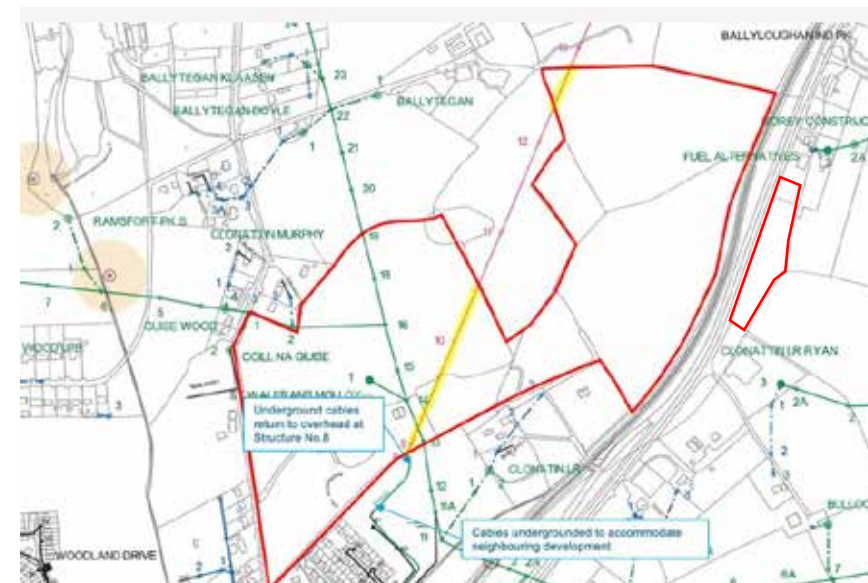


Figure 19 - Existing ESB Network



Water supply

There is an existing 3" uPVC watermain along the Ballytegan Road and a 9" truck uPVC watermain along the access laneway to the south of St. Waleran's Estate. A 160mm HDPE watermain is also present along the Arklow Road (R772) to the East of the site. The 9" truck main located along the southern boundary of the masterplan lands distributes potable water from Creagh Water Treatment Plant, located to the north-west of Gorey, to the Clonatin area, located in the east of Gorey. Capacity is available in the water supply, and the points of connection will need to be agreed with Irish Water as the development of the masterplan lands progresses. Further consultations with Irish Water will be necessary to confirm existing wayleave requirements for the 9" truck main to the south of the site.



Figure 20 - Existing Water Supply Network

Foul water drainage

Irish Water have recently completed upgrade works to the Gorey and Courtown Wastewater Treatment Plant to increase treatment capacity for the agglomeration. However, WCC have advised that the local gravity foul drainage infrastructure within Gorey is at capacity. Potential connections for the lands include a 225mm diameter foul drainage sewer to the south of the lands off the Ballytegan Road, approximately 250m from the site, and an existing 225mm foul drainage sewer approximately 170m to the West of the site flowing parallel to the western bank of the River Banoge. Future connections will be subject to capacity in the system and the completion of the detailed topographical survey for the lands.

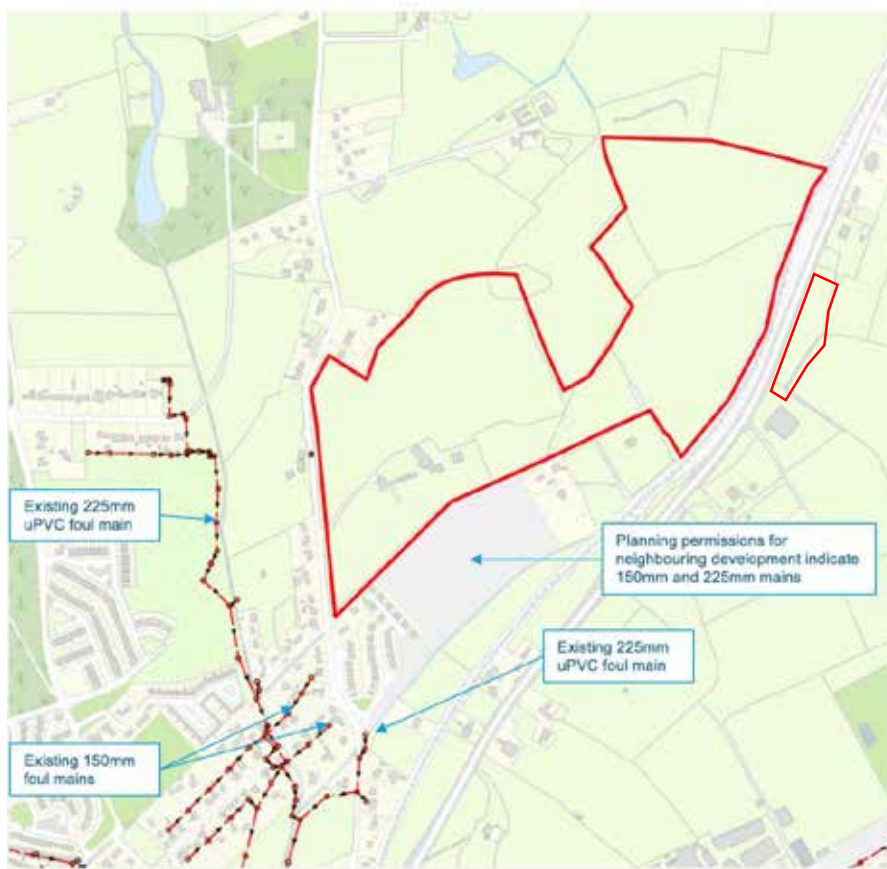


Figure 21 –Existing Foul Drainage Network

Storm water drainage and SuDS

WCC has confirmed that there are no storm water drainage networks within the environs of the site. The masterplan lands are greenfield in nature with limited artificial drainage management in place. Storm water generated within the lands during rainfall events either infiltrates into the ground, evaporates, is taken up by plants (evapotranspiration) or travels across the lands at surface level discharging to existing drainage ditches located along field boundaries. A full, detailed topographical survey is required to assess the land's natural catchments and various discharge locations to drainage ditches. The design of the proposed storm drainage infrastructure should mimic, as far as practically possible, the existing natural catchment management currently in place. Furthermore, storm water generated within the development lands must be attenuated to pre-development (greenfield) runoff rates. The incorporation of SuDS features into the storm water management strategy for the lands will assist in aligning with the existing natural catchment management of the lands pre-development.



Figure 22 – Storm Water Drainage Network

2.7 Community, education and enterprise

Local services

As a largely undeveloped area, there are no established local services in the Ballytegan area. The closest local shops and services are located on the Arklow Road (600 metres at closest point to the lands) and the Main Street (900 metres at closest point to the lands).

Education

There is a significant educational provision in the Creagh Area, the Town Centre, and the South Gorey areas. Additional provision for both primary and post-primary education will need to be considered with the continued development of Gorey.

There are four schools within walking and cycling distance of the masterplan area;

- In Creagh – St Joseph's PS, Gorey Educate Together PS, Creagh College and Gaelscoil Moshliolog; and
- In the Town Centre - Gorey Community School, Gorey School of Art, Bunscoil Loreto and Gorey Central School.

Given the potential new population of the masterplan area, there may be a requirement for a small primary school (8 classrooms and ancillary facilities, with potential for future expansion).

There is a limited provision for higher-level education in Gorey. The LAP promotes the development of additional higher-level education in the town, and this could be considered as part of the community provision in the masterplan area (with potential to focus on sustainable development).

Community facilities

There are currently no dedicated community centres in the Ballytegan area. A deficit of community facilities has been identified more broadly in the town in the current LAP. The LAP identifies a need in the town for:

- An arts and cultural venue; and
- A substantial multi-purpose, community facility.

The Council is currently looking at provision of a substantial community centre in Gorey (as part of Leader programme initiative). The LAP requires a neighbourhood community centre at St. Waleran's. This could be developed as part of a larger multi-functional centre for the town.

Recreation

Opportunities for passive recreation are limited in Gorey. However, Creagh Woods has evolved into a town-wide resource with substantial potential. The existing woodland area in St. Waleran's currently comprises approximately 4 hectares and would be of sufficient size and scale and quality to add to the strategic passive recreation provision for Gorey.

Nearby active recreation facilities include:

- Town and District Park (Creagh);
- Gorey Rugby Club – Clonattin;
- Naomh Eanna GAA Clonattin; and
- Gorey Rangers FC - Ramstown

The lands have the potential to provide for neighbourhood, and contribute to, town-wide needs for active recreation. In particular, a need has been identified for a hockey pitch with associated facilities in Gorey. Although larger-scale recreation facilities would not be compatible with the restoration of the demesne at St. Waleran's (in terms of nature of use, land take, necessary facilities and access), a location in the reserved, longer-term development area would be more appropriate in terms of location.

3 Vision and principles

The vision for St. Waleran's Demesne is to facilitate the growth of a sustainable community in a high quality, sustainable neighbourhood, supported by excellent local services and amenities and with strong linkages to surrounding communities and the town centre.

The vision is articulated by a set of masterplanning principles that underpin the spatial concepts for St. Waleran's. They are:

1. To create a unique place that is built on the positive aspects of local character, natural and landscape heritage and qualities, and in particular its position straddling the urban and rural landscape.
2. To protect and, where possible, enhance local natural and cultural heritage.
3. To create a new multi-purpose, neighbourhood centre with good links to surrounding, established communities, amenities and services.
4. To create an urban structure, which responds to the local topography, landscape, natural heritage and existing built fabric.
5. To provide for a hierarchy of streets and spaces, that provides for permeability and strong connections to surrounding areas.
6. To optimise walking, cycling and access in the area and to surrounding areas, and notably to the town centre.
7. To provide for local-level mixed use and employment services and to improve links to town centre services and employment.
8. To provide new community, health and education services and infrastructure, with strong links to surrounding community and services.
9. To encourage a diversity of households by providing for a broad mix of housing sizes and typologies.
10. To provide for a new green infrastructure for water management, recreation and amenity, mobility, and biodiversity benefits, which is focused on a new neighbourhood park and links into a larger local and town-wide network.
11. To provide for a variety of robust urban blocks which are adaptable to a variety of building and housing typologies.
12. To use a coherent approach to the continuity and enclosure of streets and spaces and building massing and scale to create a variety of attractive streets and spaces, which reflects their role and position in the hierarchy of streets and space and provides appropriate transitions.
13. To require a sustainable and high quality of design and materials in public spaces, buildings and private spaces.



4 Framework

The framework for the masterplan is based on important, area-wide

spatial concepts. For St. Waleran's Demesne these are:

- Sustainable and diverse place, which includes the core elements of sustainability and the rationale behind the core functions. The broad concept of the Ballytegan as a sustainable and diverse neighbourhood is established in the Local Area Plan. St. Waleran's Demesne will be the heart of this new neighbourhood.
- Green infrastructure, which is a multi-faceted concept connecting hubs and corridors with important roles for landscape, surface water management, biodiversity enhancement, recreation and amenity, and local movement by walking and cycling.
- Movement, which includes all modes of transport within a hierarchical, permeable and highly-connected network. It will be important also to consider the connections between the area, the Town Centre and surrounding communities.
- Community, which includes all community, health and education infrastructure and support services.
- Urban form, which includes the basic aspects of heritage, urban structure, such as urban blocks, massing, frontage and building height.

Aspects of the spatial concepts are developed into greater detail in the guidelines of this masterplan.

4.1 Sustainable and diverse place

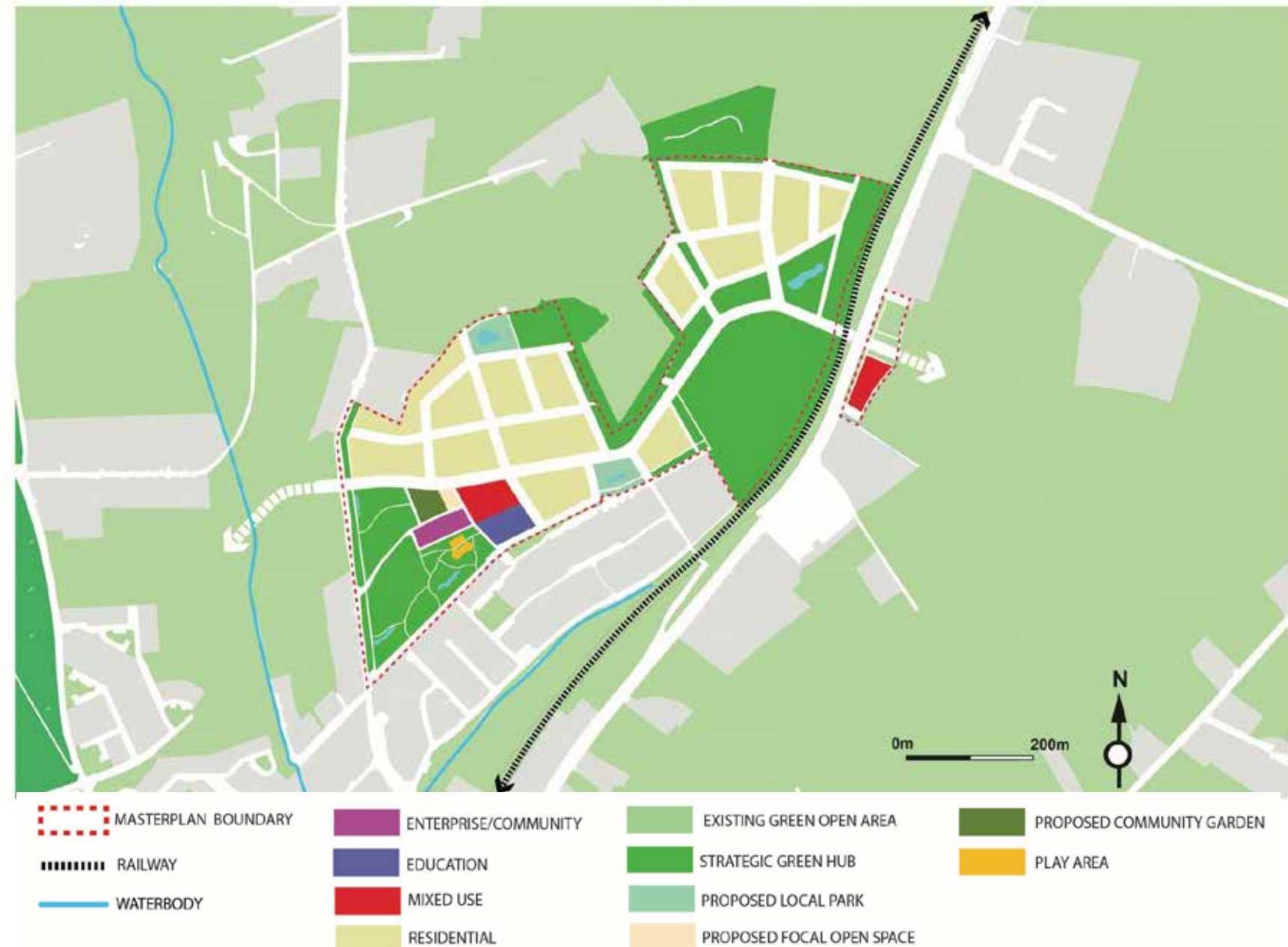
Sustainability applied to place and function provides the very basic rationale for the masterplanning of the lands. Many of the elements of place and function have already been set out in the Neighbourhood Framework Plan in the Gorey Local Area Plan. However, the masterplan rationalises the functions in the area within a new spatial concept. The key elements of sustainability and diversity of place are:

- Diversity of uses;
- Diverse community;
- Adaptable urban form;
- Sustainable building;
- Social spaces;
- Energy efficiency and management;
- Sustainable transport and mobility;
- Community and recreation infrastructure; and
- Biodiversity and surface water management

This spatial concept for functions is based on:

- A distinct, multi-functional neighbourhood centre for Ballytegan focused on the St. Waleran's. This will provide for the day-to-day needs of the future community and meet current deficits in adjoining and adjacent communities. This will comprise a range of new retail, services and community facilities.
- New educational facilities, including potential for linked provision for early childcare and primary education.
- A new community and associated enterprise centre on site of St Waleran's House.
- Local connections with the adjoining development, including the new Gleann na Ghairdín development;
- New, mixed typology and tenure residential areas immediately north and east of the St. Waleran's house/neighbourhood centre.
- Live-work capability throughout the area, by incorporating flexible ground floor building design, where appropriate.
- Active and passive recreation throughout the area, with formal play areas located in new local and strategic green spaces.

