DUNDRUM CENTRAL MASTERPLAN

P03.01 - September 2024

Comhairle Contae Chill Dara County Council

LDA DUNDRUM CENTRAL

reddy a+u

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DOCUMENT DETAILS

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CONTENTS

EXECUTIVE SUMMARY

The Masterplan sets out how the proposed scheme has responded to a range of site constraints and opportunities, and how the design process has taken into account feedback at key stages from consultation and engagement to balance the issues and opportunities and achieve the design principles and optimise the potential for this landmark site.

The LDA and DLRCC's design approach aims to be inclusive and responsive to the local context and the unique opportunity that the site presents for a new distinct and integrated urban community in Dundrum.

The document sets out guidelines on key development standards and demonstrates a response to a range of site and locality opportunities and constraints to inform the Masterplan. The lands provide a unique opportunity to transform this closed, inward-looking site into a new, welcoming, sustainable urban community with a distinctive identity that will be integrated into the wider community of Dundrum.

The Masterplan proposes a distinctive new neighbourhood and supporting amenities within an attractive environment, together with the repurposing and sensitive adaptive reuse of key heritage buildings. A strong emphasis on an inclusive landscape will ensure that the proposals will be further integrated into the surrounding Dundrum neighbourhood, which has, until now, been enclosed by a 5-metre high wall for more than 150 years.

The Masterplan demonstrates the Land Development Agency (LDA) and Dun Laoghaire-Rathdown County Council's (DLRCC) proposals to transform this landmark site.

The design provides not only for the building of new homes for people of all ages but also the development of exceptional community and recreational facilities and accessible green spaces which will be enjoyed by residents throughout the Dundrum area.

Engagement and public consultation have been core elements of the LDA's approach. This ensures that the views of the community and stakeholders have been heard from the very earliest stage of the design process. The Masterplan is the result of four phases of consultation to date, which have included a public online exhibition with c.2000 visits, a project website with c.11,500 unique visits, 22 meetings with elected representatives, community groups and residents' associations, 450 people attending across four webinars, a community survey of over 5,000 people and over 600 submissions to the project team.

Key themes which have informed the Masterplan have emerged, which include traffic and public transport capacity, green spaces, access and connectivity, height, density and scale, community infrastructure and opportunities to enhance local facilities, tenure and housing, sustainability and biodiversity, heritage, and the future of the existing wall. The feedback has been extensive, constructive and varied with many contrasting points of view from different elements of the community.

This consultation has informed the Masterplan for the project. The Masterplan shows how the designs have evolved from the outline 'Concept' plan that was presented at the third phase of consultation, to this Masterplan proposal informing the adopted Dundrum Local Area Plan (LAP) and the planning submission for the relevant decision making authorities.

"This document provides an overview of the site's wider and local context while highlighting how the production of urban design and masterplanning solutions can provide a best-fit approach that is sensitive to the surrounding environment."

01

INTRODUCTION

1.0 INTRODUCTION

This report is prepared by Reddy Architecture + Urbanism in collaboration with a multi-disciplinary team of specialist consultants on behalf of the Land Development Agency (LDA) and Dun Laoghaire-Rathdown County Council (DLRCC) for the development of institutional lands at the Former Central Mental Hospital (CMH) site in Dundrum, Dublin. The expertise of the project team has been harnessed through close collaboration to ensure high-quality outcomes for both the community and the urban environment are met. The proposed development of the 11.5 ha site will consist of 1,002 Homes, c. 4300 m^2 of Commercial / Community / Amenity Space and a 5,200 m^2 enterprise and innovation centre.

Building upon the applicant's vision and objectives, it is the team's ambition to transform the Former Central Mental Hospital site into a leading example of sustainable living with a mix of tenures where people of all ages live, retaining historic assets and providing an outstanding destination for leisure with distinctive and diverse public spaces. This report sets out the primary objectives and goals for the future of the CMH site, providing an overview of the site's context, design evolution and principles, plus rationale and key aspects of the proposed development within the masterplan process. It sets out how the scheme has responded to the key policy objectives of the Dún Laoghaire-Rathdown (dlr) County Council Development Plan 2022-2028 and addressed a range of constraints, opportunities and issues and outlines proposals with guidelines on key development standards.

The Dundrum Local Area Plan 2023 (LAP) which came into legal effect on 21st November 2023, identifies the former Central Mental Hospital as a Key Development Area (KDA) and identifies a vision, design principles and strategic objectives for the development of the lands, the current scheme accords with the movement objectives, place making objectives and built form objectives as identified in the LAP for the subject lands.

Figure 1 : Site location

Site boundary

1.1 PROJECT BACKGROUND, SCOPE AND DESIGN TEAM

The site was home to the Central Mental Hospital (CMH) which was relocated to Portrane, Co Dublin in November 2022. The CMH Dundrum was a forensic mental health facility which developed from the mid-nineteenth century onwards, beginning with the construction of the extant asylum building which dates from the late 1840s. The CMH lands are identified for regeneration as part of the Dundrum Local Area Plan 2023 (LAP) as an `infill site', with The LDA in partnership with DLRCC responsible for the redevelopment of the Former CMH site

The LDA was set up by the Irish government in 2018 to unlock State lands to provide a stable and sustainable supply of new homes.
The LDA will play a vital role in realising some of the key objectives of Project Ireland 2040 and the National Planning Framework (NPF), particularly those strategic objectives which pertain to compact growth, urban densification, transit-oriented development (TOD) and sustainability.
These objectives are embodied in this Masterplan.

The applicant's vision is to create a masterplan which will guide the sustainable redevelopment of this important historic site into an open and vibrant predominantly residential neighbourhood. Recognising the importance of the environment as an asset, the regeneration of the site will have a sharp focus on sustainability in terms of prioritising pedestrians, cyclists and public transport over cars and the implementation of best-in-class design, specification and methods of construction to maximise energy and water efficiency.
Between 2018-2020, the LDA, as agent, undertook extensive feasibility studies that have formed the basis of the masterplan brief. These studies prepared by the LDA provide a useful guide and the specific requirements for the masterplan.

The Land Development Agency (LDA) is seeking to deliver high quality, innovative, sustainable and liveable communities that can be realised through all its development channels. An agreed set of principles will help achieve the necessary balance of ensuring schemes are technically and financially deliverable, while incorporating the changes for the better that the LDA wishes to make on the Irish residential landscape.

Design Team

In April 2020, the Land Development Agency (LDA) announced the appointment of an Architect-led Single Point Design Team to prepare this masterplan and planning application for the site, with Reddy A+U leading an experienced team of designers comprising international masterplanning consultancy Tyréns UK among other leading Irish and international designers who are experts in their respective fields. The team subsequently developed a masterplan to accompany a strategic housing development application which was granted permission by An Bord Pleanala in 2022. The masterplan has now been updated to support a Part 10 application with Dun Laoghaire Rathdown Co Council of the lands at the former hospital in Dundrum.

Architecture and Built Form (Lead Consultant)	Reddy Architects + Urbanism
Masterplan and Urban Design	Tyréns UK
Landscape Architecture	Aecom Landscape
Planning	Tom Phillips + Associates
Heritage	Alastair Coey Architects
Transport	ILTP
Ecology	Altemar
Community Engagement	Future Analytics
Civil Engineers	BMCE Consulting Engineers
MEP Consultant	EDC Engineering
Daylight – Sunlight Analyst	GIA
LVIA	Macroworks
Fire Consultant	JGA Jensen Hughes
Accessibility Consultant	O'Herlihy Access Consultancy
Archaeologist	IAC
Arborist	Arborist Associates

1.2 PURPOSE OF THE MASTERPLAN

This Masterplan forms the basis of high-quality and sustainable development at the subject lands. The Masterplan conveys the development vision of the Land Development Agency, embedded within urban design principles for density and sustainable design.

Given the scale of the site, the Masterplan also ensures the comprehensive redevelopment of the site, giving consideration to both the spaces within and surrounding the site boundary. For example, the masterplanning exercise facilitates the identification and consideration of potential significant site constraints at an early stage. This ensures that certain baseline considerations are incorporated into the planning application design process from inception. This will minimise the requirement for post-design mitigation and address constraints at an early stage of the planning process, resulting in a high-quality proposal that contributes to the placemaking of the surrounding area.

As detailed in Chapter 2.0, the Dún Laoghaire-Rathdown County Development Plan 2022-2028 applies an Institutional ('INST') Objective to the subject lands. The relevant section of the Development Plan requires any redevelopment proposal for institutional sites to be accompanied by a comprehensive masterplan. This Masterplan is therefore also designed to fulfil that policy requirement.

Through the pre-planning process, the design team have worked in collaboration with the various departments at Dún Laoghaire-Rathdown County Council (DLRCC) to ensure that the proposed Masterplan provides a strong basis for a high quality and policy compliant development. Chapter 2.0 'Planning Context' of this document provides an overview of the relevant national, regional and local planning policy and how it relates to the development of the subject lands.

The Masterplan will underpin a dual planning application strategy, comprising the lodgement of a Part 10 Development planning application for the residential element of the scheme, which will be considered by An Bord Pleanála and a further planning application relating to the non-residential adaptive re-use of the Main Hospital Building.

With the dual planning application strategy in mind, the Masterplan plays a further important role in forming the basis for the holistic and cumulative assessment of both planning application schemes. For instance, the planning applications are accompanied by an Environmental Impact Assessment Report (EIAR) that assesses the cumulative impact of the entire Masterplan area. In addition to the above, the purpose of this document is to provide a holistic masterplan for the site which builds upon the Former Central Mental Hospital's (CMH) key assets to create a more vibrant community, located within proximity to Dundrum's growing town centre. Key elements that will drive this transition include:

Planning

- Under the Dún Laoghaire-Rathdown County Development Plan 2022 – 2028 the subject site is located within Zoning Objective A - "To provide residential development and improve residential amenity while protecting the existing residential amenities". Residential use is 'permitted in principle', and the proposed non-residential uses are 'permitted in principle' and 'open for consideration' under the site's zoning objective.
- As set out above, the subject lands are also subject to the 'INST' Objective which aims "To protect and provide for Institutional Use in open lands". As well as ensuring high-quality and comprehensive redevelopment proposals, the Masterplan fulfils the planning policy requirements specific to the 'INST' Objective. This includes (inter alia) the requirement to produce a Masterplan and retain the open character of the lands whilst providing a minimum of 25% open space. A Masterplan for the landholding is also required under the provisions of the Dundrum Local Area Plan, 2023 (DLAP). The application is consistent with these requirements. (Please see Chapter 2 of this Masterplan and Tom Phillips & Associates' Planning Report and Statement of Consistency including Dundrum LAP Statement of Consistency for further information.)

Conservation and Heritage

- There are 3 no. existing structures within the site that are entered in the Record of Protected Structures (RPS) under the provisions of the Planning and Development Act 2000 (as amended). The objective is to adequately take account of the built heritage and natural assets of the site and to propose a strategy to refurbish and reuse the existing structures for appropriate uses, including residential and/or commercial and other complementary non-residential uses.

Design

- The principal guiding aims of the LDA will ensure any redevelopment on this site will achieve a sustainable residential development whilst ensuring the safeguarding of the landscape and the integrity of the heritage buildings are retained.

As mentioned above, the Masterplan has been developed in association with detailed pre-planning consultation with DLRCC and key stakeholders through the public engagement consultation process referred to in Chapter 8.0 'Consultation Summary' of this document. Some of the key constituent elements of the Masterplan arising from the baseline assessments and engagement with stakeholders are permeability, access and movement strategy, conservation and adaptive reuse of heritage and natural assets, open space and landscape strategy, planning assessment and planning application strategy.

Following this, the Masterplan forms the basis for the detailed design of the Part 10 Development application which is being submitted to An Bord Pleanála and for the adaptive re-use scheme.

Prior to submission, and as part of the detailed design process, further pre-planning engagement will take place with DLRCC and An Bord Pleanála, having regard to the detailed assessment of the schemes in the context of the relevant planning policy requirements.

Chapter 2 provides an overview of the strategic planning policy context insofar as it has informed the Masterplan process. Each planning application submission will be accompanied with a full suite of documentation that demonstrates the compliance of the planning schemes with all relevant statutory planning policy.

1.3 ROLE AND STATUS OF THE DOCUMENT

This Masterplan Document, which sets out the vision and objectives for the subject lands in the context of national and local planning policy, is being submitted for the consideration of relevant authorities as part of a Part 10 Development planning application to An Bord Pleanála, and provides for the comprehensive development of land zoned for residential development to provide much-needed homes, publicly accessible open space and other facilities.

This report describes the site and its context, design evolution and the key aspects of the proposed development. It sets out how the scheme has responded to a range of different issues and outlines the proposals consistency with guidelines and key development standards as set out in the various planning documents.

The document is set out as follows:

Figure 2 : Existing fence at entrance.

Chapter 2 – Planning Context: This chapter sets out the applicable planning policies at national and local context that will influence and determine the viability of the masterplan for CMH site.

Chapter 3 – Site Context and Analysis: This chapter identifies and analyses the features of the site and its immediate context that will help define the opportunities and constraints for the masterplan.

Chapter 4 – Heritage and Conservation: This chapter elaborates on the policies, constraints and conditions related to the existing heritage structures and defines the extent of retention in order to integrate and adapt the buildings within the masterplan.

Chapter 5 - Site Accessibility: This chapter sets out the baseline analysis of the accessibility and level of traffic and transport network that will help define the access and parking strategy for the masterplan.

Chapter 6 – Vision: This chapter provides analysis and the thought process that has led to defining of the design principles through benchmarking exercise.

Chapter 7 – Masterplanning Optioneering: This chapter explains the optioneering process through which the preferred masterplan was selected. The alternative masterplan options considered for this site are documented in this chapter.

Chapter 8 – Consultation Summary: This chapter details the process of consultation and engagement with the surrounding community and other stakeholders providing summary of the outcomes and feedback that has influenced and impacted on the masterplan design.

Chapter 9 – Masterplan Framework: This chapter elaborates on the intent, scale, form and character of the proposed masterplan and provides details on approach to the development, architecture, public realm and landscape.

Chapter 10 – Engineering Services: This chapter provides an approach to infrastructure provision in consideration of the existing utilities network and aspiration for a highly sustainable neighbourhood.

Chapter 11 - Phasing and Delivery: This chapter sets out the phasing of the masterplan in consideration of the delivery approach.

1.4 MASTERPLAN APPROACH AND SUMMARY

The masterplan aims to transform the former CMH site into a vibrant and sustainable neighbourhood that will appeal to a diverse residential population. People will choose to live here because of its attractive setting and connections to transport, schools, employment and essential services.

The masterplan seeks to adhere to the design principles set out by the LDA's affordable housing mandate and DLRCC development plan by following key objectives, including:

- **Delivering a high density, mixed-use neighbourhood** by promoting a diverse tenure mix and range of residential unit types to appeal to a wide range of residents and catering for the needs of all age groups. Increasing the scale of development at the centre of the site to minimise impact on the periphery and around the heritage assets. Sensitively designing the edge to create a positive interface with the existing low-rise residential dwellings.

- **Integrating and repurposing the heritage assets**, by responding to local history, culture and heritage, with a view towards the positive integration and utilisation of key heritage buildings in our communities. This masterplan aims to develop a sustainable and distinctive community which makes best use of existing heritage assets through understanding the social histories, stories and architectural heritage of this place and the surrounding community.

- **Providing and strategically locating a range of everyday uses**, such as small-scale neighbourhood shops (e.g. convenience and grocery stores), healthcare facilities, a crèche and a café / farm shop within the masterplan. Considering these amenities as placemaking elements to activate different quarters within the masterplan. The positioning of the amenities in conjunction with the mobility and movement strategy to minimise vehicular movement in certain parts of the site. Integrating active sports facilities and play areas for different age groups in the landscape strategy and strengthening access to existing active sports facilities on Rosemount Green. The development will incorporate supporting community and recreational amenities appropriate to the scale of development and supporting a sustainable and integrated neighbourhood.

- **Integrating, complementing and enhancing the existing mature landscape** through the design of a range of amenities for passive and active recreation for all age groups. In addition to the public open spaces, generous and well-designed separate communal and private open spaces will support the needs of the new residents. Establishing and incorporating appropriate SUDs measures to ensure sustainable surface water management.

- **Defining the public realm through well-designed streetscape that will prioritise use by pedestrians and cyclists**, minimise the dominance of vehicle users and reduce dependency on the use of private cars. Clearly defining and designing the buffer zones and edge treatment between private and public open spaces. Activating the public realm by integrating the ground floor uses and entrances to encourage active and passive supervision. Incorporating appropriately designed street furniture to define the hierarchy and character of the public realm.

- **Encouraging alternative and sustainable means of movement** within and around the site by promoting active travel modes, enhancing accessibility and connectivity by integrating the proposed development within existing networks and responding to apparent desire lines. This will support reduced car dependency. Alternative methods such as carshare, efficient routes for walking and cycling, and access to public transport will be offered to the new residents to reduce dependency on private cars. Also, the permeability of the site will be increased by creating new pedestrian & cycle access points.

Planning Strategy

The Masterplan will underpin a dual planning application strategy, comprising the lodgement of a Part 10 Development planning application for most of the residential element of the scheme, which will be considered by An Bord Pleanála and a further planning application relating to the adaptive re-use of the existing buildings to the north of the site and lands in their curtilage.

The planning strategy has been influenced by the Dundrum Local Area Plan 2023 (LAP) which came into legal effect on 21st November 2023, identifying the former Central Mental Hospital as a Key Development Area (KDA). We therefore seek to fully realise the Masterplan through the proposed dual strategy as set out.

KEY DATA

Site Area: 11.5ha (9.7ha in Part 10)*
Gross Area: 106,300 sqm (Approx.)
Residential units: 1,002 nos
Commercial / Community / Amenity: 4,380 sqm (Approx.)
Enterprise: 5,250 sqm (Hospital - Approx.)
Density: 88u/ha (Gross)
Public Open Space: 3.2 ha
Car parking: 586nos (Approx.)

**11.5ha is in relations to the line boundary which extends to take in works along the Dundrum Road and associated buried services. The curtilage and physical site is 11.4 hectares.*

Figure 3 : View towards main hospital building from front lawn

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PLANNING CONTEXT

2.1 NATIONAL PLANNING CONTEXT

Full documentation and assessment of the relevant statutory planning policy will be provided within the accompanying Statement of Consistency and Planning Report. The below sections reference strategic level policy that has informed the masterplan proposal.

National Planning Framework (2018) & Draft First Revision to the National Planning Framework (2024)

The sets out a strategic development framework for the Country to 2040. The Framework focuses on:

- Growing regions, their cities, towns and villages and rural fabric;
- Building more accessible urban centres of scale;
- Better outcomes for communities and the environment, through more effective and coordinated planning, investment and delivery.

As a strategic development framework, the Plan sets the long-term context for Ireland's physical development and associated progress in economic, social and environmental terms and in an island, European and global context. Ireland 2040 will be followed and underpinned by supporting policies and actions at sectoral, regional and local levels.

Under the heading of 'Compact Growth', the NPF is:

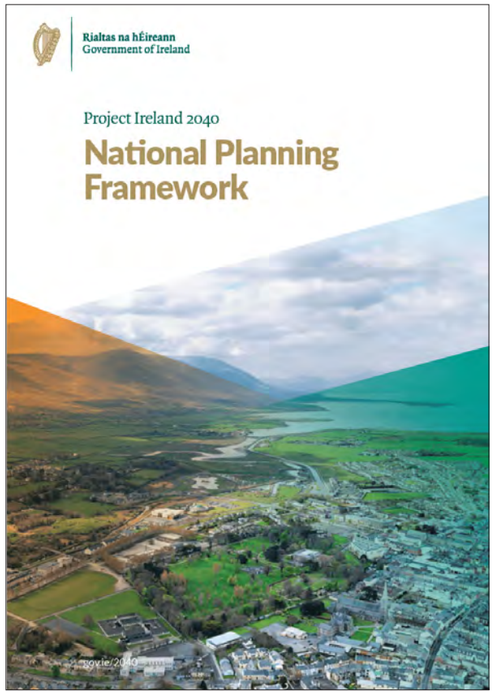
'Targeting a greater proportion (40%) of future housing development to happen within and close to existing built-up areas. Making better use of under-utilised land, including 'infill' and 'brownfield' and publicly owned sites together with higher housing and jobs densities, better serviced by existing facilities and public transport'.

The proposed redevelopment of the site seeks to make better use of an underutilised, publicly owned site that is located within the Metropolitan area of Dublin, in an existing built-up area, close to Dundrum Town Centre. Dundrum Town Centre is c.1.6km from the site, approximately a 20-minute walk or 6-minute cycle.
The site is also located in close proximity to high quality public transport systems, with direct access to the Luas Green Line and the Dublin Bus network.

The Green line of Dublin's Luas light rail system passes approximately 450m west of the site, with Windy Arbour Luas stop located little over five minutes' walking distance from the site entrance at Dundrum Road. The closest Dublin Bus stops are along Dundrum Road which is frequented by routes numbers 14, 17, 44 and 61. Each of these public transport modes provides the Central Mental Hospital with direct links to the city centre as well as other urban centres and suburbs surrounding the site. Proposals published under the NTA's BusConnects programme, which will further enhance the local bus network, include new citybound route number 86 along Goatstown Road and routes numbers 87 and 88 along Dundrum Road. Also included are new orbital route numbers S4, whose route passes along Bird Avenue to the north, and S6, whose path follows Taney Road to the south.

By virtue of its proximity to public transport links, key employment destinations and its connectivity with the city centre, the subject site is strategically located for the delivery of development that achieves high densities and contributes to the compact growth of the metropolitan area of Dublin, in line with national policy objectives.

The scale and locational characteristics of the subject site therefore provide opportunities for sustainable, higher density residential development and the delivery of a significant contribution to meeting housing needs.



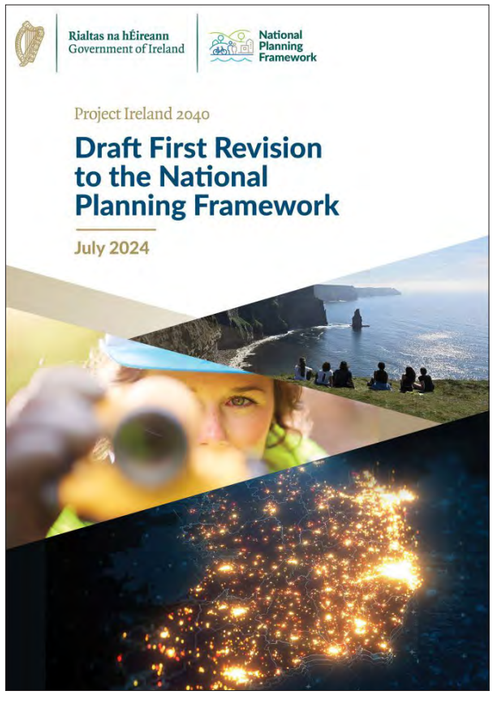


Figure 4 : Project Ireland 2040 National Planning Framework

2.1 NATIONAL PLANNING CONTEXT

Sustainable Urban Housing Design Standards for New Apartments Guidelines for Planning Authorities (2023)

These Guidelines build upon the shift in national policy, as outlined above in relation to the NPF, towards securing more compact and sustainable urban development. The objective of this is to enable people to live nearer to where jobs and services are located, which requires at least half of new homes within Ireland's cities to be provided within the current built-up area of each, i.e. on sites within the existing urban 'envelope'. The Guidelines state that it is therefore critical to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures.

In addition to providing guidance surrounding apartment design standards, the Guidelines state that generally, apartments are most appropriate located within urban areas. In Paragraph 2.2, the Guidelines have regard to the appropriate locations for higher density apartment development:

"As with housing generally, the scale and extent of apartment development should increase in relation to proximity to core urban centres and other relevant factors. Existing public transport nodes or locations where high frequency public transport can be provided that are close to locations of employment and a range of urban amenities, including parks/ waterfronts, shopping and other services, are also particularly suited to apartments."

Having regard to proximity and accessibility considerations associated with the subject site, the site is considered to be located within a "Central and/ or Accessible Urban Location". According to the Guidelines, such locations are generally suitable for small-to-large scale and high-density development that may wholly comprise apartments.

The defining locational characteristics of the subject site include its proximity to Dundrum Town Centre (approx.1,600m), a significant employment location, and high capacity urban public transport stops, including high-frequency urban bus service and the Luas line.

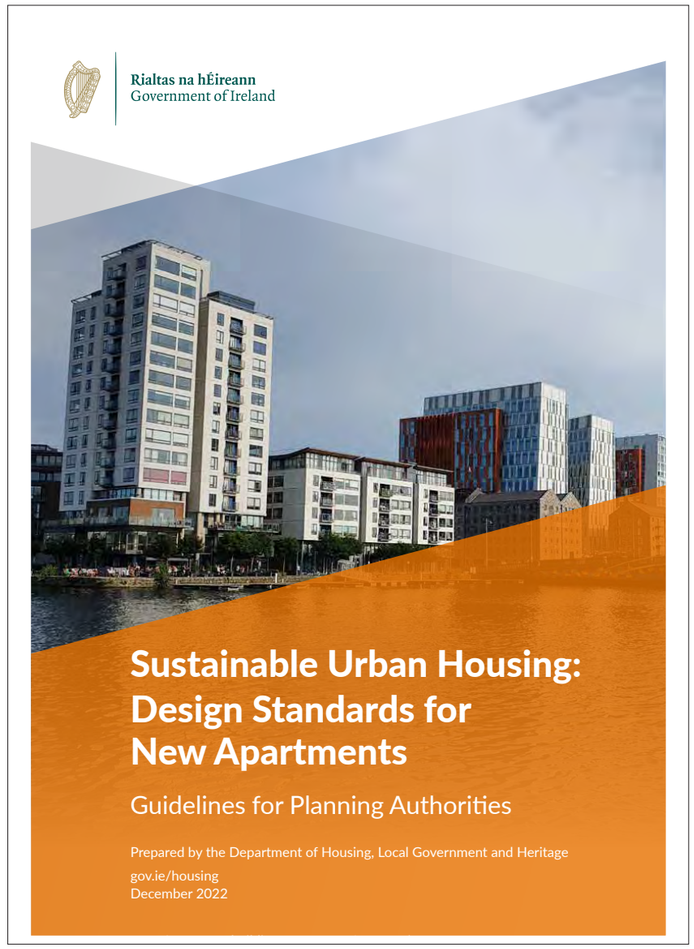


Figure 5 : Sustainable Urban Housing Design Standards for New Apartments Guidelines for Planning Authorities (2022)

2.1 NATIONAL PLANNING CONTEXT

Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities 2024

These provide national guidance in relation to the appropriate locations for the siting of higher density residential development, having regard to the locational characteristics of the lands in question.

Section 3.0 onwards has regard to 'typical area types and key areas of growth within cities' and states that in general, increased densities should be encouraged on residentially zoned lands and particularly in the locations listed below (not exhaustive):

- Brownfield sites (within city or town centres);
- Public transport corridors; and
- Major areas of urban regeneration.

The subject site encompasses the above characteristics and is therefore considered to constitute an appropriate location for higher density residential development. Importantly, the requirement to retain the open character of the site on the basis of its former institutional use has influenced the vision for the masterplan, bringing open space strategy to the fore of design considerations.

This Masterplan document will demonstrate how the Masterplan provides a strong basis for the delivery of high-quality higher density residential development through the SHD provisions. The comprehensive approach taken to the redevelopment of the subject site will result in a planning application scheme that is capable of delivering national policy objectives in relation to density and compact growth, but balanced against a carefully considered site layout, building design principles and landscaping strategy that ensures positive interaction with the existing context, including the existing open character of the lands.

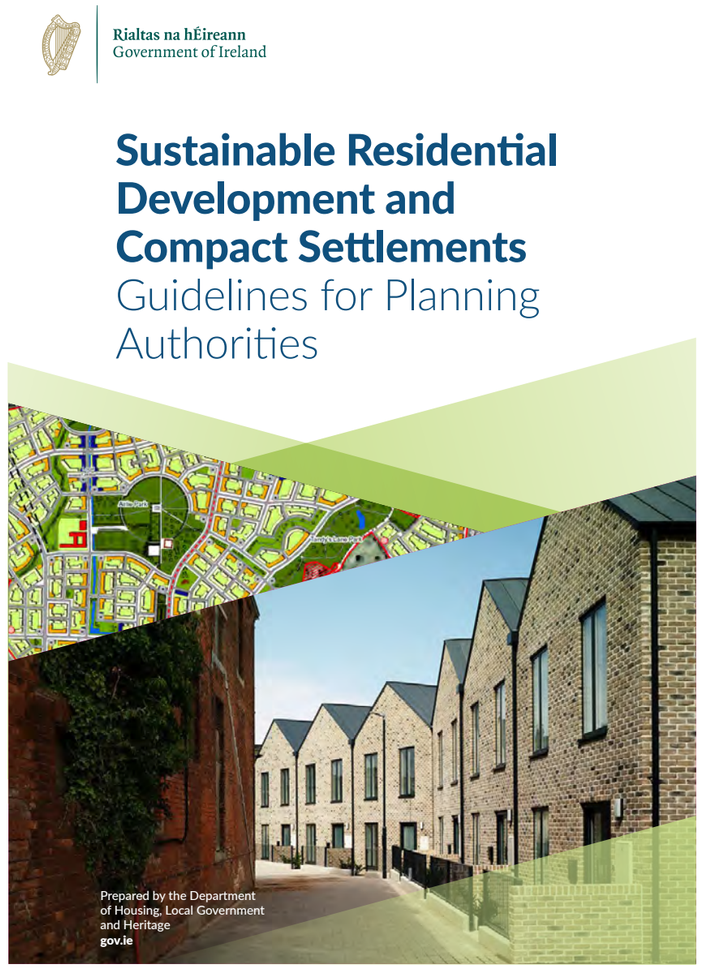


Figure 6 : Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024)

2.1 NATIONAL PLANNING CONTEXT

Urban Development and building Heights Guidelines for Planning Authorities (December 2018)

This Guidance document states that, in order to meet the objectives of the NPF, significant increases in building heights and overall building densities need to be not only facilitated but actively sought out and brought forward by the planning process, particularly at local authority and An Bord Pleanála level. This document further outlines that increasing building heights has a critical role to play in delivering more compact growth in urban areas.

Section 3.2 of the Height Guidelines set out a number of criteria which should be satisfied in terms of proposals for greater height.

Referring back to the aforementioned guidelines in relation to sustainable urban development and apartment development, there is a suite of national planning policy that requires the delivery of higher density development to achieve national objectives surrounding housing delivery. In the absence of finite land supply, increased building height is an essential component of achieving the required higher densities whilst maintaining a high standard of living accommodation and achieving sustainable communities.

In this context, the building height guidelines provide a mechanism through which building heights (and therefore densities), higher than those that may be permissible under the Development Plan, can be permitted.

The institutional nature of the subject lands and the associated policy requirement (at both national and local level), to retain the open character of the lands, juxtaposed against the requirement to provide higher density development in urban areas, highlights the importance of the provisions of the building height guidelines for the redevelopment of this site.

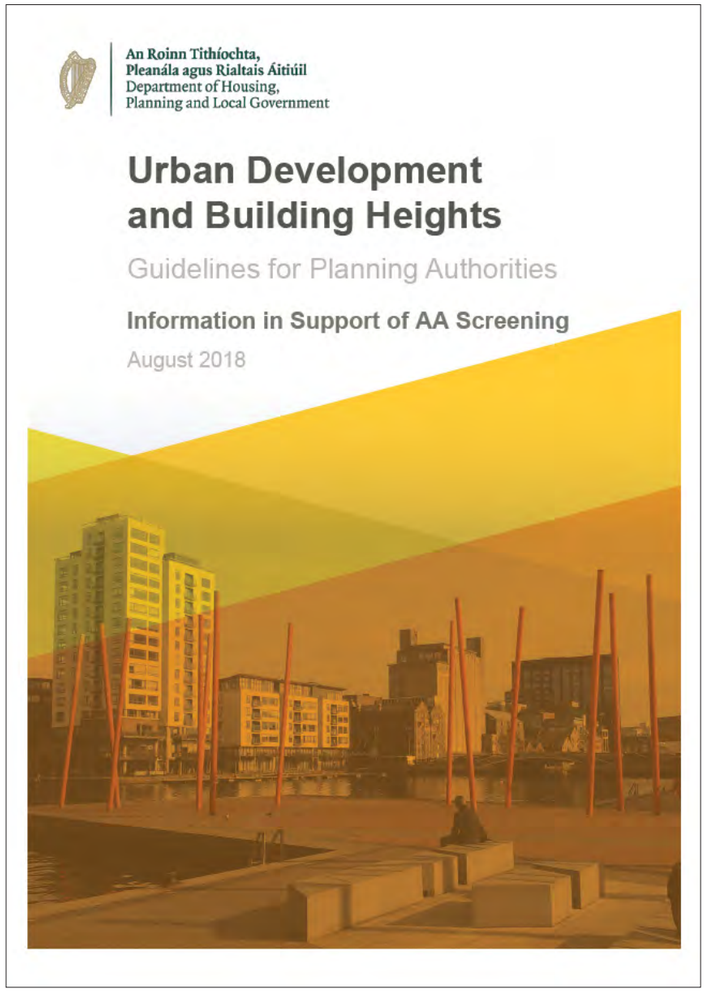


Figure 7 : Urban Development and Building Heights, Guidelines for Planning Authorities, 2018

2.2 LOCAL PLANNING CONTEXT

Dun Laoghaire-Rathdown County Development Plan 2022-2028

The subject lands are located within the Dún Laoghaire-Rathdown County Council Planning Authority Area. The Dun Laoghaire-Rathdown County Development Plan 2022-2028 is therefore the relevant planning policy document at the local tier. This document sets out the Planning Authority's framework for the development of Dún Laoghaire-Rathdown's administrative area which includes development management criteria.

Figure 8 : Dun Laoghaire-Rathdown County Development Plan 2022-2028

Land Zoning

The subject lands are zoned Objective A – 'To provide residential development and improve residential amenity while protecting the existing residential amenities'.

Table 13.1.2 of the Development Plan outlines '**Residential'** as being **'Permitted in Principle'.**

As explained in Section 13.1.3 of the Development Plan, land uses that are designated under each zoning objective as Permitted in Principle' are, subject to compliance with the relevant policies, standards and requirements set out in the Plan, generally acceptable.

The proposed residential redevelopment of the subject lands therefore accords with the land zoning objective as set out within the Development Plan.

Figure 9 : Gateway entrance looking towards Dundrum Road

2.3 INSTITUTIONAL LAND

The subject lands comprise the site of the Former Central Mental Hospital, in the current ownership of the Office of Public Works as shown on the land zoning map, subject to an 'INST' Objective. The Masterplan therefore provides for the objectives of the residential land zoning attached to the lands, together with the requirements of the 'INST' objective.

The specific Development Plan policy requirements pertaining to Institutional lands are set out below.

Institution Objective

Development Plan Section 4.3.1.4 Additional Accommodation in Existing Built-up Areas provides information surrounding the policy requirements for those lands subject to the 'INST' objective. In the first instance it states:

"Where no demand for an alternative institutional use is evident or foreseen, the Council may permit alternative uses subject to the area's zoning objectives and the open character of the lands being retained" (page 86)

The Development Plan further notes:

"The principal aims of any eventual redevelopment of these lands will be to achieve a sustainable amount of development while ensuring the essential setting of the lands and the integrity of the main buildings are retained. **In order to promote a high standard of development a comprehensive masterplan should accompany a planning application for institutional sites***" (page 249).*

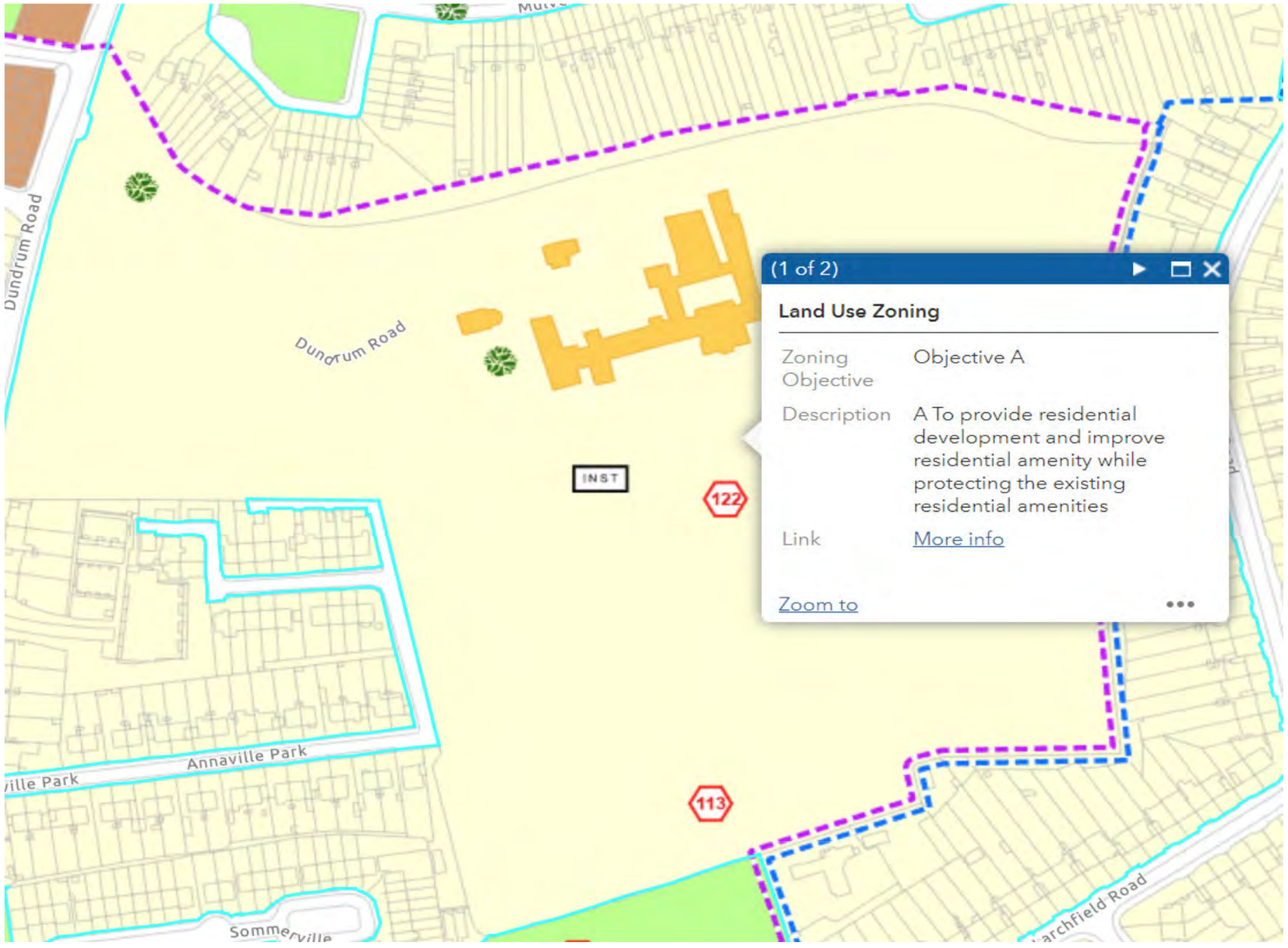


Figure 10 : Extract from the Development Plan, illustrating the subject lands are under zoning objective A, and an 'INST' icon showing that the Central Mental Hospital building and ground is also included in the Institutional Lands category.

2.3 INSTITUTIONAL LAND

Policy requirement for INST related masterplan

As per Section 12.3.7.10 and 4.3.1.4 (which contains Policy PHP21: Development on Institutional Lands) of the Development Plan, the policy requirements for the masterplan (and related planning applications) include:

- Must adequately take account of the built heritage and natural assets of a site and established recreational use patterns;
- Public access to all or some of the lands (may be required);
- Every planning application lodged on institutional lands shall clearly demonstrate how they conform with the agreed masterplan for the overall site. Should any proposed development deviate from the agreed masterplan then a revised masterplan shall be agreed with the Planning Authority;
- A minimum of 25% of the entire INST land parcel, as determined by the Planning Authority, will be required to be retained as accessible public open space. In determining the area to which the "INST" objective applies the planning authority shall have regard to the existing and historical land use and associations between land uses, and the extent to which any lands contribute to the open character and setting of the core institutional function.
- This provision must be sufficient to maintain the open character of the site with development proposals structured around existing features and layout, particularly by reference to retention of trees, boundary walls and other features as considered necessary by the Council (refer also to Section 12.3.7.10).
- In the development of such lands, average net densities should be in the region of 35-50 units p/ha. In certain circumstances higher densities will be allowed where it is demonstrated that they can contribute towards the objective of retaining the open character and/or recreational amenities of the lands.

Firstly, it is noteworthy that the subject lands are State-owned and no longer required for institutional use. It is highlighted as a national priority and part of the LDA's remit to optimise State lands to deliver compact urban development and affordable housing. The subject lands have been identified, at a national level, as being well disposed to contribute to the fulfilment of the above stated objective.

The redevelopment of the subject site is supported by a comprehensive Masterplan which fully accounts for the provisions of the Institutional policy objectives attached to the lands.

As will be demonstrated in further detail throughout this document, the following list of elements, although not exhaustive, arise from the Institutional objective requirements and will be encompassed by the Masterplan:

- Must adequately take account of the built heritage and natural assets of a site and established recreational use patterns;
- The retention of the open character of the site, including existing landscape features such as trees and the walled garden, is at the forefront of the Masterplan vision and is a key driver of the proposed site layout.
- The provision of largely publicly accessible open space that will meet policy requirements in terms of quantum and quality.
- The adaptive reuse of heritage assets within the site boundary.
- As well as meeting the policy requirements of the institutional objective, the above elements, which include the adaptive reuse of heritage and natural assets, will support the creation of a sustainable and distinctive neighbourhood.

As illustrated by this document, the redevelopment of the subject site is supported by a comprehensive masterplan which fully accounts for the provisions of the Institutional policy objectives attached to the lands.

03

SITE CONTEXT AND ANALYSIS

3.1 SITE LOCATION AND WIDER CONTEXT

3.1.1 Site Location

The Central Mental Hospital site is located at Dundrum, a suburb of Dublin situated approximately 5.5 kilometres south-southeast of the city centre in the administrative county of Dún Laoghaire-Rathdown. The administrative county of Dublin City adjoins these southern suburbs to the north, with the Irish Sea to the east, Co. Wicklow to the south and South Dublin to the west. University College Dublin (UCD) and the Dún Laoghaire Institute of Art, Design and Technology (IADT) are also located within the County.

Located approximately 800m north of Dundrum Village and 1.6kms from Dundrum Town Centre, the Central Mental Hospital site is uniquely placed close to a district town centre and is easily accessible from Dublin city centre, representing a strategic opportunity for regeneration and renewal which would provide a strong precedent and catalyst for new housing within the future Dundrum LAP.

The site's established use as a secure mental health facility housing forensic patients has resulted in an inward-looking parcel of land that is disconnected from its immediate context. The tall perimeter walls enclosing the Central Mental Hospital form a physical barrier with the site's immediate context, with public realm interfaces consisting of hard, inactive frontages along Rosemount Green to the south, at Annaville to the southwest and most prominently along Dundrum Road to the west. The remainder of the site's perimeter is adjoined by existing residential development, primarily private rear gardens.
This underutilised site with heritage buildings comprises extensive areas of mature landscape which hold potential for integration into the green infrastructure of the region. The decanting of the existing institutional facility will unlock the potential of this strategically located site, providing opportunities to fulfil demand for housing and other community uses.

Figure 11 : Regional location map, Dublin

Dun Laoghaire Rathdown County
Major routes

Figure 12 : Dún Laoghaire-Rathdown County Council boundary map

Major routes
Secondary routes

3.1 SITE LOCATION AND LOCAL CONTEXT

3.1.2 Local Context

The site is located in Dundrum within a predominantly residential neighbourhood with varied characters. The site is bound to the north by Mulvey Park, a low-rise residential development consisting of terraced two-storey houses. To the west lie Dundrum Road and the LUAS Green Line, each providing a strong north-south connection along the site's western edge. To the east lies more two-storey residential development in the form of detached, semi-detached and terraced houses at Friarsland Road, while to the south is Rosemount Green, a small open space, and the Rosemount Estate beyond that.

Dundrum Road (R117) links the CMH site with the M50 (Junction 13) and Dundrum Town Centre to the south and with Milltown, Rathmines and Dublin City to the north.

The site is well served by existing public transport infrastructure, benefiting from its proximity to the LUAS Green line whose nearest station is located approximately 450m west of the site at Windy Arbour. Dublin Bus network infrastructure includes stops at Dundrum Road, Goatstown Road (R825), Churchtown Road and Taney Road (both R112) and it is envisaged that local capacity and access will be further enhanced over the coming years under the BusConnects programme which is now being implemented.

These existing connections present a significant opportunity to build upon the connectivity of the site to the rest of the city including significant education centres including UCD, IADT and Trinity College Dublin and employment centres including the Dublin Docklands and Sandyford – all within a 25-minute reach. This underutilised site with heritage buildings comprises extensive areas of mature landscape which hold potential for integration into the green infrastructure of the region. The decanting of the existing institutional facility will unlock the potential of this strategically located site, providing opportunities to fulfil demand for housing and other community uses.

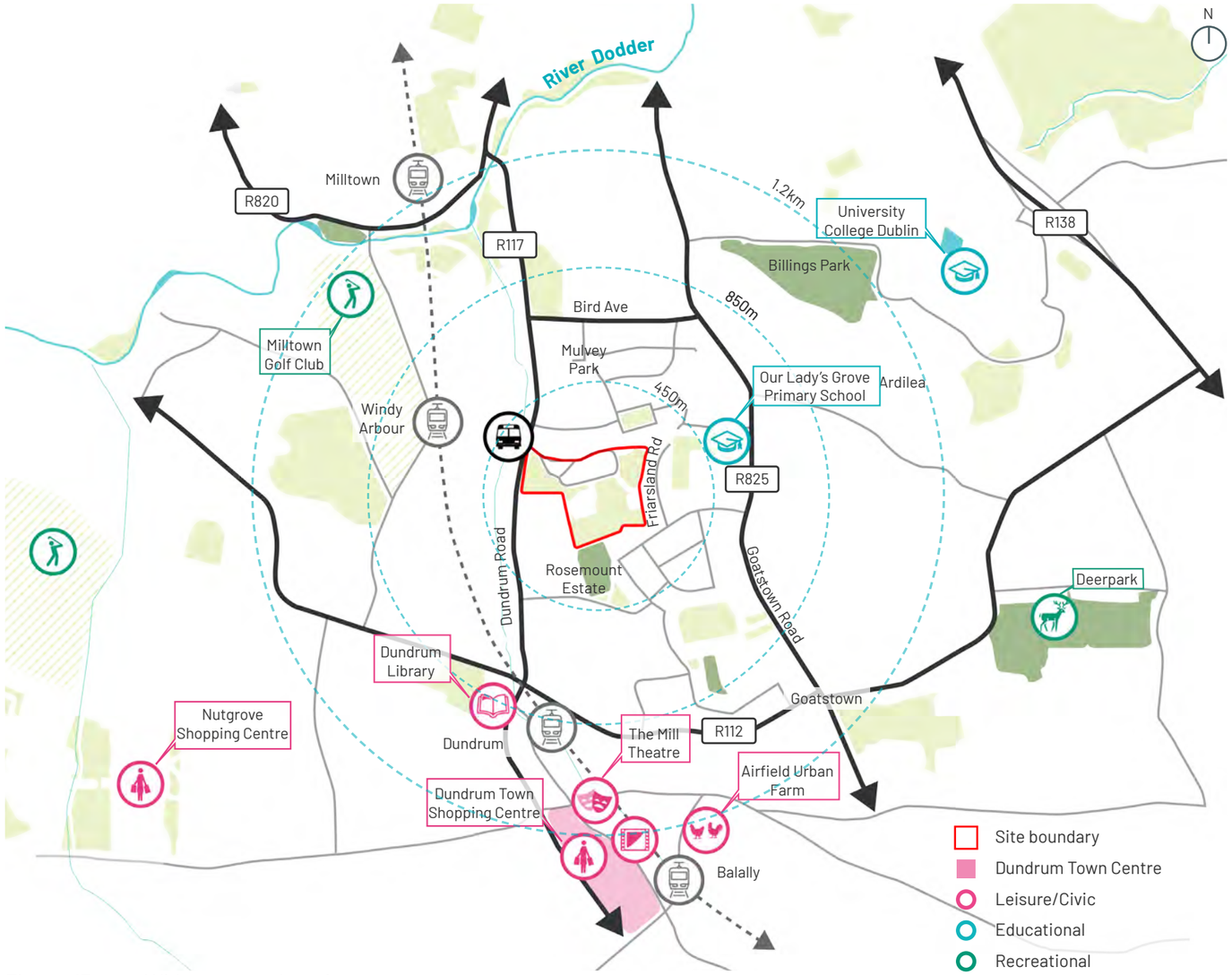


Figure 13 : Wider context location map

3.2 SURROUNDING LAND USES

Dundrum is designated as a 'Level 2 - Major Town Centre' as part of the Retail Strategy for the Greater Dublin Area 2008-2016.

Retail: Recently redeveloped and improved Dundrum Town Centre, with its extensive range of retail, leisure and community facilities, serves not only Dundrum but is also one of the most prominent shopping complexes in Ireland. The immediate context of the site largely comprises residential development of two to four storeys, with some small-scale, sporadic commercial and retail development lining Dundrum Road to the west, with a particular concentration of non-residential uses outside the site boundary at its northwest corner. Here, at Dundrum Road, a public house, pharmacy, bakery and small supermarket provide a range of local options for the existing community, while there is also a neighbourhood centre near the southern edge of the site at Larchfield Road.

Educational: There are several primary and secondary schools located nearby and within 5 to 10 minutes' walk from the site. Also, University College Dublin is approximately 15 minutes' walk from the site. New primary and post-primary schools are being proposed on the Glass Bottle Site, which is about 5 minutes' walk to the southeast of the site. The capacity of local schools to cater for projected population growth and changes in demographics will be ascertained by way of a School Needs Assessment which will accompany planning proposals for this site.

Childcare: There are a number of day-care and crèche facilities in the area such as the Mulberry Bush - Childcare & Preschool, Ready Steady Play and Narnia Nursery School in Dundrum Town Centre.

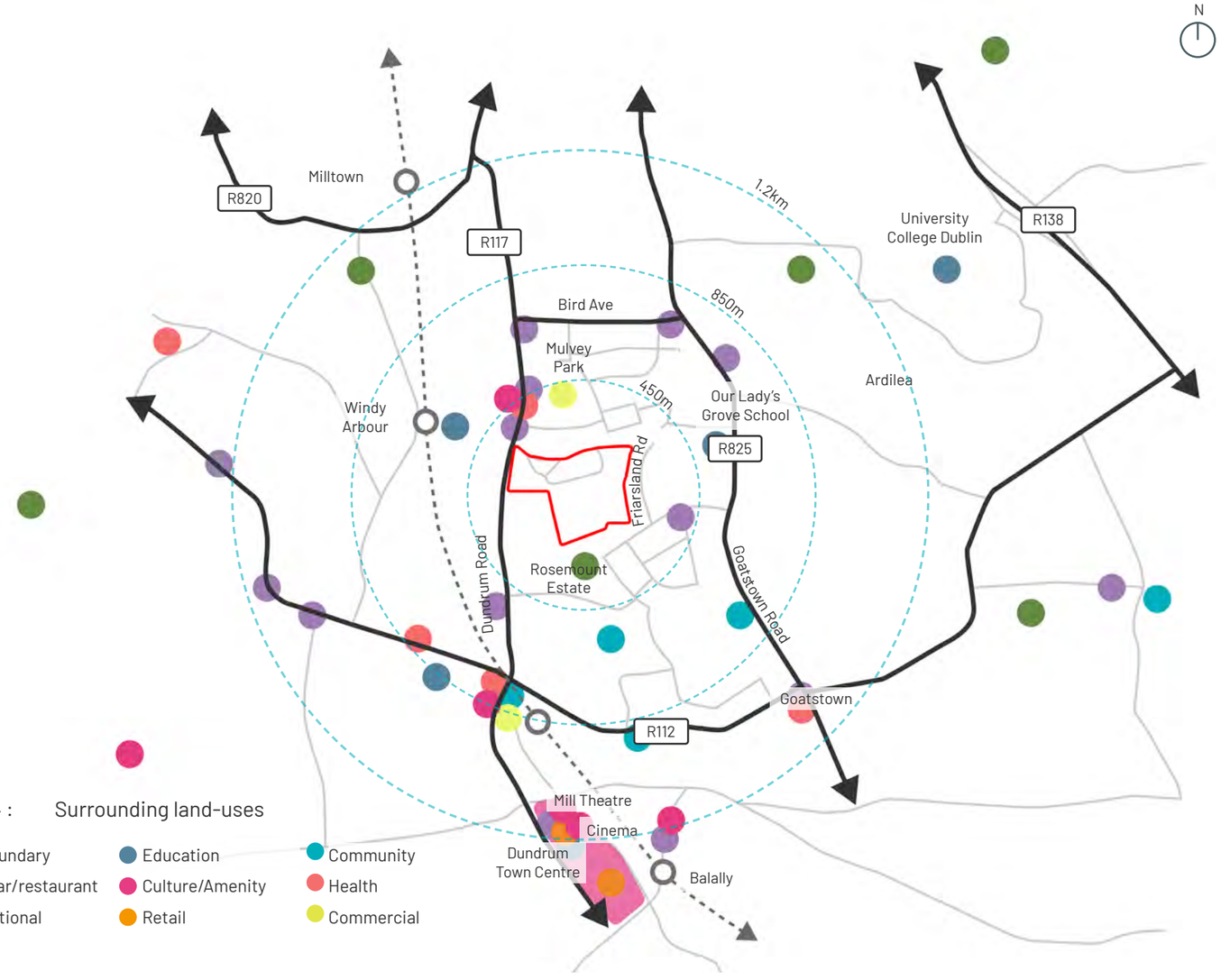


Figure 14 : Surrounding land-uses

Sports and recreational: The site enjoys access to a wide variety of sports and recreational facilities within a 1 kilometre radius. These include Rosemount Green which adjoins the site directly to the south, playgrounds at Milltown / Windy Arbour (Patrick Doyle Road) and Goatstown (off Taney Road), CUS Rugby Grounds, Milltown Golf Club and UCD Belfield. The area has a number of amenity green spaces, a couple of playgrounds and private sports provision. The adjoining image highlights the different open spaces in the vicinity of the site.

Neighbourhoods: The existing neighbourhoods surrounding the site are predominantly two-storey terraced homes and any identifiable difference in massing will have to be sensitively designed in order to achieve such integration. Access and permeability should also be carefully considered.

3.3 COMMUNITY AUDIT

The masterplan for the Central Mental Hospital site will also seek to enhance the local area's existing cultural, community facilities and open space attributes by providing opportunities for interaction between new residents and the existing local community.

Currently the site area lacks in community centres and facilities. The Rosemount Family Resource Centre (FRC) community facility is one of the closest and most accessible to the site. However, the facility is limited and at full capacity. It is situated in an old house within Dundrum Village and lacks adequate access for people with mobility issues, particularly in the absence of lift access to upstairs meeting rooms. The FRC staff also work closely with other service providers in the DLR area to ensure that the community can access a wide a range of facilities in order to promote youth services and to this end a joint outreach project was run in 2015 with Crosscare.

Dundrum Library provides standard library services, and community members can access a range of clubs and groups. These sessions can accommodate up to a maximum of 25 people at a time. Workshops and art exhibitions are also organised within the library space on a regular basis.

Among the existing structures on site is an historic Roman Catholic chapel which is actively used by CMH staff and service users. In the wider vicinity of the site there are also Roman Catholic churches at Bird Avenue (The Church of the Miraculous Medal) and on Dundrum's Main Street (Holy Cross Church). Local faith communities are also catered for at the Islamic Cultural Centre of Ireland (Roebuck Road), St. Nahi's Church (Churchtown Road) and Christ Church (Taney Road). Taney Parish Centre is a key asset for the local Church of Ireland community as well as an important community resource, hosting classes which cater for the wider community.

Destination (Distance from Dundrum Road)	Walk (min)	Cycle (min)
1 Dundrum Library *1 km*	13	4
2 Rosemount Family Resource Centre *1 km*	13	4
3 Taney Parish Centre *1.4 km*	19	8
4 Mount Merrion Community Centre *3.5 km*	45	15

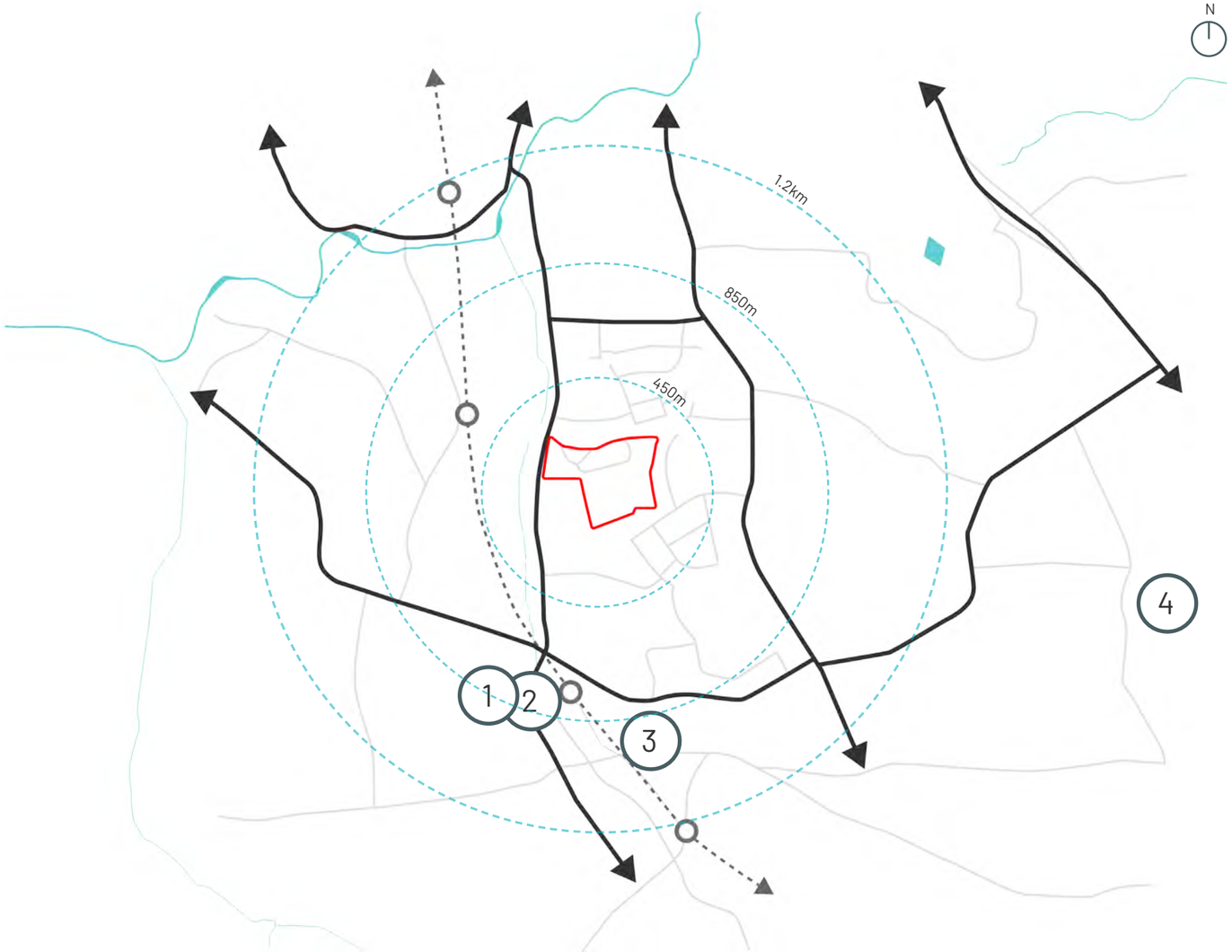


Figure 15 : Local community facilities

3.4 SITE ANALYSIS

The character of the existing site may be largely defined by the collection of historic structures which are concentrated in the north central portion of the site. These buildings are situated in a mature parkland setting, enclosed on all sides by the Central Mental Hospital's imposing perimeter walls.

The site contains several heritage assets (refer to Chapter 4.0 for details) as well as some later additions the most prominent of which is the late 20th century Admissions Unit, an extensive redbrick pavilion in the southwestern portion of the site near Annaville.

The site's landscape features include extensive open parkland, a walled garden, an orchard, the avenue of mature trees along the approach from the site entrance at Dundrum Road and limited surface parking for CMH staff and visitors.

The area enclosed by the site's perimeter walls measures 11.4 hectares, with those walls having a cumulative length of approximately 1,640 linear metres.

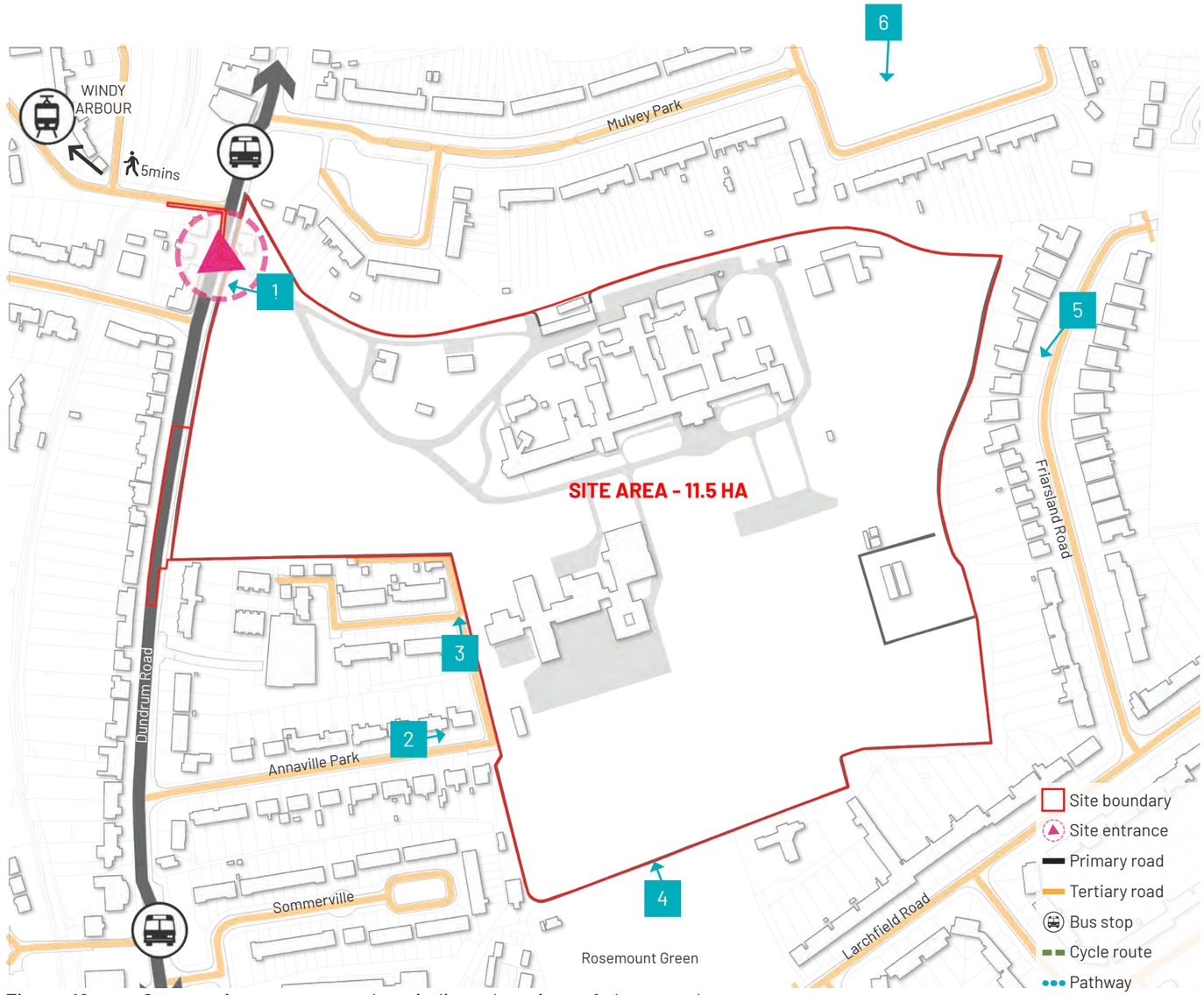


Figure 16 : Current site access - numbers indicate locations of photographs on next page

3.4 SITE ANALYSIS

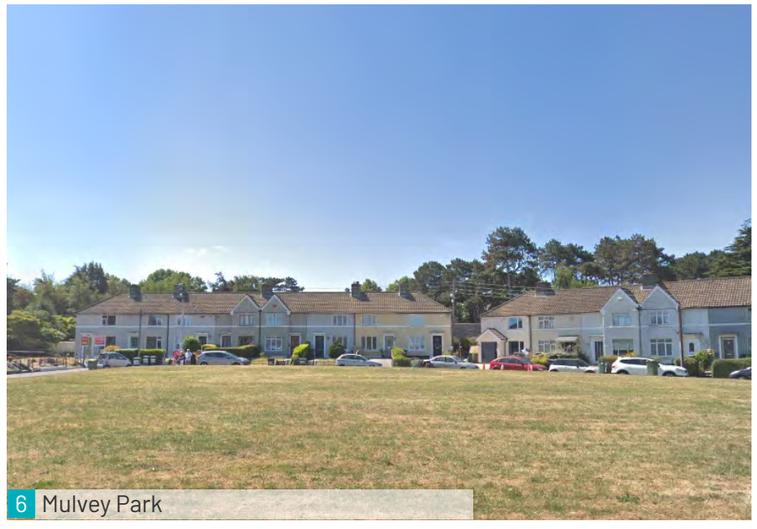
1 Site entrance off Dundrum Road

2 View along Annaville Park towards the site

3 Western edge along Annaville Grove

4 View from Rosemount Green

5 View along Friarsland Road towards the site



6 Mulvey Park

Figure 17 : Photographic analysis

3.4 SITE ANALYSIS

Site Topography and Views

The site has over 6 meters of height difference. The highest point in the middle of the site falling to the edges. The majority of the site lies between 44.0 and 45.5 for a fairly flat centre area. The main hospital building sits at 44.5m.

While the enclosing perimeter walls sever any visual connection between the site and surrounding development, there are certain vantage points within the site from which local landmarks such as the William Dargan Bridge, Christ Church on Taney Road and the Church of the Miraculous Medal on Bird Avenue can be seen. Further afield, the foothills of the Dublin and Wicklow Mountains serve to define the horizon beyond the site's perimeter walls.

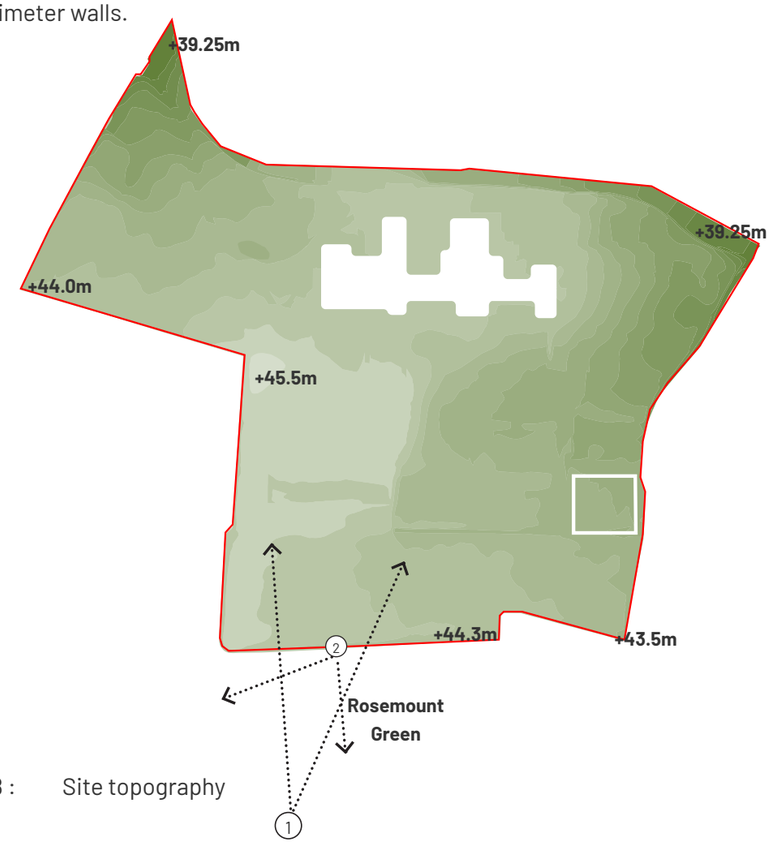


Figure 18 : Site topography

View 1: Rosemount Green offers the best long distant view of the central mental hospital

View 2: Extensive views south over Rosemount Green offers long distant views of the Dublin Mountains

Figure 19 : Views from Rosemount Green

3.4 SITE ANALYSIS

Microclimate

The Central Mental Hospital's perimeter walls and mature vegetation, as well as adjoining development, all serve to screen this site from the elements and afford a sense of shelter. The prevailing wind direction on site is from the southwest, while the site's proximity to the Irish Sea coast a short distance to the east also serves to influence the site's microclimate.

Blue and Green Infrastructure

The site spans the division of neighbouring drainage catchments – those of the Elm Park stream to the east and the River Slang to the west. The latter is a significant right tributary of the River Dodder which it joins a short distance north of the site at Milltown.

The Slang and Dodder valleys each host segregated riverside routes for active travel modes. The green infrastructure of the Slang valley is significantly less developed than that of the River Dodder, whose course will soon be flanked by a continuous Dodder Greenway to link Bohernabreena with the Dublin Docklands. The green corridor of the Dodder comprises a series of local parks including ones nearby at Dartry, Milltown and Clonskeagh.

Other significant green spaces in close proximity to the Central Mental Hospital include Milltown Golf Club to the west and UCD Belfield to the east. A number of small and informal pocket parks and open spaces are also found throughout surrounding residential areas, including those at Mulvey Park, Rosemount, Taney Road and Windy Arbour / Milltown.

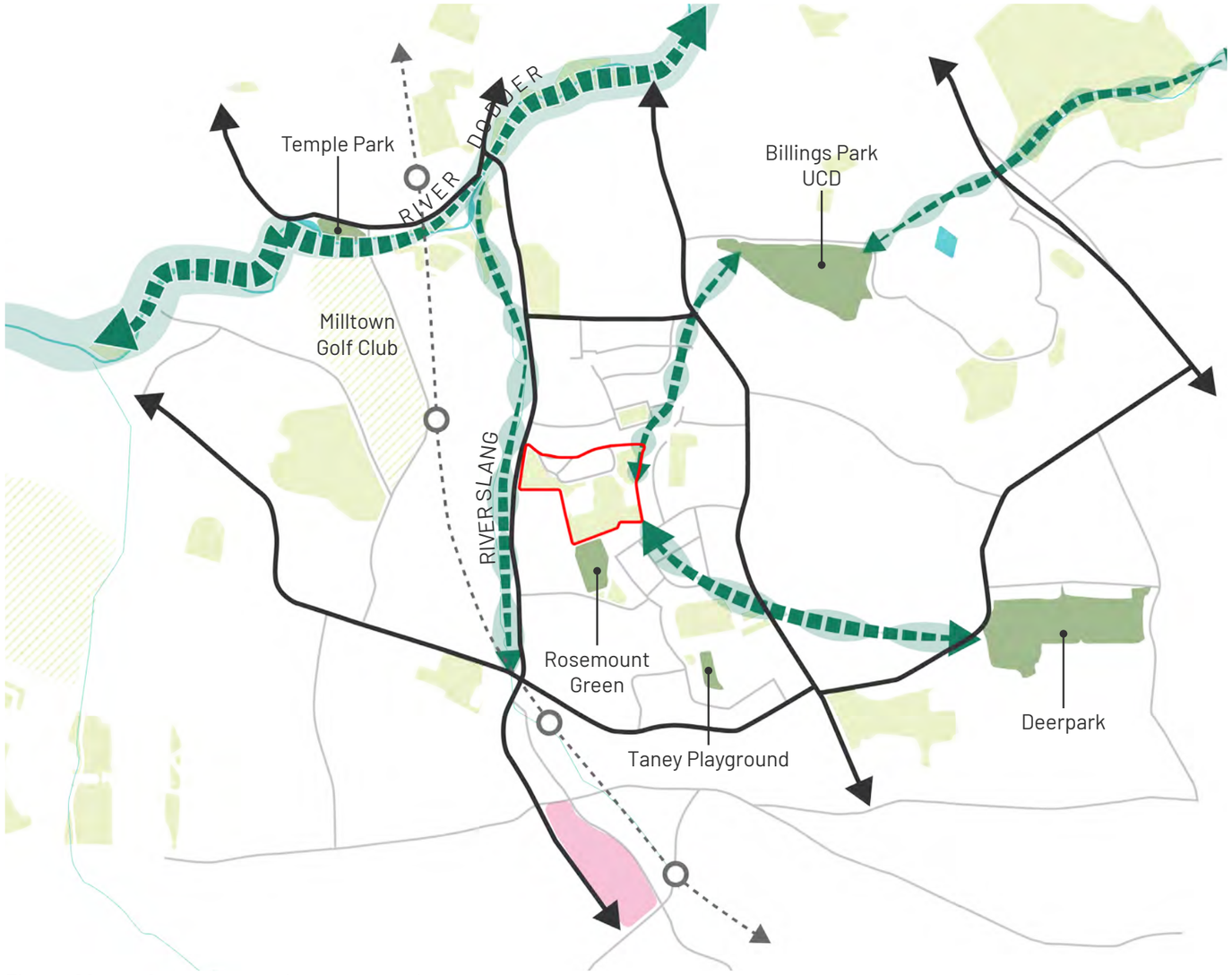


Figure 20 : Open space and green network

3.5 BLUE AND GREEN INFRASTRUCTURE

Mature Landscape

The trees of the greatest value are located near the entrance of the site, and to the front, east and west of the building. Mature trees along the main drive are very important in the context of arriving to the front of the building. A group of trees along the ditch in the middle of the site contains some large specimens. There is an orchard grove of approximately 20 apple trees, with varying degrees of quality.

The walled garden contains a formal garden with rose beds of different varieties lining its eastern edge, while the western section of the walled garden features polytunnels and some less structured planting. They are to the north of the walled garden, which has a strong sense of enclosure formed by trees to the north and the boundary walls of the garden and the site.

Figure 21 : Matured trees at the entrance to the site

Figure 22 : Site tree conditions

3.5 BLUE AND GREEN INFRASTRUCTURE

Ecology & Biodiversity

Summary of the outcomes of the surveys of the in-season flora, habitat, bat and aquatic ecology and biodiversity are presented in this section. In addition to the surveys mentioned, physical inspections of the buildings on site for evidence of bat roosts have also been carried out.
Wintering bird and other relevant assessments have been carried out and are being submitted as part of the planning applications

The site primarily consists of amenity grassland, scattered trees and parkland, treelines, some hedgerows and areas of formal gardens. No bat roosts or evidence of bat use were noted within the buildings on site. It should be noted that, the main buildings are extremely brightly lit, which would be expected to deter bat activity. However, two unlit buildings within the masterplan site formed a bat roost for three Common pipistrelle bats. Two trees on the eastern portion of the site formed a bat roost one for single Leisler's Bat and the other for a single common pipistrelle. Bat foraging was noted on site, along dark corridor areas, adjacent to trees and hedgerows.

No protected flora or habitats of conservation importance were noted on site. There is a small stand of Himalayan balsam (Impatiens glandulifera) (invasive) in the northeast corner of the site. It should be noted that two badger setts were noted on site and consultation is being carried out with NPWS and DRL Biodiversity Officer. A Badger Conservation Management Plan Has been prepared to retain the badgers on site.

Of importance in relation to potential ecological pathways and conservation sites is the presence of an open drainage ditch which traverses the southern portion of the site from the southwest corner of the orchard to the southeast corner of the walled garden where it passes under the eastern perimeter wall to rear of houses at Friarsland Road. It should be noted that this connects to the Elm Park Stream, which forms a direct hydrological pathway to the Natura 2000 sites at Dublin Bay. Mitigation measures will be required to protect the drainage ditch and the downstream Natura 2000 sites from impacts and a Natura Impact Statement (NIS) will be prepared. It would be expected that given appropriate measures in relation to downstream impacts no significant effects on the integrity of Natura 2000 sites would be foreseen.

The EIAR biodiversity chapter includes information on the habitats of local biodiversity importance within the site including the treelines, hedgerows and drainage ditch on site. It also includes detailed assessments of wintering birds, breeding birds, mammals flora and bats. Consultation was carried out within the project team to maintain biodiversity on site, compensate for losses and also include areas of enhancement.

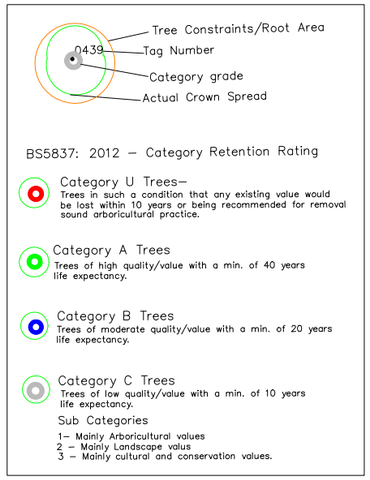
The mitigation measures recommended are as follows:

• Provision of areas for permanent bat roosting on site within the old buildings and a lighting plan that provides a sensitive landscape for bats;
• Protecting the existing drainage ditch on site to provide a permanent biodiversity and landscape feature that will be further enhanced by sensitive landscaping;
• Retention of the vast majority of the site's mature trees and supplementary planting of native hedgerow and biodiversity enhancing landscape treatments. The site's landscape strategy will be developed to promote a stable and sensitive habitat for the local biodiversity and inhabitants of the proposed development.