Figure 23: Place and function concept



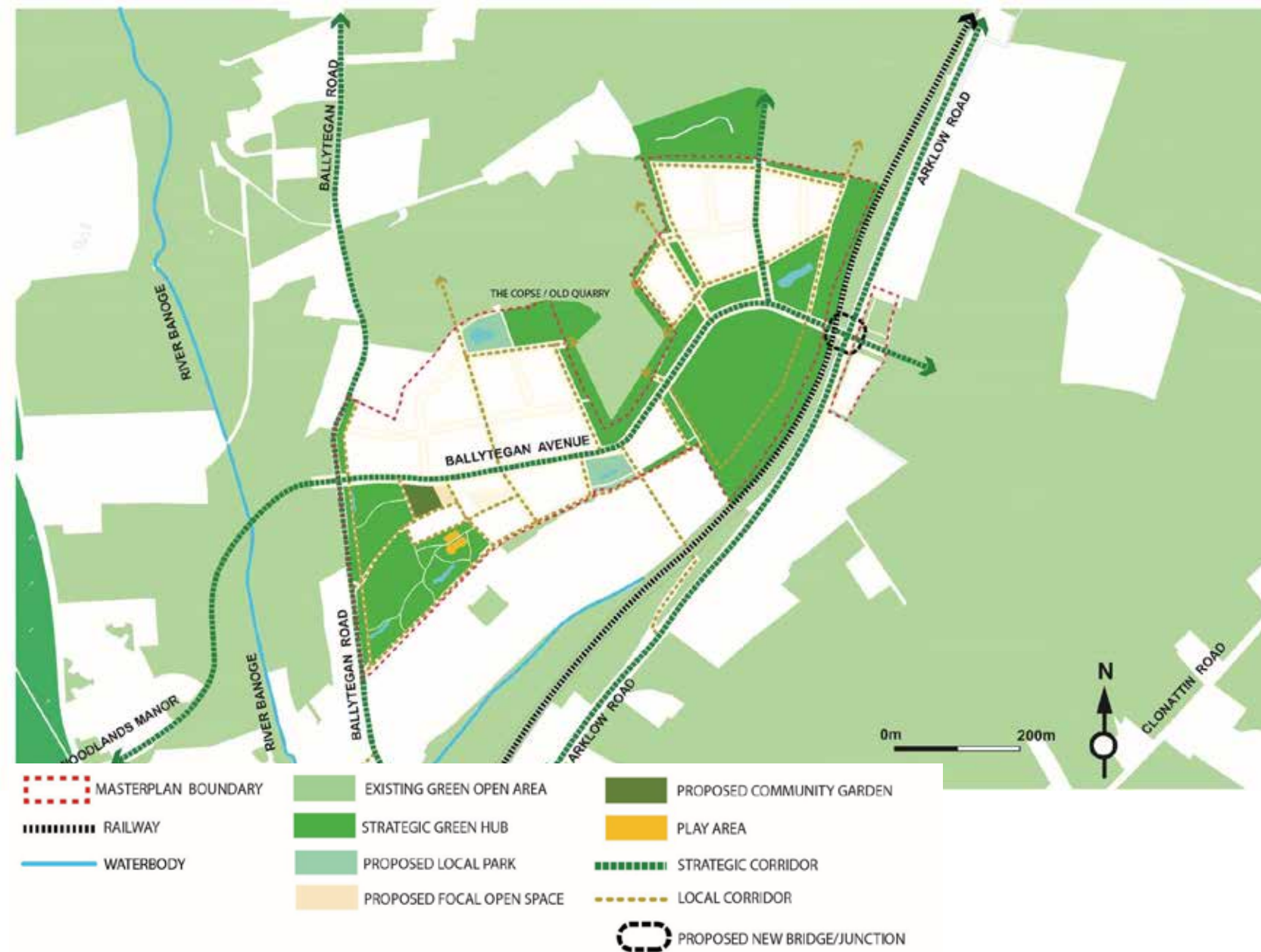
4.2 Green infrastructure – hubs, corridors and water

The green infrastructure (GI) concept brings together diverse objectives into a single, unifying spatial concept for the lands. Green infrastructure provides for enhanced biodiversity, active and passive recreation and amenity, local movement, and surface water management. GI also provides expression for an enhanced landscape structure for the lands, which is based on the main elements of the demesne of St. Waleran's.

This spatial concept is based on:

- Multi-purpose, hubs and corridors, which provide for a range of elements, including biodiversity enhancement, local movement, amenity and recreation, and surface water management.
- A new multi-functional green infrastructure hub for the neighbourhood, at new community Woodland Park at St. Waleran's.
- New strategic corridors provided by enhancement of the substantial landscape perimeters and hedgerows in the area.
- Smaller park hubs as local focal points for housing.
- Local corridors along the new Ballytegan Avenue and the main residential streets and spaces.
- Improvement of Ballytegan Road for local movement, biodiversity, and surface water management.
- Sustainable and integrated surface water management (SuDS) – combining flood risk and sustainable urban drainage;
- Strategic, local and amenity cycle routes within the green infrastructure network.
- Community gardening and potential for allotments in the new Woodlands Park at St. Waleran's.
- Designated areas for biodiversity enhancements in all hubs and corridors (special projects) with the overall objective of Biodiversity Net Gain for the masterplan area.
- Active recreation in small play areas in the local open spaces and the new Woodlands Park, with provision for a new hockey ground in the reserved lands of the masterplan.

Figure 24: GI concept



4.3 Movement - routes and spaces

The movement concept provides the basic movement network to support sustainable mobility in the masterplan area. The concept is designed to provide for priority and safety for residents, pedestrians and cyclists, with a focus on the needs of the residents and users of streets and spaces. The movement concept optimises links to surrounding communities, by developing as many connections as possible, within existing constraints. The movement concept also supports the provision of developable parcels and urban blocks which can be delivered on a phased basis.

4.3.1 Planning and design

DMURS is the appropriate design guidance to be applied to urban environments such as cities, towns, villages and urban developments such as St. Waleran's.

"The principles, approaches and standards set out in the Manual apply to the design of all urban roads and streets (that is streets and roads with a speed limit of 60km/h or less)."

DMURS requires a collaborative design process and a holistic design approach to the layout and design of urban streets; to this end the design team consisting of planners, architects, engineers and the client have engaged in a consultative process to ensure that the proposed development incorporates the design principles espoused in DMURS.

The street layout has been developed to deliver a high place function (focus on high level pedestrian and cyclist connectivity and low traffic speeds) wherein the streets and open spaces form part of the social fabric and are appropriately used for congregation and play. Achievement of this function can be greatly facilitated by developing a self-regulating street environment wherein the vehicular movement function should be limited, insofar as practicable, and a desirable maximum design speed of 30kph is achieved.

4.3.2 Principles

DMURS sets out four core principles that should be considered in the development of street and road layouts. These principles are adopted in this masterplan and are set out below.

Table 1. Compliance with DMURS Principles

Core Principle
<i>Pedestrian Activity / Facilities</i> – "To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users and in particular more sustainable forms of transport."
<i>Multi-Functional streets</i> - "The promotion of multi-functional, place based streets that balance the needs of all users within a self-regulating environment."
<i>Pedestrian Focus</i> - "The quality of the street is measured by the quality of the pedestrian environment."
<i>Multi-Disciplinary Approach</i> - "Greater communication and co-operation between design professionals through promotion plan led multidisciplinary approach to design."

4.3.3 Concept

The movement and route concept specific to the St. Waleran's Demesne are based on:

- A new permeable and filtered route structure for Ballytegan and St Waleran's, based on DMURS principles;
- A hierarchy of streets and spaces that is integrated with surrounding streets and spaces, notably Ballytegan Road and the extension of the Inner Relief route from Creagh.
- A longer-term pedestrian and cycle and vehicular connection to the Clonattin and the R772/Arklow Road.
- A flexible, tertiary structure of local streets, that provides for good permeability throughout and appropriately sized, robust urban blocks;
- Area-wide accessibility for pedestrians and cyclists;
- Dedicated new cycle routes along the new Ballytegan Avenue and Ballytegan Road, amenity cycle routes along the main GI corridors in the area, and cycle-friendly local streets and spaces;
- Optimised pedestrian and cycle links to the town centre and public transport services – (subject to actions outside of the masterplan area); and
- Safe walking routes throughout the masterplan area, with appropriate street and junction design and traffic management.

Figure 25 – Route concept

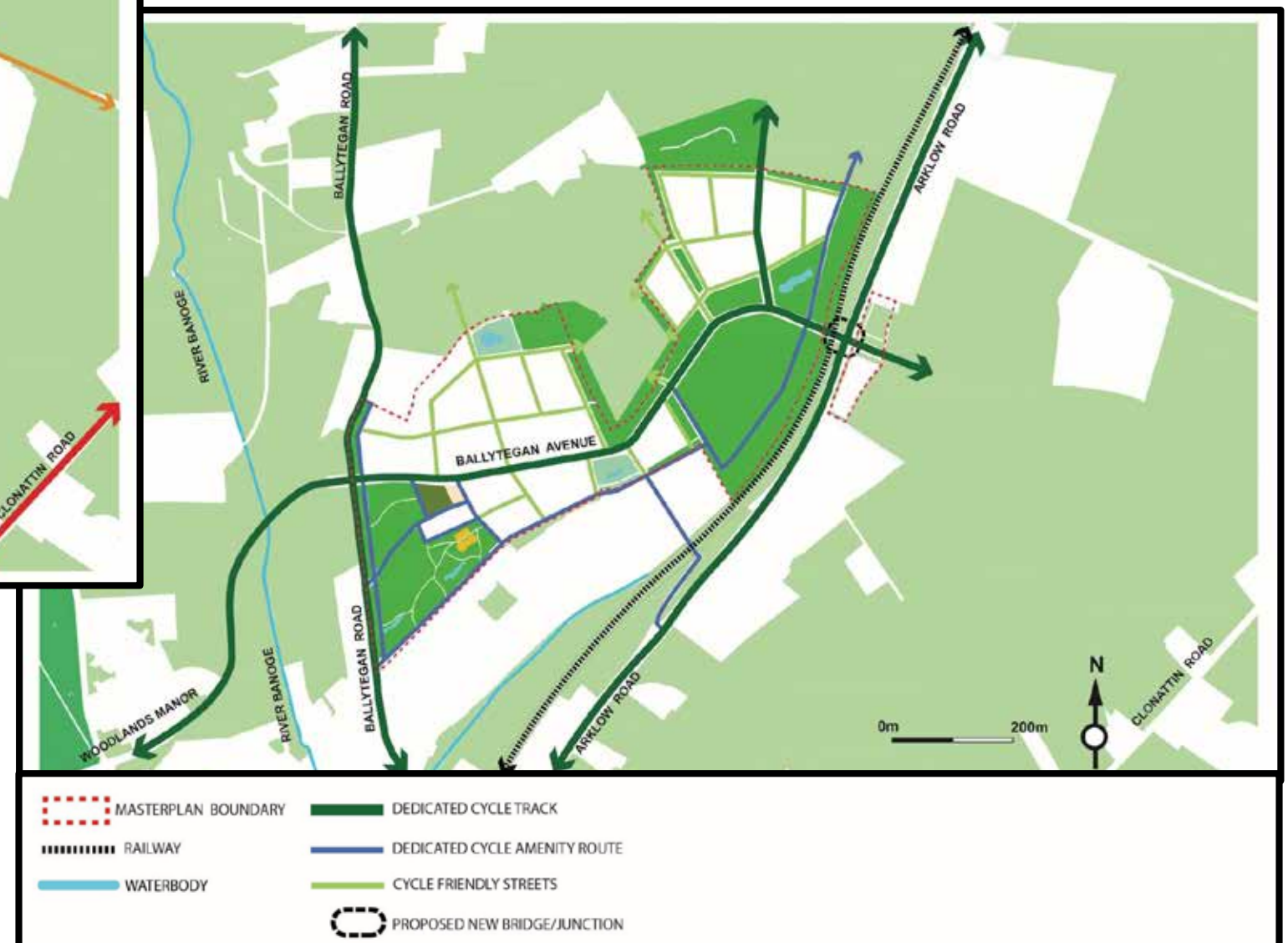
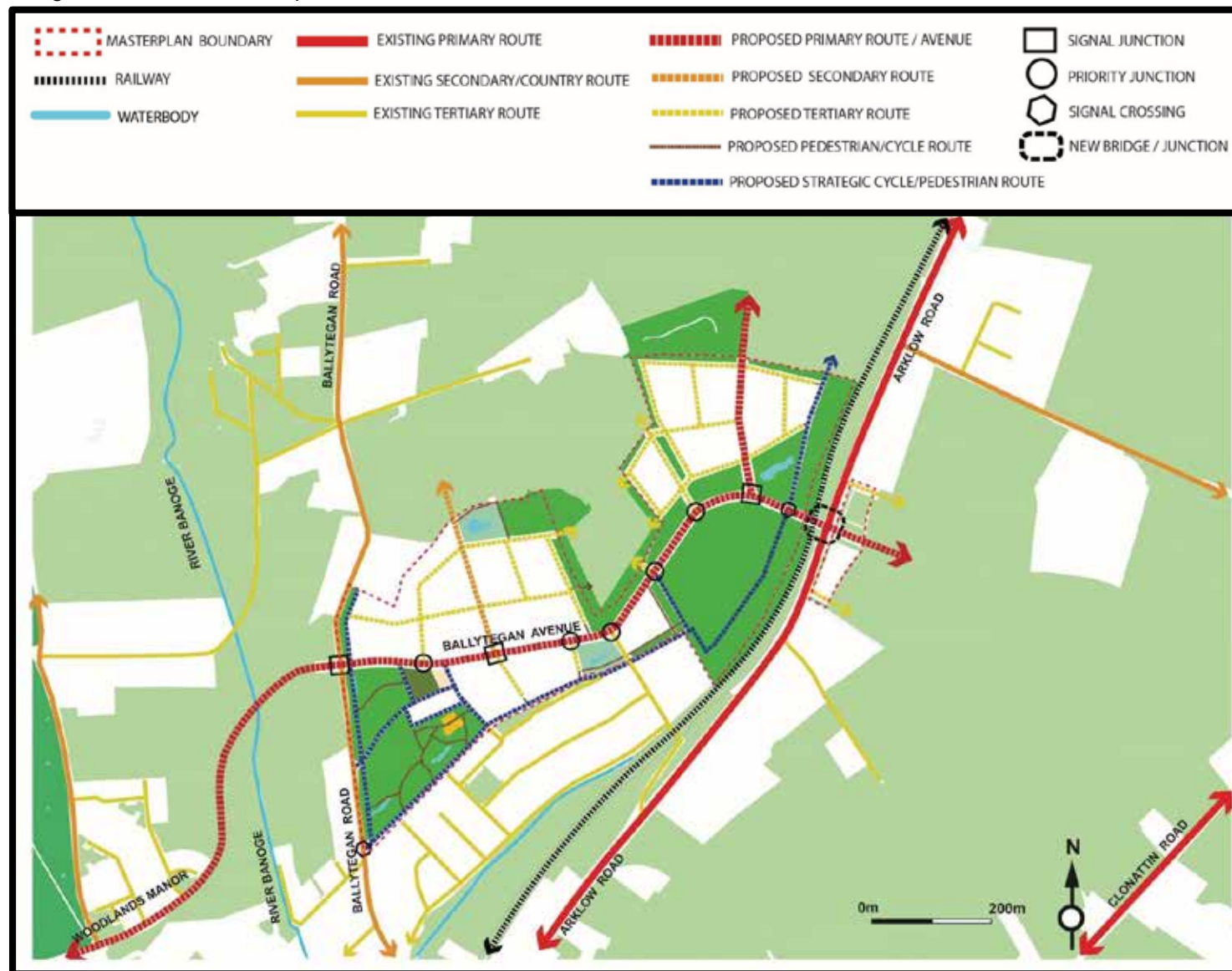


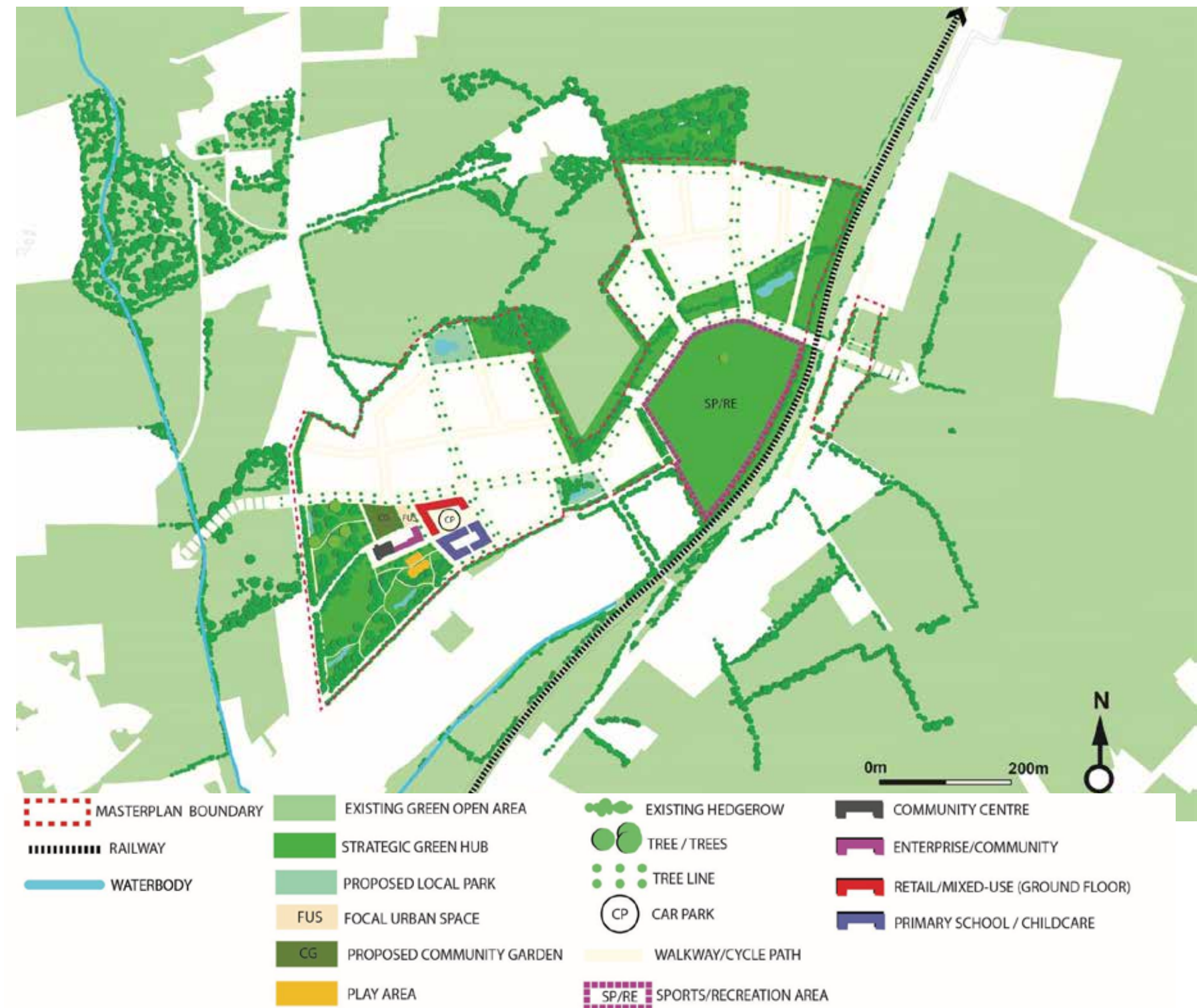
Figure 26 – Cycle concept

4.4. Community

The provision of community facilities is central to the vision of the masterplan, and a key aspect of the Neighbourhood Framework Plan for Ballytegan in the current LAP. The spatial concept shows the rationalisation of the community uses and their close connection to other local services and enterprise uses, housing and specialist housing. This spatial concept is based on:

- Centrally-located community, education and health facilities and services.
- Provision for new integrated early childcare and primary education.
- Provision for a new community and enterprise centre on the site of St Waleran's house.
- Provision for new local, primary health services (in community centre or mixed use block).
- Safe and attractive walking and cycle routes to surrounding areas and to the town centre.
- Provision for local shops and services, such as local convenience shop, pharmacy etc (in the mixed use block).
- A range of accessible passive and active community recreation in the new Woodlands Park and in other open spaces and corridors.

Figure 27: Community space and places concept



4.5 Urban form

The urban form concept derives from the urban structure provided by the network of main routes and spaces and the landscape structure. It is also developed around the important and unique elements of the natural and built heritage. A key element of the urban form is the urban block structure, which provides a flexible and robust framework for development. The built form concept also includes a frontage concept, which indicates priorities for urban frontage to streets and spaces. This may be provided by greater continuity or scale of the frontage buildings. The building height concept provides an indication of massing in the urban block structure and how it reflects local streets and spaces.

This spatial concept is based on:

- Appropriate protection of the remaining features of the built heritage as part of the historic landscape;
- Alterations and removal of elements of St Waleran's House to ensure that it is secured in a safe condition, with later, possible incorporation of some elements of the building into the new community centre.
- Restoration of the redbrick outbuilding adjacent to the St Waleran's House.
- Retention of the main gate, driveway and the remaining landscape structure of the demesne (including the woodland, lawn, orchard/garden and free-standing specimen trees and tree groups).
- A permeable new structure of urban perimeter blocks (Figure 28) of appropriate shape, size and orientation, and providing good development potential.
- Continuity and enclosure of streets and spaces with appropriate massing and scale to reflect location and order of streets and spaces.
- Active building frontage for passive supervision to all urban block frontages.
- A variety in building scale, density and building typologies, which is responsive to location and the nature and importance of the frontage.
- Greater scale of frontage to Ballytegan Avenue (typically 2-4 storeys).

- Good continuity of frontage and scale to the secondary streets and park/open space frontages (typically 2-3 storeys)
- Greater flexibility around scale and continuity of frontage on smaller local streets and spaces. (typically 1-3 storeys)
- A variety of building typologies, scales and densities to reflect location and function.

Figure 28: Urban block structure

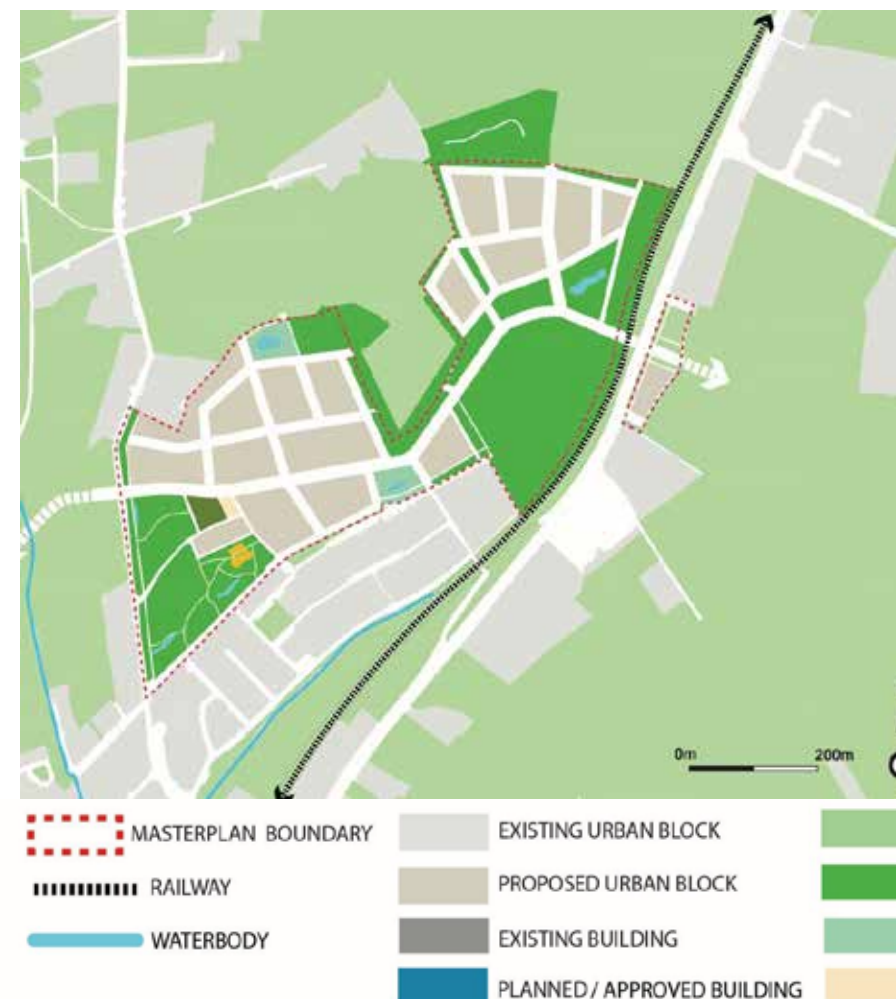


Figure 29: Frontage concept

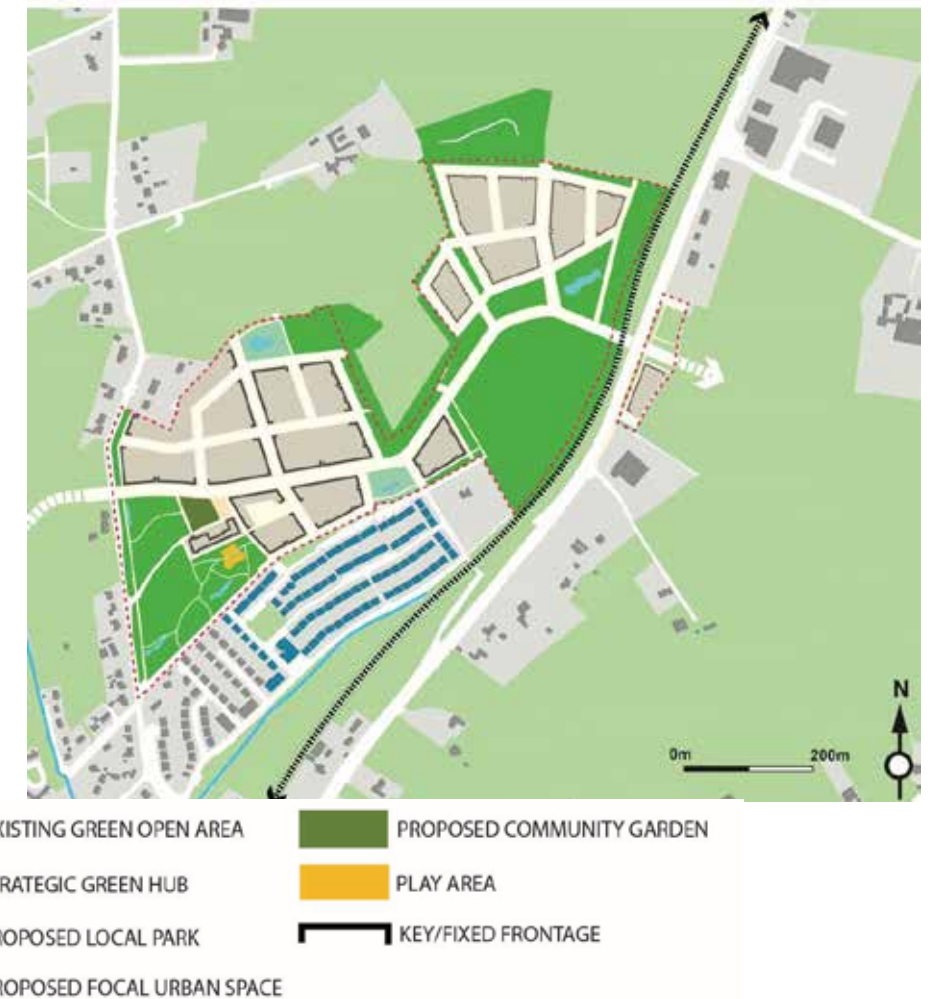
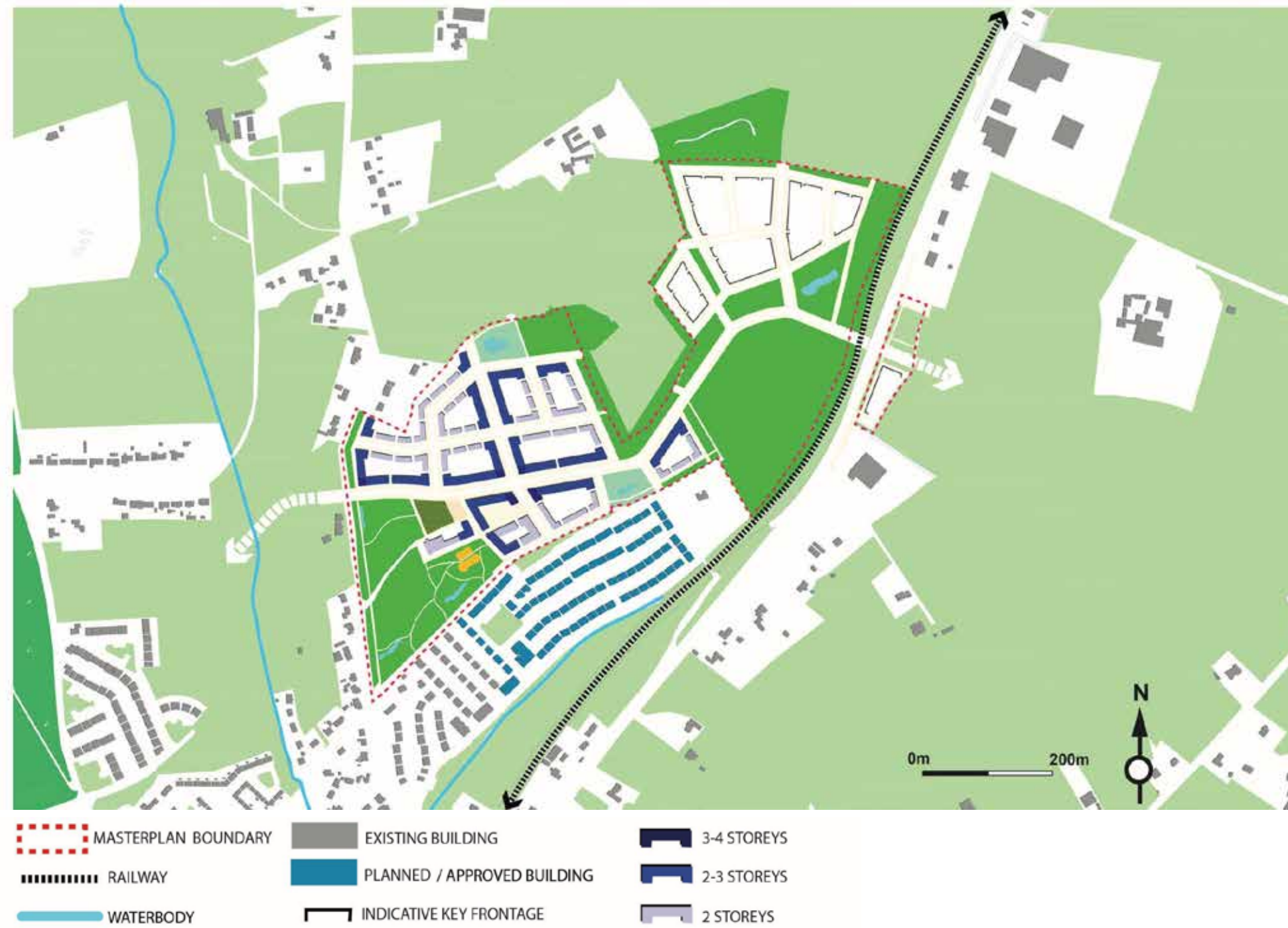


Figure 30: Building height concept



5 Guidelines

The guidelines provide further planning detail and general guidance on selected aspects of the masterplan. These aspects have been chosen to cover important aspects of the spatial concepts where a coherent approach is needed. They are also provided to cover important projects, which require greater detail to advance them to the next stage of planning and development. Later stages of planning and development, such as the planning application stage, will deal with matters such as critical infrastructure and services, final development layout, massing and building and space design and detail.

5.1. Built heritage

The demesne landscape of St. Waleran's will be protected and greatly enhanced as the defining feature of the lands. The landscape elements are incorporated into the landscape and urban structure concepts for the masterplan. The built heritage elements of this landscape will need to be resolved at the early stages of the development of the lands.

St Waleran's House

St Waleran's House was substantially destroyed by fire in 2019. Apart from external wall, very little of conservation merit remains of the original structure. The structure is also considered to be in an unsafe condition. There are clearly options in how the House could be treated. These are:

- Restoration of the house. Given the current condition of the house and the limited remaining fabric of conservation merit, and the possible need to reconstruct and replace all elements of the building, good conservation outcomes may not be secured from this option. It will also come at significant cost, which may be better allocated to other community infrastructure in the area.
- Reduction and incorporation of the ruin. This option would entail the partial demolition of the ruin, with retention of elements, such as the main doorway or parts of the remaining elevations. These elements could be incorporated into a new community centre and would provide a link to the past relationship between the house and the woodlands.

- Full demolition. This would be the safest, and most cost-effective option. Some elements of the ruin could remain in the floorplane to indicate its former position in the demesne.

The reduction and incorporation of the ruin into a new community centre is preferred as the best conservation and urban design outcome for the masterplan. However, this should be the subject of further evaluation.

Redbrick estate building

This building is adjacent to the House. The recent survey of this building in 2019 considered it to be of sufficient condition to allow for its restoration. This will require repair of walls, roof and complete internal reconstruction. This building would be ideally integrated with the new community facility and potentially accommodate enterprise and creative activities.

It is recommended that a study be carried out as soon as possible to consider options for both buildings and potential integration with community and enterprise facilities for the area. This study should be carried out by a Building Conservation Expert/Conservation Architect. This study should be carried out in consultation with Wexford County Council and the Architectural Advisory Unit of the DoHLGH. Prior to any alterations to these buildings taking place, a full written, measured and photographic record/survey of the upstanding buildings should be carried out and deposited with the Irish Architectural Archive.

Archaeology

Whilst no evidence was identified during the assessment of previously unrecorded archaeological sites within the area, the archaeological potential of the overall site is considered to be moderate to high and it is possible that such sites survive with no surface expression. Ground disturbances associated with any future development may result in an adverse impact on potential archaeological remains.

A geophysical survey and a programme of targeted archaeological test trenching should be carried out in order to inform any future planning applications. The surveys require a licence from the National Monuments Service of the DoHLGH. The results of the surveys will inform the overall impact assessment for the lands and will ensure that the archaeological risk to future development is addressed as early as possible. Dependant

on the results of the geophysical survey and test trenching, it is possible that further archaeological mitigation may be required. This may include the preservation by record or in-situ of archaeological remains, and/or archaeological monitoring. Any further mitigation will require agreement from the National Monuments Service of the DoHLGH.



5.2 Streets and spaces

5.1.1 Network

The street network will comprise streets of different function and characteristics. The network will be permeable and well connected to surrounding areas.

Provision is made for filtered permeability - reserving some junctions, connections and frontages for pedestrians and cyclists only. The new Ballytegan Avenue will provide the spine for the route network. In the longer term it will provide a town-level link between Creagh, the Arklow Road and Clonattin. This route is classified as a 'neighbourhood link' in line with DMURS.

The Ballytegan Road is very much a rural approach to the town of Gorey. A transition zone and gateway feature will need to be defined along this road in order to assist speed reduction and provide passive traffic calming. This will provide a safer environment for other pedestrians and cyclists generated by the Masterplan Site and ensure that appropriate treatment is afforded to the Ballytegan Road in relation to the Masterplan Site and the approach to the town.

5.1.2 Junctions

The street network will comprise streets of different function and characteristics. The network will be permeable and well connected to surrounding areas.

Provision is made for filtered permeability - reserving some junctions, connections and frontages for pedestrians and cyclists only (refer to section 3 of this masterplan). The new Ballytegan Avenue will provide the spine for the route network. In the longer term it will provide a town-level link between Creagh and the Arklow Road and Clonattin. This route is classified as a 'neighbourhood link' in line with DMURS.

The Ballytegan Road is very much a rural approach to the town of Gorey. A transition zone and gateway feature will need to be defined along this road in order to assist speed reduction and provide passive traffic calming. This will provide a safer environment for other pedestrians and cyclists generated by the Masterplan Site and ensure that appropriate treatment is afforded to the Ballytegan Road in relation to the Masterplan Site and the approach to the town.

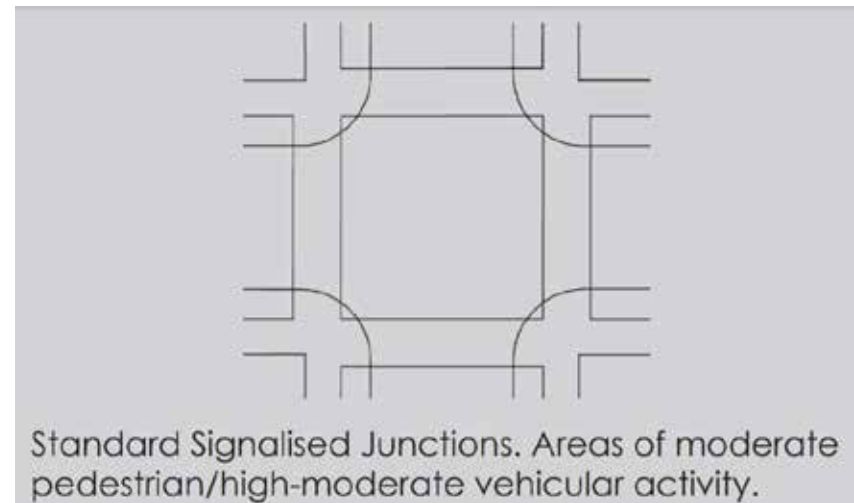


Figure 31 – Compact Traffic Signal Junction (Source DMURS 2013)

There is potential to incorporate innovative measures such as the "Protected Cyclist Junction" layout at the Ballytegan Road / Ballytegan Avenue junction. The purpose of this layout is to improve safety for cyclists at the junction, particularly from left turning vehicles. The provision of full segregation up to the point a vehicle begins its left turn movement and reduced corner radii improve safety and reduce the likelihood of serious collisions at this conflict point. A recently constructed example at Balbutcher Lane, Dublin, the first in Ireland and designed by Atkins, is illustrated in the below image.