As part of the proposed project a Construction Environmental Management Plan has been prepared to outline the sensitivities on site and how these areas and areas within the potential Zone of Influence, including sensitive receptors downstream, will be protected throughout the proposed works

Figure 23 : On-site landscape features

3.5 BLUE AND GREEN INFRASTRUCTURE



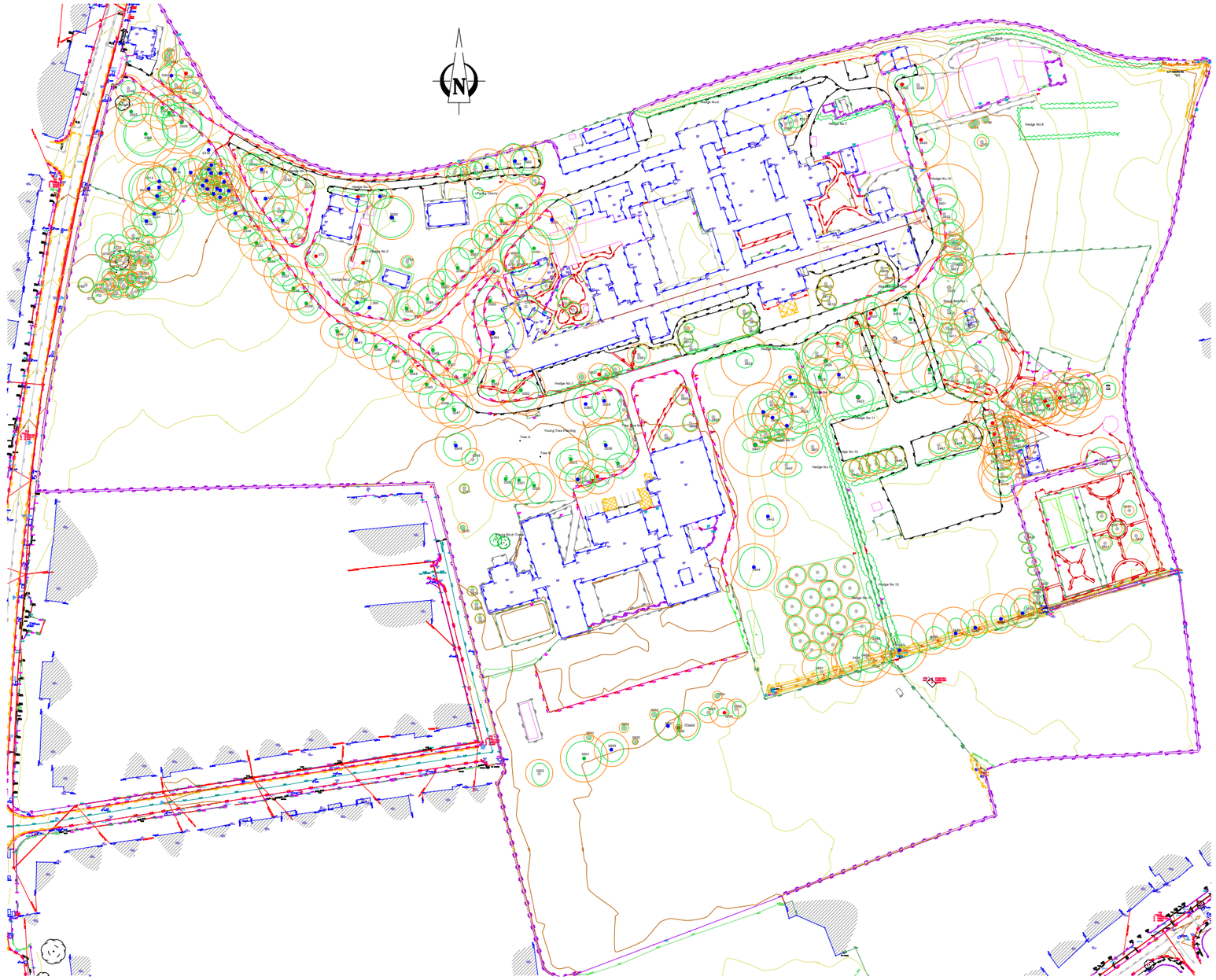
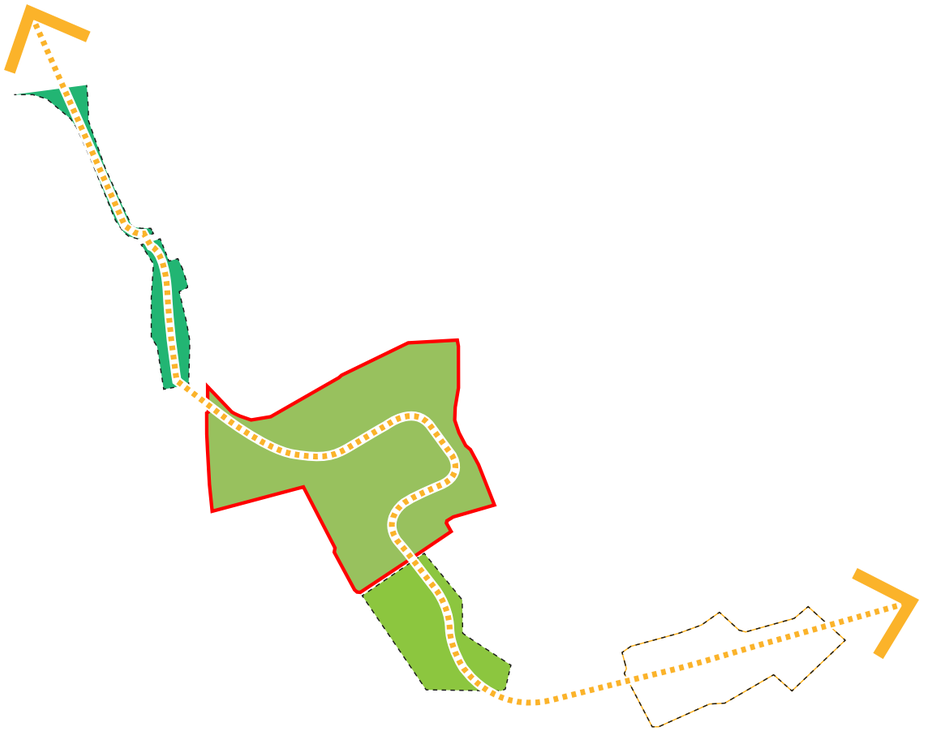


Figure 24 : Topographical survey and tree constraints plan

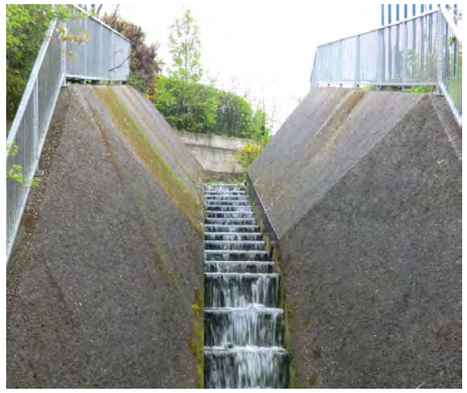
3.5 BLUE AND GREEN INFRASTRUCTURE

Urban Ecosystem Network



The site has the potential to create a new ecological link from Windy Arbour to the Glass Bottle Site and towards Goatstown Road. Providing ecological corridors and connectivity to the River Slang, Rosemount Green, Milltown Golf Club and other green spaces throughout Dundrum. It also has the potential to greatly improve pedestrian and cycling connectivity across the area, providing the local community with greater access to green spaces and recreational grounds both within the development site and in the surrounding area.

Blue/Green Corridor



River Slang

River Dodder

Green Amenity

Main Site

Playground Goatstown

Recreational Ground

Rosemount Mulvey - Football Club

CUS Rugby Ground

Figure 25 : Local urban ecosystem features

Figure 26 : Urban Ecosystem Network

3.6 UTILITIES

The current use of the site with built areas primarily to the north and central areas of the site, means that the current underground network of utilities and infrastructure is limited to these areas, served from the north or the Dundrum Road.

Existing water supply
Indications are that the supply to the existing buildings on site is taken off a connection to the 1936 9-inch cast iron public watermain on Dundrum Road. Irish Water is responsible for public water supply infrastructure. Through preliminary engagement and discussions with Irish Water the Design Team has established that there is sufficient capacity to support the quantum of development that is envisaged for this site, and to this end a 'Confirmation of Feasibility' letter was received from Irish Water in the fourth quarter of 2020.

Existing Surface Water Drainage System
This system takes rainwater falling onto roofs, roads, pavements & hardstanding areas. Preliminary surveys indicate that the existing buildings on site are drained by a combined buried drainage system (foul water & surface water together) which discharges out by gravity at the main gate to the 300mm combined sewer in the Dundrum Road on the west side of the site.

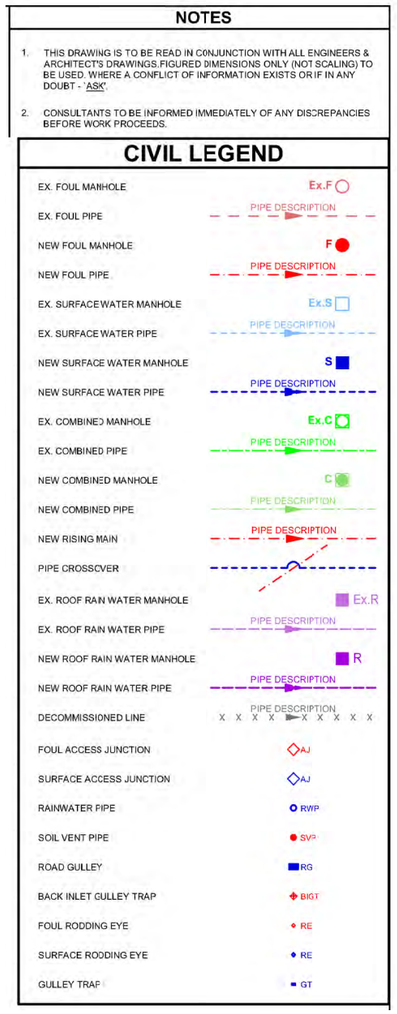
Elm Park Stream
A 500mm diameter surface water sewer enters the south of the site off Rosemount Green and connects to a small open drain/watercourse which runs across the middle of the site from west to east adjacent to the ornamental garden, exiting through a grilled opening in the east boundary wall and continuing alongside it running northwards towards UCD. Reference documents suggest that this open drain is the start of the Elm Park stream, a watercourse which passes through UCD campus, across under the N11 Stillorgan Road, into Elm Park Golf course and on into Dublin Bay near the Merrion Gates.

Existing Foul water drainage system
Preliminary surveys indicate that the existing buildings on site are drained by a combined buried drainage system (foul water & surface water together) which discharges out by gravity at the main gate to the 300mm combined sewer in the Dundrum Road on the west side of the site. Irish Water is responsible for public foul water drainage infrastructure.

Electricity
The Design Team service engineer has identified existing electrical network infrastructure, including those local ESBN substations located to the northwest and close to the site entrance at the junction of Dundrum Road and Mulvey Park and also to the southeast at the junction of Larchfield Road and Farmhill Road. Through preliminary discussions with ESB Networks the Design Team is seeking confirmation of electrical network capacity to support the projected quantum of development on the Central Mental Hospital site.

Gas
Existing Gas Networks Ireland (GNI) infrastructure servicing the Central Mental Hospital site is via Dundrum Road, with a gas regulator situated a short distance west of the main hospital building near the top of the tree-lined avenue. The proposed site services strategy under the masterplan does not envisage that new residential development on this site would rely on gas-fired plant for space or water heating or for cooking. Limited gas network infrastructure may be required to service non-residential uses, however it is envisaged that the site's existing gas supply would be adequate for this purpose.

3.6 UTILITIES



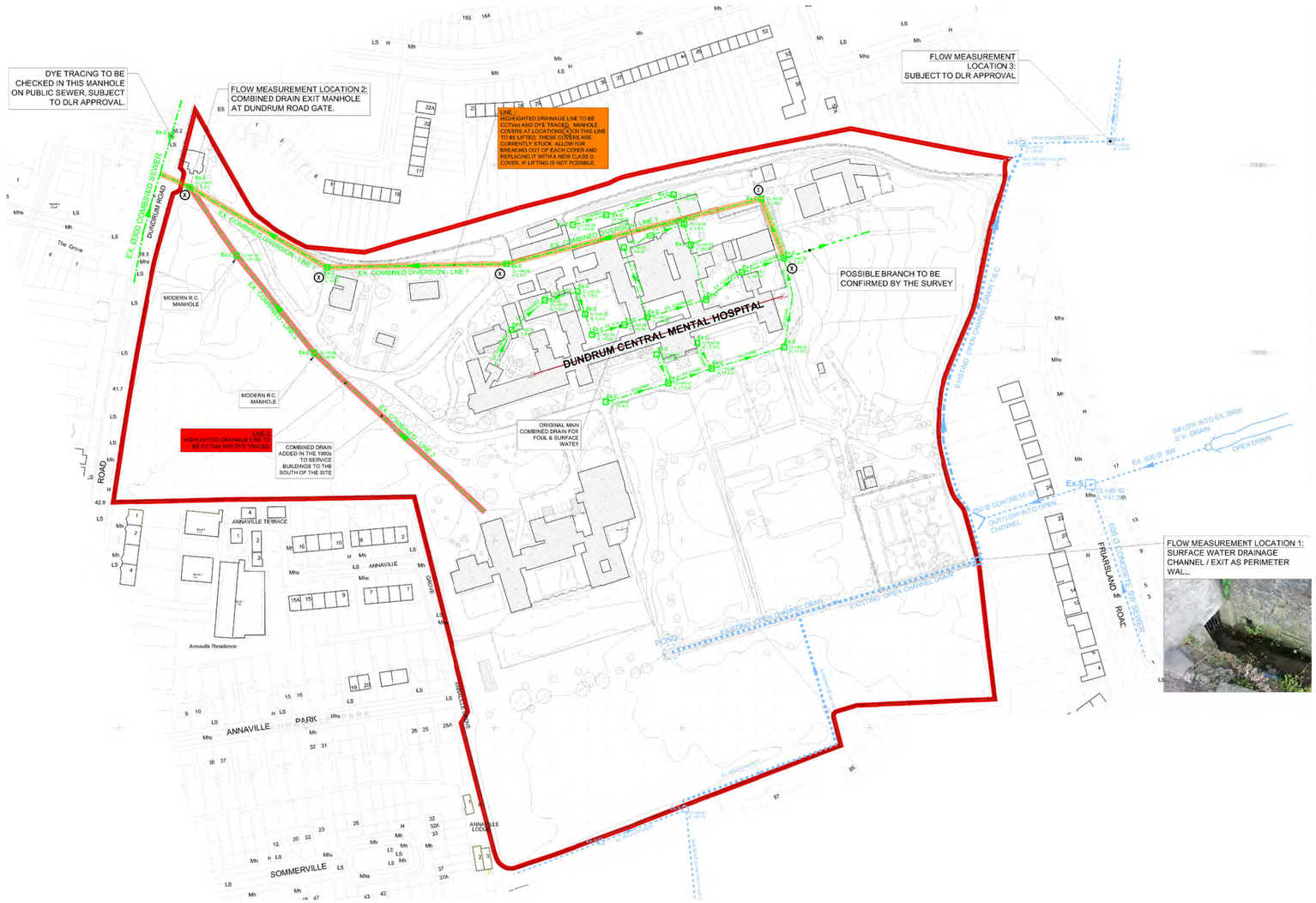


Figure 27 : Existing site utilities

3.7 OPPORTUNITIES & CONSTRAINTS

The Central Mental Hospital site's character and location are ideal for regeneration that would promote a strong character and identity for Dundrum within Dún Laoghaire-Rathdown. The site has an opportunity to develop a new identity as an active and inclusive community, linking with employment, education and retail uses throughout the rest of Dublin via existing transport connections such as the adjoining LUAS Green line and the local bus network.

To support the regeneration of the site within its wider context, overcoming and mitigating key challenges and turning them into opportunities is vital. By addressing these key challenges, this masterplan document along with the design principles will seek to enhance the physical, social and environmental qualities of the site and its surroundings. One of the main challenges for the Central Mental Hospital masterplan is to transform an insular site into a sustainable, integrated, permeable and accessible new community embedded within its wider urban fabric.

The site has several constraints that will influence the masterplan design, but these key attributes of the site also provide opportunities to create a development that is uniquely shaped by the site's specific setting and character. This document establishes design principles that address the key challenges associated with the site including but not exhaustive to:

1. Retention, restoration and sensitive adaption of heritage buildings;
2. The perimeter walls, whose role in enclosing the site throughout its historic development have also served to separate it - physically, socially and visually - from surrounding development;
3. The single existing point of access
4. The site's mature landscape and biodiversity;
5. The development of this unique site in such a way that its historic significance is honoured and maintained, while realising its potential as a centre for compact growth and densification in response to the stated objectives of Project Ireland 2040

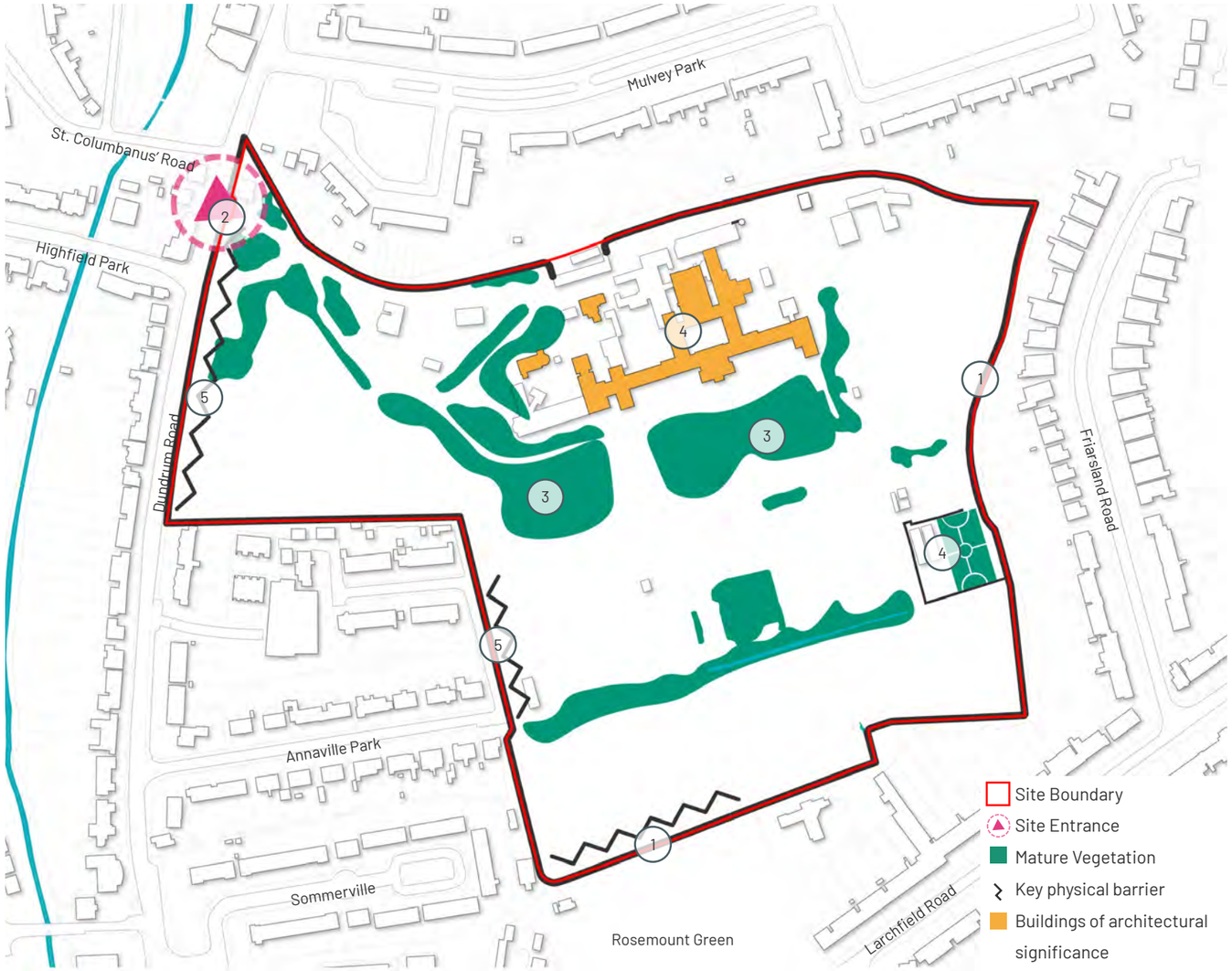


Figure 28 : Opportunities and constraints

3.7 OPPORTUNITIES & CONSTRAINTS

The Perimeter Walls

Since the site's enclosure in the late 1840s, its 11.4 Hectares have been enclosed on all sides by imposing walls whose extant construction largely comprises masonry - a mix of granite and limestone - with some later interventions in in-situ concrete, generally measuring 4 to 6 metres above adjoining ground levels and having a cumulative length of approximately 1,640 linear metres. One of the key challenges of the site's redevelopment lies in the design of a new neighbourhood within the existing perimeter walls, particularly in determining how and where to create appropriate openings and access points in those walls so as to connect and integrate the site with adjoining development. The historic nature of these walls and the adjoining stakeholders' perceptions of and relationships with the walls will inform design decisions to puncture the walls in specific locations and will ensure that the new development will become ingrained in the existing urban fabric and become an asset to the surrounding neighbourhoods. Certain parts of the wall have undergone significant alteration over the years and have diminished heritage value; such portions of the walls will be identified by way of the Design Team Conservation Architect's perimeter wall survey.

The site's redevelopment presents significant opportunities for enhanced local permeability and connectivity, for the integration of neighbouring but physically disjunct communities, and for a sensitive revelation of what has long been an inward-looking, insular parcel of land for the benefit of the wider community.

Given that these walls are a distinguishing feature of the site, innovative solutions will be required not only to retain the wall but also in the formation of proposals for appropriate, limited interventions in the walls in certain parts. The successful integration of the site with surrounding development will rely on creation of new access points, and the site's relationship with Rosemount Green to the south is recognised as presenting a unique opportunity to enhance local connectivity and permeability. The potential for retained sections of the walls to act as design features in a new residential development must also be considered. One particular challenge for the site's redevelopment will be in altering perceptions of the walls which might associate the retained walls with the site's historic use. Among the prerequisites for planning will be proposals for publicly accessible open spaces and other recreational amenities as per the site's planning designation under the institutional ("INST") zoning objective. Retention of the perimeter walls, whose imposing forms diminish the physical and visual permeability of the site, will prove to be a key challenge in enhancing access to the proposed amenities. The selective adaptation of the site's physical perimeter is seen as presenting a generational opportunity to integrate with adjoining neighbourhoods and to redefine the site's image in its setting among Dublin's southern suburbs.

Key design parameters:

- The perimeter walls' structural stability, condition and quality will determine whether certain sections should be retained, restored, modified or removed.
- Enhancing permeability and creating positive interfaces along the site's extensive public realm frontages, including certain points at which the walls have seen historical alterations.

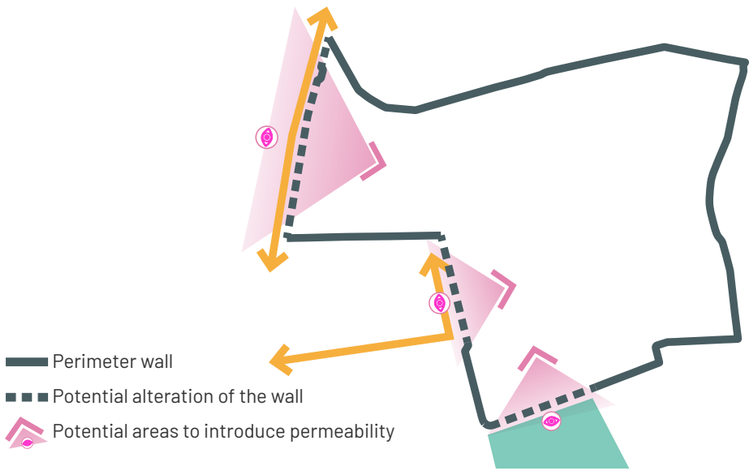


Figure 30 : Diagram showing potential opportunities along the wall

Figure 29 : Photos of the perimeter wall's altered condition

Figure 31 : View of the perimeter wall from Rosemount Green

3.7 OPPORTUNITIES & CONSTRAINTS

Single access point

Currently, the site is accessed via Dundrum Road to the west and lacks alternative access from north, east or south. The primary entrance is an all-user access; however, for the scale of the development proposed within the site, an alternative access point will need to be considered.

Potential access points for pedestrians and cyclists from Annaville Road to the west, and through the open space to the south connecting to Mount Carmel Road and Larchfield Road will need to be considered. The scope for formation of new access to the north and east is severely limited owing to existing residential development backing onto the site's perimeter walls at Mulvey Park, Friarsland Road and Larchfield Road.

Masterplan proposals will be required to respond to the unique challenge of integrating the site – and a new residential development – with surrounding development, enhancing local access, connectivity and permeability and providing the wider community with access to much-needed open space. Furthermore, emergency access to the masterplan site and adjoining development will need to be considered in the formation of proposals for the site.

Key design parameters:

- Analysis of the masterplan's impact on local roads and transportation, particularly on local public roads and intersections, so as to determine the need for alternative vehicular access.
- Site selection and formation of access(es) as appropriate to complement or supplement the existing all-user access; having regard for relevant statutory regulations, DMURS, etc.
- Enhancing the site's permeability will be a key aspect of the development's successful integration into the existing urban fabric.

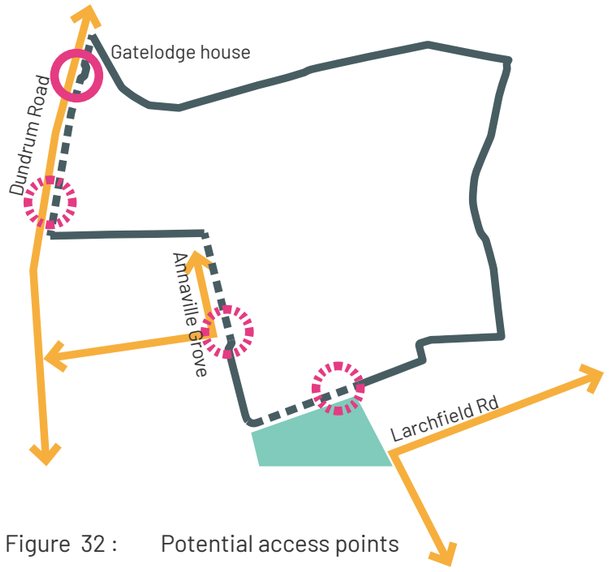


Figure 32 : Potential access points

Figure 33 : Pedestrian link to Larchfield Road at Rosemount Green

Figure 34 : Image showing the gatelodge at entrance

Figure 35 : Eastern wall along Annaville Grove

3.7 OPPORTUNITIES & CONSTRAINTS

Perimeter wall
Buildings listed on NIAH (National Inventory of Architectural Heritage)
Walled Garden
1 Hospital (National)
2 Infirmary (Regional)
3 Church/Chapel (Regional)

Repurposing of the heritage buildings

The extant structures on the site are of varied historical interest and significance, with the importance of certain existing structures recognised by way of their inclusion in the National Inventory of Architectural Heritage (NIAH).

The Main Hospital Building, Chapel and Infirmary have each been entered separately in the NIAH and in the corresponding citations these structures have been assessed as holding either national or regional significance. The Design Team will continue to assess the merits of each of these structures in formulating design proposals for the masterplan area, and a comprehensive strategy for preservation, retention and adaptive reuse of historic structures will be set out in proposals and supported by the Conservation Architect's statement of significance. Those existing buildings for which a strategy of retention and adaptive reuse is proposed are detailed in Chapter 4.0. Furthermore, a detailed structural survey will provide a clear understanding of the structural stability and condition of heritage assets and their ability to be transformed into usable spaces to achieve residential and/or other uses.

Integration of the buildings within the spatial layout, protecting the views of the building from inside / outside the site, retrofitting of the services and infrastructure, and introducing new use of spaces are few of the challenges related to the heritage buildings within this site.
The strategy in Chapter 4.0 provides a detailed rationale for conservation/protection of individual existing buildings.

Figure 36 : Heritage buildings

Key design parameters:

- The continued longevity and relevance of these heritage assets will be determined by their potential for integration into the masterplan's spatial arrangement, infrastructure and networks;
- The scope of intervention(s) in existing buildings will be determined by their respective dispositions towards adaptability for contemporary use;
- The stability, condition and quality of existing structures will determine the scope of interventions in those structures, ranging from light-touch renovation to significant structural intervention or reconstruction and in some cases demolition.


Figure 37 : Main hospital building

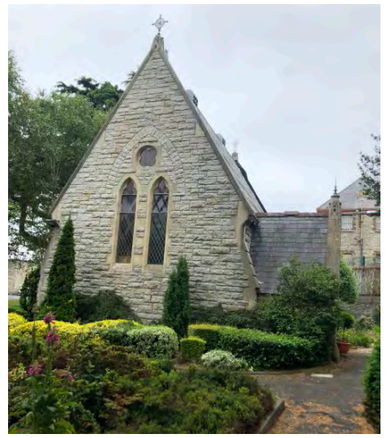



Figure 38 : Main hospital building and Chapel

3.7 OPPORTUNITIES & CONSTRAINTS

Existing mature landscape and biodiversity

The mature landscape within site imparts sylvan character to the site. The matured landscape, the orchard and the walled garden form the landscape heritage of the site. The institutional land zoning of this site and its requirement to provide 25% of the total site area as a public open space that is usable and accessible by the wider community. The existing matured landscape in parts where there is a usable space underneath the tree canopy will form part of the 25% of the site area as public open space.

The detailed ecological and environmental surveys will determine the extent of existing mature landscapes and biodiversity areas to be retained. Measures to protect, enhance, mitigate and integration within the spatial layout will need to be established. The extent of the matured landscape that will be retained in conjunction with the built heritage assets will have an impact on the extent of the developable area within site and to achieve the required density.

Key design parameters:

- Establish mitigation measures to limit the impact of the new development on ecologically sensitive areas.
- Establish a clear and defined distinction between public open space and communal/private open spaces.

Figure 39 : Matured trees within centre of the site

Figure 40 : Tree-lined avenue from entrance

Figure 41 : Tree lined avenue and Chapel

Figure 42 : Walled Garden

3.7 OPPORTUNITIES & CONSTRAINTS

Design of the units to the periphery of the site

Owing to the site's strategic location and proximity to public transport connections, the development has the capacity to support a higher density of development. Other variables that will impact on the design of the units on the periphery, is the extent of the boundary wall that is retained, particularly along the street fronts such as Annaville Grove and Dundrum Road. The interface between the existing built form and the proposed built form will hugely influence the height and set back of the new development along the edge of the site. The main approach to the design of the built form will be to minimise this impact and create a positive interface with the surrounding community.

The design of units located along the edge of the development will be critical in order to seamlessly integrate the site into the surrounding urban fabric. The existing neighbourhoods surrounding the site are predominantly two-storey terraced homes and any identifiable difference in massing will have to be sensitively designed in order to achieve such integration.

Figure 43 : Existing building heights in the immediate context

Figure 44 : Site Aerial Image

Key design parameters:

- Landscape Visual Impact Assessment and Daylight-Sunlight Assessment will each help to determine an appropriate variation and modulation in heights from the periphery towards the centre of the site.

- Sightlines towards the Main Hospital Building, as seen from within and outside the site, will inform the masterplan layout and key axes identified will be incorporated in the design

3.7 OPPORTUNITIES & CONSTRAINTS

SWOT Analysis

On-site Findings
A spatial analysis exhibits the various strengths, weaknesses, opportunities and threats found across the site. This SWOT approach demonstrates a number of key observations that are to inform a public realm design approach.

Categorisation
A colour-coded plan of these four categories illustrates a variety of findings (opposite). This framework provides the design team with a summary of findings from across the site.

Figure 45 : Site SWOT features

Strengths

Site Heritage

Enhancement of the sites Vernacular Architecture and Historical Context.

Notable Planting

Existing mature trees stand tall covering a large portion of the site.

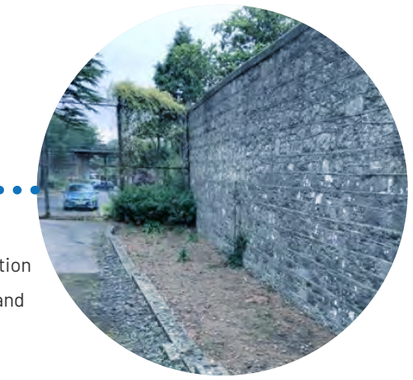
Site Wall

The boundary wall create a special character and sense of tranquillity and a sense of relief from the surrounding urban environment

Weaknesses

Edge Conditions

There is a 4m tall masonry wall separating the site from its surrounding context



Dominant Site Character

The existing character of the site is institutional. Significant change in character would be beneficial.

Opportunities

Existing Landscape Conservation

Renovation and reuse of the existing landscape on site.

New District in Dublin

The site has been inaccessible to the public.

Space Linkage

Improved access to the site. Better connection between Dundrum Road, Glass bottle site and Goatstown Road.

Threats

Eastern Boundary

Lack of permeability and activity on the east of the site could lead to dark corners or antisocial behaviour,

04

HERITAGE AND CONSERVATION

4.1 LEGISLATION POLICY AND GUIDANCE

The built historic environment is an intrinsic part of Ireland's national heritage and is an irreplaceable and finite resource.

The below legislation, guidance and policies for the protection of built heritage has guided the development of the Masterplan for the site.

- International Charter for the Conservation of Monuments and Sites (Venice Charter), 1966
- Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter), 1981
- Convention of the Protection of Architectural Heritage of Europe (Granada Convention), 1985
- Planning and Development Act, 2000
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999
- Architectural Heritage Protection Guidelines for Planning Authorities, 2011
- Dún Laoghaire-Rathdown County Development Plan, 2022-2028

Figure 46 : Hospital Main Building

Figure 47 : Hospital Main Building

4.2 CONSERVATION PRINCIPLES

To protect the significance of the Protected Structures and the site as a whole, a set of core conservation policies have been identified. These core policies have informed the development of the Masterplan, and will continue to inform the approach to, and design of, interventions to the building and site.

These core policies are:

- Keeping a Building in Use
- Researching and Analysing
- Using Expert Conservation Advice
- Promoting Minimum Intervention
- Protecting the Special Interest
- Repair Rather than Replace
- Interventions and Managing Change

The Design Team appointed by the LDA for masterplan services at Dundrum Central includes Alastair Coey Architects whose accreditation as an RIAI Conservation Grade 1 (G1) practice satisfies the requirements of the RIAI Skills Matrix for Designated Buildings as they apply to the Central Mental Hospital.

For structures described in the National Inventory of Architectural Heritage, the RIAI Skills Matrix for Designated Buildings indicates that protected buildings of national significance such as the Main Building should generally have the attendances of a G1- or G2-accredited Conservation Architect and this covers a broad range of services ranging from preliminary advice through to material alterations or changes of use. For protected buildings of regional importance such as the Infirmary and the Chapel, this requirement is eased to G2 or G3.

Figure 48 : Infirmary building

Figure 49 : Chapel

4.3 HISTORY OF THE SITE

In 1838 The Criminal Lunatics (Ireland) Act was passed, one of a series of Lunacy (Ireland) Acts passed between 1821 and 1890. When a person was detained under circumstances suggesting that they were of deranged mind and had the intention of committing a crime, then two justices were empowered to call in a physician to examine the suspect. If the physician determined that the person was a "dangerous lunatic" he could be committed to gaol until either discharged by order of two justices or removed to a lunatic asylum by order of the Lord Lieutenant. A House of Lords' committee in 1843 urged the creation of further asylum accommodation and in 1845 an Act of Parliament was passed which permitted a State Criminal Lunatic Asylum to be set up in Ireland, entirely funded by Government, for which £6,000 was allotted. The type of institution was based on the form of the district asylums already in use, adapted to the criminal patients.

In 1846 a 30 acre agricultural site was bought at Dundrum for the proposed criminal lunatic asylum. The isolated rural character of the site was a key consideration in the selection of the site for any Irish or British asylum at this point. Medical theory and an enlightened attitude to the housing of patients dictated that they should not be the object of ridicule or public gaze as had been the case at Bethlem in London in the C18. Thus a building in extensive grounds sited well out of the pressures of urban life was believed to be both humane and help the patients to recover, if possible with the benefit of extensive views to lift their mood. A roadside wall prevented prying eyes from the public realm, and helped ensure patients did not escape, although the whole site was not necessarily walled, particularly against agricultural land. At Dundrum the dramatic views south towards the Wicklow Mountains would have been regarded as beneficial for the patients.

Plans were prepared in 1846 for the building by OPW Architect Jacob Owen. By 1848 construction contracts had been let and work was proceeding, and by 1850 the buildings had been completed. The asylum opened as the first forensic mental hospital in Britain/Ireland (and possibly worldwide), and was intended to contain 80 male and 40 female patients at a total cost of £15,000. The main building was constructed of limestone rubble with granite dressings, both local materials, in so-called Early English (but in reality more Tudorbethan) style. The single-storey ornamental lodge at the gateway echoed the style of the main building and was in the same materials. The perimeter wall was constructed in phases not long after the completion of the hospital buildings, and was re-built to a degree in the late 1860's.

The asylum had reached capacity by 1863 when a 50 bed extension was proposed. In 1863 building works included many to the main building and in the grounds alterations were made to the 'out-offices and enclosure walls' . In 1866 a chapel for Protestant patients was built within the main complex.

Figure 50 : Historical drawing of Main Hospital Building (Source: OPW)

4.4 CONSERVATION STRATEGY

A draft Conservation Strategy was produced and presented to Dún Laoghaire-Rathdown County Council. It is intended to adopt a 'Conservation Management Plan' (CMP) approach and will involve and contain the following:

Statement of Significance

A Statement of Significance will provide a description of the development and life of the site and structures. It will be factual, making an objective and informed assessment of the relative value or 'significance' of aspects or features. These may be physical features, or aspects of social or historical significance, such as famous people associated with the building, memorials or events that happened nearby. A set of Conservation Policies will then be prepared, along with a management plan that will set out how to conserve and manage the significance of the site.

Heritage Impact Assessment

A Heritage Impact Assessment will be undertaken to ensure that the significance of the site and structures is taken into account when developing and designing proposals for change. It will be a core part of the design process, and will test whether proposals for change to a heritage asset are appropriate by assessing their impact on the structure and its setting.

Condition Surveys

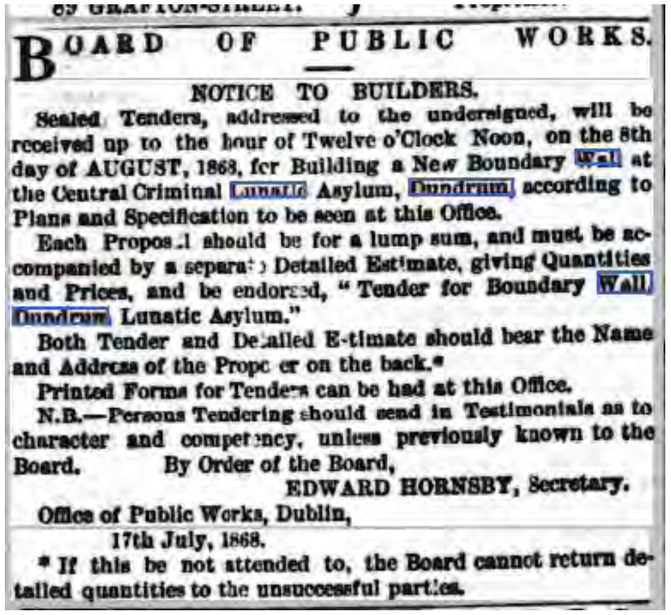
Although the complex of buildings has been in use until 2022, it is now abandoned and significant dilapidations do exist and a number of building elements (e.g. the roof covering of the main building) might be nearing end-of-life. A sustainable and long-term use for the buildings can only be assured when there is surety that major interventions will not be necessary within a known time-frame. With this period of vacancy – perhaps the first since the hospital was brought into service – there exists an opportunity for assessing its condition that might not present itself for another 50 years.

A detailed condition survey of each historic structure will be undertaken, and a report prepared to accompany the CMP. The condition of external elements such as chimneys, roof slating, render, stonework, pointing, cast-iron casement windows etc. will be assessed.

Each roof void will be inspected to establish the size and condition of structural members, the potential presence of insect infestation and fungal decay. Each room will be inspected in detail and condition schedules of existing floor, wall and ceiling finishes and joinery work, including doors, window linings and trims, will be prepared. The survey will identify locations where invasive opening up will be required.

Design Evolution in Detailed Design Stage

As the design stage progresses, proposals for restructuring and remodelling the historic buildings will be assessed in the context of the Statement of Significance and Heritage Impact Assessment in an iterative process. Issues such as horizontal and vertical disabled access, distribution of services, upgrading the thermal performance of existing structures will also be investigated in depth.



BOARD OF PUBLIC WORKS.

NOTICE TO BUILDERS.

Sealed Tenders, addressed to the undersigned, will be received up to the hour of Twelve o'Clock Noon, on the 8th day of AUGUST, 1868, for Building a New Boundary Wall at the Central Criminal Lunatic Asylum, Dundrum, according to Plans and Specification to be seen at this Office.

Each Proposal should be for a lump sum, and must be accompanied by a separate Detailed Estimate, giving Quantities and Prices, and be endorsed, "Tender for Boundary Wall Dundrum Lunatic Asylum."

Both Tender and Detailed Estimate should bear the Name and Address of the Proposer on the back.*

Printed Forms for Tenders can be had at this Office.

N.B.—Persons Tendering should send in Testimonials as to character and competency, unless previously known to the Board.

By Order of the Board,
EDWARD HORNSBY, Secretary.

Office of Public Works, Dublin,
17th July, 1868.

* If this be not attended to, the Board cannot return detailed quantities to the unsuccessful parties.

Figure 51 : Saunders News Letter 18 July 1868

4.5 SIGNIFICANT STRUCTURES AND FEATURES

The Main Hospital Building

The Main Hospital Building is recorded in The National Inventory of Architectural Heritage (NIAH) under reference 60220001 and is assessed to have National importance (on a scale of International, National, Regional and Local). An extent of the hospital building is included in the Register of Protected Structures as No. 2072.

The value attached to the Main Hospital Building arises from it being a rare example of the typical asylum provision of this period as adapted for criminal patients. As a dedicated and purpose-built criminal lunatic asylum it pre-dates Broadmoor Hospital by some 15 years, making it among the first (if not the first) institution of its type in the world. It is a tangible representation of a major shift in the approach to criminality and mental illness in Ireland, and of an emerging new institutional design.