Figure 32 – Protect Cycle Junction (Source Atkins 2021)

Regardless of the details of the future traffic signal junction, a dedicated pedestrian and cycle crossing will need to be provided on Ballytegan Road to facilitate seamless linkages between St Waleran's and the Garden City area. This can be combined with the main junction or in addition provided as a direct mid-block crossing is likely to be signal controlled given the function and traffic volumes of the route.

Ballytegan Avenue / Local Street Junctions

Along the new Ballytegan Avenue, junctions will be a mixture of traffic signal junctions and priority-controlled junctions. At all junctions, crossings will be of a high standard to ensure comfort and safety is afforded to pedestrians. Priority should be afforded to pedestrians however this will be subject to detailed landscape and technical design. Additional mid-block pedestrian and cycle crossings may be provided on the new Avenue (notably at the new neighbourhood centre).

All other streets in the masterplan area will be of low to moderate pedestrian and vehicular activity, and will also be suited to priority junctions and / or uncontrolled junctions. These junctions will also need careful design, to ensure a quality of service for pedestrians and cyclists.

In an integrated urban design approach, including surface, landscape and building design will be required to achieve a sense of enclosure at all junctions. Other measures such as raised tables may be used to moderate traffic speeds.



2013)

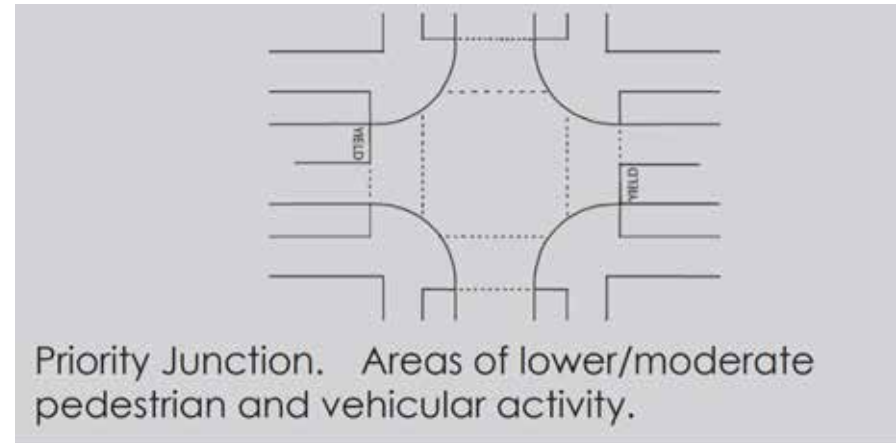


Figure 34 – Compact Priority Junction (Source DMURS 2013)

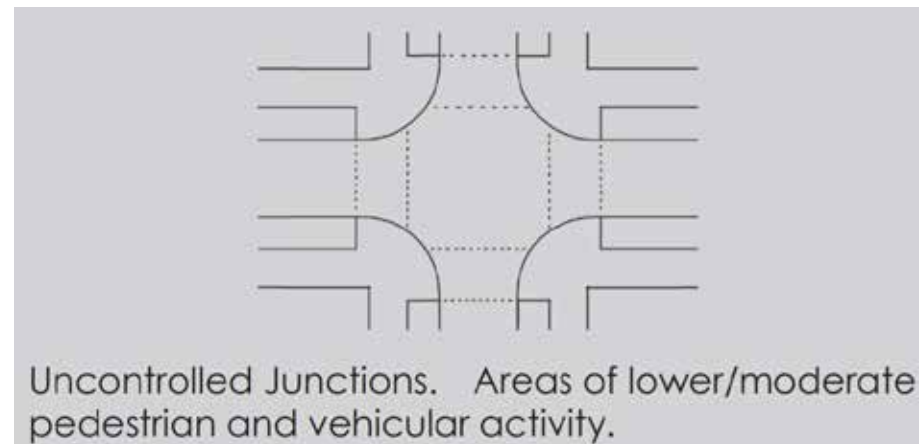


Figure 35 – Compact Uncontrolled Junction (Source DMURS 2013)

Ballytegan Avenue / Arklow Road Junctions

In the medium to long-term, a bridge over the Railway Line and the Arklow Road will be required to connect Ballytegan Avenue with Clonattin. The nature of the connection to the Arklow Road has not yet been decided. While this will require a more detailed transport and mobility study, it could provide for pedestrian and cycle access only to and from the Arklow Road, with vehicular connection directly between Ballytegan and Clonattin, or it could provide for access for all modes to and from the Arklow Road. There will be significant differences in terms of design, construction and cost between both of these options.

5.1.3 Crossings

Crossings are one of the most important aspects of street design as they are the location at which pedestrians and vehicles interact. They can be provided at junctions or at mid-block locations. Their location and frequency at which they are located is important and at all times there should facilitate the desire line of pedestrians.

At link street locations such as along the new Ballytegan Avenue they should generally be high order crossings such as traffic signal toucan crossings or zebra crossings.

On local street and homezone locations crossings can be uncontrolled or less formal courtesy style crossings. However higher order crossings where pedestrians' flows may higher such as at focal points can be considered. Again the type of crossing to be implemented will be subject to detailed landscaping and technical aspects.

5.1.4 Speed

All streets and spaces should be designed for a maximum of 30kmh. No street in the area has a designation requiring greater speed. This will be important in establishing pedestrian and cycle priority in the area, encouraging greater use of these modes and reducing perceptions of safety.

5.1.5 Key Routes

Ballytegan Avenue

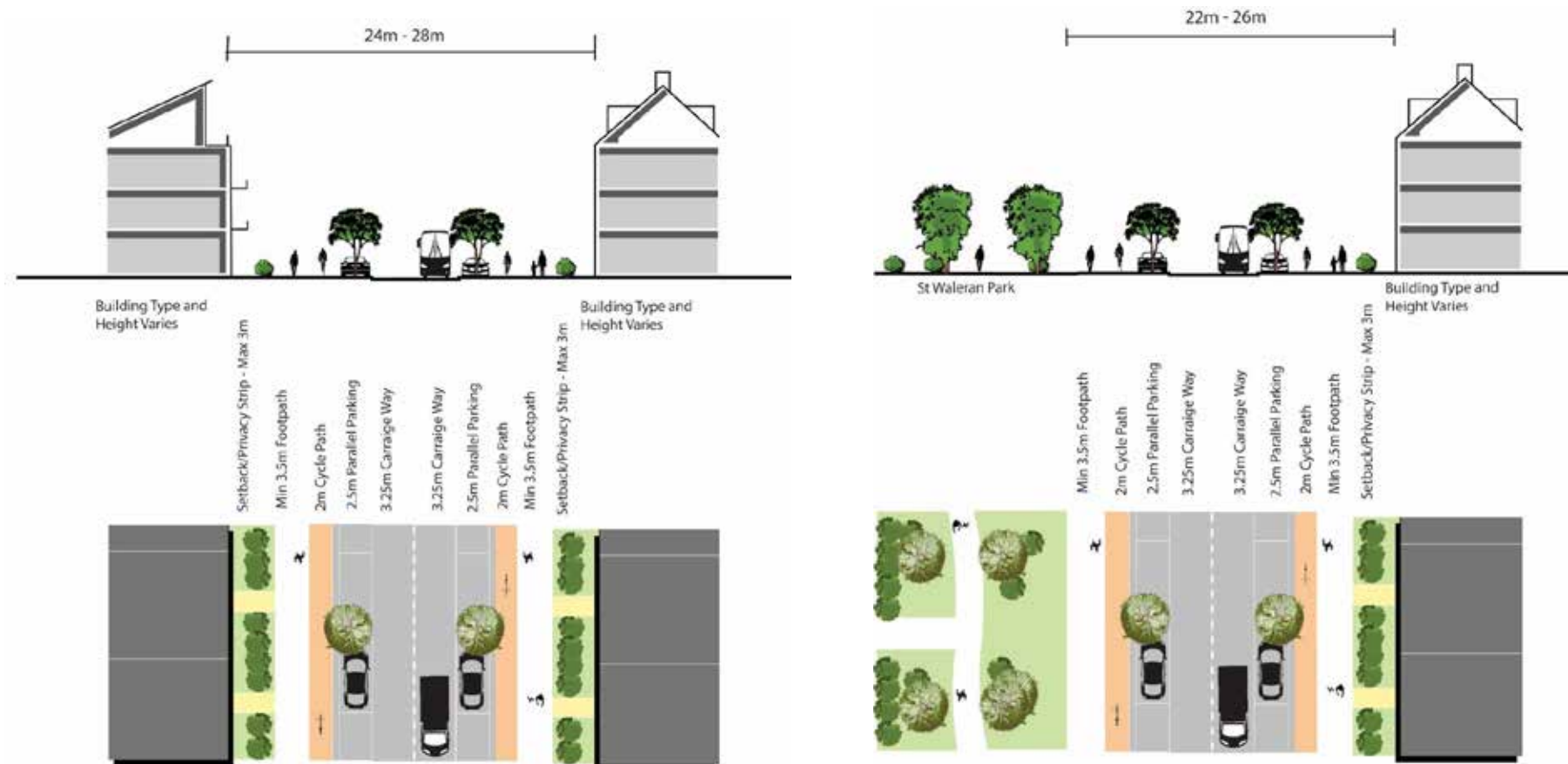
The new Ballytegan Avenue will provide the higher-level connection through the lands and will connect the main functional components of the development. Ballytegan Avenue, along with the buildings and uses along it, will play an essential role in providing legibility and sense of unity to the development.

Appropriate facilities should be provided to cater for pedestrians and cyclists travelling along Ballytegan Avenue.

They key components of the Avenue are:

- Single carriageways, maximum 6.0m width, designed to accommodate all modes.
- Parallel car parking at selected locations where development is fronting the Avenue, with options to include perpendicular parking in suitable locations.
- Coherent landscape design, including tree-lining.
- SuDS measures in avenue strips or margins and, if feasible, at car parking spaces.
- Segregated cycle track along the full length of Ballytegan Avenue (in line guidelines with Cycle Manual, 2011). Potential to consider parking Protected Cycle Tracks, with appropriate buffers.
- Generous footpath (3m minimum width preferred).
- Coherent, energy-efficient avenue lighting.
- Good building continuity and interface with appropriately sized set-backs/privacy strips (generally not more than 3m in depth, with shallower dimensions or zero set-back at block corners to aid enclosure). Zero set-backs will generally be required at commercial ground floors and at the new local centre.
- A variety of building frontage, principally comprising apartments, duplexes and townhouses.

Figure 36. Main avenue typical section



Local streets and homezones

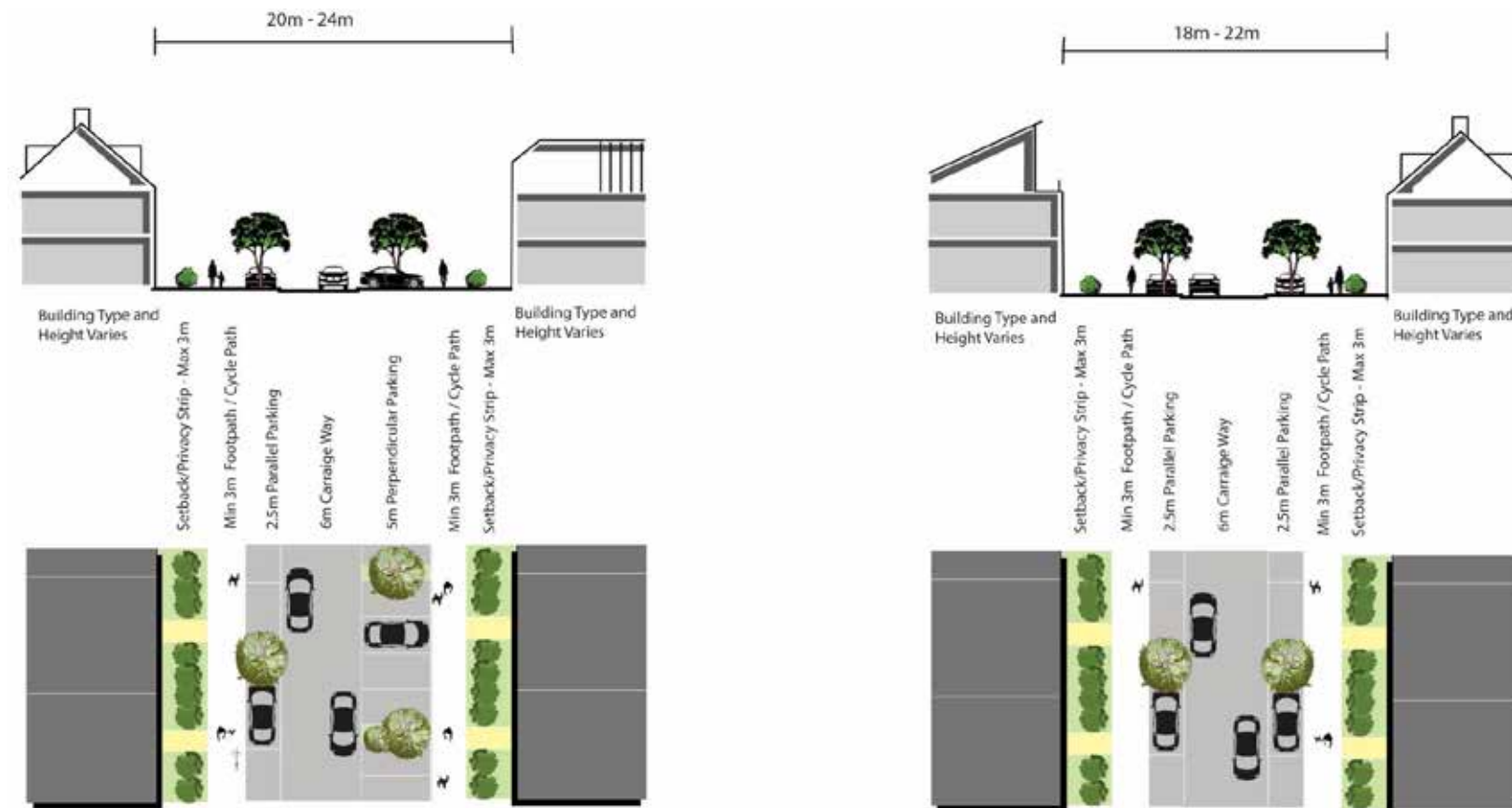
Local streets will need to be carefully designed to prioritise their safe use and enjoyment by residents. The overriding design aim will be to ensure low vehicle volumes and speed. Local streets should prioritise pedestrian activity and street life and they should be safe for cyclists. Local streets should also provide a pleasant scale, an intimate sense of enclosure and continuity of street frontage. Car parking will need to be sensitively integrated into the streetscape to ensure that it does not dominate visually and does not result in excessive building-to-building (front-to-front) dimensions. SuDS measures will also need to be integrated into the design of the footpaths and car parking areas, and carriageways, if feasible.

Homezones are pedestrian-priority local streets, where a more informal approach to street design can be taken. This may include shared surfaces, narrow and restricted carriageways and informal boundaries. Homezones will be subject to merit-based assessment at the proposals stage.

Key components:

- Local Streets, single carriageway, two-way, 5.5m maximum width
- Homezones, single carriageway, two-way, 4.8m maximum width plus 1.2m pedestrian comfort space.
- Parallel or combined parallel and perpendicular car parking.
- Coherent landscape design, including tree-lining integrated with on-street car parking.
- Small scale SuDS features providing for surface conveyancing and infiltration on permeable surfaces, including permeable car parking areas and carriageways, if feasible.
- Generous footpaths (3m width preferred).
- Lower-level, energy-efficient street lighting.
- Continuity of building frontage with typical scale of 1 to 3 storeys.
- Good building interface with appropriately-sized setbacks/privacy strips.
- A variety of building frontages and typologies encouraged, to include terraces, townhouses and mews.

Figure 37. Local street and homezones typical section



Park streets

Streets with frontages to the surrounding open spaces and parks will need to respond to the unique landscape character, views and aspects of the location. The frontages will also need to enhance the visual character and coherence of the edge of the open spaces while providing for passive supervision from overlooking homes. In most locations, where adequate space is available, modest levels of frontage access and parking will be provided to park at the frontage. In some locations, it is preferable to limit frontage access to pedestrians and cyclists (these locations are shown in the masterplan). Surrounding open spaces should be universally accessible, with frequent and permanent points of access. Any railing or other boundary will be limited in extent. Apart from retained and enhanced hedgerow and tree lines, there will be no additional gates or fences on these frontages.

Key components:

- New dedicated pedestrian and cycle links along the strategic green spaces.
- Local level access streets, with a strong place function, conducive to play and street life.
- Small scale SuDS measures, such as swales and infiltration at permeable car parking areas, if feasible.
- Parallel, on-street car parking, with perpendicular as necessary (generally only single-sided and frontage side only).
- Continuity of building frontage with typical scale of 2 to 3 storeys, and potential for occasional 4 storey scale, for example, at corners.
- A variety of building frontage, principally comprising duplex and townhouses.

Figure 38: Park frontage typical section



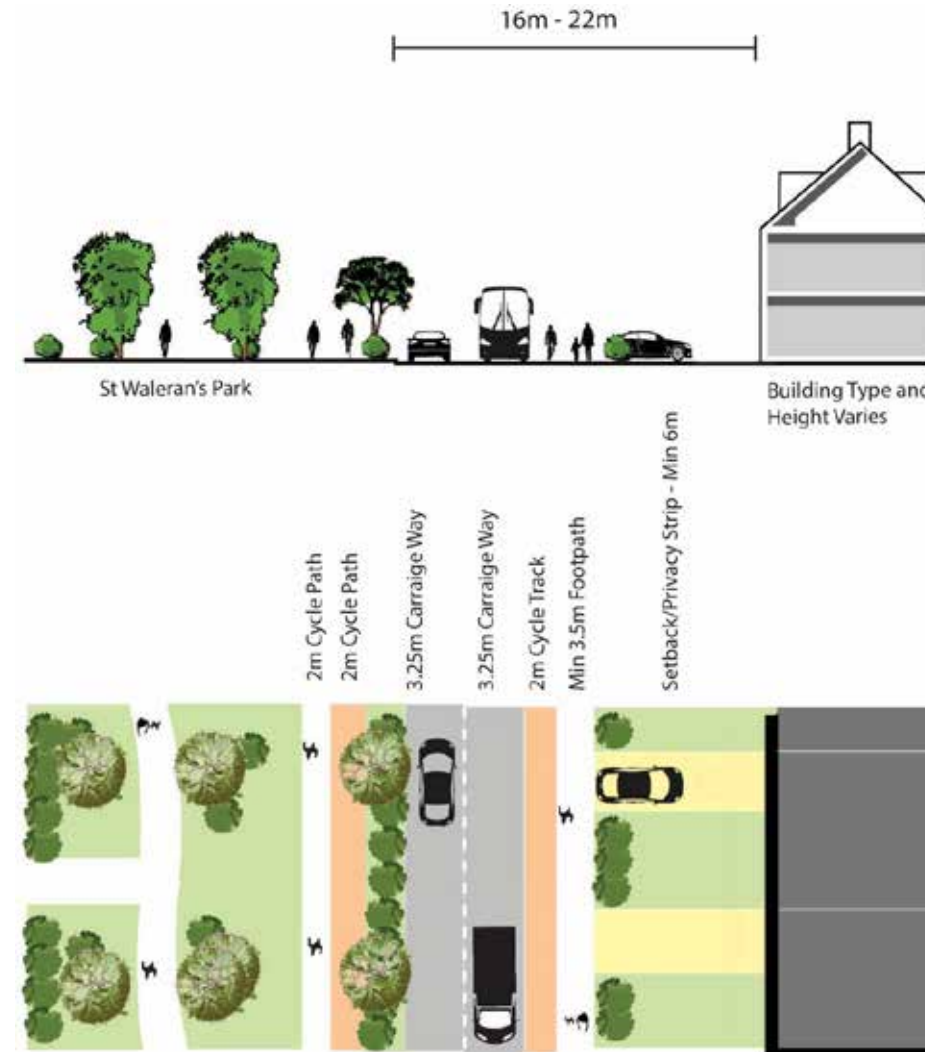
Ballytegan Road

In the longer term, Ballytegan Road will play a minor role in the movement network of the town. In the shorter term (pending connection to the larger inner relief route), it will provide for vehicular access to St. Waleran's and surrounding rural areas. It will require upgrading in terms of safety and landscape quality.

Key components:

- Pedestrian and cycle facilities provided in parallel (offline) with the road inside the Woodlands Park;
- Retention and refurbishment and extension of the drystone boundary walls, tree line and hedgerow of St Waleran's Woodland park.
- Refurbishment of the entrance and gates and driveway to the house (Cycle and pedestrian access only);
- Implementation of transition zone, wherein speed reduction will take place, and gateway feature to delineate passage from rural area to urbanised area. To be subject to technical design.
- Active and passive speed reduction and management measures (vertical, horizontal & visual measures such as chicanes, raised areas, build outs, landscaping etc.);
- Potential for small scale SuDS features for surface conveyancing and infiltration.
- Low-level, non-intrusive lighting.

Figure 39: Ballytegan Road - typical section to woodland park



Transport Sustainability

The traditional approach of supplying ever more road space to meet increased transport demand is unsustainable. The 'Avoid-Shift-Improve' approach is now favoured. This is based on avoiding or reducing the need to travel, shifting to more environmentally friendly modes and improving the energy efficiency of motorised transport modes. The aim is to reduce congestion, create more liveable towns and cities and reduce greenhouse gas emissions.

The Masterplan Site will seek to take every available opportunity to provide the option to future residents to either avoid the need to make a trip or indeed to reduce the trip distance, to make that trip via a sustainable alternative mode, or if the trip can only be made via a private car to do so as efficiently as possible.

Key Components;

- Remote Working
- Provide Remote Working Hubs.
- Provide units with built in workspaces.
- Alternative Modes
- Provide high quantum and quality cycle parking.
- Provide high quality internal cycle facilities along all streets.
- Provide permeable integration with external road and transport network
- Facilitate links to public transport stops and hubs.
- Provide reduced car parking to encourage the use of other modes.
- Future-proof Ballytegan Avenue to facilitate integration with future local bus routes.
- Sustainable Car Usage
- Provide class-setting high quality and quantum of electric vehicle charging stations
- Provide a car pooling scheme, i.e. GoCar.



5.2 Landscape and biodiversity elements

Landscape elements are an important aspect of the green infrastructure for St. Walerans. The GI concept informs the essential structure of the area and extends to surrounding elements of the green infrastructure.

The key landscape elements relate to the corridors (routes of different length and type) and hubs (of different size and type). They are:

Hubs:

- St. Waleran's Woodland Park. Foothills – an extended and enhanced focal park;
- The Copse/former quarry – a secondary focal space on the northern boundary of the lands, with potential to enhance biodiversity and provide for SuDS.
- The 'Dip' and area of biodiversity between the early and later phases of development.
- Ballytegan valley – an area of steeper topography in the eastern, later phase lands.

Corridors:

- St Waleran's Lane – enhanced walking and cycling and biodiversity route providing the southern boundary of the lands.
- Ballytegan Road (detailed under streets and spaces) – enhanced boundary to the lands, catering for walking, cycling, SuDS and biodiversity.
- New park frontage/hedgerows/natureways (detailed under streets and spaces) – these will provide linear park spaces to enhance biodiversity and to connect the main hubs

Biodiversity Net Gain

Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a better state than before. Interventions that help deliver BNG can also deliver wider environmental benefits. For example, wetland habitat creation or smaller rain gardens can deliver flood attenuation and enhanced water quality; woodland habitat creation can deliver noise attenuation, visual screening and carbon sequestration but also provides an educational and recreational resource that improves the health and wellbeing of the

local population. Mechanisms for measuring and demonstrating environmental benefits are advocated through a natural capital or ecosystem service approach that is underpinned by biodiversity and frames these benefits which derive from natural capital or ecosystem assets.

For St. Waleran's it will mean the following:

- Measuring the existing hedgerows and treelines (length) and calculating additional tree/hedgerows being planted as part of the MP.
- Establishing a baseline of bat activity, and again measure over time as numbers increase due to better roosting opportunities and better connectivity on site.

Along with other SuDS features (such as swales and ponds), and woodland and edge habitat creation, St.Waleran's could be a notable demonstration project for biodiversity net gain.



5.2.1 St. Waleran's Woodland Park

St. Waleran's Woodland Park will be the principal open space for St. Waleran's and the larger Ballytegan neighbourhood. It has been identified as a critical piece of local community infrastructure in the LAP (Item B3.2 in Ballytegan Neighbourhood Framework Plan, 2017-2023). It will also serve as an amenity for the town. The park will comprise existing woodland and park areas around the house and will be extended to include four specimen oak trees, which were part of the original demesne landscape surrounding the house. The underlying objectives for the park will be multi-functionality, accessibility, biodiversity enhancement and outstanding landscape quality.

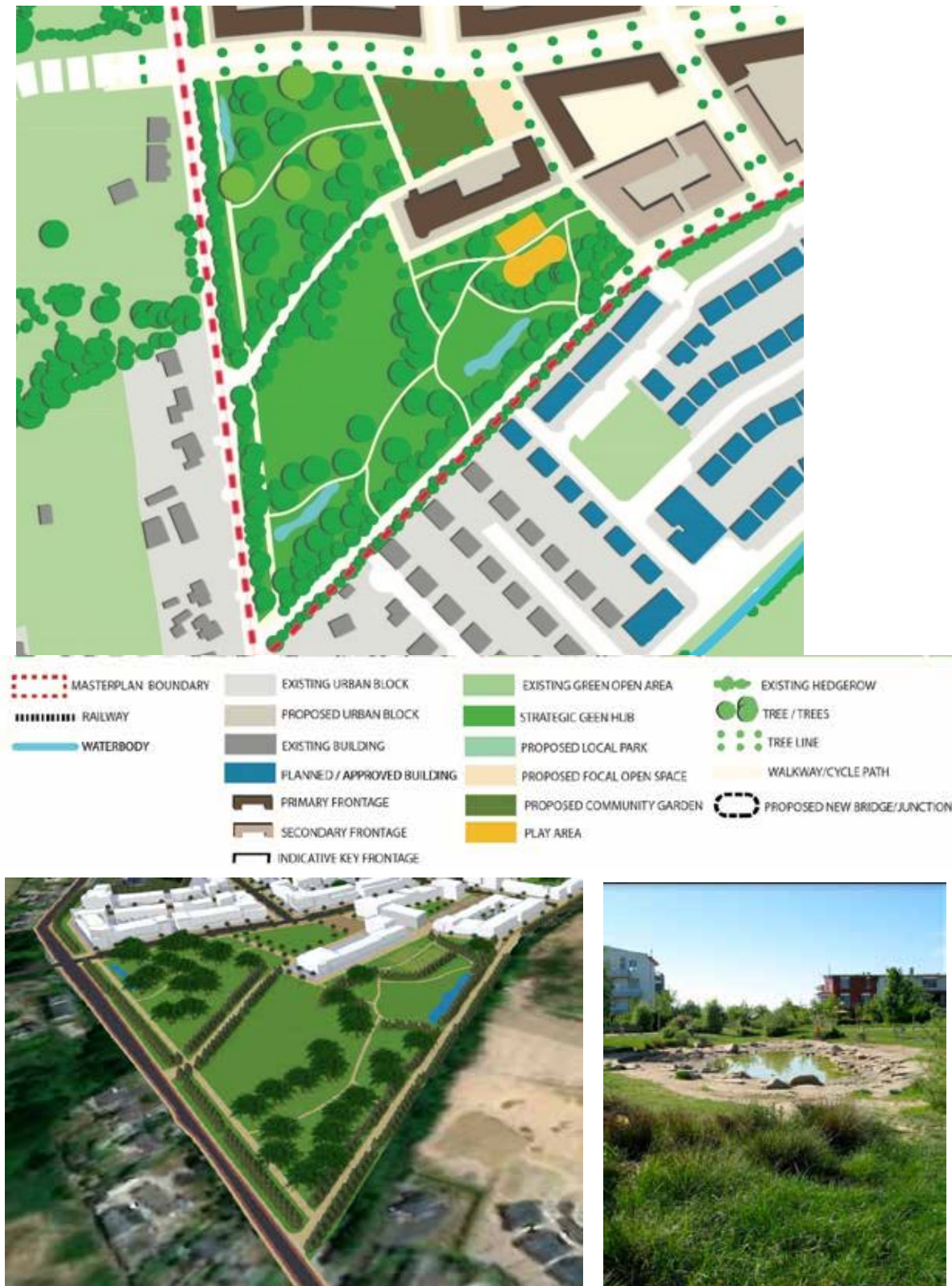
The key components of the park will be:

- Extended and enhanced landscape structure and enclosure.
- An enhanced and broader range of amenity and recreation functions.
- Enhanced active recreation - including small outdoor playing fields and children's play areas.
- New passive recreation facilities - notably sitting spaces and walking routes.
- Area for seniors' recreation.
- New areas for biodiversity protection and enhancement.
- A new outdoor social space for general gathering, exhibition and setting for artwork, and performance (potential for a small, covered area with outdoor auditorium/seating area);
- Development of the lawn area as an open space with sensitive design responding to an appropriate brief.
- Community fruit and vegetable garden, potentially located at or near the former Orchard/house garden.
- New areas for SuDS/water management, with conveyancing (swales) and storage of surface water within a designed landscape (e.g. ponds and detention areas).
- A new focal community centre – a multi-purpose building hosting community, education and enterprise uses.
- Rationalised and formalised park access points.
- Enhanced and new pedestrian and cycle routes.
- New building frontage along the Avenue to provide overlooking of the park and improve passive supervision and the perception of safety.
- Shared use of amenity space and play areas for a future primary school and childcare facilities.

Given the importance of the Park and its multi-functionality, it is recommended that a landscape design competition for the

Woodlands Park is held in conjunction with a design competition for the new community centre.

Figure 40: St. Waleran's Woodland Park



5.2.2 The Copse/former quarry

The Copse/former quarry is an area of established native woodland and vegetation, including a group of trees. It will be a local focal space for the new community in St. Waleran's. The Copse/former quarry will be a small park and will comprise the existing native woodland and vegetation, and an adjoining area of cultivated land that has been subject to waterlogging during periods of high precipitation. The Copse/former quarry will play a key role in the green infrastructure for the lands, providing for enhanced biodiversity, amenity, local walking and cycling routes, recreation, and surface water management. It will be carefully designed and improved as a diverse high-quality element of the landscape

The key components of the Copse will be:

- Reinstatement as a native woodland following the procedure set out in the Forest Service guidelines on such restoration.
- Areas clearly designated and protected for biodiversity enhancement;
- New swales and pond/basin to sustainably manage surface water;
- New landscape structure, definition and enclosure to reflect the different functions and activities within the park;
- Small children's play areas;
- Sitting and socialising spaces;
- Good levels of passive supervision from adjacent residential development.

5.2.3 The Dip

The Dip is a small, local depression comprising surrounding trees and hedgerow and an overgrown natural area. It is part of the green infrastructure of the St. Waleran's. The Dip has an important role to play in the visual character of the new and enhanced landscape. It will also play a role in biodiversity management and enhancement and management of surface water within a larger SuDS network. A small space adjoining The Dip will provide for local-level amenity for surrounding residential development.

The key components of The Dip will be:

- An enhanced natural area, with augmentation with native tree species;

- Areas clearly designated and protected for biodiversity enhancement;
- New swales and pond/basin to sustainably manage surface water;
- Small children's play areas;
- Sitting and socialising space;
- New walking and cycling amenity routes;
- Good levels of passive supervision from adjacent residential development.

5.2.4 Ballytegan Valley Park

Ballytegan Valley Park will be the strategic open space for the later stages (reserved lands) of the development of St Waleran's. It will be connected to the other elements of the green infrastructure in St. Waleran's by the corridors of the green infrastructure, notably the hedgerows, nature ways and landscaped streets and spaces. The Valley will pick up areas of different gradient, providing opportunities for a unique park with distinctive character and multi-functionality. As with St. Waleran's Park, the underlying objectives for Ballytegan Valley Park will be multi-functionality, accessibility, biodiversity enhancement and outstanding landscape quality. It will be important to secure corridor connections to the Arklow Road corridor and beyond to Clonattin.

The key components of the park will be:

- An enhanced natural area, with augmentation by native tree species, most notably in areas of steeper topography;
- Areas clearly designated and protected for biodiversity enhancement;
- New swales and pond/basin to manage surface water;
- New landscape structure, definition and enclosure to reflect the topographical changes and the different activities in the park;
- Strong landscape screening to the railway line and the Arklow Road.
- A range of children's play areas;
- Sitting and socialising spaces;
- New walking and amenity cycling routes, with new pedestrian and cycling access by bridge to the Arklow Road and Clonattin.
- Good levels of passive supervision from adjacent residential development.

5.2.5 St. Waleran's Lane

St. Waleran's Lane is an old boreen connecting Ballytegan Road and the Arklow Road (via railway small tunnel). It is currently little-used and unkempt and overgrown in some areas. It has nonetheless notable landscape features, including retaining stone walls and trees, hedgerow and tree lines. It provides one of the few existing crossing points of the railway in this location, providing a small vehicular underpass connection to the Arklow Road.

The key components of the lane will be:

- Refurbished and extended low, drystone retaining/boundary wall;
- Enhanced tree line and hedgerow;
- Potential for SuDS (for example, ditch swales);
- New gravel or other suitable permeable surface for walking and cycling;
- New cycle and pedestrian connections onward to the Arklow Road and to the Garden City and Town Centre;
- Non-intrusive, low-level lighting at access and crossing points;
- Opportunities for sitting;
- Passive supervision from new residential development in St. Waleran's

5.2.6 Hedgerows

The existing hedgerow along the entire boundary and internally will be retained as part of the strategic corridors of the green infrastructure. New planting should be established around the boundary where it fronts residential development, which will enhance the existing hedgerow and can be easily maintained. It should consist of hedge species, coppices, and tree planting.

5.3 Urban blocks

The framework plan provides a structure of robust and appropriately-sized urban blocks (see section 3). Urban blocks provide the basic parcels for the development of the area. The fine grain of urban blocks in St Waleran's provides for high levels of permeability for all users, and particularly pedestrians and cyclists. Important considerations when designing with the urban blocks are to:

- Achieve adequate building massing to the street frontage in order to secure appropriate continuity of frontage and intimate enclosure of street space.
- Provide for well-defined corners to aid legibility and sense of enclosure, with appropriately designed corner buildings, which utilise additional building height if appropriate.
- Provide active building frontage to all block sides, including the shorter block sides to lesser streets and spaces.
- Avoid staggered building lines, while allowing reasonable variation within coherent street frontages.
- Provide for adequate back-to-back distances between buildings, in order to achieve adequate amounts of private open space, levels of privacy and access to daylight and sunlight.
- Provide for access to the internal areas of blocks (for access and parking) for larger building typologies (apartments) and mixed use or commercial typologies, where necessary.