The Main Hospital Building has a strong association with a number of eminent architects – Jacob Owens and Frederick Villiers Clarendon. The built form is a development of the district lunatic asylum model, with the symmetrical layout and cellular form almost completely intact (full internal surveys have not been completed).

The Group Value that the Main Hospital Building and Historic Landscape have derive from their being conceived and executed as holistic approach to the treatment and recovery of those suffering from mental illness. The combination of the two elements provided not just for therapeutic treatments, but also for recreational and vocational activities intended for the enjoyment of the patients – all for the benefit of their recovery.

Until 2023 the hospital fulfilled the role for which it was designed and, although modified and extended as described in the site history, remains substantially intact. It demonstrates a continuous approach to the therapeutic treatment of a very specific sector of Irish citizenry, uninterrupted for the 170 years between its inception and the hospital's move to Portrane.

The Perimeter Wall

The perimeter wall (also referred to as the boundary wall) is part of the first phase of development of the site, being constructed soon after the Main Hospital Building. With the exception of the main entrance to Dundrum Road, a gateway into the maintenance yard and some minor blocked pedestrian gateways, the wall is complete and to the greater extent unaltered. A section at the south-east has been replaced in mass concrete, and some sections have been given additional height in concrete blockwork, but these are isolated sections of limited extent.

At the time of survey the wall was found to be in excellent structural condition. The inside face of the wall has been comprehensively maintained to a high standard. External faces of the wall (where observable in detail) were also sound but not uniformly as well maintained as the inner face. Although the wall would likely have originally had a complete cleared perimeter on the outside face, to facilitate inspection and repair, this situation does not currently exist. A high proportion of the residential properties constructed directly outside the wall have subsumed the space between their presumed rear boundary and the wall.

Figure 52 : South facade of Hospital

Figure 53 : Pertimeter Wall

Figure 54 : Pertimeter Wall

4.5 SIGNIFICANT STRUCTURES AND FEATURES

The Gate Lodge

Construction of the Gate Lodge followed very quickly the commencement of construction of the Main Hospital Building and it was present by 1853. Ornamental in character and constructed in the same material palette of dark grey calp stone with granite dressings.

The picturesque quality that the Gate Lodge undoubtedly possessed on its original construction has been eroded by the cumulative effect of poor maintenance, inappropriate repairs and the many accretions it has gained in terms of inappropriate extensions and signage. It does however retain to a large extent its original form and construction.

The Farmstead

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The picturesque quality that the Gate Lodge undoubtedly possessed on its original construction has been eroded by the cumulative effect of poor maintenance, inappropriate repairs and the many accretions it has gained in terms of inappropriate extensions and signage. It does however retain to a large extent its original form and construction.

The Chapel

The Chapel is recorded in The National Inventory of Architectural Heritage (NIAH) under reference 60220002 and is assessed to have Regional importance (on a scale of International, National, Regional and Local). The chapel is a Protected Structure with reference No. 2071.

The value attached to the Chapel arises from its Communal and Historical associations, but additionally from its Architectural quality and associations. It was constructed in 1901 to a design by James Franklin Fuller, an eminent Dublin architect who was prolific, particularly in respect of his ecclesiastical work. The exposed timber structure of its roof is noted in the NIAH as being of technical interest for its adoption of the scissor-truss.

The Chapel and Main Hospital Building derive Group value from their representing a holistic approach to the treatment and recovery of those suffering from mental illness, the presence of a Chapel being a notable development from earlier Irish asylums.

The Chapel remains substantially intact and unmodified, but with the abandonment of the site it is disused. At the time of first survey its condition was found to be very good, but the period of abandonment has seen that condition deteriorate markedly.

Figure 55 : Gate Lodge

Figure 56 : Chapel

Figure 57 : Farmstead

4.5 SIGNIFICANT STRUCTURES AND FEATURES

The Walled Garden

The walled garden to the east of the Site would have been originally an orchard, though it now exists primarily as an enclosed area of ornamental landscaping.

The garden is enclosed by a wall having two ornamental gateways surviving. Since abandonment of the site the gardens have grown wild and the wall is un-maintained though in reasonable condition.

The Historic Landscape

The perimeter wall (also referred to as the boundary wall) is part of the first phase of development of the site, being constructed soon after the Main Hospital Building. With the exception of the main entrance to Dundrum Road, a gateway into the maintenance yard and some minor blocked pedestrian gateways, the wall is complete and to the greater extent unaltered. A section at the south-east has been replaced in mass concrete, and some sections have been given additional height in concrete blockwork, but these are isolated sections of limited extent.

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Figure 58 : Walled Garden

Figure 59 : Historic Landscape

4.6 BUILDINGS TO BE RETAINED

01: The Main Hospital Building
02: The Chapel
03: The Infirmary
04: The Workshops
05: The Coach House
06: The Gate Lodge

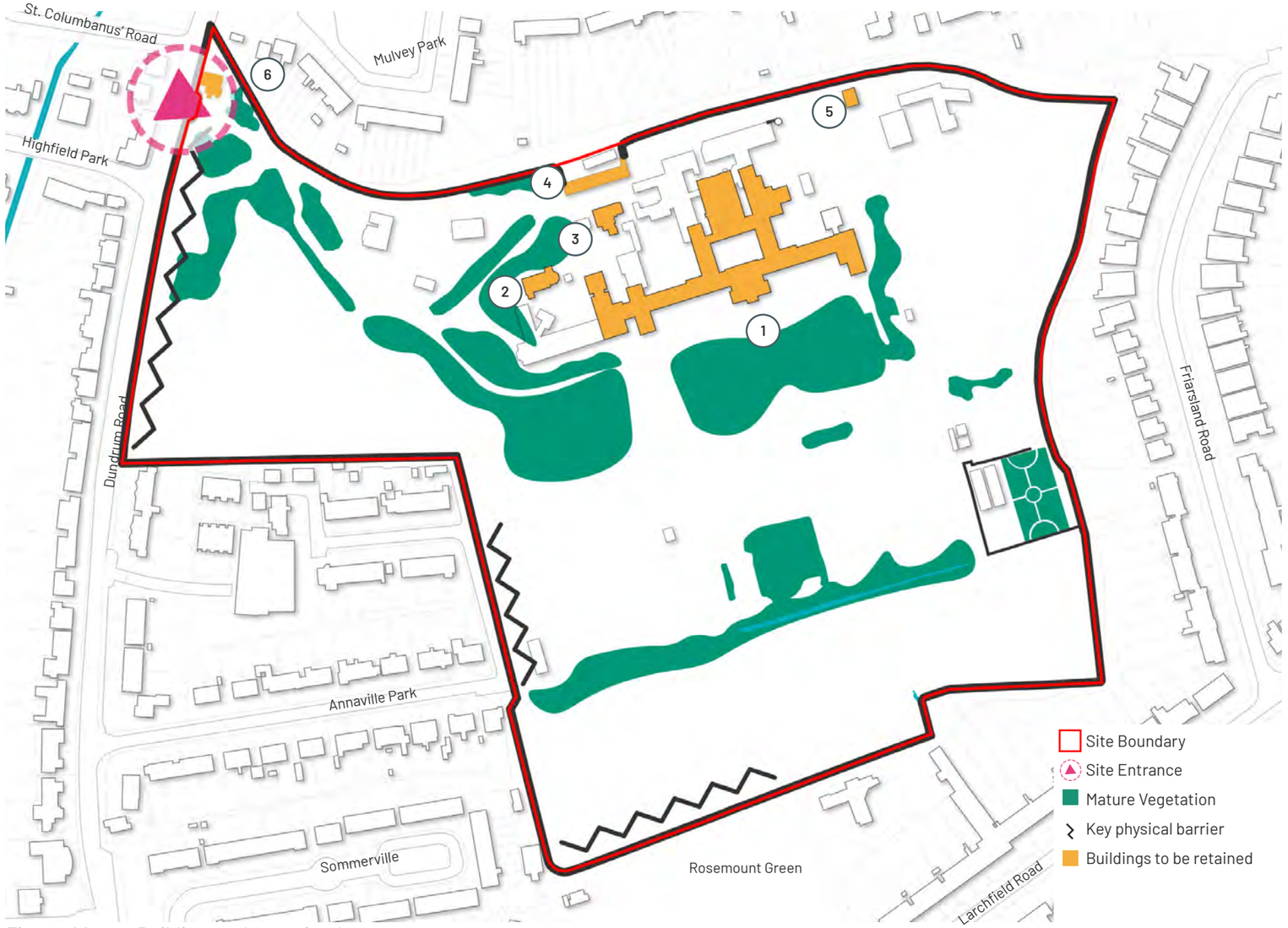


Figure 60 : Buildings to be retained

05

SITE ACCESSIBILITY

5.0 SITE ACCESSIBILITY

Researching the history of the site, from the origins of the Central Mental Hospital, has revealed an enclosed and highly secure campus which at the time of its construction lay beyond the built-up area of Dublin City's southern townships. Over the intervening 170 years, Dublin has expanded, with new growth subsuming the Central Mental Hospital site, now a walled enclave situated among some of Dublin's established inner suburbs which include Milltown, Windy Arbour, Dundrum, Goatstown and Clonskeagh.

Throughout this time the site has, for operational reasons, remained physically enclosed by its imposing perimeter walls, sections of which have evidently been adapted, repaired and renewed over time. Those perimeter walls together measure approximately 1,650 linear metres and enclose a substantial landholding of 11.4 Hectares. The surrounding urban grain has developed in response to the closed, impermeable nature of the site. While these suburbs have developed to abut the site perimeter, the existing relationship between site and surroundings is at present one where there is an acute absence of access to and connectivity between what are effectively distinct geographical entities.

The Design Team has assessed that the site holds significant potential to enhance connectivity and increase permeability in the surrounding area, and the masterplan access and circulation strategies have been devised and developed in line with best practice as set out in the Design Manual for Urban Roads and Streets (DMURS).

Figure 61 : Aerial (satellite) view of the site and surrounding development.

5.1 APPLICATION OF DMURS PRINCIPLES

This includes an integrated design approach that ensures the promotion of sustainable travel modes in the overall design layout. The overall design approach and access strategy ensures that regard is given to user priorities and towards ensuring appropriate permeability and legibility for all road users. The orderly integration of the development into the surrounding residential and employment areas, and wider urban environment is promoted through making provision for appropriate pedestrian and cycle linkages to adjacent lands and the adjoining road network. The proposed development also provides direct linkage to the existing public transport (PT) network that currently serves the wider community.

In line with the DMURS principles, the proposed design approach and access strategy considers pedestrians and cyclists at the top of the user priorities, followed by access to public transport and then vehicular access to the wider road network via a street hierarchy consistent with those set out in DMURS. The proposed site layout and pedestrian and cycle links seek to give excellent connectivity to the wider area to ensure that all local trips can be made using these sustainable travel modes.

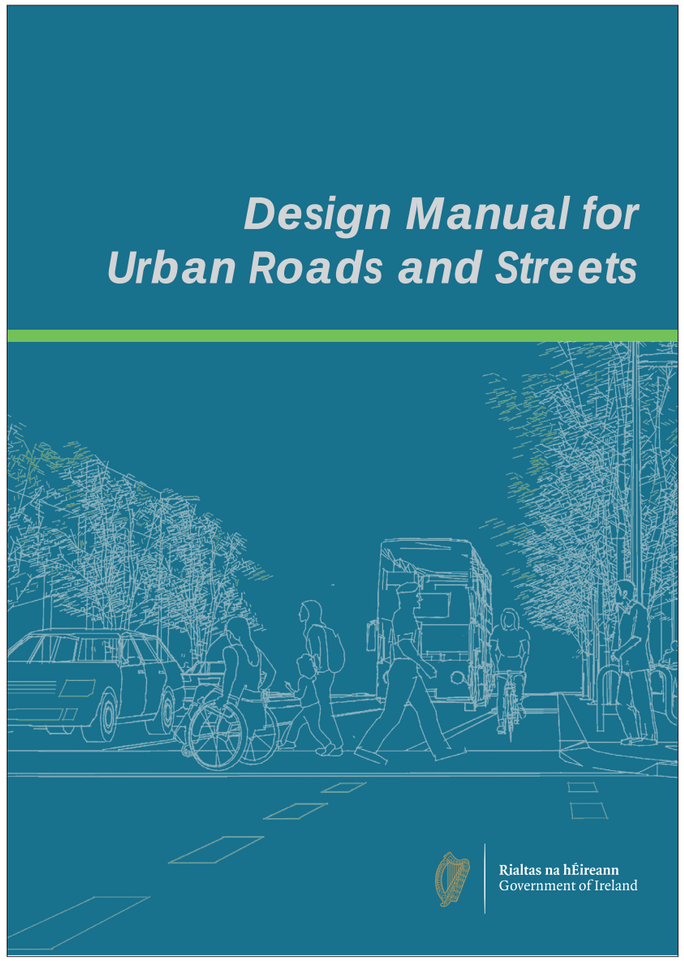


Figure 62 : Design Manual for Urban Roads and Streets, DMURS, 2019

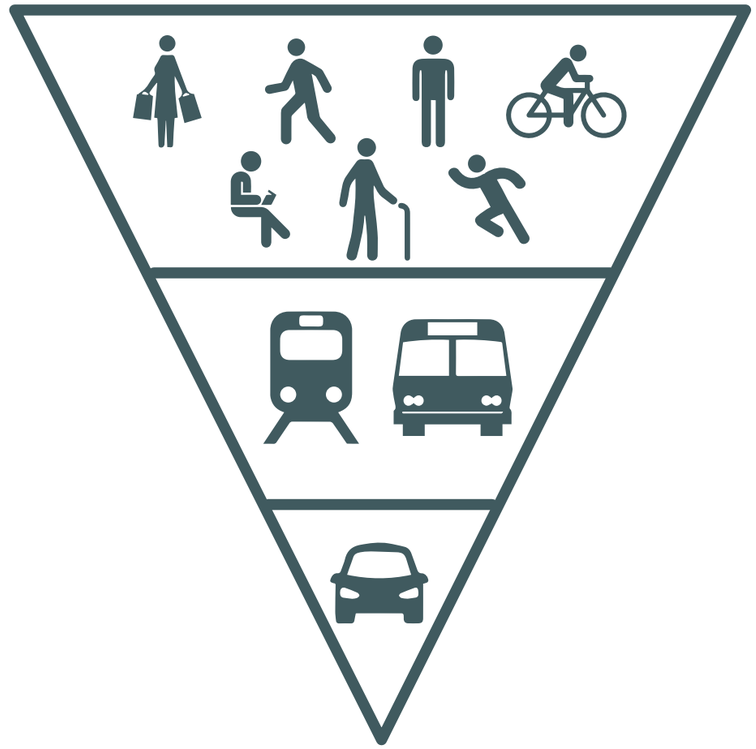


Figure 63 : User hierarchy that promotes and prioritises sustainable forms of transport

5.2 BASELINE OVERVIEW

Dundrum already benefits from good quality public transport – being in close proximity to bus links and the LUAS. In designing a masterplan for a new community, it is essential to ensure direct access and easy navigation and wayfinding for residents and visitors alike. The baseline overview has analysed the network and capacity of the following modes of movement and connectivity to ascertain the strategy to be adopted for this masterplan:

- **Public transport and connectivity** – LUAS and bus
- **Road network and access** – primary and secondary roads, access to the site
- **Pedestrian and cycle linkages** – cycle network

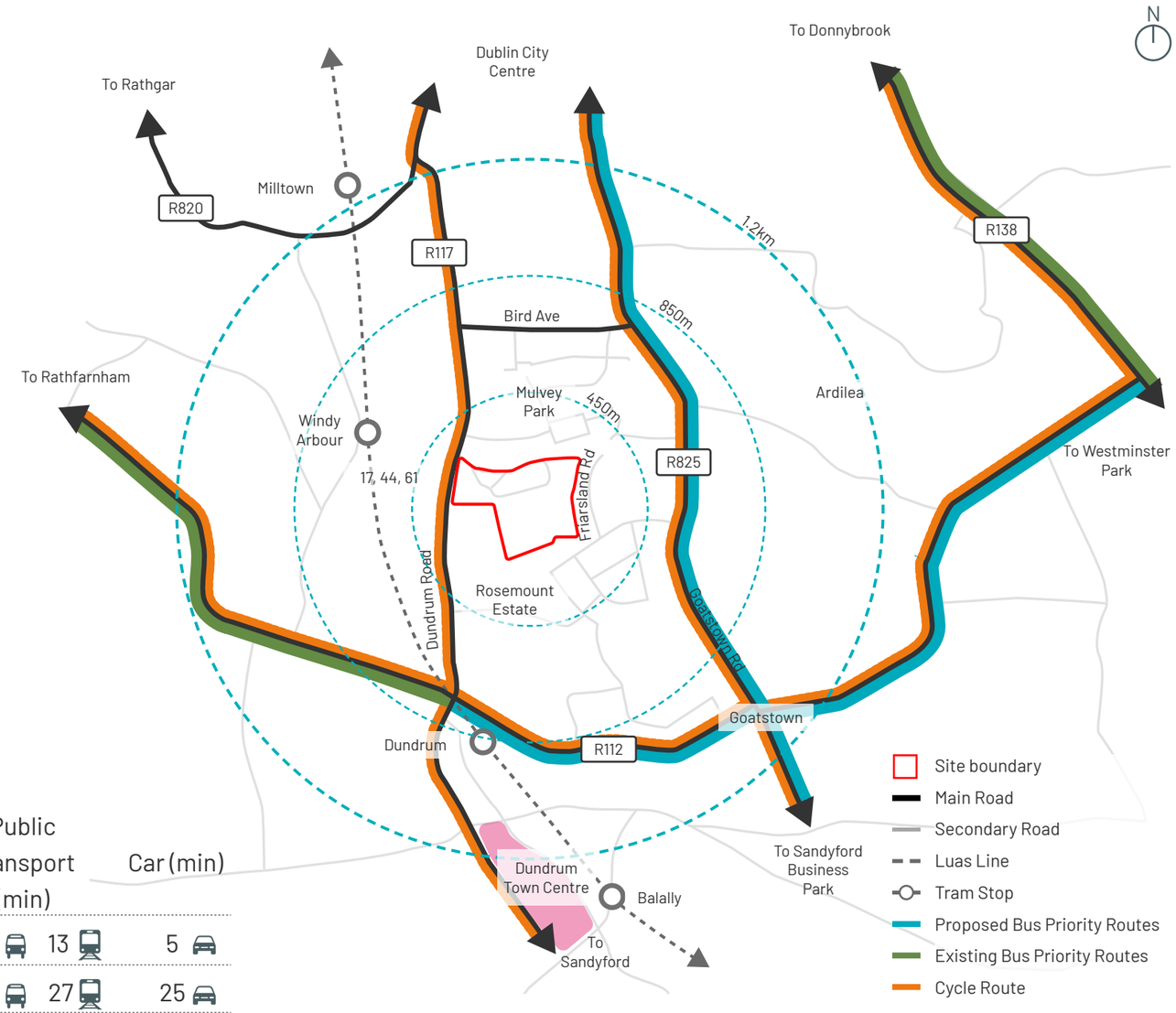


Figure 64 : Site connectivity map

Destination (Distance from Dundrum Road)	Walk (min)	Cycle (min)
Mulvey Park *500 m*	6	2
Milltown Golf Club *1 km*	13	5
Dundrum Town Centre *1.6 km*	20	6

(Distance from Dundrum Road)	Public Transport (min)		Car (min)
Dundrum Town Centre *1.6 km*	7	13	5
Dublin Centre *7.2 km*	22	27	25
Dublin Airport *20.6 km*	60	60	32

5.2 BASELINE OVERVIEW

Public Transport

The subject site is located to the east of the Luas Green Line running from Brides Glen to Broombridge via the city centre, with the Windy Arbour stop in closest proximity, approximately 500m west of the CMH site. Current Luas services to and from the city centre typically operate at high frequency, at an average of 3-minute intervals during the AM peak period.

There are also bus services routed to and from the city centre on Dundrum Road, and also on Goatstown Road to the east. Route 11 on Goatstown Road operates at approximately 20-minute intervals during peak periods, and Routes 44 and 61 on Dundrum Road run approximately every hour. Route 14 also runs to the west of the subject site connecting to the city centre and Beaumont, and operates at 15-minute intervals during peak periods.

The closest bus stop is located on Dundrum Road, which is served by the 44 and 61 bus services. Bus route 142 also serves the next bus stop to the north on Dundrum Road, which is in the vicinity of Bird Avenue. The closest bus stops to the east of the site on Goatstown Road are served by the 11 bus route.

The proposed development site is therefore already well served by high quality public transport services, including bus and LUAS services in the immediate vicinity.

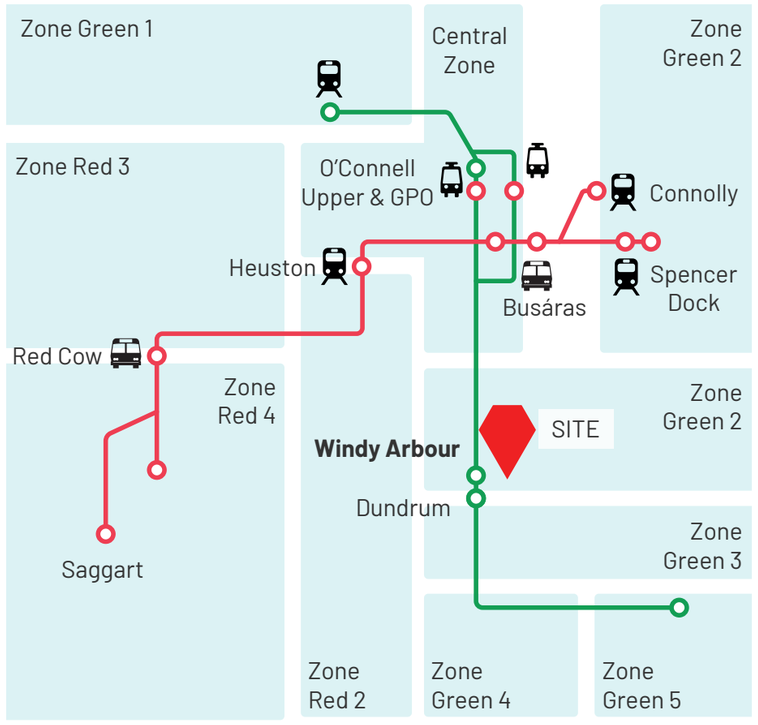


Figure 65 : LUAS network

Figure 66 : Proposed Busconnects Network

5.2 BASELINE OVERVIEW

Road Network

The proposed development is located off the R117 Dundrum Road. This regional roadway runs north-south connecting the city centre with Stepaside, Kiltiernan and Enniskerry. The R117 is also a primary arterial route linking the city centre with Junction 13 of the M50. The R825 Goatstown Road to the east is also located within 350m of the eastern boundary of the site, which also runs north-south and has dedicated cycle lanes in place in the vicinity of the subject site. This route also links the city centre with the M50 Junction 14.

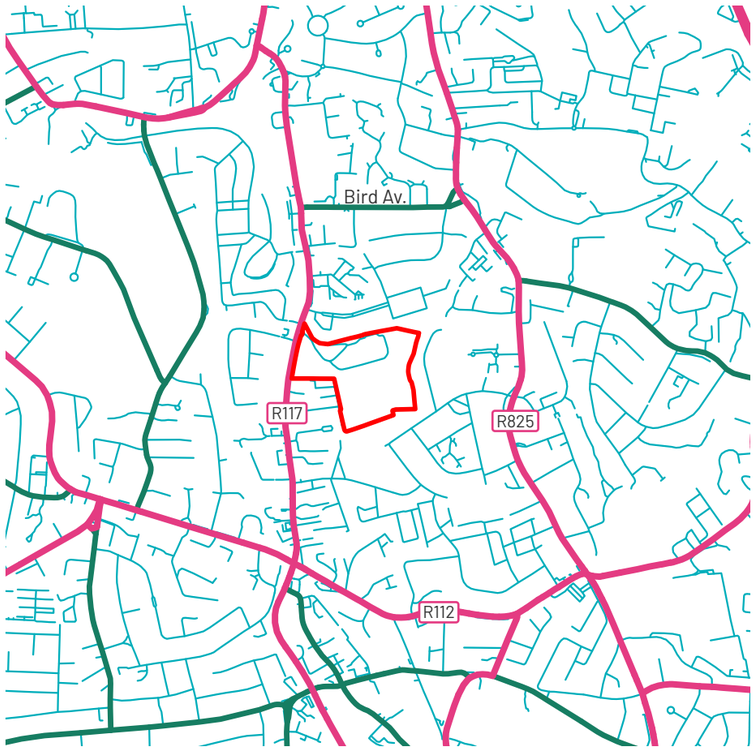


Figure 67 : Road hierarchy diagram

Pedestrian and Cycle Network

Pedestrian facilities, including footpaths, are provided on the R117 adjacent to the Proposed Development. There is an existing pedestrian crossing on the R117 at the junction with St. Columbanus' Road, which facilitates pedestrian and cycle access to the closest Windy Arbour Luas stop. There are also cycle lanes along St. Columbanus' Road to the immediate west of the site which facilitate direct cycle connectivity between the subject site and the closest Windy Arbour Luas stop. In addition to the pedestrian facilities adjacent to the existing road network there are also pedestrian routes in the adjacent Rosemount Green to the south. There are no dedicated cycle provisions on the R117 Dundrum Road. The R825 Goatstown Road to the east is also located within 350m of the eastern boundary of the site and has dedicated cycle lanes in place in the vicinity of the subject site.

Figure 68 : Safe, secure routes for active travel modes

Figure 69 : Extract from the NTA's Greater Dublin Area Cycle Network Plan (Map CN2 - Full Dublin Cycle Network)

5.3 CAPACITY ASSESSMENT

The Design Team has appraised the capabilities of existing transport infrastructure and public transport networks to serve the needs of development on the masterplan site.

The Central Mental Hospital site is currently served by Dublin Bus and LUAS services as well as cycle and road networks already in place. Recent development of these networks has included upgrades to the existing LUAS Green line as part of the LUAS Cross City project, under which longer trams and extended platforms were procured, resulting in a significant increase in capacity on the line.

Figure 70 : Windy Arbour is the closest station on the LUAS Green Line. Recent major network upgrades include longer trams and platform extensions at stations.

Figure 71 : Dublin Bus operates regular and frequent bus services passing in close proximity to the site and connecting the Dundrum area with other local and regional centres.

5.3 CAPACITY ASSESSMENT

Projected future increases in capacity on the public transport network serving the site are being planned by TII, the NTA and other agencies in the form of capital investment in the development of new network infrastructure such as Metrolink and BusConnects as well as planned network enhancements, expansions and upgrades.

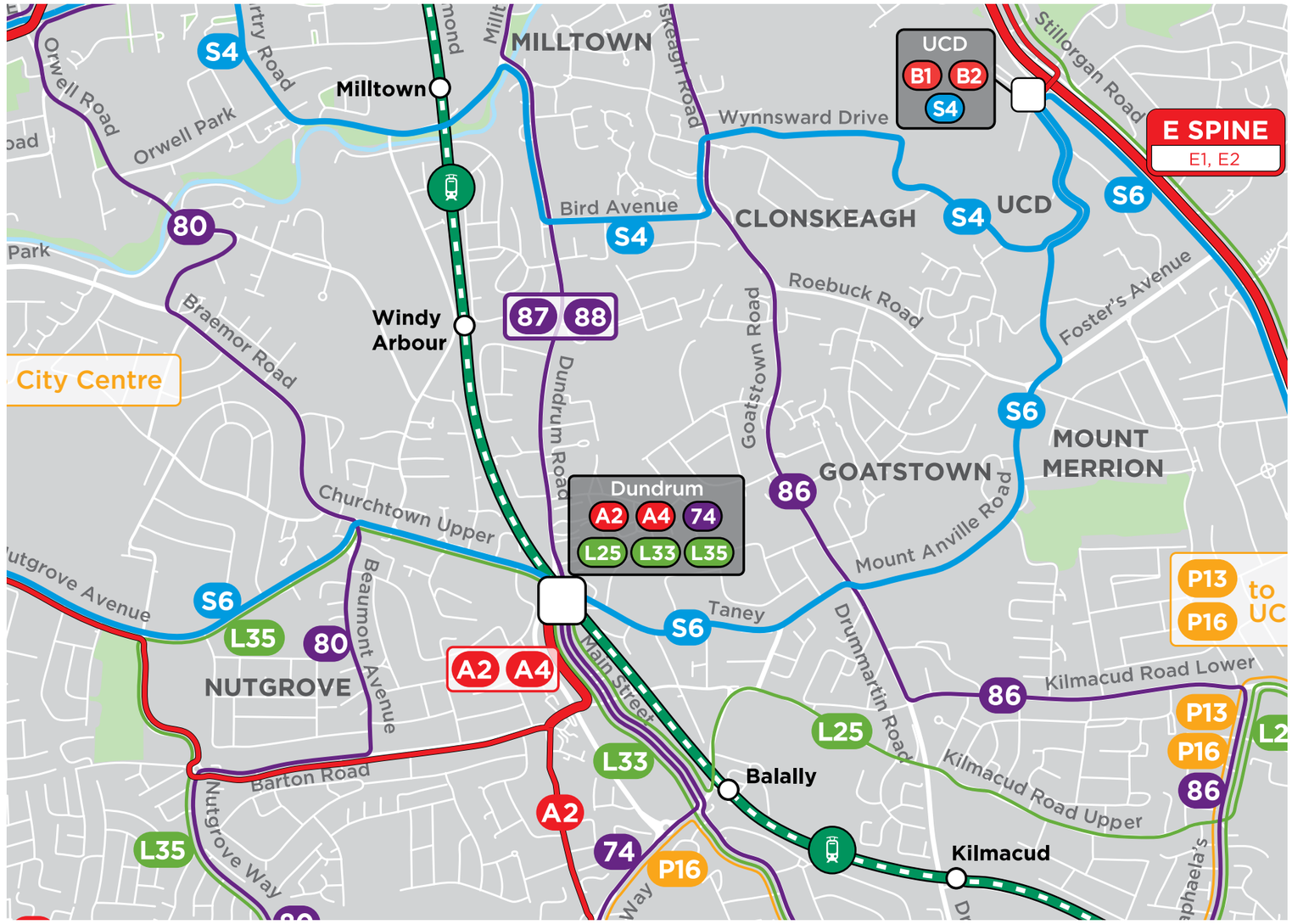


Figure 72 : Extract from BusConnects Dundrum Area Map
Source: https://busconnects.ie/media/2018/dundrum-area-map.pdf

5.4 ONGOING AND PLANNED UPGRADES TO TRANSPORT NETWORKS IN THE AREA

Bus Connects Network and Route Upgrades

The National Transport Authority (NTA) has recently published the new Dublin Area Bus Network, which will be implemented on a phased basis, commencing in 2021. This includes a series of primary Spine routes classified as 'A' routes, with additional Radial, Orbital, Local and Peak-Only / Express routes.

These proposed routes will replace the existing routes serving the site, including routes 11, 44, 61 and 142.

Spine Route A2, connecting to Dublin Airport via the City Centre, and A4 to Swords via the City Centre, will operate at 12-minute intervals each, and can be accessed to the south of the CMH site south at the Dundrum Luas stop. Route A2, in particular, provides a more frequent and direct service to and from the city centre, which would benefit the proposed development.

The Bus Connects Network also includes increased orbital connectivity and frequency for the subject site. This includes Orbital Route S4 on Bird Avenue linking to Liffey Valley at 10-minute intervals and Orbital Route S6 on Taney Road serving Tallaght at 15-minute intervals.

New citybound routes 86 along Goatstown Road and 87 and 88 along Dundrum Road are also included in the proposed Bus Connects network, which replaces existing Dublin Bus routes 11, 44 and 61. The new bus network proposals maintain the frequency of service along Dundrum Road, however the interval between peak hour bus services on Goatstown Road is proposed to increase from 20 minutes to 30 minutes.

The NTA is also proposing to implement Bus Connects Corridors along a number of radial and orbital routes, which are proposed to deliver better and more reliable bus frequencies across the bus network. These will also include improved cycle and pedestrian facilities as part of these proposed schemes. Further detail has been provided in a Transport and Traffic Assessment prepared by ILTP submitted with the planning applications.

Figure 73 : An example of earlier upgrade works on the Luas Green line
Source: https://www.tii.ie/public-transport/projects-and-improvements/

Recent and Proposed Luas Upgrades

Since its initial opening in 2004, the Luas Green Line has been upgraded in terms of capacity, frequency and extent of service in response to passenger demand on an ongoing basis. The Luas Green line was recently extended to Broombridge as part of the Luas Cross City project, where it connects to the main national rail network. This increased the overall catchment of the Luas network and provided for better integration of public transport services generally.

The NTA have also published plans for the Luas Green Line Capacity Enhancement project in 2019, which is currently being implemented on a phased basis, to provide extra capacity in the short to medium term in the Luas Green Line. This includes lengthening the existing green line trams to 55m in length, purchasing 8 additional 55m long trams and a major expansion of Sandyford Depot, which is currently underway, to facilitate the growth in the green line fleet.

The NTA have made projections regarding the current implementation and projected capacity of the Luas Green Line Capacity Enhancement: "In October 2019, the first of the newly-extended trams to run on the Luas Green Line was introduced, and 25 more are to be extended and enter service over the next 14 months. The 11.1m extension increases the length of the tram from 44m to 55m and increases passenger capacity by 30%."

This upgrade of the Green Line trams was completed in 2021. The proposed increases in capacity and frequency of services on the Luas Green Line and new Bus Connects Network will benefit the proposed development and will further promote greater uptake of public transport services as an alternative to the private car. The Luas currently operates at 3-minute frequencies in the AM peak. The Luas line can, in the future, operate at 2-minute frequencies.

5.4 ONGOING AND PLANNED UPGRADES TO TRANSPORT NETWORKS IN THE AREA

Planned Metrolink

Transport Infrastructure Ireland (TII) is progressing the Metrolink scheme on behalf of the NTA, which is a proposed new light rail project linking Swords with the Luas Green Line at Charlemont.

This scheme is due to terminate at Charlemont Stop but tunnel extensions to Beechwood will be provided to allow for future integration with the Luas Green Line.

The Preferred Route for Metrolink was published in Q1 2021 and an Oral Hearing took place in 2024.

The planned opening date of Metrolink is now 2032-2034.

Proposed Cycle Upgrades

The National Transport Authority (NTA) published the Greater Dublin Area Cycle Network Plan in 2013 which includes extensive proposals for cycle network improvements throughout Dublin and the Greater Dublin Area, which are being implemented on an ongoing basis.

This includes the designation of Goatstown Road as a Primary Cycle Route and Dundrum Road as the Feeder Cycle Route. Goatstown Road already has dedicated cycle lanes in place which accords with its Primary Route classification. Dundrum Road is also designated as a feeder route in this plan.

Further cycle network improvements in the vicinity of the subject site in line with the NTA's published proposals would further promote cycling for residents of the proposed development.development lands for walking and cycling.

Dundrum Local Area Plan

The Dundrum Local Area Plan (LAP) came into effect in late 2023. The LAP contains proposed access and movement strategy for the area surrounding the CMH lands. This strategy set out is reproduced as Figure 74.

The key transport initiatives, in respect to the subject site, within the LAP include a new cycle/ped route through that area that includes a link through the subject lands, linking Mulvey Green to Rosemount Green. It also included for a pedestrian/cycle link to Annaville from subject site and a single all movement access on to Dundrum Road.

The concept of filtered permeability was applied to the overall design rational. Filtered permeability describes a design approach to urban streets and the urban realm that allows through journeys for selected modes of transport, typically walking and cycling (but sometimes also buses) and removes or restricts through routes for motor traffic. In this case the overall design approach achieves this requirement through the removal of any through traffic, while allowing pedestrian and cycle permeability through the development lands, which also provides improved access to existing public transport services, open spaces, and other local services. The filtered permeability also benefits the wider community through the provision of a new route through the

Figure 74 : Dundrum Local Area Plan 2023

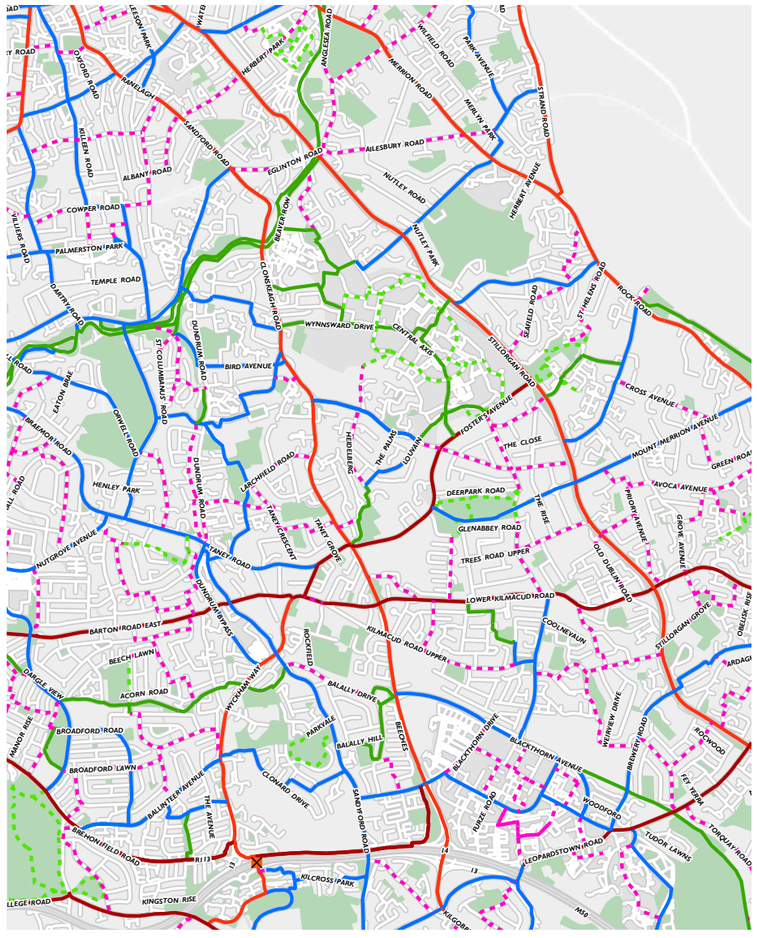


Figure 75 : Proposed Cycle Network by NTA

5.5 SUSTAINABLE MODES OF TRANSPORT

The proposed development site is strategically located within the Dundrum area, with key attractors in the immediate vicinity of the site including schools, University College Dublin, Dundrum Town Centre, and various parks and amenities. The proposed development site layout is designed to include new pedestrian and cycle links through the lands which will provide increased permeability in the area. As well as increasing access to the surrounding facilities this will also improve connectivity to the wider area and provide improved access to public transport services.

The proposals to include walk and cycle permeability through the Dundrum Central proposed development is fully in accordance with the Dundrum LAP 2023 and the principles set out in the Design Manual of Urban Roads and Streets (DMURS), which puts pedestrians and cyclists at the top of user priority list, followed by access to public transport and then vehicular access to the wider road network.

By providing pedestrian and cycle access on Dundrum Road and making provision for additional pedestrian and cycle linkages through the site as part of the proposed development the pedestrian and cycle connectivity and linkages in the area will also be enhanced for both existing residents and new residents of the proposed development. As required by the County Development Plan and the National Cycle Manual, secure covered bicycle parking is being provided for all residents on site.

Figure 76 : An example of a shared cycle docking station
Figure 77 : An example of secure and sheltered cycle storage

5.6 SUMMARY OF TRANSPORT AND CONNECTIVITY STRATEGY

The proposed Dundrum Central (CMH) site is currently well served by high frequency and high-capacity Luas services. The proposed development will therefore be served by existing facilities and any internal infrastructure included as part of the planning applications. The travel demands of the proposed development will be mitigated through the implementation of Mobility Management Plans (MMP) and the development of green infrastructure within the development.

The recent budgets also increased capital spending significantly for cycle infrastructure and other sustainable travel modes. As a result, overall expenditure on sustainable travel has increased significantly in 2021 and there are Government commitments to continue this budget strategy into the future to meet both national and international climate change obligations.

In addition, the Luas Green Line Capacity Enhancement and the Bus Connects Network projects will further increase both the frequency and connectivity of the public transport network serving the site.