Figure 41: Typical urban block/frontage



Figure 42: Some features of a robust urban block



Source: Google maps

5.4 Sustainable building

According to the Irish Green Building Council, buildings are one of the biggest contributors to climate change in Europe and account for over 40% of the EU's final energy demand and 36% of CO2 emissions. The European Energy Performance of Buildings Directive Recast 2010 (EPBD) requires all new buildings to be nearly Zero Energy Buildings (nZEB) by 31st December 2020 and all buildings acquired by public bodies by 31st December 2018. Compliance with the standard for both residential and non-residential buildings is a matter for the Building Code. The Building Regulations have been revised to ensure compliance of new residential and non-residential building in Ireland.

nZEB buildings are likely to require a combination of performance improvements, including:

- Building insulation;
- Glazing ratios and insulation values;
- Airtightness;
- Linear thermal bridging;
- The use of renewables and free cooling;
- The use of solar shading;
- Passive solar gain;
- Renewables as a substantial part of energy use;
- Efficient lighting and services.

Net zero carbon buildings

The IGBC advocates a commitment to Net zero carbon building. This is a concept where 'a building that is highly energy efficient and fully powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset' (IGBC). NZCB prioritises energy efficiency and reduction in energy demand over all other measures. Energy needs should be met by renewable energy (preferably onsite), with the offset of any remaining carbon emitted by energy offset on an annual basis. Community and public buildings in St. Waleran's should aim for net zero carbon status.

Solar energy

Collection of solar energy should be a feature of all buildings in the masterplan area. This may take the form of Solar PV or Solar water heating or a combination of both. Development of small stand-alone solar PV arrays could be investigated for community and public buildings.

Loose fit, long-life buildings

A general principle for sustainable building design in St Waleran's will be physical adaptability and flexibility of use of buildings. Buildings which are inherently flexible will facilitate change over time and allow for mixing and changes in use and tenure over time.

The masterplan makes provision for a mixed-use block in the neighbourhood centre. It is envisaged that an element of this block will allow for local services and retail uses at ground floor level, with potential for residential uses at upper floors or elsewhere in the block. Live-work typologies would also be appropriate in this centrally-located block.

Flexible housing offers occupiers the opportunity to modify and personalise their homes. In the design of the townhouses and standard terraced housing, there should be potential for building alterations to suit individual preferences and changes in needs over time. This will require a consideration of the configuration of the building at design stage (including its height, width and depth), access arrangements, the amount and configuration of internal space, and entrances. Consideration should be given to incorporating potential for attic conversions and small ground floor extensions in the initial design of residential buildings. Residential buildings should also consider incorporating flexible spaces for home working.



Image Source: Dun Laoghaire-Rathdown County Council



Access for all

Buildings and public spaces must address the needs of everyone, and especially those with disabilities, children, younger people and older people. Flexible design can assist in matching changing needs through the lifetime of a household. It has been the County Council policy since 2007 to require a minimum of 20% of homes to be adaptable/lifetime homes in developments of over 10 dwellings. In addition, the majority of the dwellings in all phases of development in St. Waleran's must be adaptable for accessible living. Apart from meeting the requirements of the Building Regulations, particular attention should be paid to the ease of access at the interface between buildings and the public domain, and general accessibility from all homes to public and community spaces.

Building height

Building height in Gorey is typical of small country towns in Ireland. In the town centre building heights typically range between 2 and 4 storeys. A lower scale of between 2 and 3 storeys is typical of the secondary streets in the town centre. A scale of between 2 and 4 storeys is considered appropriate in St. Waleran's, given its location, its vision and the proposed nature and density of development. While a coherence of building height adds to a sense of coherence and general urban quality, it will also be important to differentiate important legibility points, such as corners and focal points, and to emphasise higher order streets and spaces, by using increases in scale and continuity of frontage.

Building styles

The LAP notes that building styles and materials in Gorey vary widely reflecting the historical development of the town. The town centre retains much of the earlier building fabric, including many small eighteenth and nineteenth century townhouses, which adds to the coherence of the town centre, and points to potentially successful building typologies for St. Waleran's (notably townhouses). Equally, the understated but attractive vernacular town architecture can provide the inspiration for a new design approach, that derives from the genius loci of Gorey. A diversity of design approaches will be encouraged through the use of a phased and parcelled approach to the development of the lands, and the engagement of as many designers, developers and partners as possible. All development proposals will be required to outline

underpinning design principles and concepts and the urban design and architectural rationale behind these. Poor weathering has been a feature of some recent housing in Gorey. These materials should be avoided, in favour of durable high-quality materials and finishes.



Bottom Image Source: Clare County Council

5.5 Car parking

Car parking provision levels have a significant impact on modal choice and can have a major impact on the design and quality of streets and spaces. Car parking provision levels will be as determined by the statutory plans. However, as a general principle, car parking provision will be minimised to promote more sustainable modes of transport to ensure that streets and spaces are not dominated by car parking, and to ensure that pedestrians and cyclists are not inconvenienced. Reductions in car parking provision should also be considered where demand is likely to be lower (e.g. for specialist housing).

Given the location of the lands in the town, and the general scale and density of development, most, if not all car parking is likely to be provided on the surface. As a default for St. Waleran's, car parking should not be provided in the front curtilage or front garden/set-back, as this will take up valuable development land, dominate the character of the building frontage, and diminish the quality and interface of the building and street. Car parking should be provided on-street, or in small, communal car parking courtyards within a larger block or in small, landscaped areas near to the housing. In all cases, car parking should be kept in view of, and as near as possible to, residents. Car parking for apartments, duplexes and maisonettes, for example, can be designed on the basis of shared, rather than designated owner parking.

The new (currently draft) county development plan will require 100% of off street spaces to have EV charging points. In addition, 20% of public car parking spaces will be required to have charging points with the remaining spaces serviced for future EV charging connections.

In designing car parking, designers are required to observe the principles and design standards of the Design Manual for Urban Roads and Streets.

5.6 Social and community infrastructure

A range of community infrastructure and facilities is necessary in supporting a successful community. Providing the right community facilities in the right place at the right time will be important in meeting needs of the new community, the larger neighbourhood of Ballytegan and certain needs of Gorey. The community concept shows the central location of community infrastructure in the plan area, and the close relationship it has with education and enterprise uses, housing, local services and recreation. Accessibility for all to community infrastructure will be paramount in importance. The LAP makes specific reference to provision of a multi-user community facility in Gorey (CF01) funded by development contributions and other potential sources (with a separate Arts Centre more centrally located in the town). A new community centre is identified as 'Ballytegan Multi-purpose Community Centre' in the Neighbourhood Framework in the Gorey Local Area Plan.

The key elements of the community infrastructure are:

- Close integration of new facilities with surrounding residential, enterprise, education and other uses.
- Integrated, multi-user community centre;
- Potential for multi-level sustainable development education in the centre and outdoor areas of the new Woodlands Park;
- New indoor and outdoor recreation in wider open space network;
- New, centrally-located spaces for local enterprise;
- Community gardening and urban agriculture;
- Space for local shops and services to serve local neighbourhood needs (Limited in size and number in line with LAP policy);
- Space for local healthcare needs;
- Indoor and outdoor spaces for the arts, cultural events and events;

5.6.1 Community Centre

The centrepiece of the new community infrastructure in St. Waleran's will be the new, multi-user and multi-purpose Community Centre. This is a key element (B3.2), of the Neighbourhood Framework Plan for Ballytegan in the Gorey Local Area Plan. While the use of the centre has not been specified in the LAP, it is clear that it should serve the needs of the new neighbourhood, and that it should meet some of the existing, wider needs for community infrastructure in the town. A more detailed brief for a multi-purpose

centre should be prepared by the Council, based on a review of existing needs and potential provision. The following elements should be considered in such a brief:

- A wide range of uses and activities;
- Community coherence - social gatherings and events;
- Community development – community interest and action groups and initiatives;
- Entertainment and performance – local theatre, music and performance in indoor and associated outdoor areas;
- Space for culture and the arts.
- Multi-level education - including community awareness (potentially in the areas of sustainable development, the circular economy and sustainable energy) in partnership with other providers;
- Recreation – including a small indoor, multi-purpose space, with associated outdoor multiple-use games area;
- Food and drink – including space for a small café or canteen and outdoor terrace.
- Administration and reception – including space for management, information and reception for all activities in St. Waleran's Community Centre and Woodlands Park.

The detailed objectives and specification for the new community centre will be prepared by Wexford County Council. It is envisaged that the preliminary design proposals for the community centre would be subject to an open design competition, coordinated by Wexford County Council.

5.6.2 Formal education

The St. Waleran's masterplan provides for the likely educational needs of the new community. Given the longer-term estimate of the size of the community in Ballytegan, space is allocated for a small primary school to serve local and neighbourhood needs. This should be located centrally in St. Waleran's, in close proximity to, association with, the other community uses, local services and specialised housing. The school should have direct access to the Woodlands Park, where it will share a range of outdoor and play areas. The LAP commits to exploring and supporting new post-secondary/third-level education in Gorey (s.2.5.1). As set out above, this could be delivered in conjunction with the development of the new Community Centre, in partnership with other providers,

such as Wexford and Waterford Education and Training Board and Gorey Community School.

The key elements of the primary school will be:

- New buildings within the format of a larger, adaptable perimeter block, with potential for future expansion of the school;
- Direct access to, and overlooking of, Woodlands Park and St. Waleran's Lane;
- Shared outdoor play areas located in Woodlands Park and small, internal courtyard/yard;
- Close association with the proposed community centre and its various initiatives;
- Direct access to safe routes to school for walking and cycling;
- School mobility management plan with carefully located and managed drop-off and pick up areas;
- Limited staff parking in line with the School mobility plan;
- Co-location with childcare within same larger building complex or within the same urban block.

5.6.3 Early Childcare

Early childcare facilities will be required for St. Waleran's and Ballytegan. The level of provision should be based on a local needs assessment. It should also have regard to the standards set out in Childcare Facilities Guidelines for Planning Authorities (2001). Given the development potential of the area, early childhood care facilities (with potential for expansion to cater for up to 160 children) should be provided along with the initial phase of development and co-located or integrated with the development of the primary school. Alternatively, smaller scale childcare facilities (up to 80 children), could be provided clustered with the initial community facilities, within the Woodlands Park, with a later phase childcare facility catering for up to 80 children, co-located with the primary school. In all cases, the location and layout of the Childcare will allow for direct and safe access to the Woodlands Park. Additional early childhood care facility may be required in the later, strategic phase of development of the reserved lands. This will be confirmed at a later stage by a local demand assessment. Co-location with the Sports complex would be considered as an option.

5.6.4 Health

The masterplan makes provision for the health facilities that the local community will need to support a healthy lifestyle. In a passive sense a healthy lifestyle will be promoted by providing for a high-quality walking and cycling network, access for all to open space for passive and active recreation, access for all to community facilities for social activities. In terms of support infrastructure and services, provision is made for small-scale primary healthcare in the mixed-use urban block adjacent to the community centre. This urban block will also provide for a local General Practice, pharmacy and other private healthcare professionals (physiotherapy, dentistry etc.). In addition, it is expected that supporting healthcare would be provided as part of the specialist housing.

5.6.5 Enterprise and creativity

The masterplan makes provision for local enterprise, to support small innovation and creative spaces, start-ups and social enterprise. Supporting such uses, is done by providing the conditions necessary for these enterprises including, small and flexible spaces, low-cost rental and low overheads, high quality digital connectivity, co-location of similar uses and activities, other supporting activities and services (café, stationers, suppliers etc.). The refurbished red-brick outbuilding has been identified as a suitable building for such enterprise uses.

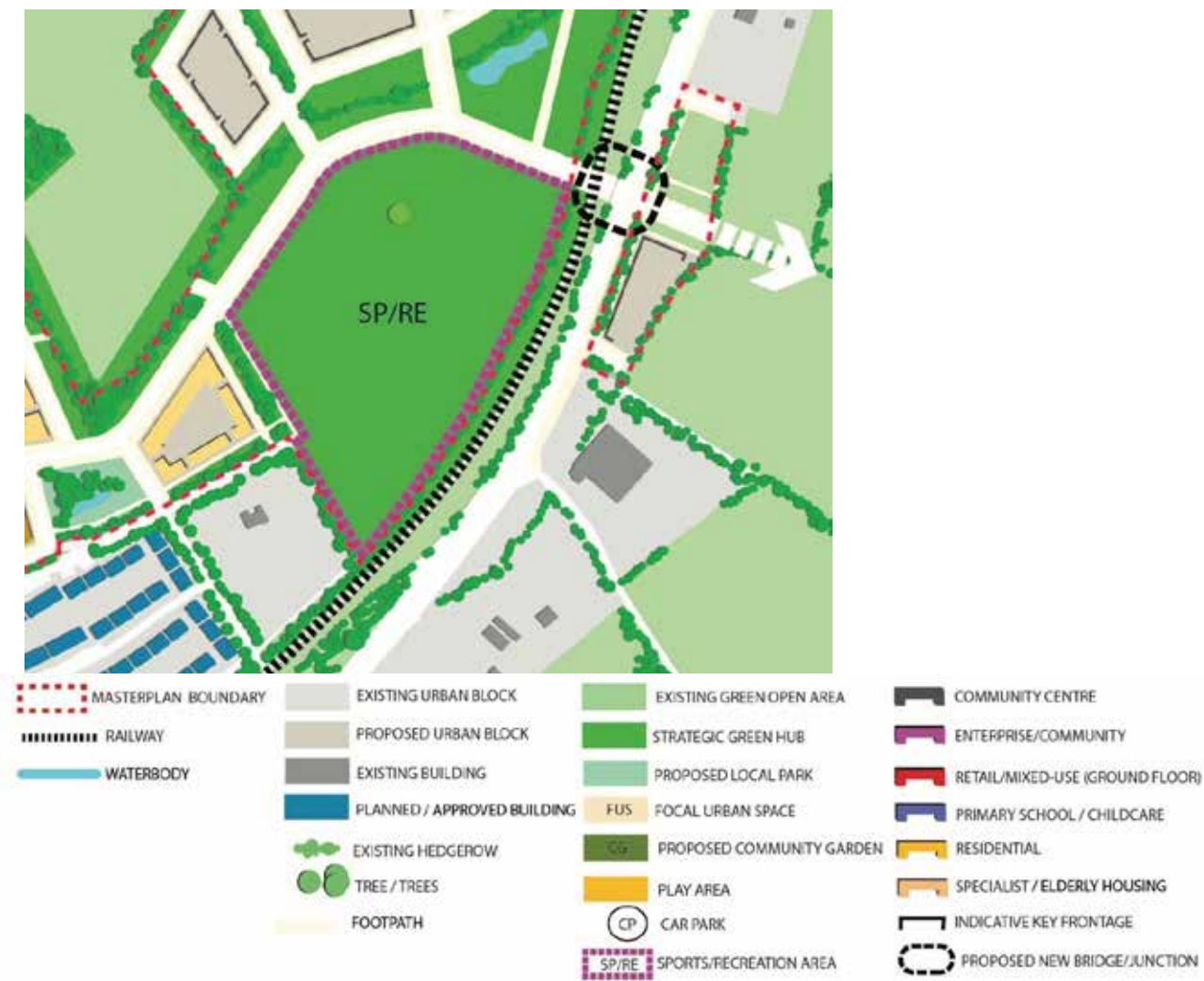
Social enterprise could be a unique and defining activity for St. Waleran’s combining community, education and enterprise objectives. Social enterprise could be themed around the circular economy, with activities including education and awareness on the circular economy, training and skills for upcycling and a retail component. Small-scale social enterprise could be supported in the community centre and the enterprise space in the initial phases of development, however, larger scale social enterprise would need to be included as part of the extension of enterprise uses identified in the masterplan. A detailed brief for enterprise spaces will be prepared by Wexford County Council. Proposals for these spaces may be included in the competition for the main Community Centre.

Figure 43: Community, enterprise, and education hub



5.6.6 Sports

The masterplan makes provision for an integrated outdoor sports complex in the reserved lands. The lands would principally accommodate field sports. The complex will be the subject of later design proposals, which will consider access, regrading, support facilities, use configurations and services. The area identified may also be suitable for the co-location of early childcare facilities to support the development of the reserved lands.



5.7 Housing mix, density and typologies

The need for housing in St. Waleran's is established in the Core and Housing Strategies of the County Development Plan and the Gorey Local Area Plan. The new methodology for Housing Need Demand Assessment (DHLGH, 2021) will be applied and will assist in establishing likely housing needs for Wexford and Gorey in the coming years. The masterplan for St. Waleran's will need to contribute to meeting housing needs in Gorey, and it must allow for some flexibility in meeting changes in these needs over time. Changing housing needs may affect the nature of households to be accommodated and types of housing to be provided for these households.

Gorey LAP includes broad housing policies (H01 to H05), and a commitment to mix and diversity of housing. Policy H05 indicates a general mix of house sizes of; 25% two bedroom, 30% three bedroom, 25% four bedroom, and 15% flexible, with potential for deviation from this mix where necessary. The LAP also commits to provision of social housing (through PART V) and recognises the role of approved housing bodies and the Housing Assistance Payment in the private rental sector in meeting social housing needs. The LAP also addresses specific housing needs, including provision for older people, and the need to provide housing to support independent living for those with disability. The LAP promotes the provision of small self-contained and adaptable units and other supports as part of the response to specialist housing needs.

The LAP also promotes diversity of house types, apartments where there is a demand for smaller households and provides an encouragement to meet higher than national standards for Apartments. The LAP also identifies the potential for higher density housing at street frontages, nodes, in line with high quality siting and design.

The masterplan puts in place the conditions for:

- A mix of housing typologies to match housing need;
- A range of household types, ages and sizes;
- Housing for special and specific housing needs;
- High quality, energy efficient housing;
- Tenure diversity comprising private, affordable and social tenures;
- Parallel provision of social, community, recreational and physical infrastructure;

Housing mix and density

St Waleran's will accommodate a diverse mix of housing for a diverse mix of households. Housing mix in St Waleran's will be broadly in line with LAP requirements and may be revised by HNDA process.

While a density of between 35 and 50dph is targeted for residential development in the masterplan area, localised densities within the individual parcels in the masterplan will vary depending on location, street frontage and street type and expected building height.

Housing typologies and location

It is important that a good mix of residential typologies will be achieved in the area, that reflects the objectives of the Local Area Plan, the location of St. Waleran's in the town, and the proposed urban structure and form. Given the household mix for the area typologies are likely to include:

- Townhouses – two and three storeys in height will be the most common unit type in the area, and will be suitable for most local streets and frontages;
- Duplex and maisonettes – suitable for higher density locations and frontages and in corner locations or shorter frontages;
- Apartments – suitable for higher density locations/frontages, such as block corners and the frontage to the ne Avenue.
- Smaller terraced houses – suitable for smaller streets and in corner locations or shorter frontages;

Specialist housing

A large block adjacent to the community centre has been identified for specialist housing. This block has potential to accommodate:

- Housing of different typologies for older people, with access to supporting services;
- Housing for those with disabilities, with access to necessary support services;
- Housing for independent living to suit other special needs;

Different types of specialist housing could be developed in a perimeter around a shared, large internal courtyard in the perimeter block.



Bottom Image Source: Dun Laoghaire-Rathdown County Council

5.8 Sustainable services and infrastructure

The lands will require considerable new investment in new services and infrastructure, including new surface and foul water drainage, water supply, telecommunications, gas and electricity. The general approach to these services is outlined in section 2.6 of the masterplan. Sustainable Urban Drainage Systems (SuDS) will be a key feature of the new infrastructure for St. Waleran's, and an important aspect of the green infrastructure.

SuDS

The incorporation of SuDS features into the storm water management strategy for the lands will assist in aligning with the existing natural catchment management of the lands pre-development. SuDS provide four key benefits; water quantity, water quality, amenity and biodiversity. The overall approach to surface water management on the lands will be based on the principles of Sustainable Drainage Systems (SuDS). The aim of SuDS is to reduce the amount of untreated surface water arriving in the piped system. To achieve this, SuDS aims to mimic, insofar as possible, natural or existing surface water drainage processes in the area. This is done by rationalising and integrating the surface drainage regime on the lands into the proposed urban structure. The process slows down the movement of surface water, by optimising infiltration and evaporation during conveyancing on the surface, and by detaining water in specially-designed landscape features. This reduces the need for physical infrastructure and water treatment. It also reduces the risk of flooding downstream. SuDS can also help to passively filter runoff and reduce pollution to receiving watercourses.

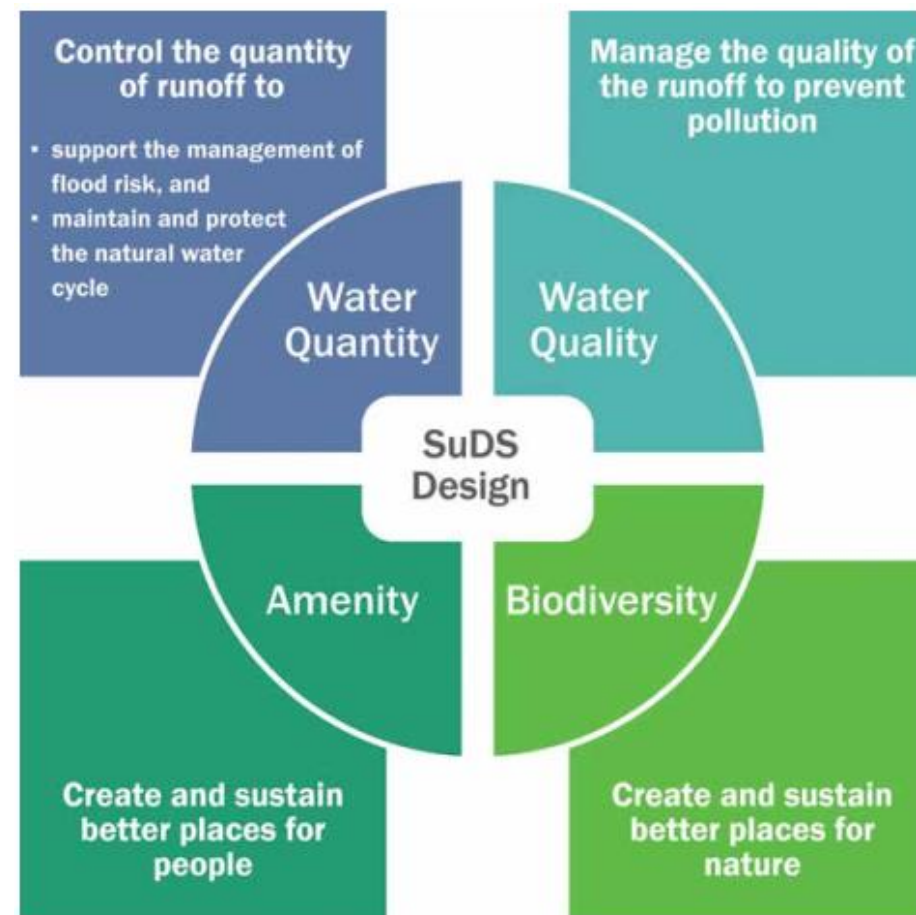


Figure 44 - Four Pillars of SuDS Design

In addition to the above, SuDS can also provide various educational opportunities. For the masterplan lands, the provision of information boards at key SuDS features is recommended to educate residents and the public on storm water management principles. Furthermore, WCC have suggested that this development is utilised as an exemplar project for future development in the county. Therefore, it is recommended that SuDS features are integrated into the design of the scheme as much as practically possible and that storm water remains visible at surface level for as long as possible.

Types of SuDS features which could be incorporated into the water management strategy for the masterplan lands include:

- Rainwater and grey water harvesting systems
- Green roofs
- Infiltration systems
- Filter strips
- Filter drains
- Swales
- Bioretention systems (including rain gardens)
- Tree pits
- Permeable pavements
- Detention basins
- Ponds & wetlands

In addition to a detailed topographical survey, it is recommended that site investigations are undertaken to assess the potential for infiltration within the masterplan lands. Investigations should include a review of possible soil or groundwater contamination, groundwater level and infiltration capacity of the soil. Throughout the design of the storm water drainage for the proposed masterplan lands, including SuDS, the following key documents / standards are to be taken into consideration;

- CIRIA report C753 The SuDS Manual-v6
- Greater Dublin Strategic Drainage Study (GDSDS)

Local planning objectives

In addition to the above, the proposed development will also have to meet the following Draft Wexford Development Plan 2021-2027 Surface Water Management and Open Space Strategic Objectives:

- Objective SWM01. To require the application of SuDS in accordance with the CIRIA SuDS Manual 2015 and any future update of this guidance, or other best practice guidance as may be specified or required by the Council. All proposals should include a commensurate drainage assessment used to design the surface water management system for the site, and this assessment should outline the drainage design considerations/strategy in line with the flood risk, surface water management and climate change requirements and objectives of the County Development Plan and the County Strategic Flood Risk Assessment in Volume 11.
- Objective SWM02. To require new developments to provide for the separation of foul and surface water drainage networks within the application site boundaries.
- Objective SWM03. To work alongside Irish Water so ensure the separation of foul and surface water drainage networks where feasible and undertake drainage network upgrades to help remove surface water misconnection and infiltration.
- Objective SWM04. To promote and support the retrofitting of Sustainable Urban Drainage Systems (SuDS) in established urban areas.
- Objective SWM05 To identify existing surface water drainage systems vulnerable to flooding and develop proposals to alleviate flooding in the areas served by these systems in conjunction with Office of Public Work subject to compliance with the Habitats Directive and the proper planning and sustainable development of the area.
- Objective SWM06. To encourage the use of Green Roofs particularly on apartment, commercial, leisure and educational buildings.
- Objective SWM07. To discourage the use of hard non-porous surfacing and pavements within the boundaries of rural housing sites.
- Objective ROS05. To ensure that open spaces and recreational facilities are multi-functional spaces incorporating biodiversity, SuDS and flood attenuation, where appropriate.

Image Sources: Atkins Consulting

Figure 45: Blue Infrastructure Concept



5.9 Sustainability energy

While the emphasis for the plan area will be in reducing energy demand in the first instance, it will be crucial also to look at the potential for energy from local renewable sources (such as solar heating and power from buildings). In addition, greater use of low-carbon energy and, for example, potentially wasted heat will have an important role to play in reducing carbon dependency in St. Waleran's.

District Heating

District heating (DH) is a technology has the inherent flexibility to utilise multiple diverse, locally available, renewable and low-carbon heat sources. Low-carbon district heating networks reduce carbon emissions and can help in meeting county targets for carbon reduction (possibly as part of future Local Climate Action Plans). District heating networks benefit from economies of scale, the reduced coincidence of heat demand between different customers leading to lower capacity requirements (when compared with multiple building level units), increased efficiency of larger heat generation units and the reduction in maintenance costs of having a centralised plant. These benefits allow heat to be generated more efficiently and at a lower cost. Having fewer, larger heat generation units when compared with having an individual, building-level heating plant also allows for easier decarbonisation of heat in the long term, as it requires less individual heating units to be replaced when adopting newer technologies (Interreg NWE/Codema HeatNet NWE, 2019). St. Waleran's would be an ideal pilot (and proof of concept) for new communities in County Wexford, and nationally.

A district heating scheme consists of an insulated pipe network, which allows heat generated from a centralised source (energy centre) to be delivered to multiple buildings to provide space heating and hot water. For St. Waleran's it is envisaged that a small DH network consisting of network of primary route with branches connecting the community and specialist housing could be investigated. This network would be designed with potential for expansion. An indicative network is shown in Figure 45.

Potential heat sources for the network in St. Waleran's are:

- Waste heat from community centre, schools and childcare;
- Deep geothermal sites;

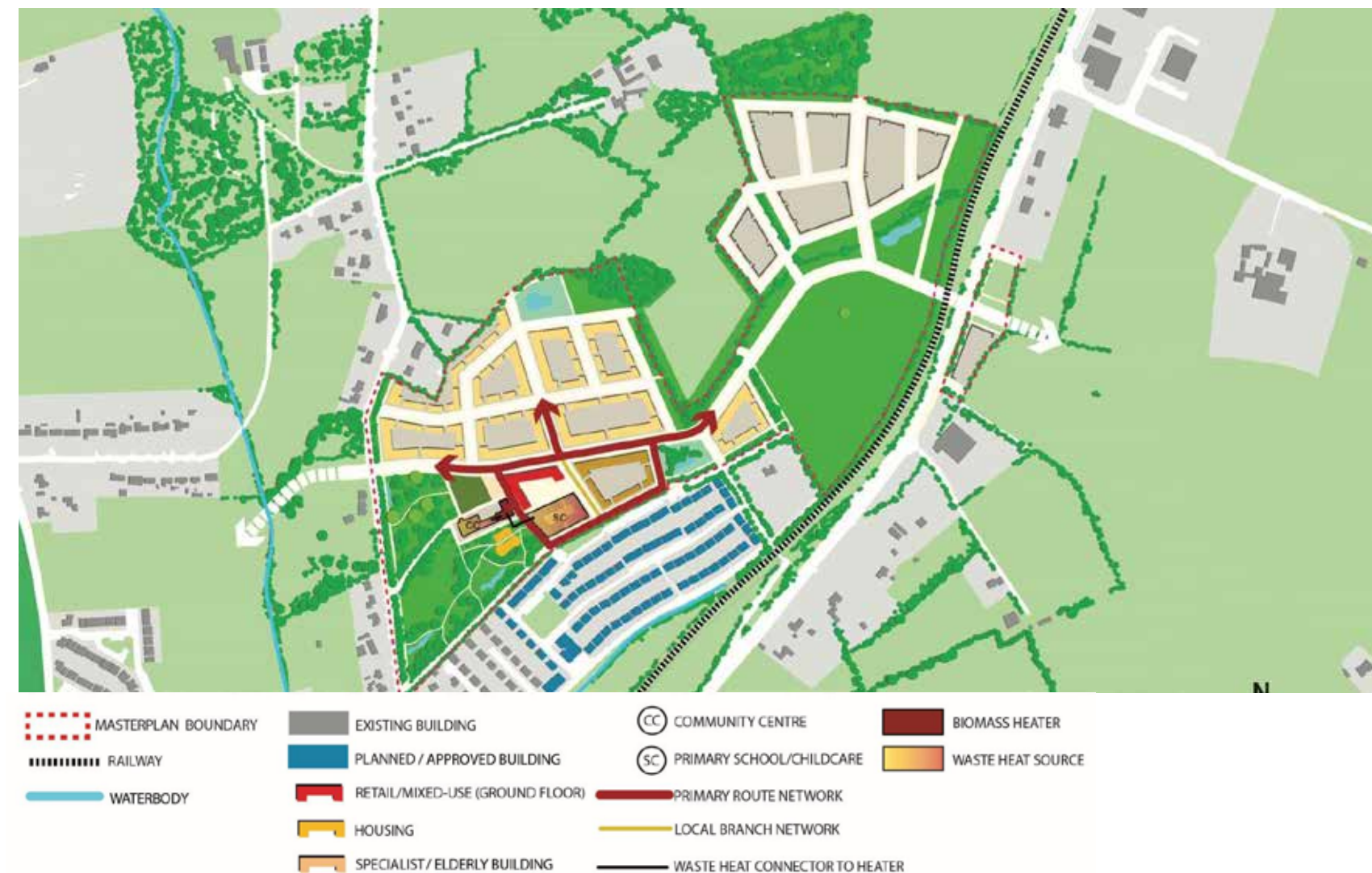
- Low-carbon biomass boiler, serving all residential and non-residential uses;
- An array of solar panels (e.g. on community and public buildings).
- Other longer-term, potential local or town sources (e.g. electricity transformation, industrial uses etc.).

Substantial design, feasibility and legal work will be required as part of the development of the DH system for St. Waleran's. It is likely that DH would be provided in conjunction with a specialist advisor/partner/provider. The operation and management of the DH system would be responsibility of the Council and the local community and any specialist advisor/partner/provider. A feasibility study will be commenced for the DH system at St. Waleran's as a near-term priority.



Image Source: Kerry County Council

Figure 46: Indicative District Heating Network



6 Masterplan

The masterplan shows the indicative integrated urban and landscape structure for the lands and an overall approach to the layout and design of development at Killinarden. A permeable urban structure and networks of spaces has been integrated into a strong landscape framework. A range of block sizes and shapes have been included to allow for a range of different building typologies and uses. The masterplan shows the importance of coherence and continuity of frontages in creating legible streets and spaces. Later planning and design stages will provide the detailed approach to all aspects of the public and private domains.

Although the masterplan covers the entire masterplan area, it is important to interpret the proposed layout in the reserved longer-term development lands as indicative. Given a sequential approach and the later development of the reserved lands, flexibility will be required around use mix, housing mix and typology, layout and urban block structure. Other aspects of critical, local infrastructure will also need to be further developed (such as the crossing of the railway and the Arklow Road) and this may have an effect on the masterplanning of this area.

Figure 47: Indicative, integrated urban and landscape structure

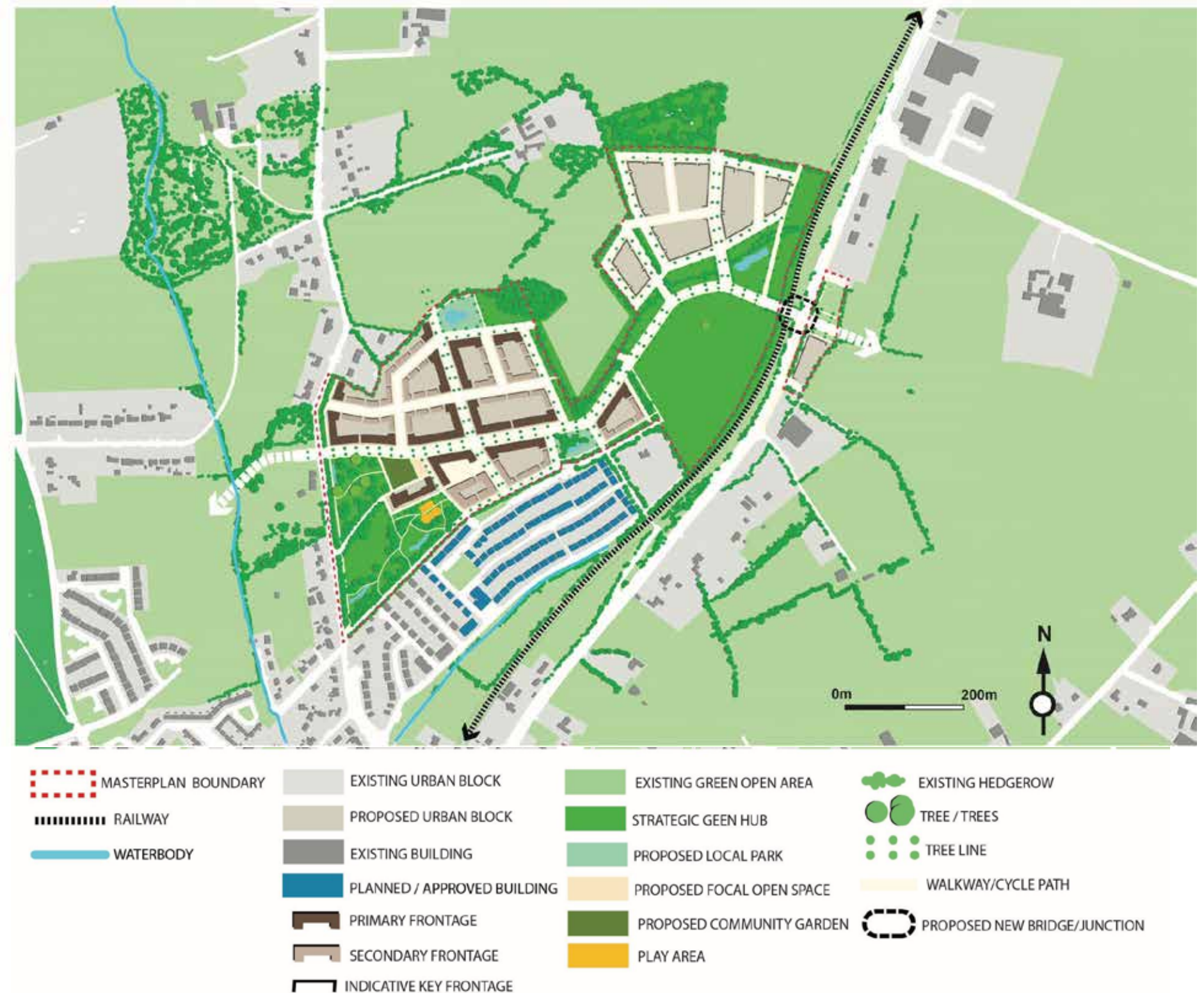


Figure 48: Indicative urban function concept





Figure 49: Integrated urban structure (3D)



7 Development potential and delivery

7.1 Statutory Development Plan and planning processes

This masterplan must be read in conjunction with the statutory Gorey Local Area Plan, 2017-2023 and the current County Development Plan. It should be noted that the policies and development management objectives of both the Gorey Local Area Plan and the County Development Plan apply to the development of these lands. If any inconsistency in provisions or interpretation arises between these statutory plans and this masterplan, then the interpretation and provisions of the statutory plans will prevail.