The prime location of the subject site in conjunction with the existing and planned cycle and pedestrian routes through the site will benefit the residents of the proposed development and promote a greater uptake of more sustainable modes of travel in the area generally.

Figure 78 : Safe and secure routes for active travel modes.

06

THE MASTERPLAN VISION

6.1 FACTORS THAT INFLUENCE THE VISION

For this complex site with various challenges and opportunities, it is imperative to understand, analyse and learn from local and global trends that will influence the vision of this strategic site in Dublin.

The design principles for this site are developed in response to the challenges of the site, analyses and lessons learned from national and international benchmarking, and incorporating future trends in environmental, social and economic approaches to masterplanning.

Along with the site's specific challenges and features that are described in chapter 3, a number of global and local factors that inform the site's vision are as follows:

Global factors

To future proof and create an exemplary new neighbourhood, commitment to environmental and sustainability goals is required.

Macro-level factors

Responding to macro-level factors by understanding the strategic role of this site in fulfilling the requirements at national level such a housing requirement, national environmental goals and masterplanning trends in Ireland.

Micro–level factors

Addressing the micro-scale factors that inform the vision and design of the site are the key planning requirements - aspect and orientation, open space, community uses, access and permeability.

Community

The needs and aspirations of the community from this site will drive the programming of site with recreational amenities that will help bring the existing and new community together.

Site

Appreciating the site-specific characteristics will help create a unique vision that will bring out the intrinsic qualities of the site and embedding the masterplan in its setting.

6.1 FACTORS THAT INFLUENCE THE VISION

Figure 79 : Factors that influence the vision

6.2 BENCHMARKING

In order to inform the site's guiding design principles, a series of international benchmarking and desktop analysis of case studies were carried out that presented best-practice in placemaking and sustainable models of development. This was intrinsic to identifying key common-threads and parameters that could be replicated within the scenario for the Former Central Mental Hospital (CMH) site.

The case studies were selected based on several parameters in order to illustrate what can be achieved. The parameters included:

- Relevance to site
- Global trends in masterplanning
- Completed schemes
- Compact neighbourhoods
- Transit oriented (15-minutes rule)
- High sustainability standards
- Community-led
- Greening techniques (minimise carbon footprint)
- Smart technology

Subsequently, the benchmarking of the vision themes, provided a deep understanding and appreciation of current global trends in masterplanning. The lessons learned from each of these case studies which have been summarised in this chapter, have helped to inform the design principles and the objectives for this masterplan.

A masterplan is influenced by multiple factors, from global through to a local level. For a strategic flagship project such as the Former CMH, addressing these various factors will help create a unique exemplar and a new resilient community that will be well-suited to adapt to future issues through flexibility of spaces in order to respond to a changing demographic profile and needs of its users. Key lessons learned from each of the masterplan case studies have helped to refine the project brief and design considerations.

6.2 BENCHMARKING

Grangegorman, Dublin 7

The ongoing development of this masterplan aims to co-locate the academic, research and teaching facilities of the Technological University of Dublin (TU Dublin, previously known as Dublin Institute of Technology or DIT) whose campus was previously a disparate collection of buildings and mini-campuses spread throughout the city. The Grangegorman masterplan incorporates widescale adaptive reuse of significant heritage structures on the site and the completion of LUAS Cross City has enhanced public transport network capacity and connectivity in this part of the city, making it an attractive location for a new academic community

Lessons learned:
Placemaking in new masterplan developments can be complemented by a strategy of minimalist intervention in heritage structures, while transit-oriented development is key to supporting densification and achieving greater sustainability under any masterplan.

Hammarby, Stockholm, Sweden

One of the most successful and award-winning sustainable development models that has redefined the standards for masterplanning through exceeding the UN environmental goals by creating their own standards. The project adopted innovative circular systems to help minimise the project's impact on the environment and lower C02 emissions. New technologies such as biogas production from waste, power generation from trash, solar hot water tubes, centralised vacuum tube recycling collection, stormwater remediation, and green roofs were just some of the initiatives that were successfully implemented.

Lessons learned:
Setting high environmental standards paired with integrated planning solutions from the onset helped the project achieve recognition as one of the most successful urban renewal projects in the world. Investing in new integrated technologies helped provide long term benefits to the community.

Malmo Bo01, Malmo, Sweden

A mixed-use development in Malmo based on design principles to enhance the quality of life by defining new environmental and social sustainability standards with high emphasis on creating 50% open space to foster social interaction. Europe's first carbon-neutral neighbourhood with energy production from 100% renewable energy and despite the high density a great deal of attention was also given over to highly diverse green spaces and biodiversity at eye-level.

Lessons learned:
Innovative planning procedures as a result of collaboration between the city, developers and planners/designers created a mixed-use district which obtained 50% open space while fostering social interactions between residents and achieving high sustainability standards with 100% renewable energy serving as a true example for urban renewal.

Figure 80 : Grangegorman Masterplan (Source: GGDA.ie)

Figure 81 : Hammarby Sjostad

Figure 82 : Malmo Bo01

6.3 VISION THEMES

The lands provide a unique opportunity to transform this inward-looking site into a new, welcoming, sustainable urban community with a distinctive identity which will be integrated into the wider community of Dundrum.

The masterplan design team has adopted an ethos based on six principles or themes:

- Distinctive Landscape
- Diversity
- Identity and Character
- Integration with Community
- Heritage
- Sustainable Urban Community

With these guiding principles in mind, and taking lessons learned from those domestic and international case studies examined in the previous section, a set of broad visions for the masterplan could be defined. Each of these visions has been explored in great detail with reference to the unique characteristics of the masterplan site.

A wide array of emerging ideas from the case studies were fundamental to capturing the key lessons learned from domestic and international benchmarking. An extensive database of examples had been gathered by the design team of experts highlighting change across specific themes and markets and subsequently summarised into a series of directives and objectives.

For each of the lessons learned, coupled with emerging ideas and concepts, the aim was to inspire the design team to help inform the masterplan vision themes. These were further reviewed and compared against Dundrum's demographic profile and target user group in order to influence the emerging proposal.

The key aspects of the site that the team felt determined the character, look, feel and experience were divided into three core areas: Landscape, Heritage and Sustainability.

Figure 83 : Vision themes diagram

6.3 VISION THEMES

Landscape-led masterplan vision

Green infrastructure corridor: Enhancing, strengthening and integrating the landscape within site with the regional green infrastructure corridor.

Landscape that functions all year round: Provision of a range of activities and adaptable spaces that will be usable by all age groups throughout the year.

Focus on microclimate: Design of landscape and architecture will focus on achieving conducive microclimate for all users and limit consumption of energy.

Sense of belonging: By seamlessly integrating existing with new, and retaining the matured landscape will evoke a look and feel of the 'village' character and sense of living with nature.

Sense of hierarchy: Defining the hierarchy and order of spaces through distinction between public and private open spaces to provide comfort for the new residents.

Sustainable urban drainage: Integrating SuDS measures within the landscape strategy emerging proposal.

Heritage-led masterplan vision

Adaptive reuse: Breathing new life into the heritage buildings will result in their continued productive use and enjoyment and their retention will enhance the character and elevate the placemaking of the new development.

Celebrating heritage: Programming uses around the heritage assets as a focal point by enhancing their setting.

Eco-village

Envisioning a masterplan built around strong sustainability principles.

Community-focused: Providing opportunities for a socially sustainable new community through community-focused activities such as urban farming, range of open spaces for active and passive recreation, and community meeting places.

Smart neighbourhood and circular systems: Creating systems and networks that will result in a smart, efficient, zero-carbon community.

Resilient and sustainable: Respecting the site's environment and ecologically diverse zones and harnessing the potential for a symbiotic relationship between the new residents and the sites' rich biodiversity.

6.3 VISION THEMES

6.3 VISION THEMES

Landscape-led

A landscape led vision emphasises and prioritises the design of the spaces between the buildings to create a neighbourhood for a community with a sense of place and belonging. The landscape design becomes a driving factor of the masterplan layout to create diverse and exciting experiences. The network of curated open spaces that range from recreational amenity to productive landscape spaces will enrichen the experience and provide an opportunity to enhance the biodiversity of the site.

The existing rich landscape of the site can be well integrated to create a sustainable, safer and sociable environment that will appeal and foster interaction between the new community and the existing community, and people of all ages and backgrounds. The architectural design will support in animating the spaces through a positive interface leading to efficient use of spaces.

By bolstering the ecological landscape of the site and enhancing the network into the Dundrum wide green infrastructure, the embedding of this new community in the existing urban fabric can be achieved. There is a requirement to create public open space within the site for a wider community. For the open space to be accessible and usable for the wider community, it depends on creating new and strengthening existing walking/cycling linkages from the existing urban fabric.

Heritage-led

In this approach, the quality of the heritage assets, not just the buildings but the landscape, its setting, views and character areas of the site are identified and enhanced. Considering these assets as placemaking elements within the site will reinforce their significance and improve their quality. Repurposing of these assets through strategic interventions and appropriate uses will breathe new life into the buildings and the spaces. New community uses will help change the perception of the hospital building and can be enjoyed and appreciated by the existing and new community.

This approach defines the genius loci of the site and its wider context around the cluster of the heritage assets with new community uses and placemaking initiatives to enhance their setting; not just for the new community but for the wider area of Windy Arbour. This will encourage interaction and social cohesion between the existing and new community.

Eco-villages

A completely self-reliant, highly sustainable, integrated, efficient and resilient new neighbourhood to be created through the use of advanced technologies to create a circular system with renewable energy. This regenerative model and approach to masterplanning not only focuses on applied technologies to meet environmental targets but also strongly encourages social and economic sustainability. The design of such an integrated community is possible through frameworks for empowering the residents and development sense of community as part of the shared local ecosystem.

In summary, the masterplan for the Former Central Mental Hospital site presents a generational opportunity to design a new diverse and sustainable urban neighbourhood in a site whose unique heritage, location and connectivity are unrivalled, and to ensure this new neighbourhood can be integrated with its surroundings and adjoining development for the benefit of all stakeholders. Design principles for this approach are not limited to spatial design but include an approach to architecture, typologies, landscape and the programme of uses within the site.

6.4 URBAN DESIGN PRINCIPLES

The design principles defined in this chapter are informed by the challenges of the site, the LDA Design Principles and aligns with DLRCC vision of the Dundrum LAP.

The aim is to create an exciting masterplan and provide for the new urban community. This masterplan will maximise the overall regeneration potential of the site to create an economically viable, deliverable, successful and sustainable neighbourhood that is contributing to housing, employment growth and community resilience. By adopting these design principles, the masterplan can achieve an exciting place to live, work and play:

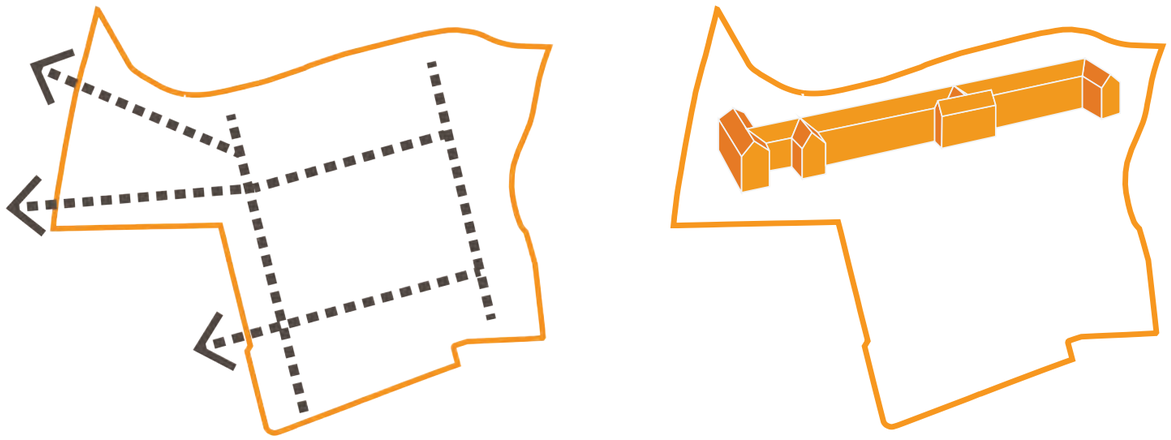


Figure 84 : Design principles

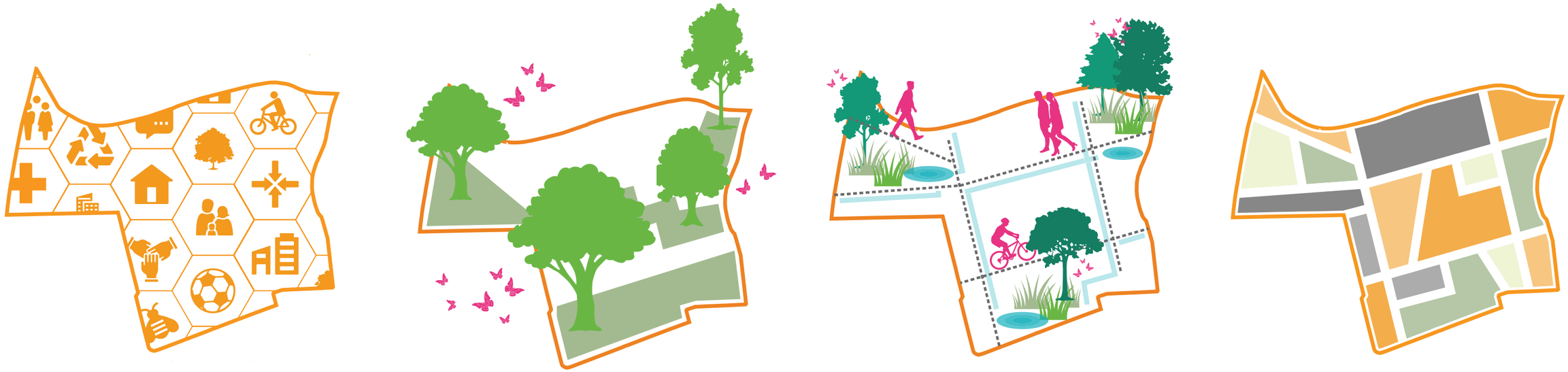
Integration

Adopt a holistic masterplan design approach that enhances the permeability of the site by improving connectivity between the site and its surroundings in order to integrate the new community into the existing urban form. The integration of the new community can be strengthened by providing pedestrian/cycle links between neighbourhoods and key destinations which offer safe, active and attractive routes, linking people and places and opening up the area for greater movement and permeability. Along with a physical response to the site conditions, the approach also considers the community, the context, the scale, the uses and people's behaviour within the space, aiming to develop a community's social, economic and cultural situation as well as their physical surroundings.

Heritage

Encourage adaptive reuse of the existing built heritage assets such as the Former Central Mental Hospital and associated outbuildings into residential and community facilities, enhancing the setting of the buildings and integrating them within the open spaces and public realm network.

6.4 URBAN DESIGN PRINCIPLES



Identity and Character

Creating a place that celebrates the site's unique setting and maximises its development potential. Establish an identity to the new built environment by building on the site's intrinsic qualities and defining an identifiable character for the new community through the quality of architectural style, open spaces, materials, activities and providing a new sustainable lifestyle. The identity and character will be strengthened through well-designed spaces that play an important part in supporting the components of society: these spaces improve people's health and patterns of movement, making walking and cycling networks usable and attractive. They create visual links and connections that are clearly defined and easy to read.

Distinctive Landscape

Create a distinctive landscape that will build upon, refine and integrate the existing natural assets within the masterplan; enhance the landscape by adopting innovative and sustainable water management and protection of valuable ecological habitats and vegetation. Design adaptable open spaces which integrate the existing landscape and biodiversity with any newly built form. Maximise the area's existing public open space and green assets while providing improved public spaces and amenity offers such as play, exercise and rest spaces, as well as increased access to nature.

Sustainable Urban Community

Create an urban quarter which is environmentally and socially sustainable and focuses on enhancing diversity and inclusion by providing adequate public services and amenities for a diverse demographic to meet the different needs of residents enabling healthy, independent and sustainable lifestyles. Designing a strategic green network consisting of streets, paths and parks that the wider area can enjoy. Providing a space for the local community to come together, accommodating a wide range of ages and home tenure-ship. Increase in shared activities and services between neighbourhoods. Promoting climate change and resilient design by strengthening connectivity to public transport and encouraging walking and cycling.

Diversity

Design a neighbourhood that significantly changes the perception of the area and provides a neighbourhood that is attractive to a different profile of residents. Create a diverse environment by proposing a mix of uses and tenure mixes located within close proximity of one another so that a new development culture is recognised, valued and encouraged. Work towards responding to the essence of the place and actively encouraging new cultural opportunities to flourish.

07

MASTERPLAN OPTIONEERING

7 MASTERPLAN OPTIONEERING

This phase of the masterplan's development helped to determine the key components of the built-form strategy. For a masterplan of this scale, an iterative process was adopted to explore all the placemaking and vision objectives.

Certain key site characteristics and drivers of the masterplan configuration and spatial layout have been identified and these are as follows:

- Access and movement
- Open space configuration
- Edge condition
- Community facilities

7.1 OPTIONEERING FRAMEWORK

Each of these spatial drivers was assessed in the context of the aforementioned principles, themes and visions of the masterplan.

Access & Movement

One of the key parameters that will impact the site layout is the provision of single / multiple all user access that will determine the internal circulation layout. This involves the hierarchy of movement corridors involving pedestrians, cyclists, private vehicles and delivery drop-offs and emergency access. The location of primary vehicular access to the site informs the internal circulation. The capacity of Dundrum Road to absorb additional traffic generated by this development will determine the need for second access to the site. Also, creating two separate entrance will help distribute the traffic generated, towards west to Dundrum Road and east towards Goatstown Road via Larchfield Road.

Single access from Dundrum Road for all users results in a continuous movement loop potential located closer to the edge of the site to promote a car free zone at the centre. The different community clusters are fed by secondary access corridors connected to the primary loop.

Multiple access points off Dundrum Road results in a detached internal loop, this approach has an impact on the traffic circulation along Dundrum Road due to staggered entrance/ exit.

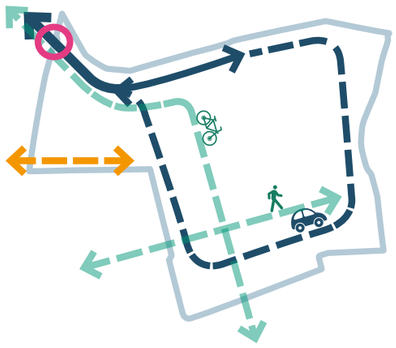
Potential additional access from the south side of the site will allow a disconnected internal vehicular circulation to promote shared surfaces and car free zones at the centre of the site.
While providing a necessary vehicular service to residents/users, footpaths and cycleways should be equally distributed across the site to encourage walkability to facilities and transport connections.

7.1 OPTIONEERING FRAMEWORK

Open Space

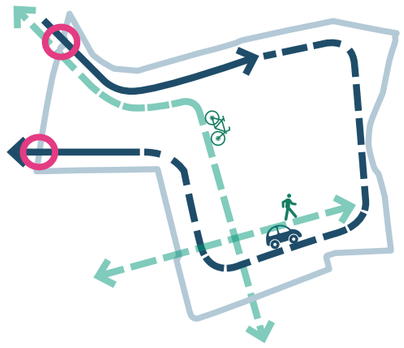
This looks at the various configurations of open space to achieve the quantum of open space required as per the land zoning requirement. The different configuration of open spaces leads to the creation of multiple characters and typologies from parkland, greenways, active spaces, to linear eco parks.

Different approaches to open space configurations are explored to analyse their impact on the masterplan layout and the quality of spaces created. Key parameter in determining the quality of the space is the usable size of the space for a range of activities and the clear distinction between public, communal and private spaces.



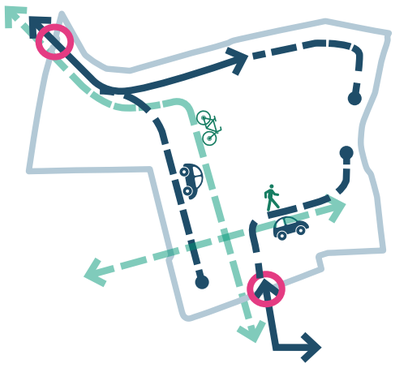
Single loop

Single access from Dundrum Road for all users results in a continuous movement loop potential located closer to the edge of the site to promote a car free zone at the centre.



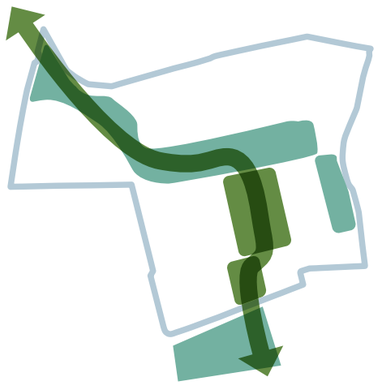
Detached loop

Multiple access points off Dundrum Road results in a detached internal loop, this approach has an impact on the traffic circulation along Dundrum Road due to staggered entrance/ exit.



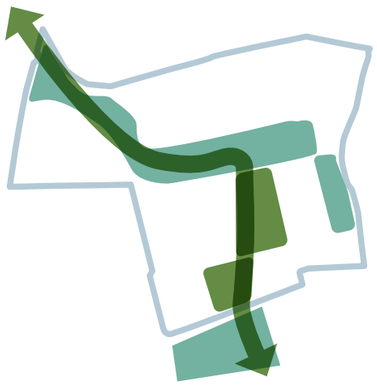
Multiple access

Potential additional access from the south side of the site will allow a disconnected internal vehicular circulation to promote shared surfaces and car free zone at the centre of the site.



Central greenway - Concentrated open space

Multiple greenways - Distributed open space



Staggerred greenway - Concentrated open space

7.1 OPTIONEERING FRAMEWORK

Edge condition

The relationship and interface with the immediate context outside the perimeter wall will be determined by the extent of alteration to the perimeter wall. The emphasis on integration in the design principles has led to different approaches to the opening of the strategic stretches of the wall to create a highly permeable neighbourhood. Key areas where there is a possibility to alter the wall are along Dundrum Road, Annaville Grove and along Rosemount Green.

By altering the perimeter wall along the key areas, it provides opportunities to create a positive interface with the existing neighbourhood outside the wall and provide active frontages. Particularly along Dundrum Road, there are considerable design opportunities such as the creation of improved public realm, active frontages, increased visibility and accessibility to the mature landscape, improved entrance to this new neighbourhood.

The formation of a new pedestrian/cyclist access at Annaville would serve to shorten travel distances between Annaville Road and Larchfield and reduce journey times between existing community facilities on either side of the site. Rosemount Green as a community open space has a potential to be integrated with the network of open spaces created within the site. The section of the perimeter wall along the southern boundary at Rosemount Green may be altered so as to seamlessly connect and strengthen the relationship between Rosemount Green and this new neighbourhood.

The rationale and intent behind altering the wall is to enhance permeability and integration, however, where there are no opportunities to enhance permeability, the extent of alteration to the wall will be determined by the structural condition survey.

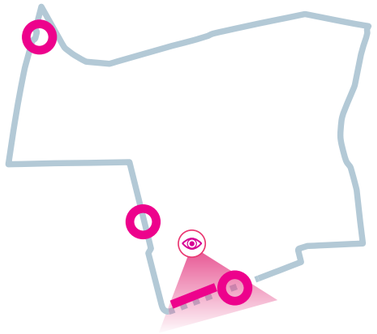
7.1 OPTIONEERING FRAMEWORK

Community Facilities

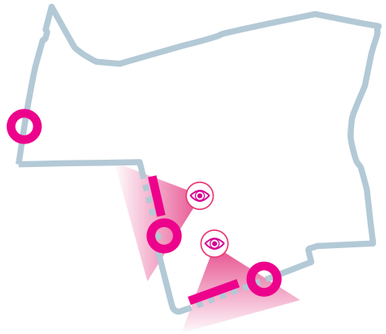
Given the size of the site and the scale of development being proposed under the masterplan, the proposals should also consider an appropriate range and scale of community facilities to support residents of the masterplan and surrounding development. Non-residential uses within the masterplan site present opportunities for sensitive adaptation and repurposing of heritage structures. The provision of such facilities as part of the masterplan development would benefit not only those who inhabit the masterplan site but also wider community interests. The location and the approach to clustering of these facilities within the site will be dependent on the size of the facility, access and parking requirements and its catchment. Such new facilities are being proposed in consideration of the existing facilities in the site's context and increased demand for certain facilities arising as the masterplan site accommodates the addition of approximately 3,000 people in the new neighbourhood.

The planning application submission for the Part 10 scheme will be supported by a Social Infrastructure Audit which will have regard to relevant social infrastructure facilities in the vicinity of the subject lands. The Audit will determine where there is adequate supply of facilities such as education, childcare, community and cultural, healthcare, religious and retail facilities within close proximity. In addition to the aforementioned Audit, the planning application submission will further include a Schools Demand Assessment which will have specific reference to the existing level of school services provision and potential requirement for additional facilities at this location.

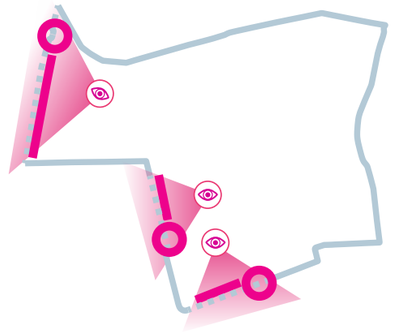
In terms of childcare facilities, the Part 10 scheme will include for the provision of a crèche. The Social Infrastructure Audit will determine the required crèche size, based on existing capacity in the surrounding area and the additional demand that will arise as a result of the Part 10 proposal.



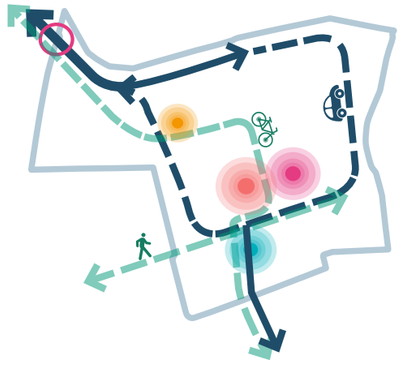
Positive interface with Rosemount Green



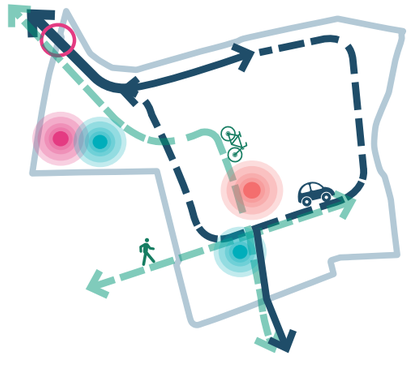
Positive interface with Rosemount Green & Annaville Grove



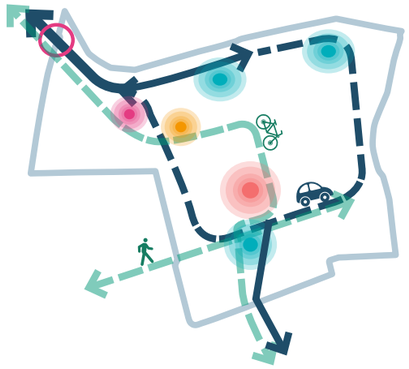
Positive interface with Rosemount Green, Annaville Grove & Dundrum Road



Single neighbourhood Centre



Hierarchy of centres



Network of sub-centres

7.2 CONCEPT DESIGN OPTIONS

This section describes the range of concept options that were explored in response to criteria from the client and planning briefs as well as those design principles and masterplan vision themes that were established in previous sections.

The three master plan concepts illustrate a variety of plots to be developed as either built or as green spaces. An appropriate balance between built form and open spaces will be key to the success of the master plan.

Within the concept options, the team have indicated an extensive mix of uses which could potentially be incorporated to include not only community facilities, assisted living and other related amenities, but also meeting spaces, leisure uses, and/or small retail/cafe. A mix of uses in the site's core will be of great benefit in creating activity and vibrancy throughout the public realm.

Each building plot will serve a purpose that takes into consideration not only its location in the overall site, but also its relationship to nearby spaces and amenities.

To reinforce the variety of the site's environs, the concept design options explore new uses, access and movement, focal points and the adaptive re-use of the main hospital building and other such various structures of retention value as per the design principles.

In order to explore the best place-making principles of the masterplan, a series of concept design options were refined. These scenarios were benchmarked against international best practice and further developed into a single viable option. This option was further tested against the site's design principles to ensure the viability of the final masterplan design.

7.2 CONCEPT DESIGN OPTIONS

Figure 85 : Concept design option 1

Figure 86 : Concept design option 2

Figure 87 : Concept design option 3

7.2 CONCEPT DESIGN OPTION 1

This concept design option has a strong focus around vibrant compact neighbourhoods which are interwoven into the landscape and bound through a primary north-south parkland

Access and Movement

The site is accessed via a new vehicular route to the south of the existing main entrance whilst the original entrance is retained as a key pedestrian and cyclist route. In order to create a car-free centre and avoid creating a short-cut for the vehicles through the site, the different compact neighbourhoods are serviced by either north / south vehicular access. Therefore, a secondary vehicular route is also considered to the south connecting to Larchfield Road.

Open Space

The north western entrance marks the beginning of the parkland route and becomes a new arrival space. The tree foliage around the main hospital building is retained, allowing key views to the south of the site. A new green space builds upon its central north-south axis.

Focal Points

A new green heart forms the main central core of the site whilst connecting the north and south of the site. The enclosed plots become small neighbourhood centres which meet diverse demands of everyday life while allowing users to be close to nature.

Key features:

- Linear park connects to open space network
- Walkability + active movement
- Low to mid-rise density
- Productive landscape + leisure opportunities
- Largely vehicle free to allow pedestrian and cycling movement
- Small distinct neighbourhood centres with community facilities
- Pedestrian and cycle links to surrounding neighbourhoods
- Key views to open spaces / nature and amenity opportunities

Figure 88 : Development option 1

7.2 CONCEPT DESIGN OPTION 1

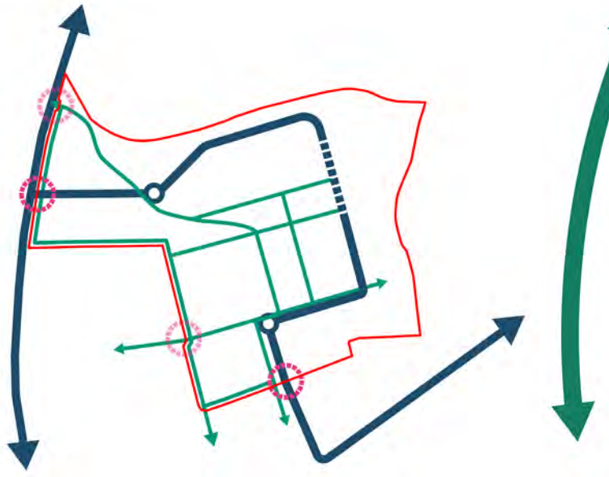


Figure 89 : Access and movement

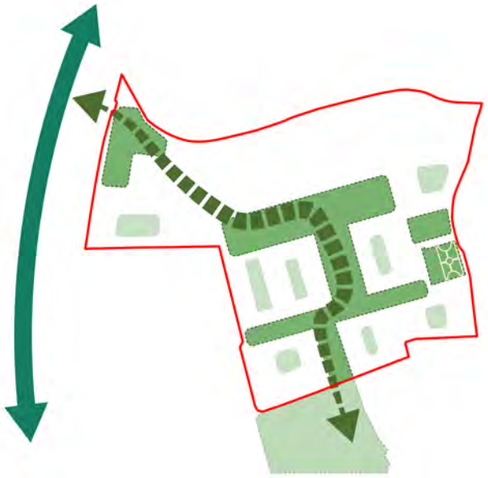


Figure 90 : Open space

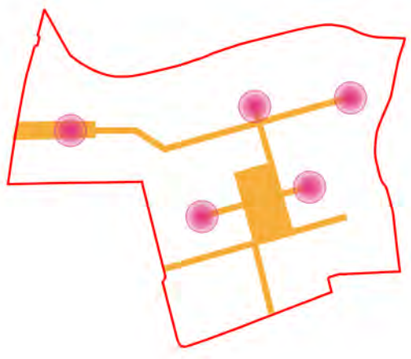


Figure 91 : Focal points

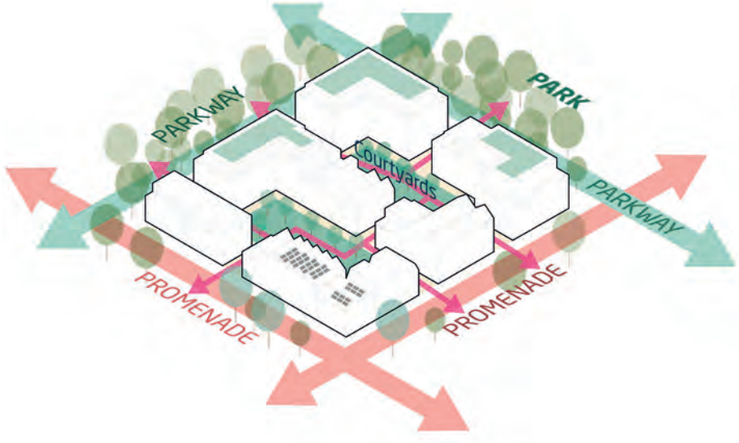


Figure 92 : Compact neighbourhood

Figure 93 : Option 1 in 3D axonometric view

Built form

Mixed low to mid-rise blocks on a more human scale with an immediate connection to nature with informal courtyards that nourish a sense of community. Clusters of ample park spaces located around the Hospital building to the orchard which connect down to Rosemount Green.

The parkway provides an integral pedestrian and cycle friendly environment that plays host to various amenity uses and a diverse range of habitats for the existing community and future residents to be at one with nature.

7.2 CONCEPT DESIGN OPTION 2

This option combines the future urban living and the spirit of village living. Set within a strong framework of natural landscape, the design harnesses the green corridors to connect the new communities with the existing communities.

Access

The entrance is retained but widened for all users and secondary access is proposed to the south which forms a new gateway to the south of the site. A shared space links the two main roads along the walled garden creating a pedestrian friendly environment.

Open Space

Open space is concentrated to the north and around the hospital building leading directly to the walled garden. The walled garden becomes the main recreational focal point with productive landscapes and community garden allotments.

Interlinked Neighbourhoods

A strong public realm corridor is created connecting some of the site's key features such as the walled garden, the chapel and the new gateway to the south. This space could play host to an array of events throughout the year whilst being environmentally sensitive.

Key features:

- Sequencing of spaces along N-S and E-W links
- Diverse spaces, architecture, landscape and experiences
- Clear hierarchy of spaces
- Heritage buildings as set pieces
- Clear desire lines
- Focus around community facilities
- Central promenade connecting the sports field to the south with the heritage quarter

Figure 94 : Development option 2

7.2 CONCEPT DESIGN OPTION 2

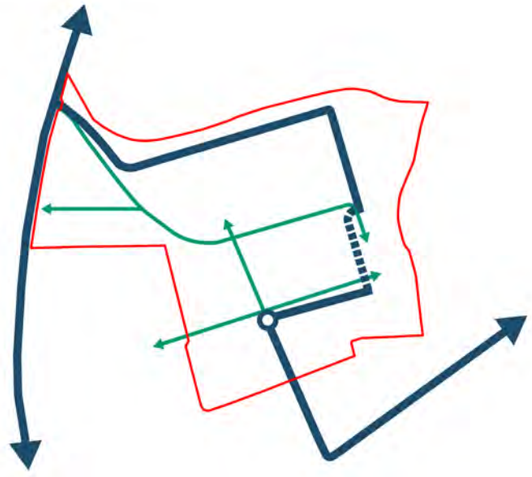


Figure 95 : Access and movement

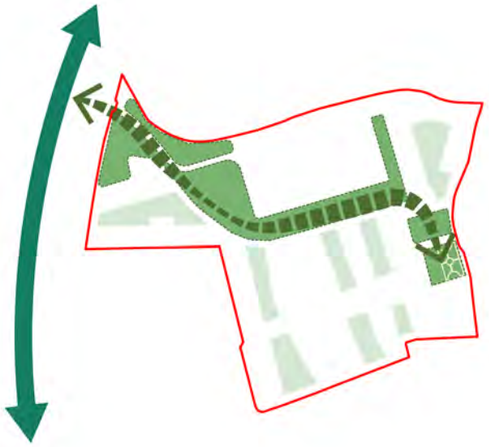


Figure 97 : Open space

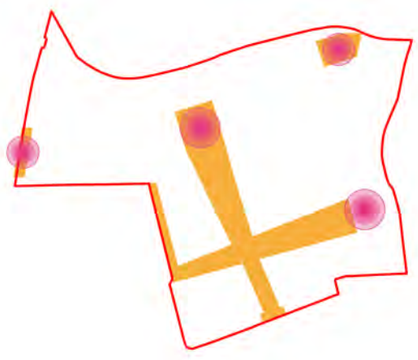


Figure 96 : Focal points

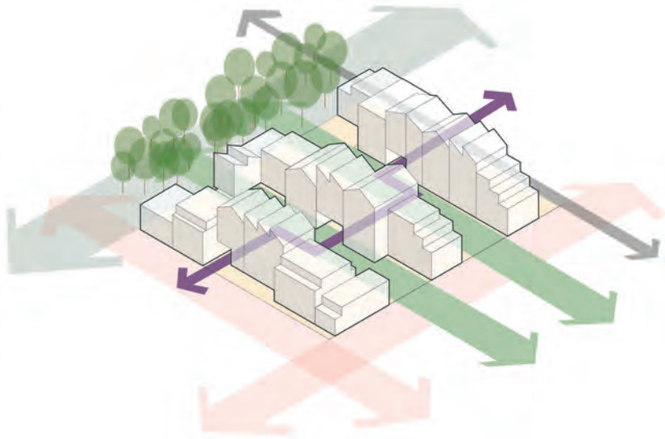


Figure 98 : Urban living

Figure 99 : Option 2 3D axonometric view

Built form

Each neighbourhood is defined by carefully thought out buildings with a variety of height and density, maintaining optimal sunlight and maximizing views of the green spaces throughout. Mid to high rise compact residential quarter (multi generational units, apartments, town houses penthouses) with green fingers connects to the mature landscape.

The variety of building heights also provides opportunities to create usable recreational spaces at different levels.

7.2 CONCEPT DESIGN OPTION 3

This concept option seeks to form a strong relationship between new and existing communities by providing new facilities and creating public spaces which will support a range of activities and encourage greater social cohesion and interaction.

Access

The existing site entrance along Dundrum Road is retained to allow pedestians, cyclists and emergency vehicles to access the site. A new main vehicle entrance is introduced further south along Dundrum Road. Similarly, to concept 1 and 2, along Annaville Park, a pedestrian and cycle-way will allow access to the site from the west. An additional pedestrian and cyclist access will be located adjacent to the Rosemount Green which will connect to Larchfield Road.

Open Space

The space around the gate lodge to the north-west will see the retention of the tree-lined avenue to create a green arrival space. Retention of the landscaping features and open spaces surrounding the main hospital grounds will also be retained. Directly leading from the main hospital entrance, a key viewline will look southwards towards a central public realm space which will lead users to Rosemount Green creating a strong desire line with views towards green amenity spaces.

Urban Centre

The staggered spatial organisation of two distinct open spaces with the market square as a passive space and the green space to the south as an active space together form a new urban centre of this neighbourhood.

Key features:

- Strong connectivity to the west and south of the site
- A robust public realm offer with a new centralised public space connecting the site's main features including the hospital, walled garden and new southern access
- Retention and enhancement of views towards amenity and green spaces
- Introduction of a MUGA and community facilities
- A strong movement and access strategy that involves shared space discouraging rat-runs and promoting vehicular free pedestrian and cycle ways.

Figure 100 : Development option 3

7.2 CONCEPT DESIGN OPTION 3

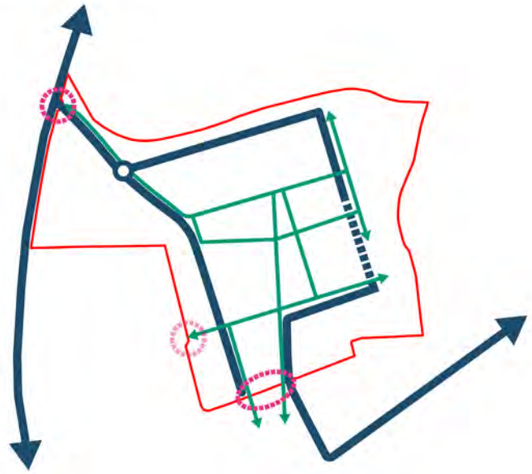


Figure 101 : Access and movement

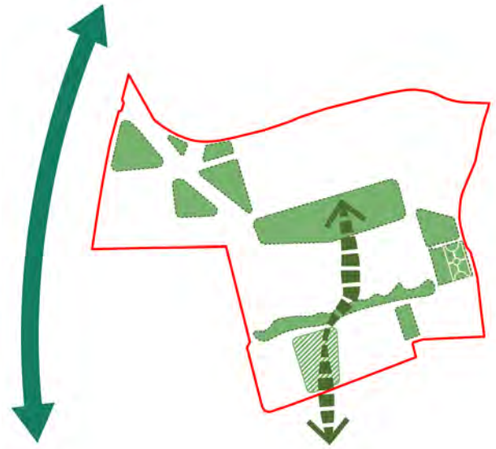


Figure 103 : Open space

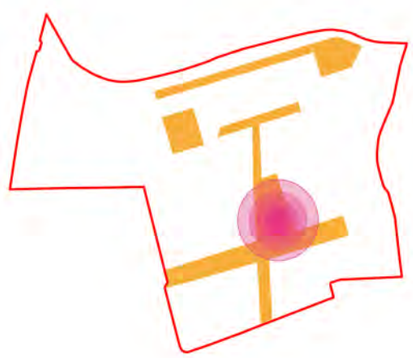


Figure 102 : Centres

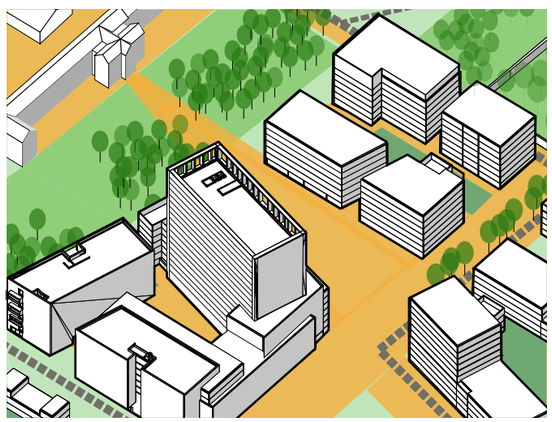


Figure 104 : Concept Option 3 bird's-eye view

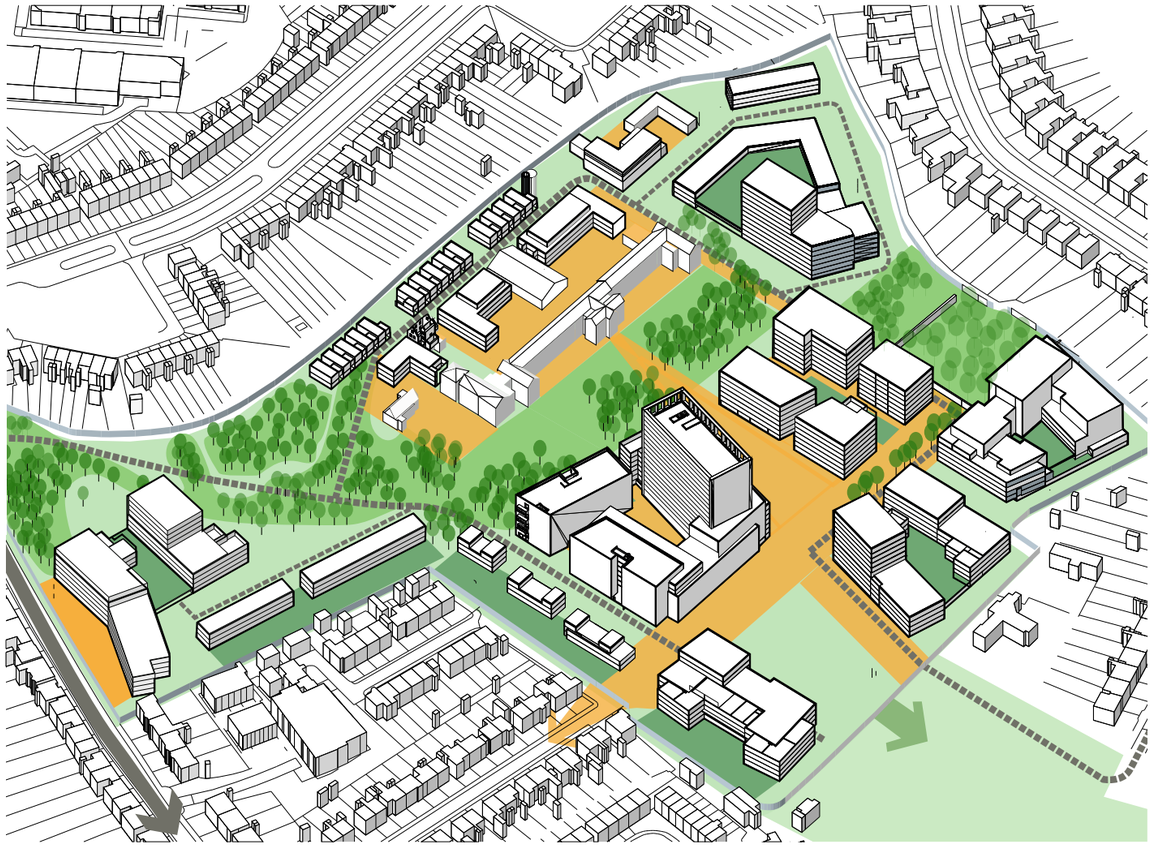


Figure 105 : Option 3 3D axonometric view

Built form

The existing site was the starting point for the proposed layout. Residential plots informed by site constraints were provided to form interconnected public spaces framing views to the Main Hospital.

Buildings vary in height with low rise buildings located where the site directly abuts existing dwellings, with larger scale buildings placed towards the centre of the site, providing a distinct urban edge to a new public plaza.

7.3 ANALYSIS OF OPTIONS

Development Option 1

Strengths:

- Multiple neighbourhood centres
- Retention of natural open space / heritage buildings
- New central greenspace
- Largely car-free pedestrian and cycle ways
- Human scale

Weaknesses:

- Private courtyard spaces
- Lacks diversity in plot sizes and/or uses
- More built footprint
- Lack of dual aspect units
- Potential for Impact at Rosemount Green

Development Option 2

Strengths:

- Strong desire lines/public realm
- Two centres
- Community facilities
- East-west green link to walled garden
- Varied typologies creating distinct architecture

Weaknesses:

- Lacks clear distinction between public and communal open space
- Higher ratio of built footprint
- Challenging to meet dual aspect unit requirement
- Potential for Impact at Rosemount Green

Development Option 3

Strengths:

- Network of green spaces
- Community facilities
- High density urban core
- Responds to view corridor axis
- Responds to requirement for dual aspect units

Weaknesses:

- Lacks positive interface with Annaville Grove
- Potential for Impact at Rosemount Green

7.3 ANALYSIS OF OPTIONS

Progressing from the optioneering stage, Option 3 was selected as the preferred basis for further design development and refinement.

This option was considered to combine all of the best attributes of each of the foregoing options as appropriate to the scale and urban grain of the area, creating much-needed homes and community facilities along with associated public spaces and social infrastructure to support a new urban community.

Also, as the site's interface with Annaville had been identified as an area where masterplan concept design option 3 had certain shortcomings, this was identified as an area requiring further design analysis and exploration of design options.

Further analysis of Development Option 3 was carried out which led to Development Option 3.1. The material changes involved the removal of the vehicular access over Rosemount Green and the provision of a new entrance at Dundrum Road to the south of the existing entrance. This creates a greater sense of space and visual connection at Dundrum Road, and limits any potential impact to Rosemount Green. Pedestrian and cyclist connection is proposed from the existing path at Rosemount Green through the site and to Mulvey Park via a new opening under Development Option 3.1.

Development Option 3

Strengths:

- Network of green spaces
- Community facilities
- High density urban core
- Responds to view corridor axis
- Responds to requirement for dual aspect units

Weaknesses:

- Lacks positive interface with Annaville Grove
- Potential for Impact at Rosemount Green

Development Option 3.1

Strengths:

- Network of green spaces
- Community facilities
- High density urban core
- Responds to view corridor axis
- Responds to requirement for dual aspect units
- Greater sense of space at Dundrum Road
- No control mechanisms required to limit through-traffic
- Pedestrian and cyclist friendly permeability

08

CONSULTATION SUMMARY

8.1 PROCESS AND METHODOLOGY

The Land Development Agency (LDA) was set up by the Government to unlock State land for more efficient use, delivering housing and sustainable communities. The LDA has set out design principles that are committed to transforming this site into an attractive, high quality and sustainable neighbourhood which will be integrated with the existing Dundrum and Windy Arbour community. The LDA recognises and appreciates the true value of meaningful engagement through an extensive community and stakeholder consultation in achieving a sustainable community.

The LDA and Project Design Team launched an extensive Community and Stakeholder Engagement Plan process in September 2020. This five stage Community and Stakeholder Engagement Plan was published and is available at the Project Website, www.dundrumcentral.ie, and provides details relating to activities and outputs for each of the engagement stages.

The LDA appointed a Community Liaison Office to lead and represent the organisation in responding to the various interest groups and stakeholders. The Community Liaison Officer identified the local community groups and stakeholders to be engaged in order to gain valuable local knowledge.

Subsequent consultation and engagement was undertaken including analysis of the quantitative and qualitative responses received on the key themes selected in the interest of providing tangible insight for the LDA and Design Team. This chapter details emerging priorities raised by the public that were emphasised during the evaluation process, and highlight the local strengths, needs, challenges and opportunities, as informed by the public and concludes by outlining emerging priorities for the Design Team.

A holistic approach to engagement was adopted to champion positive urban change within Dundrum Central, by delivering a project that respects the unique context of the site and its relationship with neighbouring areas through a citizen-centred engagement process to capture the community's aspirations and expectations from the project.

The Community Engagement Plan sets out the following stages:

Stage 1: Introductory Communications
Stage 2: Community Information Gathering
Stage 3: Engage – Concept
Stage 4: Engage – Masterplan
Stage 5: Planning Application Process

The Engagement Plan identified a wide range of Residents Association, Interest Groups and Stakeholder Groups for introductory discussions to learn from valuable local experiences.

Innovative and multiple communication methods were adopted to engage, cognisant of the COVID-19 restrictions, a dedicated website was published to provide regular updates, a platform to provide feedback and opportunities for direct engagement. The different communication methods include:

- Newspaper announcements
- Information leaflets
- Mini surveys and questionnaires (online / paper)
- Meetings and workshops (online / face-to-face)
- Virtual Town hall meeting
- Exhibitions and presentations

This communication approach proved to be extremely beneficial for the Project Team, providing rich insights and local knowledge which have informed the development of the project.

STAGE 01

INTRODUCTORY COMMUNICATIONS

Widely communicate the project – its aims and objectives, how the engagement process will inform the project, how people can get involved, means of contact, etc.

STAGE 02

COMMUNITY INFORMATION GATHERING

Using surveys, listening and gathering to learn about local strengths, needs, challenges and opportunities.

STAGE 03

ENGAGE - CONCEPT

A series of events, workshops and conversations where early ideas, views, sketches and concepts will be explored. There will be ongoing engagement with key stakeholders.

STAGE 04

ENGAGE - MASTERPLAN

Events to present the emerging masterplan for Dundrum Central, and to receive feedback from the community and stakeholders.

STAGE 05

PLANNING APPLICATION PROCESS

Following lodgement of an application, submissions or observations can be made by interested parties to the decision making authority. Application available online and for viewing accessibility for all.

Figure 106 : Consultation stages and process

8.2 COMMUNITY FEEDBACK

Stage 1: Introductory Communication

The appointment of the Single Point Design Team to the project was announced via LDA press release in Spring 2020, following which initial introductions were made, lines of communication established and the project introduced to stakeholders.

These include the Local Authority, local representatives, residents' associations, clubs, community groups and other key organisations in the surrounding area and these introductory communications were made in parallel with commencement of design development and supporting survey work.

Stage 2: Community Information Gathering

A survey was made available online and circulated via leaflet drops to local homes on 03 and 04 September 2020. A series of invites were made via the Dun Laoghaire Rathdown Public Participation Network and other fora to encourage responses. A soft-close to the survey was pursued during October, to ensure lots of time for the community to provide their responses.

Alongside, meetings (virtual meetings, as necessitated by public health advice in relation to Covid-19) took place to listen and learn about local strengths, needs, issues and opportunities. As part of the process the following groups have been engaged with:

- Rosemount Residents Association
- Frankfort Park Residents Association
- Roebuck Residents Association
- Highfield and Westbrook Residents Association
- Rosemount Mulvey Football Club
- Annaville and Dundrum Road Residents Association
- Imagine Dundrum
- Mulvey Park Residents Association
- Windy Arbour Village (Business Association)
- Local councillors

This engagement and feedback are essential and has helped to inform key themes and ideas that have been presented in this document.

As part of the Community Information Gathering stage, leaflets were dropped to all residential premises within an agreed 1km catchment of the site. This delivery was conducted on 03 and 04 September 2020 resulting in a total of 5,281 houses receiving the tri-fold information leaflet, representing Stages 1 and 2 of the Consultation and Engagement Plan's Road Map. The Mini-Survey questions were collated with the objective of providing the LDA and the Project Team with a stronger appreciation and understanding of the key priorities for the wider Dundrum and Windy Arbour community with respect to the project. Over the course of the 1-month period in which the mini-survey was "live", some 458 responses were received (as of 04 October 2020). This is considered to be an acceptable level of response given the format involved and the wider context of the project stage, etc.

1/ What are the "Top 3" areas you would like to see discussed as part of Dundrum Central's consultation process? (1 =most interested). The options included: Urban Design, Sustainability and Environment, Community, Amenity/Open Space, Heritage, Connectivity and Others (to be stated by responder)

This question provided insights into the top priority areas chosen by the community and help guide effective investment towards supporting measures and amenities. From the illustration below, it can be noted that the 'top 3' priority areas were (i) Amenity/Open Spaces (76.42%); (ii) Community (70.52%); and (iii) Sustainability and Environment (67.03%). These were followed by Urban Design (52.40%), Connectivity (45.63%), Heritage (34.72%) and Others (10.92%).

1	**Amenity/Open Spaces**	**76.42%**
2	**Community**	**70.52%**
3	**Sustainability and Environment**	**67.03%**
4	**Urban Design**	**52.40%**
5	**Connectivity**	**45.63%**
6	**Heritage**	**34.72%**
7	**Other**	**10.92%**

Figure 107 : Survey results

8.2 COMMUNITY FEEDBACK

2/ 'We want this future neighbourhood to be inclusive of all age groups and members of the community' – what features do you think would help to achieve this?

Responders were asked to suggest features and measures that they believed could assist in building an inclusive, community-oriented, developed and evolved neighbourhood. The word cloud below clearly illustrates the elements that stood out of the feedback.

Figure 108 : Graphical representation of Survey Monkey result

3/ Please indicate your level of agreement with this statement: "Dundrum Central presents an opportunity for this currently inaccessible site to positively contribute to the wider community."

This question was mainly asked for increased clarity to understand the local community's and stakeholders' satisfaction and agreeableness on this proposed development. The results of the survey indicate that 44.98% Strongly Agreed; 32.10% Agreed; and 12.01% were Neutral on the fact that this project presents an opportunity for this currently inaccessible site to positively contribute to the wider community. 6.99% of the respondents disagreed and 3.93% strongly disagreed to the statement. To conclude, with a predominantly positive response by participants, this assuredly reinforces the team's effort to advance this opportunity.

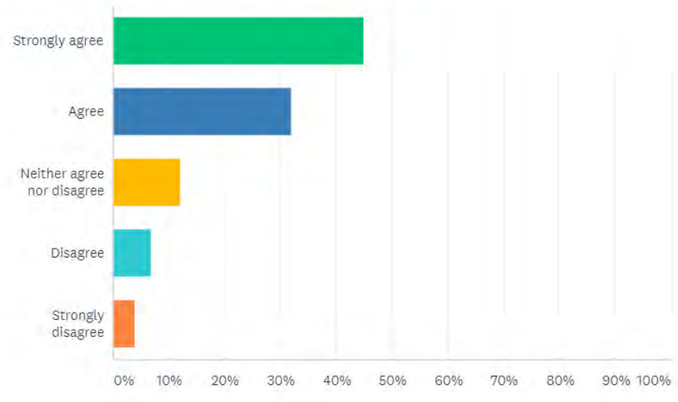


Figure 109 : Bar chart representation of Survey results

4/ What are the key elements that you feel should be considered when designing this new neighbourhood within Dundrum and Windy Arbour?

This question was particularly asked in order to give local communities, stakeholders and other related organisations the chance to explicitly mention features they would want considered; enable them to outline current challenges that could potentially be rectified; and to provide them a platform to discuss their viewpoints. The word cloud below illustrates the key words that repetitively stood out from the feedback.

Figure 110 : Graphical representation of Survey Monkey result

8.2 COMMUNITY FEEDBACK

Stage 3: Engage – Concept

Taking into consideration the valuable feedback received at earlier stages, the Community and Stakeholder Engagement was progressed to the Concept stage of engagement with a programme of remote engagement events which had to be held remotely on account of the persisting COVID-19 pandemic. This stage of engagement was supported by updates communicated via press release and the launch of a public Virtual Consultation Room.

Following the launch in February 2021 of a public Virtual Consultation Room, a series of online public webinars was held. These webinars featured presentations delivered by key members of the project team, with hundreds of stakeholders pre-registering for and attending each event, and the webinar format facilitated a live question-and-answer ("Q&A") session which followed the main presentations in the running order.

In parallel with these online events, the project team facilitated remote engagements with elected members as well as key stakeholder and community organisations including residents associations.

Feedback received via the Virtual Consultation Room, Webinar Q&As, emails to the Community Liaison Office and engagements with stakeholder organisations was considered by the Client and the Single Point Design Team and went on to inform the next stage of design development and community engagement.

Stage 4: Engage – Masterplan

The Draft Masterplan was published within a dedicated and easy to access web page on the project website, www.dundrumcentral.ie. This reflected the latest and most detailed thinking from the project Design Team which, albeit in draft, was maturing and benefited from a series of specialist surveys, studies and analyses per discipline. The project website included a flythrough video outlining the proposal for the site.

The Draft Masterplan was complemented with a useful and practical report which provides an overview of the matters the community "asked for" and how these have been considered by the Design Team and incorporated or rationalised on a case by case basis.

Shortly after the launch of the Draft Masterplan content, the LDA requested that the Design Team produce and publish a series of draft supplementary views, which was added to the Draft Masterplan's web page. The webinars and the community engagement meetings had generated similar such requests, and the LDA was pleased to accommodate same. In order to make the community, stakeholders and interested parties aware of the significant engagement Stage underway, newspaper adverts were taken out in local newspapers, posters were erected in local shops and church notice boards, etc.

A further series of webinars were organised for members of the public to register for via our project website. These webinars built on feedback from the webinars in previous stages of the project, and so a focus was prioritised to facilitate a longer period of time for the Questions and Answers segment. There were also remote engagements undertaken with elected representatives.

Following each of the webinar events, which saw the LDA representatives alongside the Project Architect making comprehensive presentations on the Draft Masterplan, a recording of each webinar was published on the project website. This provides wide access to those unable to join either webinar, or an opportunity for further reflection on the content.

Stage 5: Planning Application Process

Following lodgement of a planning application, submissions or observations can be made by interested parties on the application to the decision making authority. A dedicated website will be available where the plans, reports and particulars contained in the application pack can be viewed. The pack will be available for viewing at relevant public counters to ensure ease of access for all.

The aim is to lodge a quality planning application which reflects the vision and masterplan for the site that has been developed following the inclusive community engagement process.

In seeking to secure planning permission to facilitate the timely delivery of much needed homes and ancillary amenities on the Dundrum Central site, the LDA is keen to highlight to the local community that, upon securing consent and initiating the construction programme on site, regular and transparent communications will continue via the Community Liaison Officer (CLO).

8.3 KEY OUTCOMES

Some of the priority issues, challenges and opportunities raised in the Mini-Survey feedback are grouped under key themes. This has helped the Project Team to group common matters and rich insights into a digestible form which has been considered and has informed the concept and detailed masterplan proposals.

The Project Team intend to demonstrate what they learned from the preceding Consultation and Engagement Stage and how the Design Team proposes to apply these insights in the Concept and subsequent Detailed Masterplan proposals.

Traffic and Sustainable Transport

- Connectivity
- Permeability
- Efficient transport management
- Improved and sustainable transport infrastructure
- Accessibility

Housing Types and Tenures

- Different housing types, sizes and price ranges
- Supporting services and amenities

Community Integration and Socialisation

- Opportunities for new neighbours to integrate
- Ensuring socialisation
- Creation of an inclusive connected community-oriented and positive environment
- Accessibility

Sustainable Building Design

- Sustainability
- Permeability
- Accessibility
- Affordability

Community Amenities

- Appropriate mix of uses and facilities on-site (residential, community, retail, etc.)
- Suggestions included: crèches, infrastructure for recreational activities, sports facilities, etc

Built Heritage

- Protecting the various built heritage elements of the site (including walls) where possible, while reimagining their potential
- Adaptive reuse
- Community amenities potential

Natural Heritage and Landscape

- Adequate and high-quality open space and landscaped areas

Construction and Post Completion Impacts (including key Concerns raised)

- Addressing construction-related concerns (traffic, noise, pollution, hours of work, etc.)

Figure 111 : Key outcomes of the consultation process

09

MASTERPLAN FRAMEWORK

9.1 ILLUSTRATIVE MASTERPLAN

The masterplan for the Central Mental Hospital site has been developed following site and urban design analysis and an extensive consultation process with the community and key stakeholders.

Land-use
Whilst the dominant land use will be residential, several non-residential uses are key to creating and supporting a sustainable and integrated neighbourhood. To provide for the new and existing community, a crèche, farm shop and local groceries, healthcare facility, café and an indoor sports / community facility are proposed within the masterplan. The location of these facilities is based on the understanding of projected movement patterns and desire lines within the site as well as the respective catchments of the facilities being provided. In addition to the uses within the buildings, a holistic approach to landscape and open spaces is adopted to provide for a varied experience.

Access and Movement
The masterplan development is intended as a pedestrian- and cycle-friendly environment, prioritising healthier active and sustainable travel modes. The proposals are balanced by vehicular needs for limited local access and servicing, with a site access and circulation strategy designed to mitigate the negative impact of vehicular through-traffic, and a parking strategy which seeks to minimise on-street, at-grade parking and promotes clustered podium parking instead. Proposals that would enhance connectivity with development to the west at Annaville and to the south at Rosemount Green would enhance local access and ease movement to surrounding neighbouring uses and services. Increased permeability through the site will facilitate improved access between Rosemount Green and Windy Arbour LUAS. A clear road hierarchy and parking strategy will also improve the functionality and safety of local streets.

Open Space
To enhance the natural amenity of the CMH, public spaces and streets require an identifiable hierarchy and design strategy. They will be safe, pedestrian and cycle friendly and designed for a diverse population. New, active and improved parkland, play spaces, and public realm will encourage interaction and provide a variety of meeting places. They will be integrated with key community facilities and associated services close to existing transport connections. A clear hierarchy of open spaces is proposed. The centrally located Market Square holds potential to become a gathering spot generating greater footfall and hold seasonal events throughout the year such as pop-up stalls etc.

Built form
In order to accommodate the new homes, supporting amenities and community facilities the proposed built form strategy considers taller buildings to the centre of the site based on daylight-sunlight and shadowing analysis. Taller buildings within the centre mean reduced shadows affecting the existing builtform outside the site. Height of the buildings will transition down towards the periphery of the site to be more sensitive of the existing low-rise neighbourhoods outside the site. The proposed builtform also considers varied typologies from apartment buildings to terraced housing and tenure mix that will appeal to the growing population of Dundrum.

The proposed masterplan layout establishes seven character areas that are composed overleaf. Each of these areas will establish a distinct character and identity within the overall CMH site.

The master plan will foster the long-term growth of a vibrant and cohesive neighbourhood.

Dundrum Central will be an inclusive community with shared civic spaces, relevant community services and facilities, and housing choices for a diversity of residents.

9.1 ILLUSTRATIVE MASTERPLAN

The Masterplan adheres to the design principles and seeks to achieve the following key objectives:

- Delivering an appropriate density in a mixed-use neighbourhood.
- Integrating and repurposing the heritage assets.
- Providing and strategically locating various everyday uses.
- Integrating, complementing and enhancing the existing mature landscape.
- Defining the public realm through a well-designed streetscape that will encourage use by pedestrians and cyclists.
- Supporting and promoting sustainable and active means of travel.

9.1 ILLUSTRATIVE MASTERPLAN

Character Areas

As Dundrum develops a stronger character and identity within the growing Greater Dublin region, the CMH has an opportunity to strengthen its own identity as an active and inclusive community. The opportunity for redevelopment has been identified and studies have outlined the CMH's future potential:

- To maintain existing site characteristics such as mature trees, buildings of retention value, topography and open spaces to enhance the sense of place
- The density and height of new development will decrease moving outward from the Market Square, the transitioning of building heights, together with the topography, will provide a clear urban structure focused on facilitating good solar access and views of green spaces
- The development of the masterplan presents an opportunity to improve permeability by introducing new connections across the site to Rosemount Green, the increased permeability will improve access to education and retail services provided in the area
- The redevelopment of the site will help deliver improved quality of affordable housing and new public domains, as well as pedestrian connections
- The masterplan will promote high quality buildings and public spaces for existing and future residents
- The site will seek to promote better access and through-connections to retail, social services and public transport complemented by a high quality public domain which fosters social interaction and amenity uses among its users
- To ensure that community needs and aspirations are considered in the design process.

Figure 112 : Character Areas

9.1 ILLUSTRATIVE MASTERPLAN

Heritage Quarter

Maintaining and reinvigorating the existing heritage of the CMH - particularly the iconic hospital building - is seen as a desirable objective.

The main hospital building is assessed as holding excellent potential for adaptive reuse as a local employment and enterprise hub.

The area surrounding the main building will be sensitively adapted to contemporary reuse(s) with retention of several other structures including the Chapel, the Infirmary and selected outbuildings serving to enhance and complement the distinctive character of this heritage setting.

The chimney structure, whose extant form appears to have been reduced in height at some point, is assessed as holding limited potential for adaptive reuse, with its truncated form and position to the rear of the main building limiting its value as a potential wayfinding device, and it is proposed that this structure be removed in favour of limiting constraints for access and residential development in the northern part of the site.

Figure 113 : Heritage Quarter Character Area

9.1 ILLUSTRATIVE MASTERPLAN

Windy Arbour

The character of this quarter is influenced and defined by Dundrum Road. By proposing medium density units that are sensitive to streetscape character of Dundrum Road a positive interface is created with the immediate context. The active frontage proposed along Dundrum Road will enhance the quality and experience of public realm along Dundrum Road. The contemporary architectural quality of the proposed mid rise

Higher density will be located along Dundrum Road to take advantage of bus and rail transport connections. Lower density will be located along the southern edge of the character area to take advantage of the space looking towards the tree-lined avenue parkway leading towards the main hospital building.

The Farm

The built form and special atmosphere of the collection of farm buildings and outhouses may be seen as holding potential to complement the character of a proposed quarter of small-scale housing which is being designated for age-friendly living, with valuable amenities and community facilities situated in close proximity.

The Orchard

This area will consist of a high-density residential area with a tight urban form with excellent links to surrounding green spaces and uses.

Views towards the hospital building in the north, the walled garden to the east, the eco-corridor to the south and the market square to the west makes this a core component of the new site layout.

Users will be able to use this landmark to navigate the site from north to south and east to west.

This character area will have daytime and night-time active uses on the lower ground floors to complement the spaces outside such as the market square to encourage social interaction among residents and passers-by.

9.1 ILLUSTRATIVE MASTERPLAN

Larchfield

This area will comprise a leafy, medium density residential neighbourhood around an informal network of pedestrian friendly streets with excellent links to the heart of the development, the surrounding established residential neighbourhoods and the wider green network.

This Character Area will become the focus for aspirations of alternative approaches to community living, with opportunities for shared community space and local food growing with the Walled Garden placed nearby.

Annaville

Lower scale development at the western fringe of the site will help maintain the local built character within Annaville. Towards the centre, the density will gradually rise as it reaches the market square to help create a strong desire line from north to south. This character area will take advantage of key views of the public realm and green spaces located close-by.

Rosemount

This Character Area comprises new residential and community facilities set around a central landscaped area which is suited to a wide variety of uses.

Interacting directly with the site's interface with Rosemount Green to the south, this Character Area will host new community facilities catering to the new and existing residential communities alike.

9.2 PROPOSED MIX OF USES

The masterplan will enable positive changes to the existing mix of uses within Dundrum. The proposed land-uses within the masterplan are primarily residential, this will help create opportunities for more people to live close to existing transport connections which maximises convenience and helps contribute to the site's activation and vibrancy.

Much of the development will be for residential use, meeting housing needs and allowing more people within Dundrum to live close to the town centre, increasing catchment and footfall in local facilities, therefore increasing vitality to the town centre.

Housing will include a mix of sizes, types and tenures which should be spread throughout development. The Masterplan proposes 1,002 new homes.

Non- Residential Uses

The masterplan for the Central Mental Hospital site will not only develop a significant number of new homes but also provide a range of supporting amenities and a diverse mix of uses and activities.

Analysis conducted by Savills Ireland in Q4 2020 has been used to inform the development of the masterplan proposals for such non-residential uses. These proposals are being formulated having regard for existing supply of - and projected demand for - such facilities in the site's wider context as well as the site's capacity to support such alternate uses.

Applications for planning permission under this masterplan will be accompanied by evidence to support such uses in the form of detailed local needs assessment and community infrastructure audit reports, as appropriate.

The main building presents a unique opportunity to develop local employment and enterprise uses overlooking a generous green space at the heart of the site. The site proximity and excellent infrastructure links to employment centres such as Sandyford, Dundrum Town Centre, UCD and the Dublin Docklands mean it is well connected and accessible for this purpose.

In line with this vision, a large part of the non-residential component of the Masterplan is the proposed adaptive reuse of the existing Hospital building as an Enterprise Centre. The use of the building as an Enterprise Centre accords with the land zoning objective for the site, as contained within the Development Plan and allows for the "use of a building of part of a building or land for small scale ('Starter-type') industries and/or services usually sharing grouped service facilities."

Retail and food and beverage units will be provided at the Public Plaza. Other uses provided around the site include a medical centre, crèche and a community building with sports and community facilities.

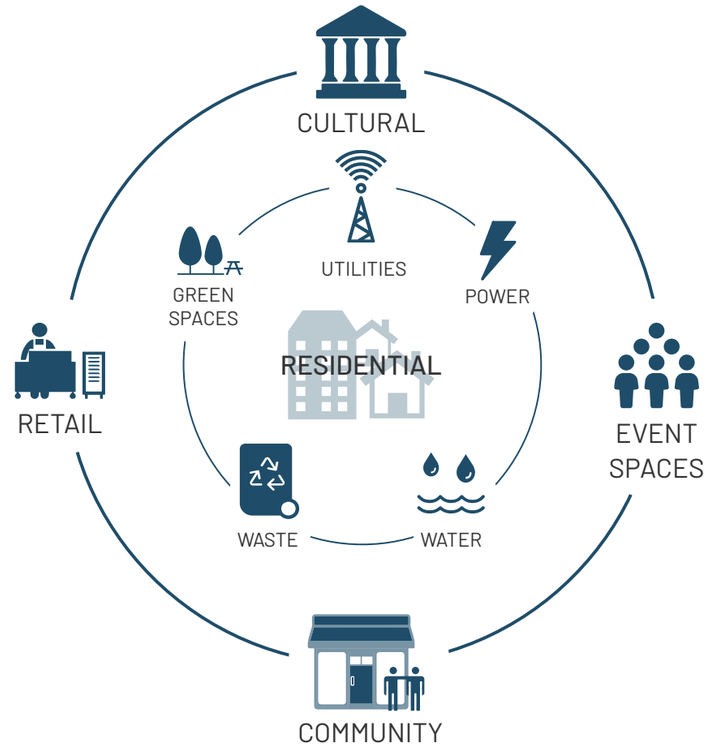


Figure 114 : Proposed site programming

9.3 ADAPTIVE REUSE

Embracing the built heritage found on the site is one of the core vision themes in the development of the masterplan. It is important that in creating this new neighbourhood, structures of architectural significance are protected and enhanced.

As new life is breathed into the site, it is necessary to repurpose and adapt historical buildings to the needs of the new community.

The proposed density and built form in the masterplan consider the viability of controls and the potential for site amalgamation and housing delivery.

Historical structures on the site include the perimeter walls, the main hospital building, the infirmary building, the chapel, the chimney structure (proposed for removal – refer to description of "Heritage Quarter" in section 9.1.1), the coachhouse and some outbuildings whose previous uses may be associated either with forensic/mental healthcare, horticultural or ancillary (e.g. maintenance, plant, equipment, storage) uses on the site.

Figure 115 : View of Hospital from Block 07

Figure 116 : Front of Hospital Building

9.4 DESIGN DEVELOPMENT

01 SHD Pre-App Masterplan

The Masterplan was developed following an appraisal of the site's existing features, and extensive pre-planning and community consultations. The Masterplan proposed 1,259 new homes across the site.

SHD Pre-App Masterplan

- 1,259 Dwellings
- 2-11 Storey Height

02 SHD Pre-Application Design

The SHD Pre-Application submission in June 2021 was based on the Masterplan for the site. Given the restrictions on non-residential floor space, the proposed adaptive reuse of the Main Hospital Building was not included in the SHD scheme. It is intended that the works to the Main Hospital Building will form a future planning application, submitted as close as possible to the SHD Application.

SHD Granted

- 1,048 Dwellings
- 2-6 Storey (*7-Storey at limited areas incl. Lower Ground)
- Blocks 01, 11, 12 to form separate application directly to DLRCC in conjunction with the Main Hospital Building.

Current Masterplan

The Part 10 application is almost identical in many respects to the granted SHD design. It builds on the principles established by the SHD permission to transform the Central Mental Hospital site into a leading example of sustainable living with a mix of tenures for people of all ages.

Part 10 Application

- 934 Dwellings
- 2-8 Storeys
- Blocks 01, 11, 12 to form separate application directly to DLRCC in conjunction with the Main Hospital Building.

9.5 DENSITY AND BUILDING HEIGHTS

The masterplan seeks to improve the built-form and architectural outcomes, while providing more opportunities for people to live within easy access of transport connections. In order to achieve efficient use of the land, medium density across the site is proposed, with higher densities located within the central areas. Lower densities will be situated around the edge of the site and around key green spaces in order to allow direct views and amenity uses. Higher densities also mean facilities can be supported by a larger catchment population within a shorter geographic area, thereby increasing sustainability of Dundrum and the vitality of its town centre. The objectives of this proposal are aligned with the principles of compact growth as it will deliver 1,002 no. units at a density of approximately 88 dwellings per hectare (dph) on this well-connected site.

Generous open space provision, in the order of approximately 28% of the site's area, is considerably in excess of the minimum requirement of 25% open space on lands with an Institutional ("INST") zoning designation under the Dún Laoghaire-Rathdown County Development Plan, and it is considered that such a generous level of open space provision will support the case for taller buildings.

The centre of the site will host taller buildings and the surrounding buildings gradually transition down in height as distance increases from the core of the site.

- Medium- high-rise buildings (6-8 storeys) are located at the heart of the site, with taller elements situated a minimum 60m distant from the site perimeter.
- Low- to mid-rise buildings (2-6 storeys) are generally placed around these taller elements and towards the centre of the site and at Dundrum Road, where buildings of between 2 and 6 storeys will frame an arrival space and serve as visual markers to identify the new development.
- Terraces or town houses are proposed in areas along Annaville Grove, north of the site within the curtilage of the Heritage Zone and to the north east.

9.5 DENSITY AND BUILDING HEIGHTS

SHD Masterplan

1-3 storeys

4-5 storeys

6 storeys*

(*7 storeys at limited locations when including Lower Ground Floors)

9.5 DENSITY AND BUILDING HEIGHTS

Part 10 Masterplan

- 1 storey
- 2 storey
- 4 storey
- 5 storey
- 6 storey
- 7 storey
- 8 storey

9.6 PLANNING APPLICATION STRATEGY

Existing Site

- Existing Site appraised by the Design Team in consultation with the Community and the Planning Authority.

Current Masterplan

- The Design developed during the consultation period with a masterplan developed for the subject lands.
- Masterplan includes the adaptive reuse of several heritage buildings in addition to the provision of 1,002 new homes.

Part 10 Planning Application

- The Part 10 planning application includes 934 new dwellings and various non-residential and community uses.
- The Main Hospital Building and adjacent structures and will form part of a future planning application along with the 68 additional residences which form the Current Masterplan.
- Further details on the current Masterplan are included as an Appendix to this report.

CURRENT MASTERPLAN

Residential

Block	No. Dwellings
Block 01	012
Block 02	104
Block 03	156
Block 04	92
Block 05	114
Block 06	37
Block 07	218
Block 08	24
Block 09	16
Block 10	173
Block 11	036
Block 12	020
Total	**1,002 Dwellings**

Non-Residential Uses

Use	Approx. Area
Retail	1,160 sqm
Restaurant	266 sqm
Community Facilities	1,749 sqm
Creche	716 sqm
Medical Centre	288 sqm
Cafe	78 sqm
Management Suite	123 sqm
Chapel	112 sqm
Infirmary	158 sqm
Main Hospital Building (Enterprise & Innovation)	5,250 sqm

PART 10 LAYOUT

Residential

Block	No. Dwellings
Block 02	104
Block 03	156
Block 04	92
Block 05	114
Block 06	37
Block 07	218
Block 08	24
Block 09	16
Block 10	173
Total	**934 Dwellings**

Non-Residential Uses

Use	Approx. Area
Retail	1,160 sqm
Restaurant	266 sqm
Community Facilities	1,750 sqm
Creche	716 sqm
Medical Centre	288 sqm
Cafe	78 sqm

9.7 TOWNSCAPE AND VISUAL IMPACT

The key considerations for the initial visual impact elaborated in this section are:

- from where within the surrounding townscape context might the proposed development be visible depending on proposed building heights
- when visible, does the proposed development appear overbearing in relation to surrounding receptors or result in an unacceptable degree of overlooking, particularly into neighbouring residential properties. In this instance the visibility scenario needs to take account of an existing c. 5m high security wall that surrounds the site, substantial sections of which are likely to remain in-situ.

In order to understand the nature and extent of potential visibility of the proposed development, Digital Surface Model (DSM) data was acquired for a 1km radius around the site. DSM data generates a digital 3D environment that includes for all terrain and land cover elements (buildings and vegetation) and allows for visibility analysis to be undertaken in the form of a Zone of Theoretical Visibility (ZTV) map that takes account of inherent screening. ZTV mapping was then undertaken for each level of the proposed development from 2 storey buildings up to 12 storey buildings (see Appendix for series of floor-by-floor ZTV maps). Of particular interest is when the ZTV pattern strikes the ground plain as this indicates visibility at ground level. When the ZTV pattern strikes roofs and tree tops, it is of less relevance, other than the fact that it might indicate visibility from upper level windows of surrounding receptors.

As can be seen from the ZTV analysis, ground level scheme visibility of elements up to 2 storeys in height is restricted to the immediately surrounding context, including the park to the south and small portions of green areas within housing estates to the north and east. Visibility increases progressively and consistently with each additional level up to 8 storeys, but remains relatively concentrated within the immediately surrounding area of the site, at least for ground level viewers. At 10 storeys the ZTV pattern actually decreases in terms of overall extent and this relates to the fact that there are fewer more centralised structures of this height within the CMH site and the opportunity for visibility between intervening buildings and vegetation is reduced.

However, where visibility does occur it is generally more intensive (covers more of the ground plain) than for lower levels of development. Again, at 12 storeys in height, visibility is not noticeably more extensive within the overall study area, but where it does occur, it occupies more of the ground plain than lower level structures. Subsequent to this analysis it was determined that a height of 6 storeys would be a satisfactory threshold within which to design the buildings on site. Closer to the boundary walls the buildings step down to minimise visual impact and overshadowing of adjacent buildings. Generally the buildings rise to a height of 5 or 6 storeys at the centre of the site.