This masterplan provides a framework for designers in preparing more detailed development proposals, within a parcelled and phased context. The development of the land will involve the preparation of further local studies and surveys, and detailed development proposals, which will be subject to the normal, statutory development management processes (planning applications for development proposals or similar provisions made for development proposals by the local authority (such as Part 8 provisions). All development proposals will be considered having regard to the statutory plans, this masterplan, any relevant planning guidance and any other relevant, merit considerations.

7.2 Phasing

Principal sequencing

The principal sequencing of the lands will be as set out in the Gorey Local Area Plan, with the currently zoned lands being fully developed before the development of the reserved strategic lands.

Parcelling

Given that the lands are likely to be developed over the short, medium and longer-term, it is important that manageable, independently-developable parcels of land are available at all stages. For this reason, and to promote diversity of typologies, styles and stakeholders, it is recommended that the lands be developed in parcels. Parcels are planned as discrete parts of the masterplan area (Figure 50). Each parcel can be interpreted as a gross development area, including elements of local infrastructure, services, urban blocks and open spaces. The zoned lands comprise 4 discrete parcels; Parcels S-A, S-B, S-C and S-D. The reserved lands comprise 4 discrete parcels; Parcels S-E, S-F, S-G and S-H. The parcels exclude Ballytegan Avenue (an element of the critical infrastructure).

Figure 50: Parcel diagram

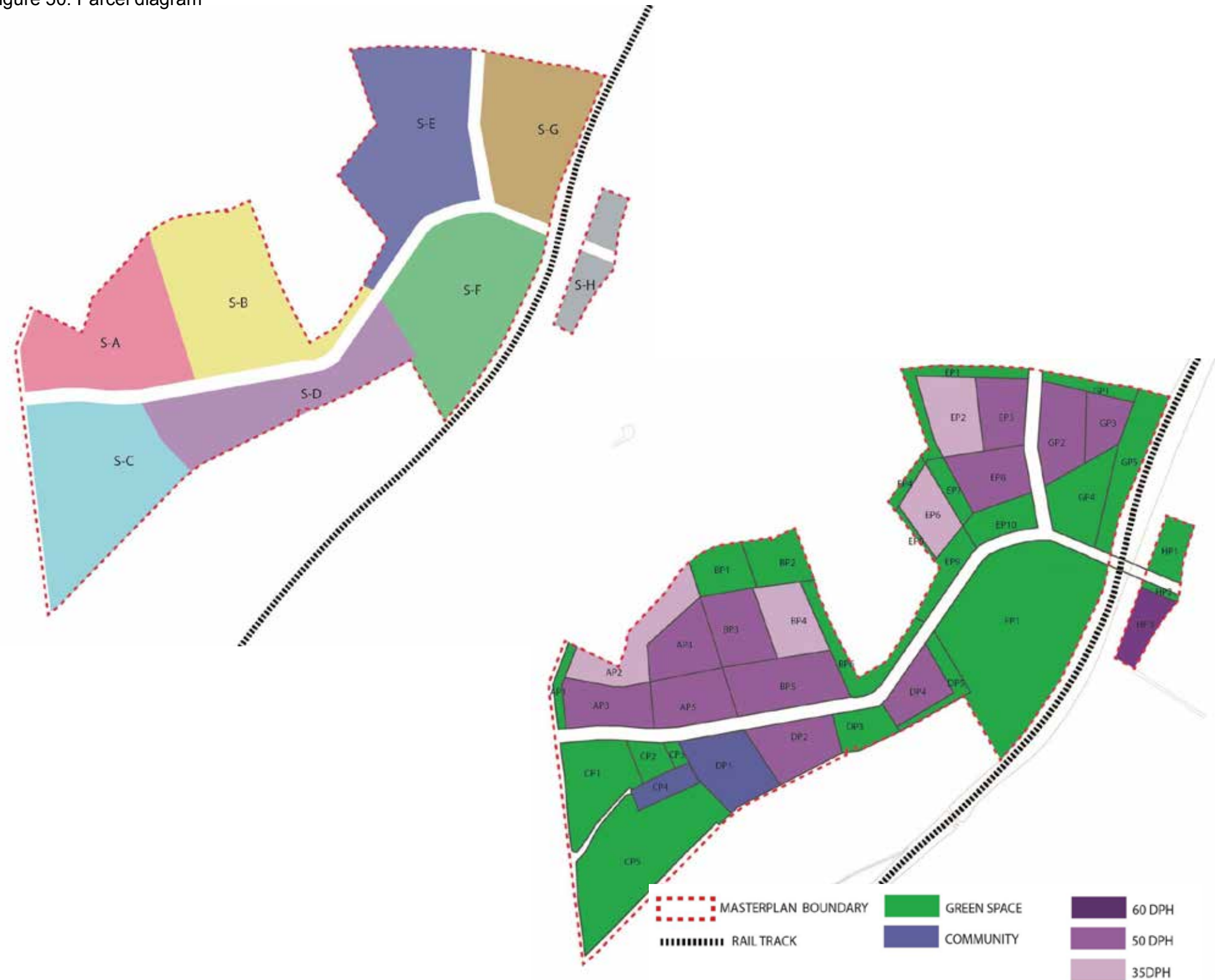


Figure 51: urban block and open spaces

Phasing

The lands will be developed in 3 main stages.

- Phase 1 and 1a;
- Phase 2; and
- Phase 3.

Phase 1 will include the development of parcels S-A and S-C located in the zoned lands. This will incorporate the woodlands park, community and enterprise centre, residential housing lands, and the main avenue between parcel S-A and S-C as shown in Figure 52. Phase 1a will include the development of Parcel S-F identified as a sports and recreational lands. Appropriate pedestrian, cycle and vehicular access to this facility will need to be provided. Ideally, this will be provided by the extension of the new avenue eastwards from the phase 1 lands. Alternatively, temporary access measures may be available from the local road on the southern boundary of the lands at St. Waleran's.

Phase 2 will comprise of the development of the primary school, childcare, elderly and specialist housing, and other housing located in parcels S-B and S-D in the zoned lands. This stage will be dependent on the extension of the new avenue.

Phase 3 will include the development of parcels S-E, S-G and S-H located in the reserved lands. The urban structure, housing development and local critical infrastructure in these lands will need to be further developed as shown in Figure 55.

Figure 52: Phase 1

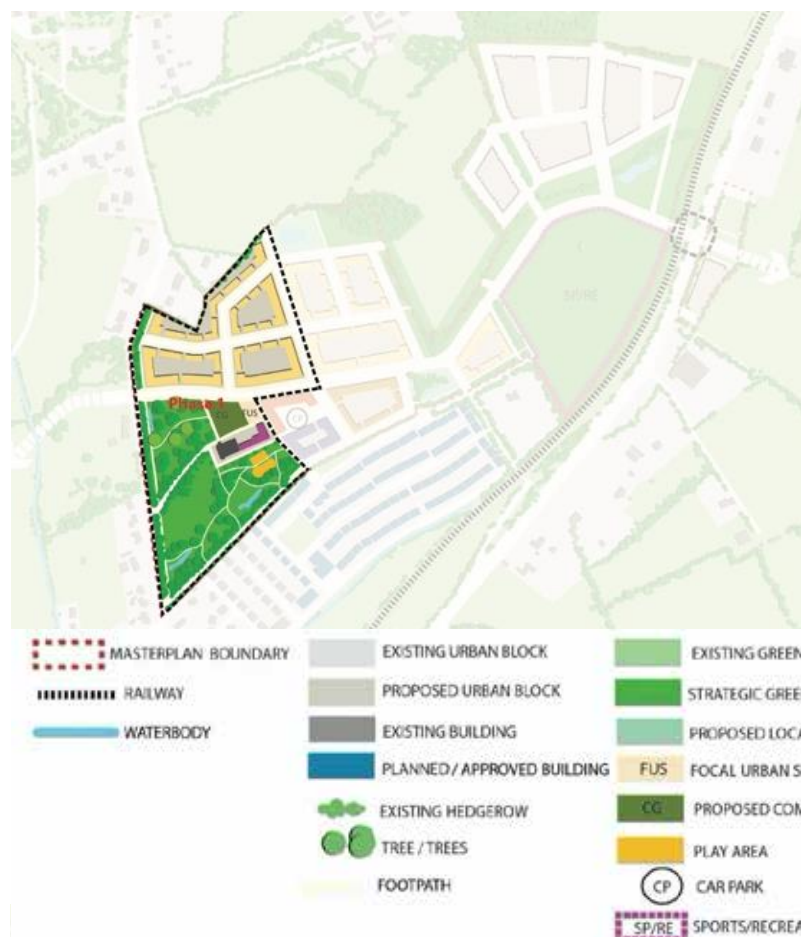


Figure 54: Phase 2



Figure 53: Phase 1a

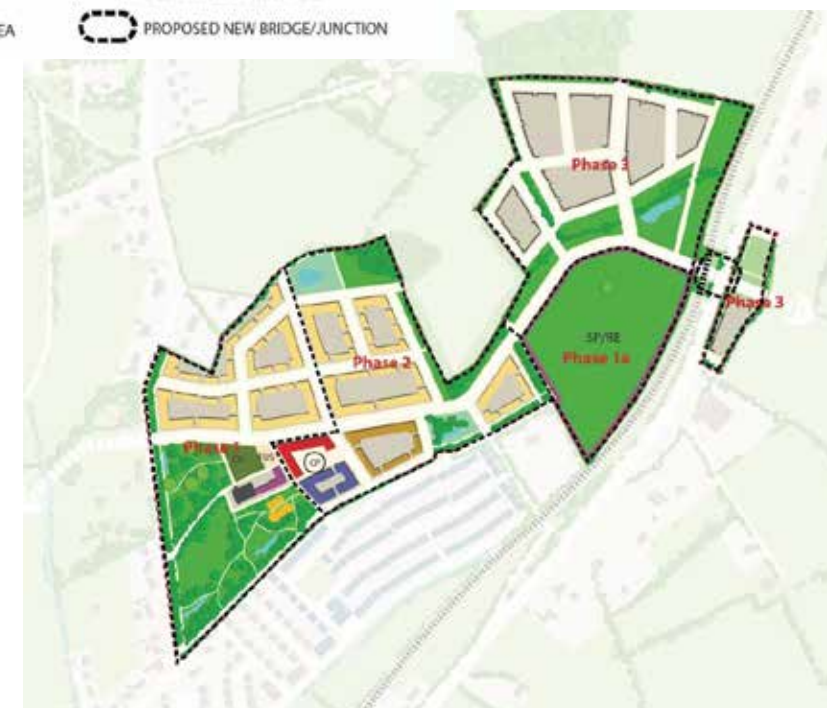


Figure 55: Phase 3

Urban blocks and open spaces

The parcels contain urban blocks and open spaces (Figure 50). The urban blocks represent the net development areas in the masterplan area. An urban block is effectively the area which will be defined as private or semi-private space. It normally extends to the edge of the public domain (i.e. the back of the footpath or other public or open space). An urban block includes all buildings and building curtilage or plots.

In St. Waleran's, all open spaces are part of the connected green infrastructure of hubs and corridors. These open spaces are allocated to parcels for ease of delivery. However, these open spaces may be developed as local critical infrastructure prior to development.

Critical local infrastructure

It will be important that the critical and local infrastructure is in place to accommodate and serve development as it is delivered. Critical local infrastructure in the zoned lands will include:

- The new Ballytegan Avenue and junctions;
- Ballytegan Road upgrade;
- The strategic elements of the green infrastructure including Woodlands Park and The Copse;
- The Community Centre (or key elements of the centre);
- The main development services (Water supply, foul drainage, energy and other services);
- The primary elements of the SuDS surface water management system.

7.3 Development potential

The nature of land use and the density of development in St. Waleran's was determined by the characteristics of the masterplan area, the masterplan concepts, the range of considerations set out in the statutory Plans and relevant planning guidelines.

Although the masterplan area extends to just over 30 hectares, approximately 45% of this area is reserved for later stage, strategic development. In the area zoned for development in the current Local Area Plan, substantial areas have been identified for open space (principally at St. Waleran's Demesne) and for community, tourism and leisure uses. The remaining lands are zoned for

residential development. The masterplan rationalises and reconfigures these uses in this area, to support the vision for the area and to provide a better and more sustainable relationship between land uses, built form and movement.

Given the longer-term development of the reserved lands, masterplan proposals here are indicative in nature, and will require further surveys and studies. Proposals here may change in response to local critical infrastructure or changing needs.

The masterplan envisages a range of residential densities, which closely reflect the masterplan route structure and the general disposition of development within the masterplan. In general terms, higher density development will be focussed on the higher order streets and spaces (i.e. St. Waleran's Avenue and some frontages to larger open spaces), where they can also make a contribution to good urban form.

Density

While a density of between 35 and 50dph is targeted for residential development in the masterplan area, localised densities within the individual parcels in the masterplan will vary depending on location, street frontage and street type and expected building height. In estimating the development capacity of the masterplan area, a broad assessment of each parcel and urban block has been made. The initial estimate for development capacity indicates a range of between 290 and 310 units in the zoned area and between 200 and 220 units in the reserved area (depending on the final extent and distributions of land uses).

It is important that a good mix of residential typologies will be achieved in the area, that reflects the objectives of the Local Area Plan, the location of St. Waleran's in the town, and the proposed urban structure and form. Given the targetted household mix for the area typologies are likely to include:

- Townhouses – two and three storeys in height will be the most common unit type in the area, and will be suitable for most local streets and frontages;
- Duplex and maisonettes –suitable for higher density locations and frontages and in corner locations or shorter frontages;
- Apartments – suitable for higher density locations/frontages, such as block corners and the frontage to the ne Avenue.

- Smaller terraced houses – suitable for smaller streets and in corner locations or shorter frontages;

Non-residential development is likely to be very limited in extent, given the larger area population density structure and density. However, a provision should be made for up to 1,000sqm, of small retail and local services in the mixed-use block identified in the masterplan. The mixed-use block would make provision for residential use, such as townhouses, duplexes and apartments. This block would also be ideal for live-work units. Additional working space should also be located throughout St. Waleran's in the form of flexible spaces for home working.

Table 2. Summary of development potential

Masterplan Areas	Net Area (Ha) Blocks and open spaces?
Zoned area – First stage	
Strategic Infrastructure/Strategic Open space	6.82
Community and enterprise	0.79
Education	0.45
Residential Developable Area	7.27
Local Open Space	0.92
Sub-Total	16.25
Reserved area – final stage	
Strategic Infrastructure/Strategic Open space	4.93
Developable Area (Residential)	4.53
Sports and Local Open Space	4.29
Sub-Total	13.75
Total masterplan area	30.00

7.4 Priority planning and design

The masterplan provides the design concept for the lands and describes an overall and coherent approach to important masterplan elements. Further planning and design work will need to be carried out to bring the development of St. Waleran's forward, including:

- Completion of the detailed topographical survey. This will be important for planning and designing new site services and infrastructure. It will also inform future detailed masterplanning for the reserved lands.
- Detailed site and geophysical investigations to precede development, to ensure appropriate ground conditions, notably for SuDS measures;
- Detailed geophysical survey and a programme of targeted archaeological test trenching.
Building and conservation study for St Waleran's House and Redbrick estate building.
- Detailed design of road and street infrastructure, including study and proposals for the bridge and junction of the Ballytegan Avenue with the Arklow Road. This study should also include a larger mobility and access study of connections to local communities and the town centre.
- Scoping of the functions and briefing for the new community centre, followed by an architectural design competition.
- Detailed landscape design of the critical elements of the green infrastructure. Landscape design competition for the new Woodlands Park, ideally in conjunction with the architectural design competition for the new community centre. As part of this an arboricultural assessment of specimen trees should be carried out.
- Assessment of needs for specialist housing. Preparation of brief and procurement of design services.
- Detailed design of the SuDS/surface water management system.
- Detailed design of water supply, foul drainage, energy and other services. Consultations with service providers should continue as the project progresses, noting ESB and Irish Water in particular;

- Initial study for District Heating network. Followed by a potential partnership, design, construct and management
- The design and delivery of new childcare facilities in line with phased development, in parallel with discussions with Department of Education and Skills on provision of a primary school.
- Provision for a hockey pitch and facilities in the reserved lands, with appropriate access arrangements.
- Identification of all potential funding sources and sports

7.5 Roles and responsibilities

Wexford County Council will be the lead agency in the development of St. Waleran's. The Council will engage with other partners and agencies as necessary in the provision of development and local and community services and infrastructure. The Council will establish a steering group which will oversee the development of the area and the implementation of the masterplan. Appropriate technical support will be provided to the project, and it is envisaged that a project manager will be appointed to maintain progress in the project, and to report to the steering group.