The ZTV mapping exercise is also useful for determining representative viewpoint locations within the surrounding landscape that will be used for the visual impact assessment. A selection of viewpoints has been chosen for the TVIA following consultaiton with stakeholders and the Planning Authorities.

Mass-model montages have been prepared from each of the viewpoint locations and these give a better understanding of the nature of the visibility (bulk and massing) of the proposed development than the ZTV mapping can provide. In terms of the nature of visibility, the montages indicate that when relatively open visibility occurs towards the site (i.e. VP2 and VP7) there is a relatively clear sense of scale transition from the peripheral lower buildings towards the central taller buildings such that the latter do not appear overbearing or likely to generate close overlooking of residential properties.

Where the foreground is more contained by vegetation and buildings (the majority of the remaining views) the proposed taller structures in the central portion of the CMH site tend to rise into view without the transitional scale context of the lower peripheral building, which are screened from view. This scenario can generate a minor degree of ambiguity from tall buildings rising within a residential street scene, however, there is still a sense of space and distance to the development that ensures that it does not appear overly bulky, overbearing or likely to result in overlooking. There also tends to be generous spacing between the taller buildings giving a sense of permeability and preventing all of them being visible at once from most locations.

9.7 TOWNSCAPE AND VISUAL IMPACT

Figure 117 : LVIA viewpoint locations selected for the Central Mental Hospital Development

Figure 118 : Current view from LUAS line at Dundrum Luas Bridge (VP1)

Figure 119 : Proposed view from LUAS line at Dundrum Luas Bridge (VP1)

Figure 120 : Current view towards site from Rosemount Green (VP2)

Figure 121 : Proposed view towards site from Rosemount Green (VP2)

Figure 122 : Current view towards site from Mount Carmel Road (VP3)

Figure 123 : Proposed view towards site from Mount Carmel Road (VP3)

Figure 124 : Current view towards site from Larchfield Road (VP4)

Figure 125 : Proposed view towards site from Larchfield Road (VP4)

Figure 126 : Current view towards site from Farmhill Road (VP5)

Figure 127 : Proposed view towards site from Farmhill Road (VP5)

Figure 128 : Current view towards site from Goatstown Road (VP6)

Figure 129 : Proposed view towards site from Goatstown Road (VP6)

Figure 130 : Current view towards site from Mulvey Park (VP7)

Figure 131 : Proposed view towards site from Mulvey Park (VP7)

Figure 132 : Current view towards site from Mulvey Park (VP8)

Figure 133 : Proposed view towards site from Mulvey Park (VP8)

Figure 134 : Current view towards site from Glasson Court (VP9)

Figure 135 : Proposed view towards site from Glasson Court (VP9)

Figure 136 : Current view towards site from Annaville Park (VP10)

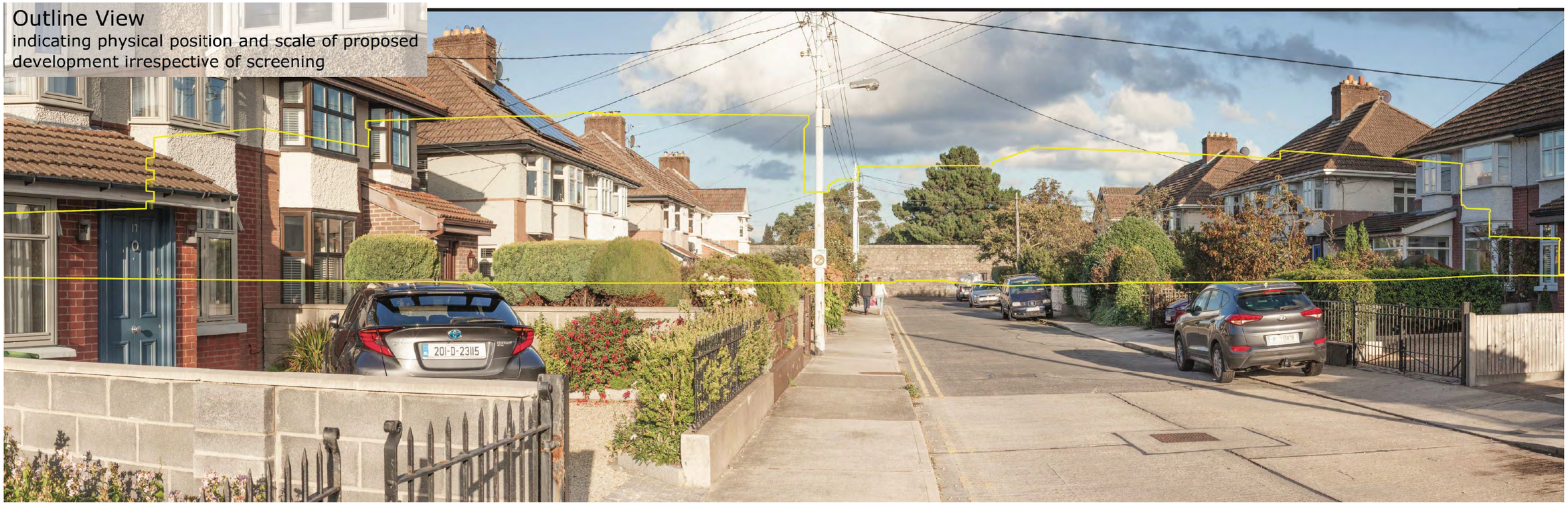


Figure 137 : Proposed view towards site from Annaville Park (VP10)

9.8 SUNLIGHT AND SHADOW ANALYSIS

The Building Research Establishment's Site layout planning for daylight and sunlight: a guide to good practice (the BRE Guide) suggests using the 25 degree test as an initial test to see if more detailed sunlight and daylight analysis is required. Specifically, the Guide states as follows:

- In relation to sunlight access, Section 3.2.1-3.2.3 of the BRE Guide states: "In designing a new development or extension to a building, care should be taken to safeguard the access to sunlight both for existing dwellings, and for any nearby non-domestic buildings where there is a particular requirement for sunlight... Obstruction to sunlight may become an issue if:...in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25° to the horizontal measured from the centre of the lowest window to a main living room... To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south."
- In relation to daylight access, Section 2.2.5 of the BRE Guide state: "Measure the angle to the horizontal subtended by the new development at the level of the centre of the lowest window... If, for any part of the new development, this angle is more than 25°, a more detailed check is needed to find the loss of skylight to the existing building."

Using the context model, preliminary analysis of windows in existing houses surrounding the site to determine zones on the application site in which developments of different heights might be located (i.e. the bands show where different heights of development would fall below the 25° line taken from windows in neighbouring buildings).

Preliminary analysis indicates that the impacts to the neighbouring properties are within the intention and application of the BRE guidelines and therefore should be considered acceptable in daylight and sunlight terms.

Figure 138 : Sunlight/ Daylight analysis modelling. Please see Daylight & Sunlight Report prepared by GIA for further information.

9.9 ACCESS AND MOBILITY STRATEGY

The masterplan site is assessed as being in a "Central and/or Accessible Location" in line with Section 2 of the Design Standards for New Apartments (DSFNA). This assessment takes into consideration Dundrum Central's proximity to significant employment locations such as Dundrum Town Centre and University College Dublin and high-capacity urban public transport stops (Luas) and high frequency urban bus services. This has in turn informed masterplan proposals for access and mobility in and around the site, as seen in a masterplan which promotes active modes, enhanced connectivity and permeability in the surrounding area over increased car dependency and dominance.

The proposed design approach and access strategy should therefore put pedestrians and cyclists at the top of the user priorities, followed by access to public transport and then vehicular access to the wider road network via a street hierarchy consistent with those set out in DMURS. The site layout and pedestrian and cycle links should seek to give good connectivity to the wider area to help ensure that local trips can be made using sustainable forms of travel.

Many of the existing residential estates off Dundrum Road have in effect being designed as a series of cul-de-sacs. This means that in many cases movement by all modes are on and off Dundrum Road. This concentrates traffic flows along this corridor and also significantly increase distances travelled to a variety of destinations in the area.

Pedestrian and cycle movement are more adversely impacted by increases in travel distance between destinations where poor permeability is provided.The existing CMH lands, by necessity of their current use, are walled and the lands currently represent a barrier to movement in the area.

A key challenge for the site is permeable walking routes between homes and community facilities, local schools, shopping activities and public transport. The redevelopment of the site will allow an opportunity to support some forms of mixed-use and community buildings. The pedestrian journey through the centre will be improved by ground level shops, community spaces, a new civic realm, comfortable rest stops and improved footpath/cycleways. Areas adjacent to the centre will be better connected with a new north-south route connecting Dundrum Road and Larchfield Road. An extension of Annaville Park will also be provided to accommodate a new east-west pedestrian route heading towards the Walled Garden along the eco-corridor. Where suitable, vehicular route connections will traverse through the outer-core area to help service the site's private vehicular needs.

Retaining and enhancing the existing gateway to the north-west near the Windy Arbour LUAS station will create a new arrival point within the new active and walkable neighbourhood. A new gateway to the south adjacent to Rosemount Green, will open up both pedestrian, cycle and vehicular connections, making it easier for users to connect to Goatstown Road from Dundrum Road. An increase in frequent services will significantly improve access to employment and education opportunities also located within the area. The LUAS line will greatly help integrate the CMH site into the urban fabric of Dundrum to ensure direct access, and easy navigation and way finding for residents and visitors.

Figure 139 : Aerial Image of Neighbourhood

9.9 ACCESS AND MOBILITY STRATEGY

Legend:

Primary Cycle Route (aligns with the Dundrum LAP proposals for increased cycle infrastructure)

Primary Vehicular Route

Pedestrian/Cycle access and Occasional / Emergency Access

Local Access / Homezone

Pedestrian/Cycle access and Occasional / Emergency Access

Access Point - All Users

Access Point - Ped & Cyclist

Access Point - Pedestrian/Cycle access and Occasional / Emergency Access

Access points

1A. Dundrum Road - All Users
1B. Dundrum Road - Pedestrian, Bicycle Access, Emergency Vehicles
2. Mulvey Park - Ped / Cycle
3. Annaville - Ped / Cycle
4. Rosemount Green - Ped / Cycle

9.10 CYCLING INFRASTRUCTURE

Cycling parking provision
The masterplan proposals promote healthy active travel modes and sustainable modes of transport over car-dependent transport. Priorities for the masterplan will be the development of high quality infrastructure for pedestrians and cyclists and enhancing access and permeability to and through the masterplan site in the context of surrounding development.

A variety of cycling infrastructure is proposed for the site. Stacked multi-level bike racks within secure storage units will provide the majority of cycle parking for residents of the multi-storey apartment blocks.

Secure on-street bike racks are proposed for the on-street residences, in order to avoid cycle parking within homes, and generous on-street cycle parking will be provided for visitors to the site, in well lit, overlooked spaces.

Enhanced cycle infrastructure in the wider Dundrum - Windy Arbour area may be brought about by way of increased provision of dedicated cycle lanes and the introduction of such infrastructure would also improve connectivity through the masterplan site.

Visitor bicycle parking provision
Visitor short-stay bicycle parking is located at-grade for residential and non-residential uses. Visitor bicycle parking consists of Sheffield Stands and at least 50% of these will be covered.

Figure 140 : On-street cycle parking

Figure 141 : Public rental cycle scheme

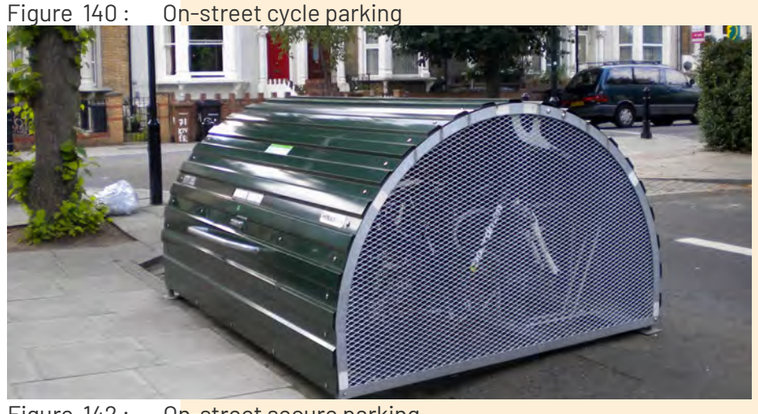


Figure 142 : On-street secure parking

Figure 143 : Pedestrian and cycle footpath

Figure 144 : Secure stacked cycle parking

Figure 145 : Cycle parking adjacent to building entrance

9.11 PARKING STRATEGY

From the site's assessment as being in a "Central and/or Accessible Location", a detailed assessment whose basis is described previously in Section 9.7, it follows that the masterplan would seek to reduce car dependency and dominance in the built environment and to encourage active travel modes such as walking and cycling.

For such locations, DSFNA recommends the following:
"Planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard ."

The creation of a pleasant, people-friendly public realm, with conditions that are conducive to greater uptake and participation in active modes, are key drivers of the masterplan design proposals. The masterplan seeks to provide for such conditions by reducing the dominance of cars in the design and utilisation of public space, particularly in the historically sensitive context of retained heritage structures including the main hospital building. The design of public realm and streets within the masterplan site will incorporate homezones and other measures that will reduce the speed of motorised traffic, limit through traffic and seek to minimise at-grade or surface parking for cars.

Car parking
Car parking in the proposed development will consist of podium/lower ground floor parking, with suitably placed at-grade parking and a small proportion of units having in-curtilage parking. The podium/lower ground floor parking will concentrate car parking in clusters, where users can walk a short distance to and from residential units.
Such parking clusters will be located below or adjacent to each apartment block, or in a dedicated parking facility or structure at another location within the site.

Visitor parking
Visitor parking will be primarily located at-grade and provision will be proportional to the residential and non-residential uses.

Figure 146 : Pedestrian and cycle footpath

9.12 STREET HIERARCHY

MOVEMENT STRATEGY

The provision of improved connectivity to surrounding transport routes, facilities, prospective transport nodes and key destinations is important in creating a sustainable community. Through the creation of routes through the site, this will allow for links between residential neighbourhoods and landscape facilities, creating a highly accessible, permeable and well-connected environment that will benefit both new and existing communities .

The quality of the built environment can also encourage healthier travel choices and encourage greater recreation and leisure activities outdoors. By integrating landscape features alongside active travel routes, important existing ecological corridors can be preserved and new ones created.

Cycle links

Pedestrian links

Recreation trail

Parkland trail

Wetland walk

Destination

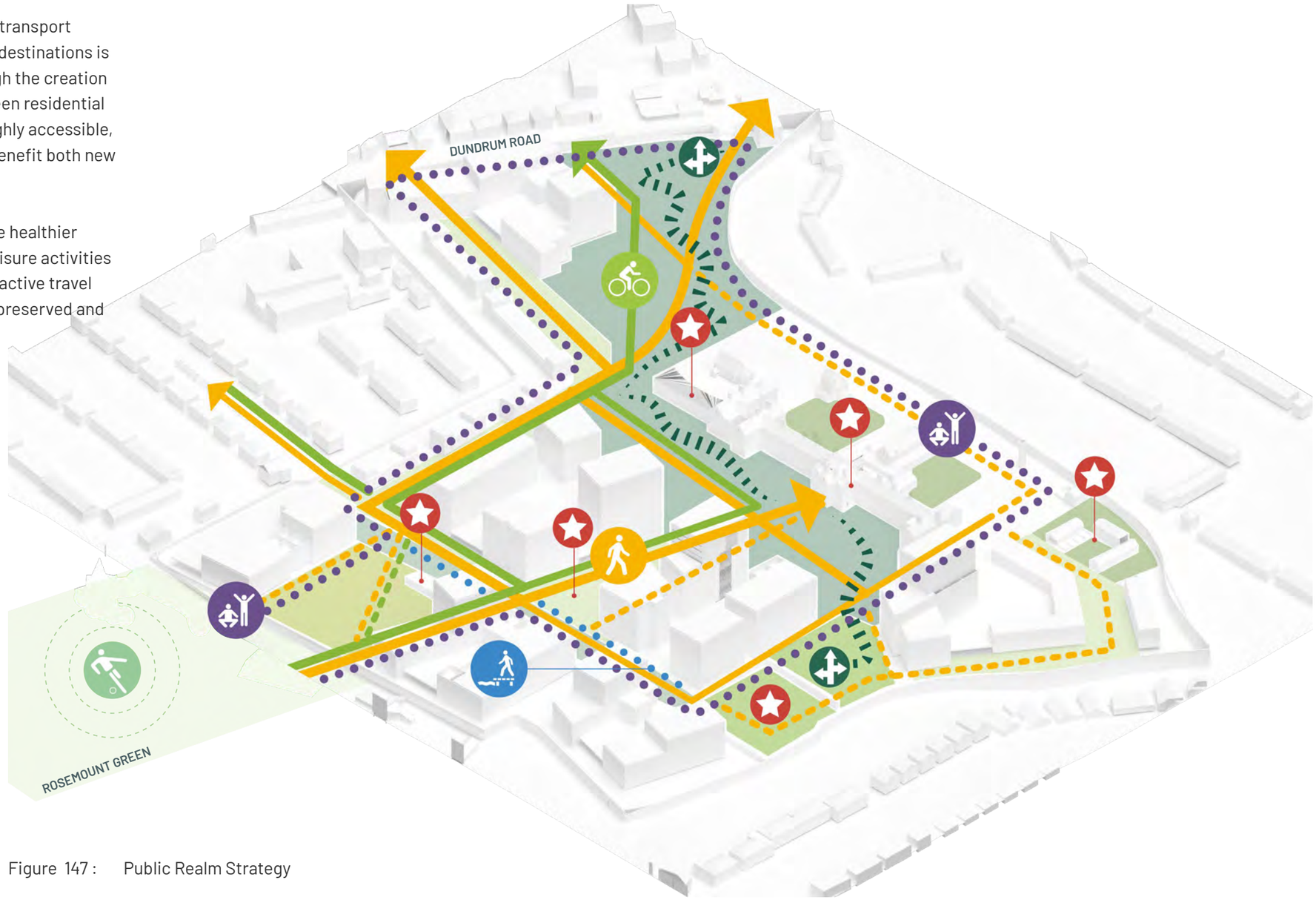


Figure 147 : Public Realm Strategy

9.12 STREET HIERARCHY

Figure 148 : Streetscape Hierarchy

Type A | Primary (Link) Street
(6.0m wide)

Type B | Secondary (Local) Street
(5.5m - 6.0m wide)

Type C | Homezone / Local Street
(5.5m wide)

Type D | Pedestrian street
(5.5m - 6.5m carriageway)

Type E | Shared Pedestrian & Cycle Active Travel Route
(5.0m wide)

Type A - Primary (Link) Street
Primary streets form the main access route to the development for vehicles, providing clear and easy to navigate routes where larger volumes of traffic movements are anticipated.

Type B - Secondary (Local) Street
Self-regulating local streets provide local access within communities and encourage lower vehicular speeds. The lightly trafficked nature of these streets supports use of minimal signage/line marking due to their low speed nature and low movement funcion.

Type C - Homezone / Local Street
Streets which seek to meet the needs of pedestrians, cyclists, children and residents and where the speeds and dominance of cars is reduced. Homezones will accommodate parking access and on-street parking.

Type D - Pedestrian Streets
These streets are solely for pedestrians and cyclists. Motorised vehicular traffic will generally not be able to access these streets. Local access for servicing and emergency vehicles will be provided as necessary.

Type E - Active Travel Route
Two-way shared pedestrian and cycle active travel routes provide a safe and attractive, high quality off-line facility for non-motorised road users, and greatly reduce the occurrences of potential conflict points with vehicular traffic.

Figure 149 : Primary streets

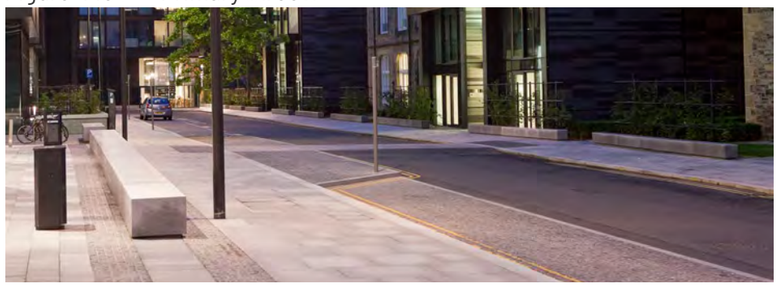


Figure 150 : Secondary streets

Figure 151 : Homezone streets

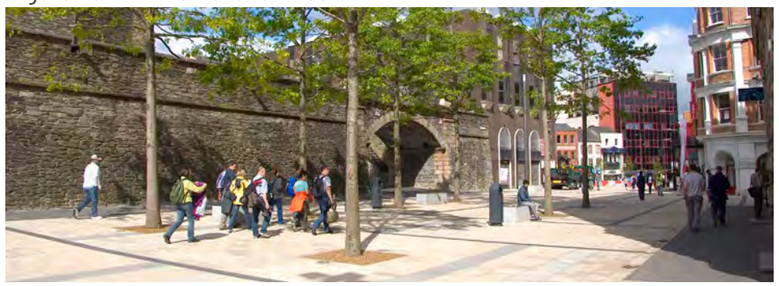


Figure 152 : Pedestrian streets

Figure 153 : Active Travel Route

9.12 STREET HIERARCHY

Figure 154 : Section a' aa': Access Road

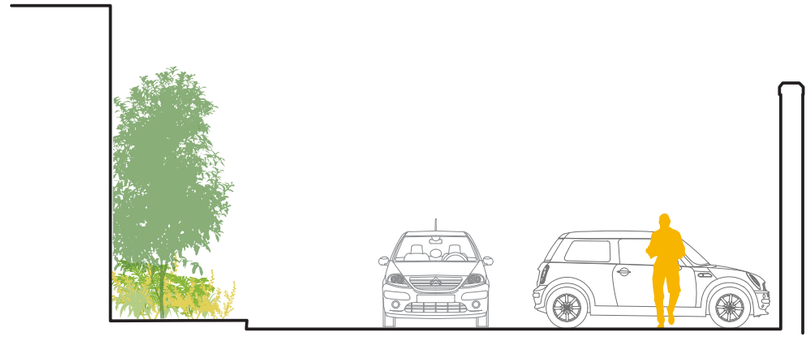


Figure 155 : Section b' bb': Shared surface circulation

Figure 156 : Section C1 -C2: Access Road & Community Park

9.12 STREET HIERARCHY

Figure 157 : Section D1-D2 - Home zone / Local Road & Eco Corridor

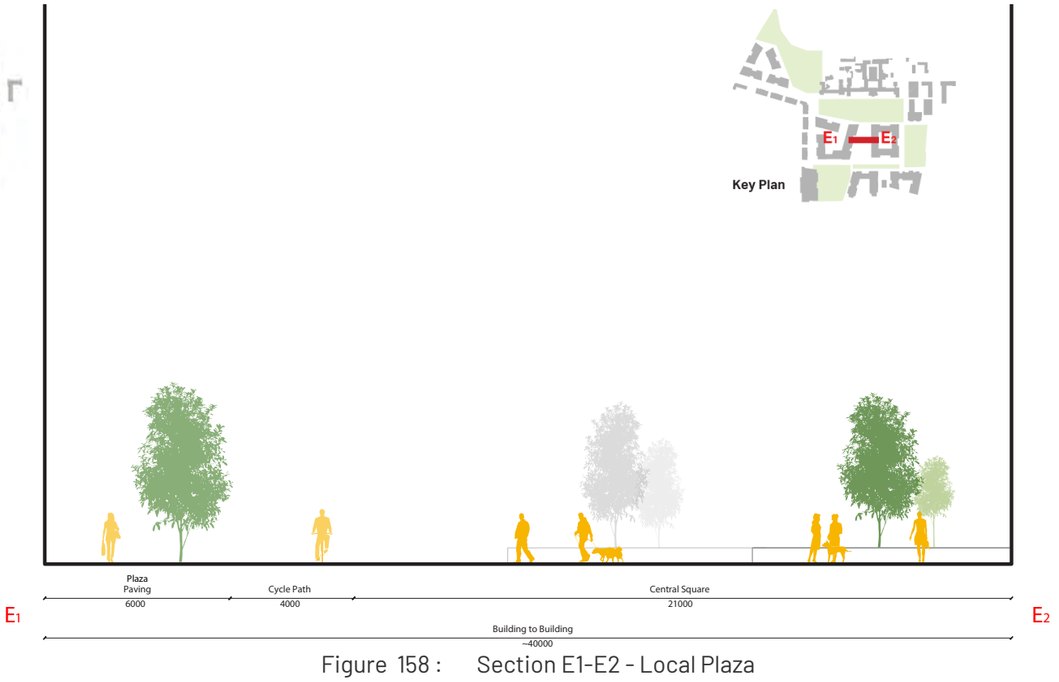


Figure 158 : Section E1-E2 - Local Plaza

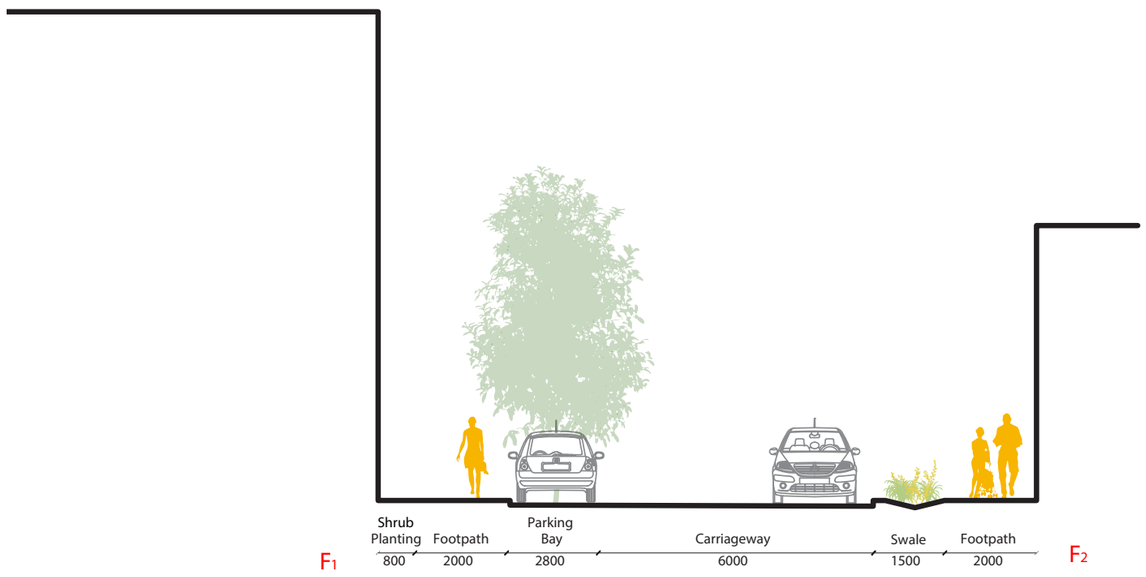


Figure 159 : Section F1-F2 - Intimate Street

9.13 LANDSCAPE & OPEN SPACES

Placemaking

The distinctive collection of heritage buildings on the masterplan site contribute to the site's unique character and it is envisaged that sensitive retention, restoration and repurposing of these structures will provide focal points for distinctive placemaking within the masterplan site.

Among those Character Areas identified through concept design is a "Heritage Quarter", whose centrepiece is the main hospital building, with other outlying heritage structures such as the Chapel and the Infirmary building contributing to a wider sense of history's presence on the site.

It is recognised by the Client and the Project Team that these historical structures have an important role to play in the site's future development.

The landscape needs to respond and facilitate a wide range of age-groups, with differing physical abilities and different levels of independence. Different groups of people will have different interests and preferences of open space and it's important that the landscape provides leisure and recreational opportunities to a broad range of the population in order to support a healthy lifestyle for new residents and the surrounding existing community.

Figure 160 : Landscape Vision & Objectives

Figure 161 : Placemaking Objectives

9.13 LANDSCAPE & OPEN SPACES

Landscape Concept and Inspiration

Inspired by the history of the site, of a hospital within a parkland setting, acting as a place of tranquillity and restoration, and associated with the Picturesque movement, which places emphasis on the picto-rial values of architecture and landscape in combination with each other.

Figure 162 : View of a London Hospital in an open landscape

9.13 LANDSCAPE & OPEN SPACES

Landscape Programme

Recreation

SPORT

PASSIVE RECREATION

PLAY

The aim of the open space strategy is to provide informal recreational space throughout the development, this allows for sport, passive recreation and play. Informal recreational space ensures there is sufficient space to accommodate a variety of sporting and recreational activities, providing space which is flexible and accommodates a wide variety of user groups. This ensure the open spaces are inviting and encourage greater participation in recreational activities and health lifestyle choices.

Environment

LANDSCAPE HABITAT WATER FEATURES

All open spaces will be multi-functional, catering for the needs of people, as well as the natural environment, supporting habitat creation, the growing of trees, plants and food, and the integration of landscape drainage, to help improve the local environment, improve air quality and aid climate change mitigation.

Education

PARKLAND EDUCATION

Dundrum Central contains existing natural assets such as the parkland entrance of mature trees, the walled garden and heritage features such as the hospital building and the farm building. Other assets and future landscape such as wetland areas can become important educational tools for local children visiting the site, learning about the natural environment, nature and local heritage.

Culture

DESTINATION EVENTS

The site has the potential to become a key local destination due to location and the quality of the environs. The different open spaces could accommodate a variety of cultural and entertainment events, and the central square could accommodate markets throughout the year.

Leisure

The peaceful and tranquil environs of the site lend themselves to the provision of social and leisure/recreational facilities such as cafés, small scale retail, a farmer's marketplace, community sports and nature walks. The character and conditions of the environment on site hold potential to provide a unique destination which would provide some respite or relief from the densely developed urban and suburban environs of the site .

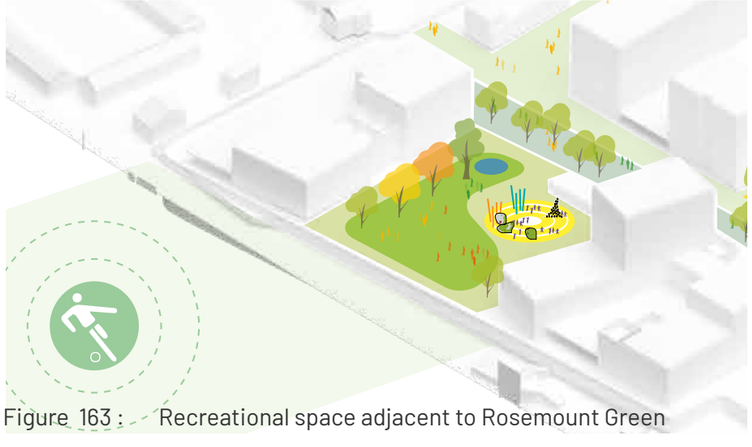


Figure 163 : Recreational space adjacent to Rosemount Green

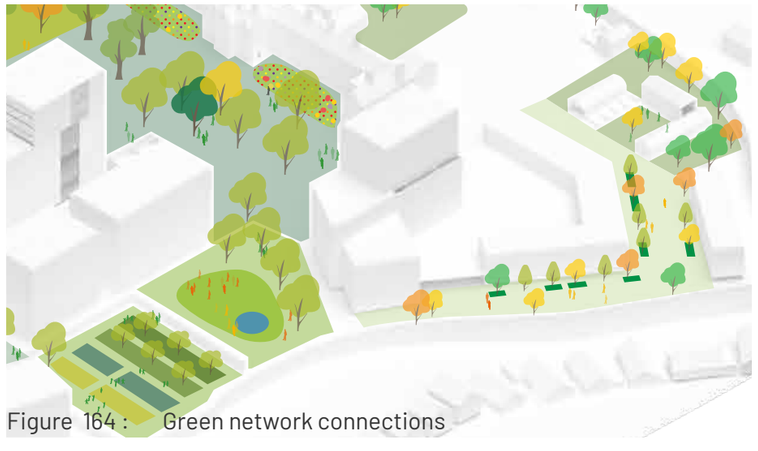


Figure 164 : Green network connections

Figure 165 : Eco-corridors

9.13 LANDSCAPE & OPEN SPACES

Figure 166 : Landscape and open spaces strategy

9.13 LANDSCAPE & OPEN SPACES

To enhance the natural amenity of the Dundrum Central site, public spaces and streets require an identifiable hierarchy and design strategy. They will be safe, pedestrian and cycle friendly and designed for a diverse population.

New, active and improved parkland, play spaces, and public realm will encourage interaction and provide a variety of meeting places. They will be integrated with key community facilities and associated services close to existing transport connections.

The quantity of Public Open Space is outlined on the Open Space Plan prepared by Reddy Architecture + Urbanism in conjunction with the Design Team and is summarised below:

Site Area: 11.4 ha

Public Open Space: 3.2 ha

Proposed Population*: 1,882 people

Public Open Space per Person: **17 sqm**

In addition to the 3.2ha of Public Open Space, the site's open character is maintained and enhanced with the provision of general landscaped areas (not contributing to Public Open Space) and with external communal amenity areas for residents.

Landscaped Areas: 0.43 ha

Communal Amenity: 1.05 ha

Communal Rooftop Amenity: 0.02 ha

Open Space per Person: (Including Additional Areas) **22 sqm**

*Population calculation refers to calculation at Section 12.8 of DLRCC County Development Plan 2022-2028.

Figure 167 : Open Space Masterplan

9.13 LANDSCAPE & OPEN SPACES

Hierarchy of Open Spaces

The following diagrams illustrate the public, shared and private space throughout the development. This will inform the types of open space which will be created in each area, the provision of public resources such as play spaces, amenity open spaces, and the location of community gardens etc.

Public space will accommodate a variety of users and activities and include elements which attract people into the development such as parkland, playgrounds, pocket parks and public squares
Private Spaces are for the use of residents only, and will include podium and roof gardens, and private gardens. These spaces will provide areas for leisure, relaxation and recreation for small children, but also accommodate such facilities as secure bike parking and other necessary facilities.

Shared space will be publicly accessible, but instil a communal character, and will be designed for the use of local residents, both in and outside of the site. The communal spaces will help integrate the development within the locality and encourage an active community.

Existing Heritage Features

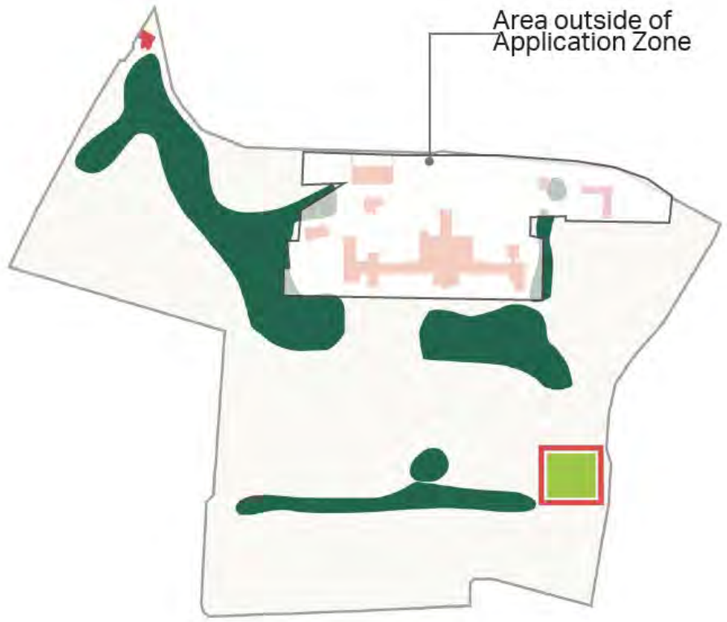


Figure 168 : Existing Heritage Features Diagram

Heritage Buildings / Structures
Landscape Heritage Assets
Walled Garden

Built Development

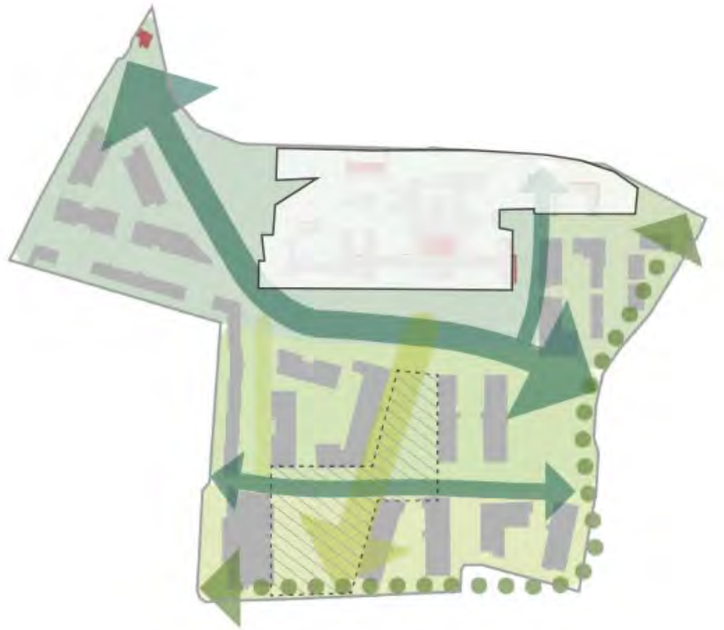


Figure 169 : Built Development Diagram

Heritage Buildings / Structures
Built Development
Central Landscape

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces

Figure 170 : Key Open Spaces Diagram

- The Parkland
- Central Landscape
- Central Square
- Walled Garden Landscape
- Elm Park Stream corridor
- Rosemount Park
- Boundary / threshold change

Landscape Character

Figure 171 : Key Open Spaces Diagram

- Parkland
- The Farm
- Agrarian Field Network
- Open Grassland

Landscape Framework

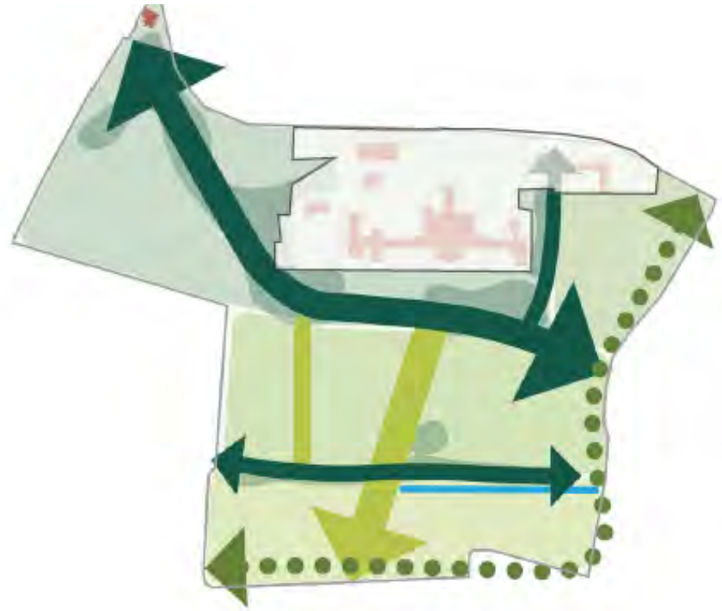


Figure 172 : Key Open Spaces Diagram

- Heritage Landscape Corridor
- Landscape Corridor / Connectors
- Eastern Ecological Landscape Corridor
- Elm Park Stream

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Central Parkland

The primary aim of the Central Parkland Landscape will be about protecting and enhancing its existing character which is defined by the mature trees and historic landscape as a setting for the hospital building. Part of the strategy for this landscape will be the removal of more recent additions which have been added to the landscape which detract from the scale and character of the space. The subtle introduction of footpaths and areas of meadow and perennial planting which will define areas of amenity lawn and ensure the space caters for more passive recreation activity and enjoyment the newly accessible mature trees of the site.

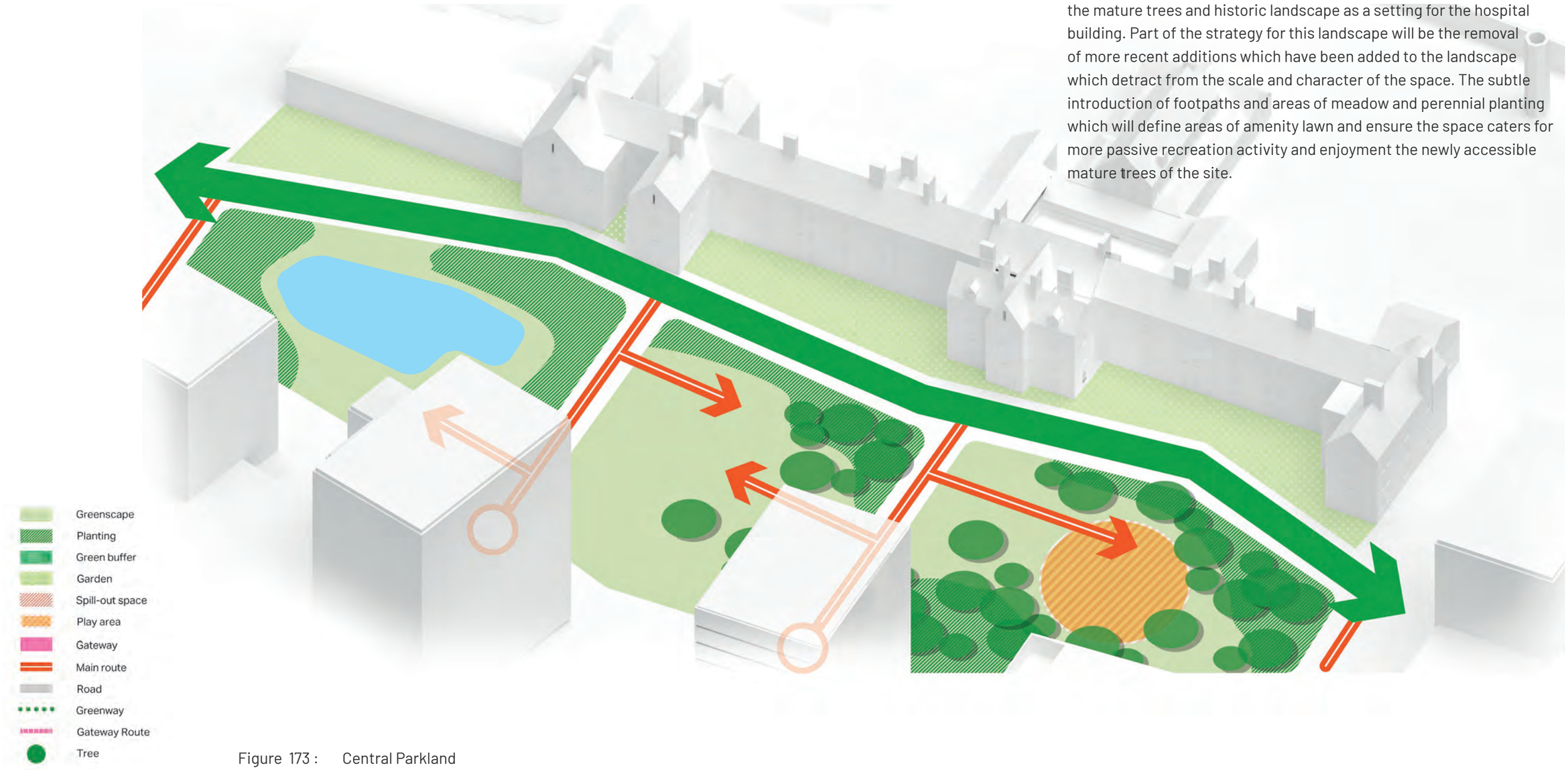


Figure 173 : Central Parkland

9.13 LANDSCAPE & OPEN SPACES

Figure 174 : Existing mature beech trees on site

Figure 175 : People lingering,picnicing,sunning within parkland

Figure 176 : Managed grasslands

Figure 177 : Filtration pond and wildlife habitat

Figure 178 : Intimiate garden spaces adjacent to civic buildings

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Market Square

The Market Square will provide a civic heart to the new community of Dundrum Central. The concept for the square is the idea of exchange be that social, cultural, leisure or small-scale neighbourhood retail.

The square will be designed to provide flexibility and accommodate markets, pop up festivals and cultural events. It's important the square maintains a level of intimacy in the scale of its spaces, so that it encourages everyday activities such as meeting friends, getting a coffee or lunch, encouraging people to linger in the space.

Encouraging greater use of the space will help create a more vibrant community and heart to the development.

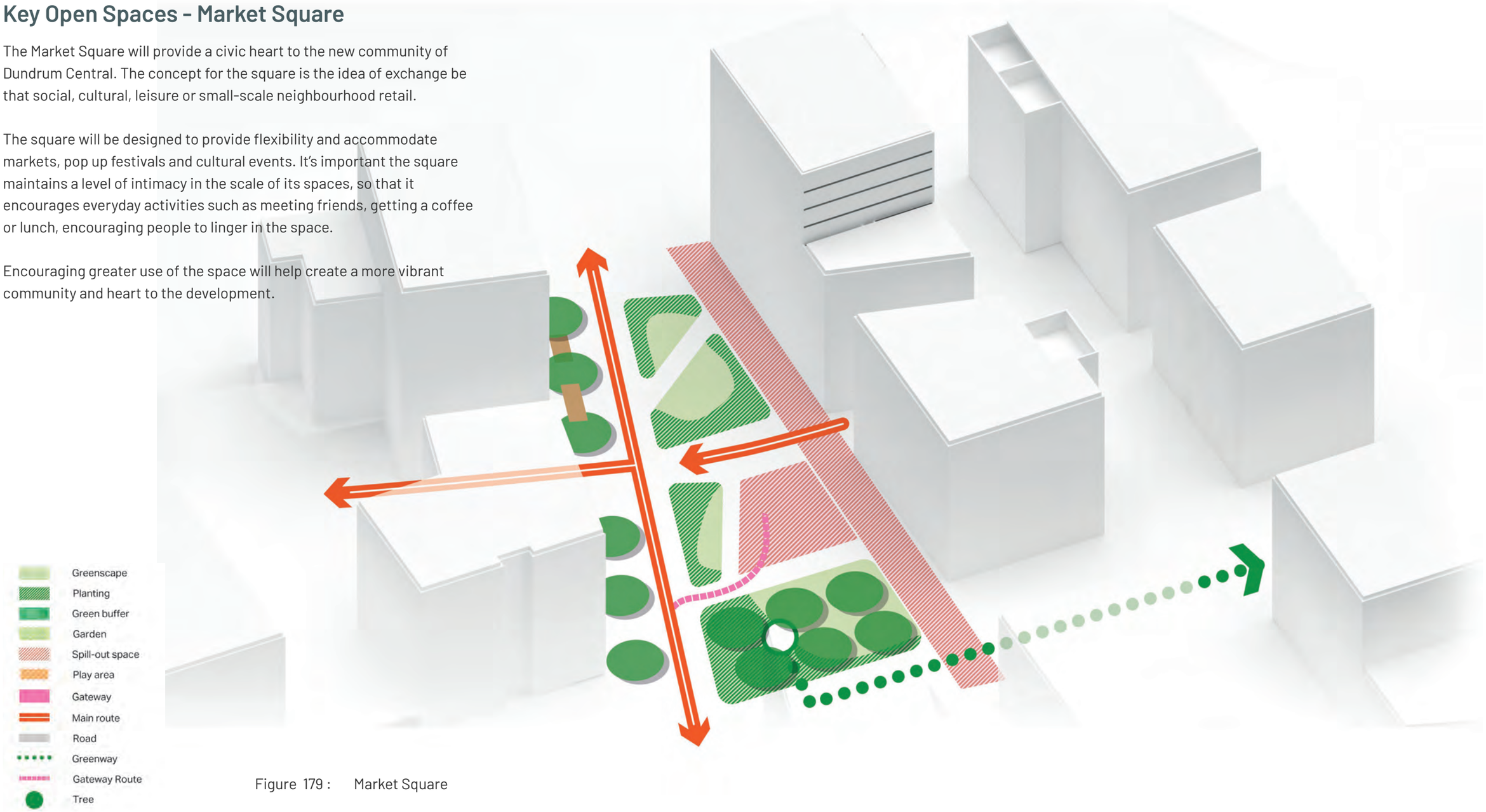


Figure 179 : Market Square

9.13 LANDSCAPE & OPEN SPACES

Figure 180 : Focal point to central square

Figure 181 : Flexible spaces whcih are intimate in scale

Figure 182 : Spaces to wait and linger

Figure 183 : Active frontage to public space

Figure 184 : Integration of benches and planting

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Community Park

The Community Park will provide an important gateway and connection to the south of the development. It is an important space in creating a welcoming environment to residents, the local community and visitors. The masterplan design proposes the physical integration of the new Community Park with Rosemount Green.

It is envisaged that the Community Park would come to be seen as a natural extension of the Green and would encourage greater use of both spaces. While Rosemount Green sees frequent use for organised and active sports, the Community Park will provide for play and flexible open spaces for informal play. The arrangement of the park is also designed to encourage exploration into the wider Dundrum Landscape, creating visual links, vistas to other areas, destinations, such as the hospital, the Market Square and the Walled Garden.

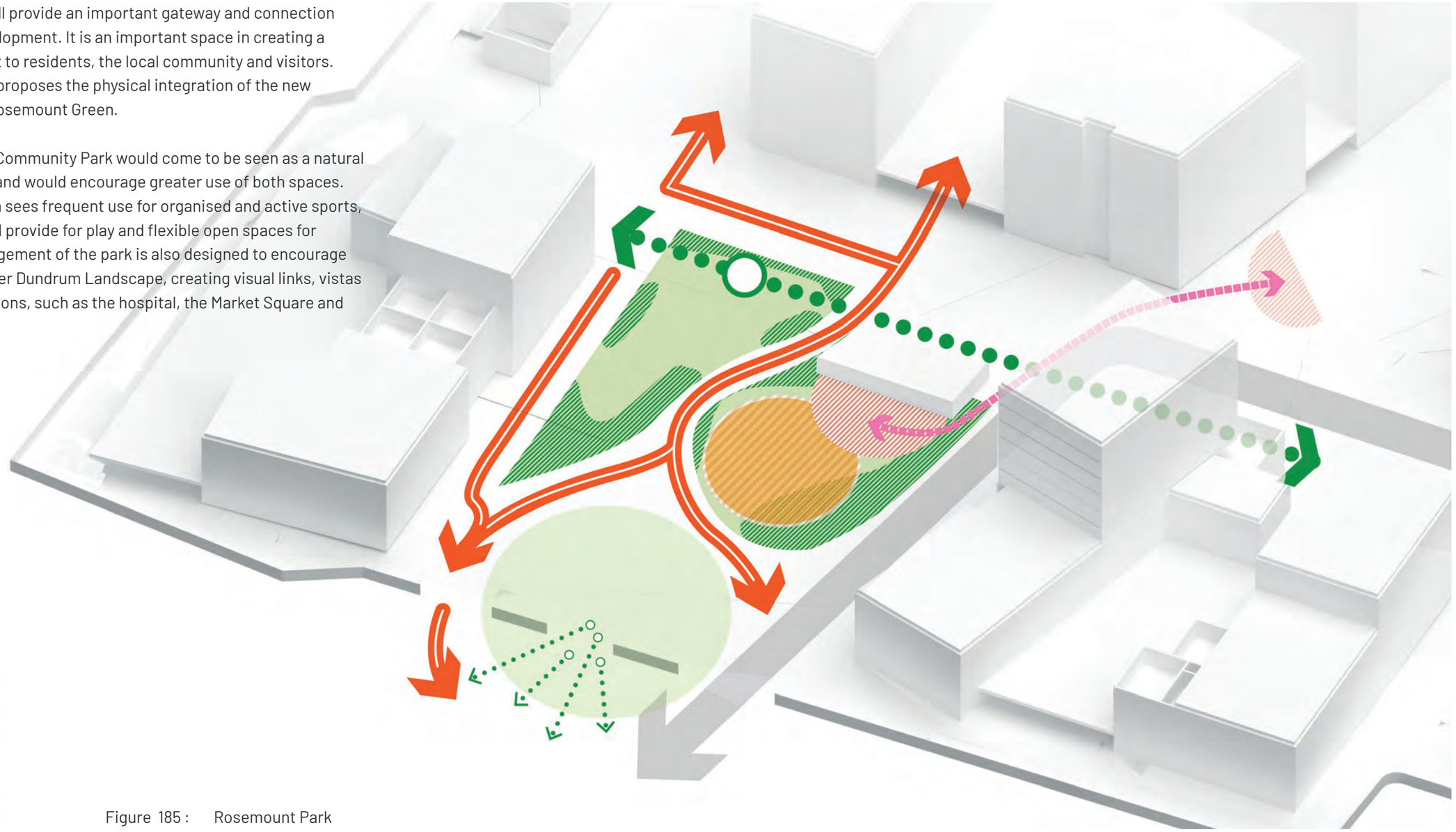


Figure 185 : Rosemount Park

9.13 LANDSCAPE & OPEN SPACES

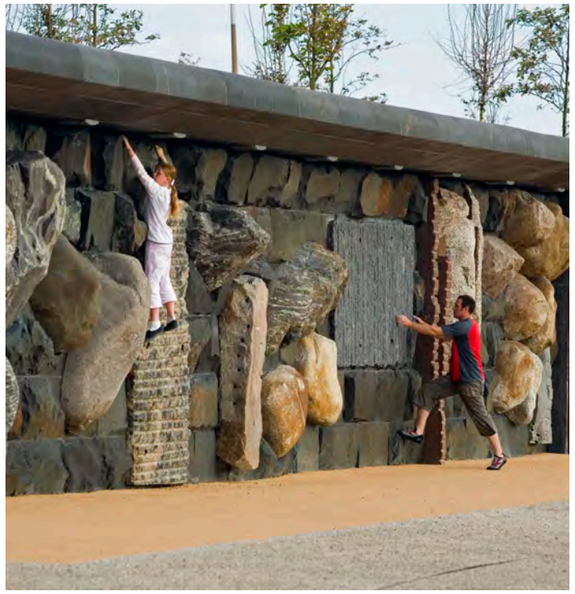


Figure 186 : Engaging landscape features

Figure 187 : Water play spaces

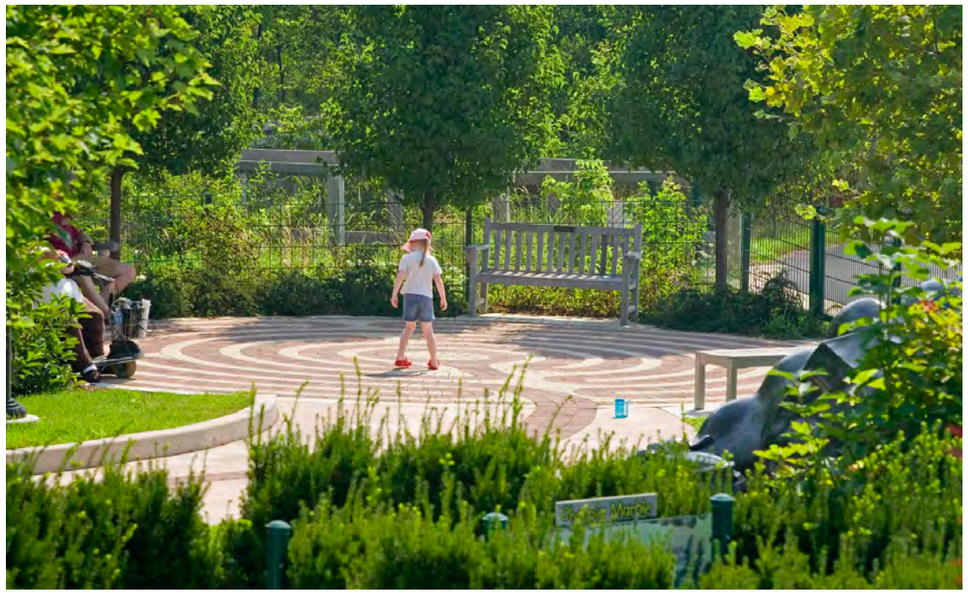


Figure 188 : Spaces enclosed by planting

Figure 189 : Community buildings activating public space

Figure 190 : Landscape for children to explore

Figure 191 : Play spaces for all ages

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Walled Garden

The Walled Garden is one of the most important existing features on site. It provides an area of complete tranquillity within the site. The concept for this space is to create a Kitchen Garden, a place for the residents can grow vegetables.

It can also be a place of education, and a destination for local school children and the local community, an area of relief from the surrounding environment. There may be the opportunity to link the Kitchen Garden with a cafe on site.

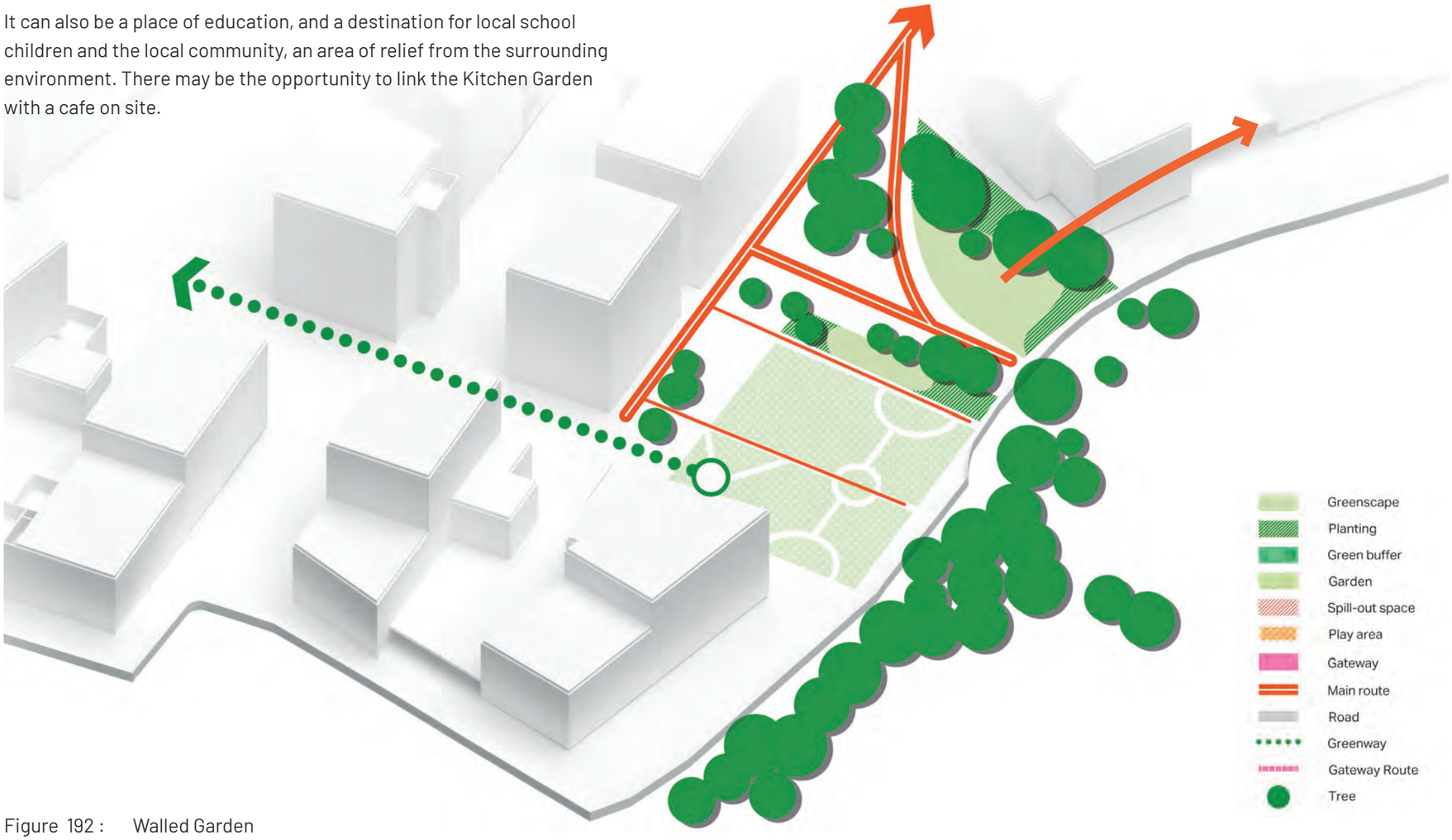


Figure 192 : Walled Garden

Figure 193 : Kitchen garden

Figure 194 : Espalier fruit tree within walled garden

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Eco Corridor

The Eco Corridor will provide an important habitat corridor on site. The area already contains some semi-mature trees which will be retained, a ditch and some wet grassland areas.

The area can be significantly improved, and the areas of wetland habitat increased which will benefit a wide variety of plant and animal species including bats.

It will also be designed to provide educational tools/information which can be used by local school children as well as adults, to gain greater understanding of the natural world.

Figure 195 : Rain-water from building feed swale

Figure 196 : Large filtration pond provide large area of habitat

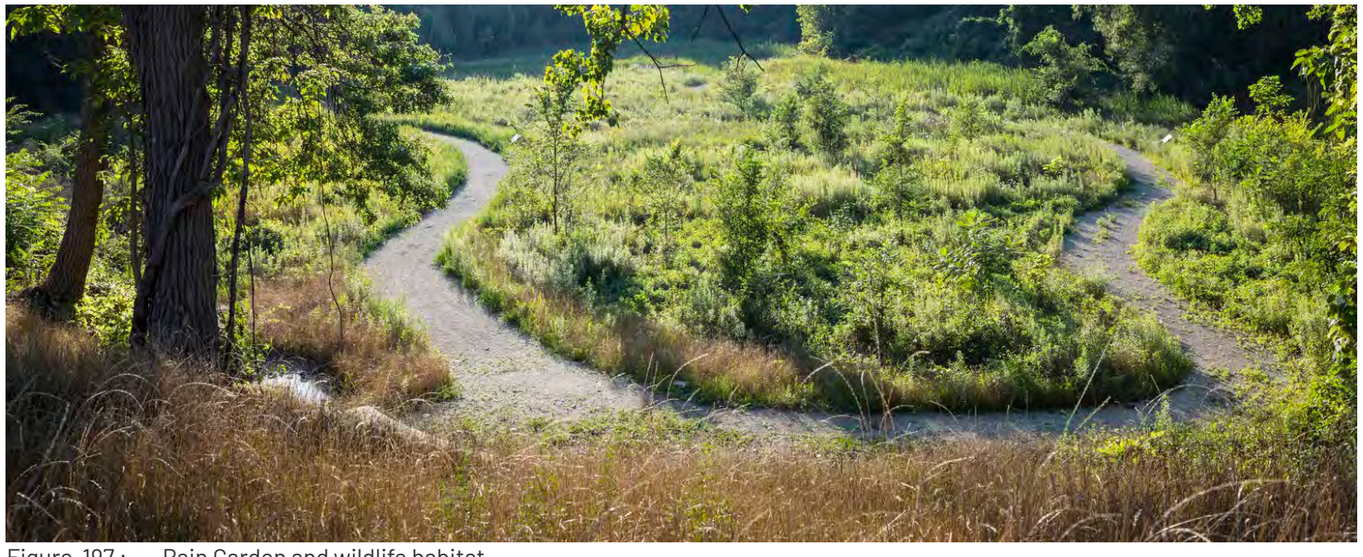


Figure 197 : Rain Garden and wildlife habitat

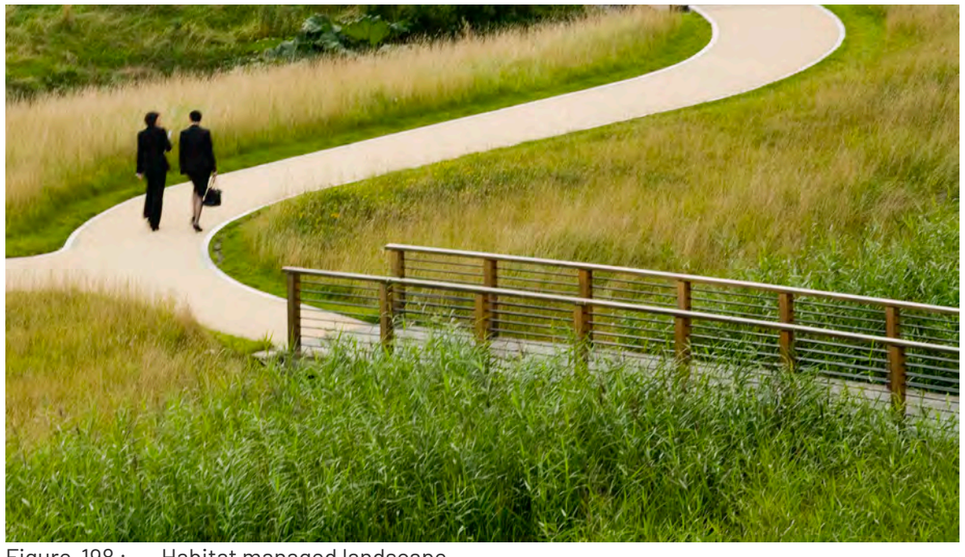


Figure 198 : Habitat managed landscape

9.13 LANDSCAPE & OPEN SPACES

Key Open Spaces - Streets and Homezones / Local Streets

Streets form an important component of the masterplan, and the quality of streets in terms of hierarchy, design, materiality and user priority will have an impact on the character and quality of these spaces and play an important role in providing safe environments for all residents, especially children in accessing different spaces as well as encouraging walking and cycling.

The interface between Dundrum Central and Annaville Park provides an opportunity to strengthen links between the existing and new community. The creation of a space which links to Annaville Park, which creates a understated gateway to Dundrum Central and designed at a scale for children's activity will ensure the connection is more informal, encouraging connection.

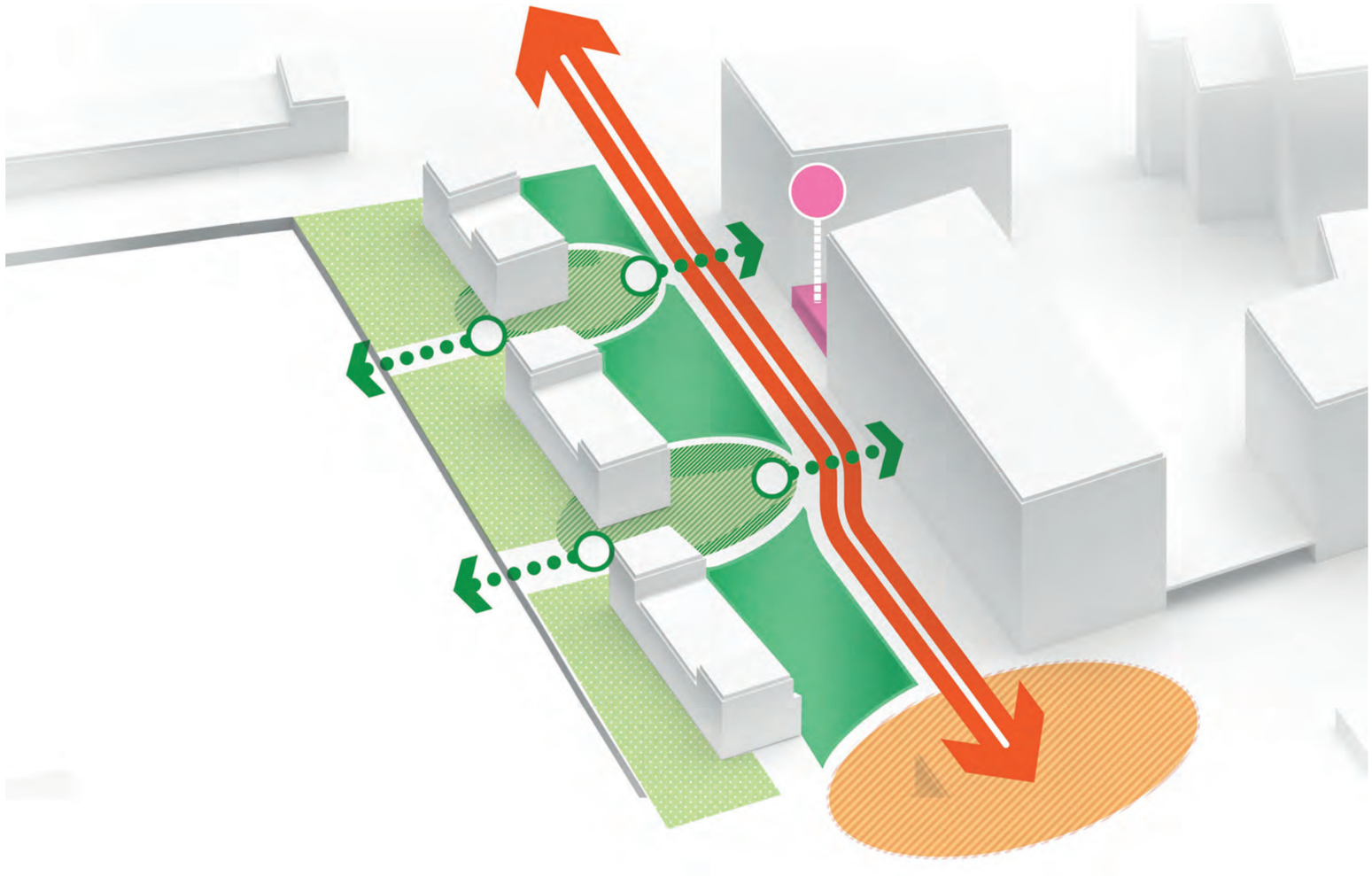


Figure 199 : Greenway

9.13 LANDSCAPE & OPEN SPACES

Figure 200 : Public through route

Figure 201 : Street trees and benches create rest points

Figure 202 : Rain gardens provide sustainable drainage features

Figure 203 : Raised plating provides a buffer to ground floor residences

Figure 204 : Tree planting create privacy and enlosure along streets

9.13 LANDSCAPE & OPEN SPACES

Landscape Design Approach - Play Scapes

Play provision will be an important integral part of the development. The open space network that is proposed for Dundrum Central will allow for a broad variety of play and play spaces. Differing materiality, scale, surrounding built form and content ensure that each play area caters for varying age groups and skills. Play spaces will be located so they are both convenient and easily accessible to both residents and visitors.

Demonstrated through the accompanying images, there will be a focus on natural play within the development. Designed to encourage exploration and imaginative play through the integration of play features and structures within the landscape, and using natural features which encourage interaction and exploration of the natural environment. All play areas will be well connected through a comprehensive network of pedestrian and cycle routes.

Figure 205 : Natural play spaces

Figure 207 : Playspaces within landscape

Figure 208 : Child friendly spaces

Figure 206 : Provision of dedicated cycling infrastructure encourages cycling for all ages. Cycle parking is provided on-site for visitors to play spaces

Figure 209 : Natural elements as play spaces

9.13 LANDSCAPE & OPEN SPACES

Landscape Design Approach - Courtyards and Podiums

Courtyards and roof gardens are important spaces for residents as places to relax, play and enjoy outdoor space close to their homes. These spaces are especially important for children and the less abled who may not have access to the larger open spaces on a day to day basis.

Courtyards provide important spaces where neighbours can meet one another and therefore enhance the sense of community within large developments as well providing environments which create habitats to support local wildlife.

Key Principles, Opportunities

- Privacy Buffer for Ground Floor Apartments
- Pedestrian Circulation
- Flexible Central Open Space
- Formal And Informal Play Opportunities
- Congregation And BBQ Opportunity
- Recreational Opportunities
- Communal Garden Opportunity
- Storage provision
- Structural Planting with Seasonal Interest

Figure 210 : Privacy buffer to ground floor properties

Figure 211 : Flexible central open space

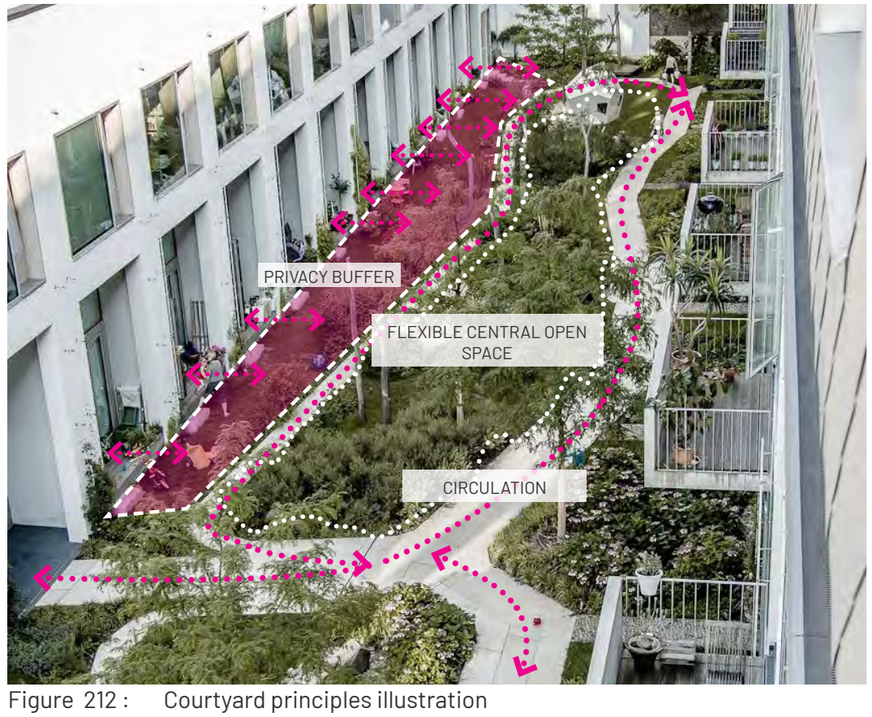


Figure 212 : Courtyard principles illustration

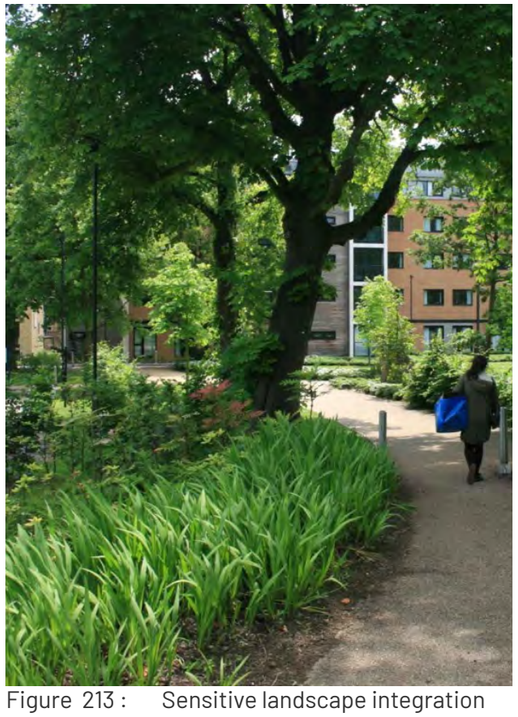


Figure 213 : Sensitive landscape integration

9.13 LANDSCAPE & OPEN SPACES

Landscape Design Approach - Green Roofs

Green roofs will be provided on the tops of buildings where roof gardens may not be viable for structural loading or climatic conditions, but as demonstrated can provide aesthetically pleasing environment which benefit people and wildlife. Green roofs can play an important role in stormwater management, in capturing rainwater and reducing run-off into the public drainage system. Green roofs also provide habitats for insects and birds, helping to improve the areas biodiversity.

Key Principles, Opportunities

- Stormwater Management
- Recreation Opportunity
- Improved Biodiversity
- Aesthetic Improvement

Figure 214 : Green Roof

Figure 216 : Green Roof, Swarthmore College of PA, Pennsylvania

Figure 215 : Roof garden communal amenity, Fulham, London, UK

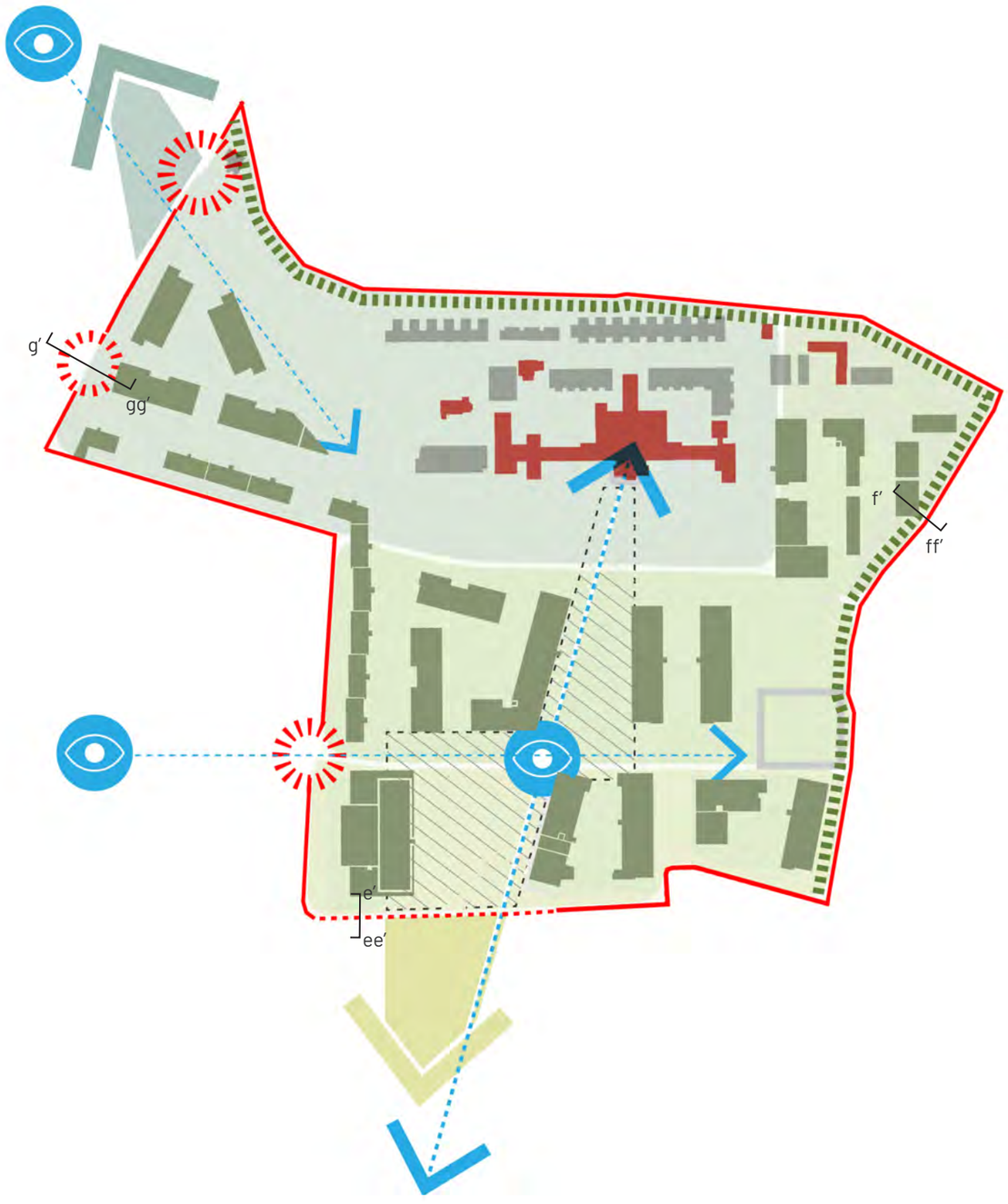
Figure 217 : Roof garden communal amenity, Cincinnati Green Roof 300 Ivy Green Roof, San Francisco, USA

9.13 LANDSCAPE & OPEN SPACES

Landscape Design Approach - Boundary Strategy

Maintain the boundary wall as a unique feature to the site, which creates a sense of enclosure within the estate, and provides sense of relief from the surrounding area. Change in height to be considered, where the wall condition is poor, or the wall is overbearing on residential areas. Key strategies will be to:

- Define key gateways, which are welcoming and encourage people into the estate to create a vibrant public realm
- Framing views of the development set within the landscape to draw people into the site
- Create a landscape corridor along the length of the wall, to visually soften its aesthetic and to create a strong ecological corridor which augments the back gardens which adjoin the site.
- Explore ways to creatively change the boundary so as to encourage physical and visual permeability, and engages people.



Gateways

Existing Boundary Wall - Height Change to be considered

Existing Boundary Wall / Habitat integration / fauna permeability

Change in boundary to integrate the site into the wider urban context

Important views

Figure 218 : Boundary Strategy

9.13 LANDSCAPE & OPEN SPACES

Landscape Design Approach - Boundary Strategy

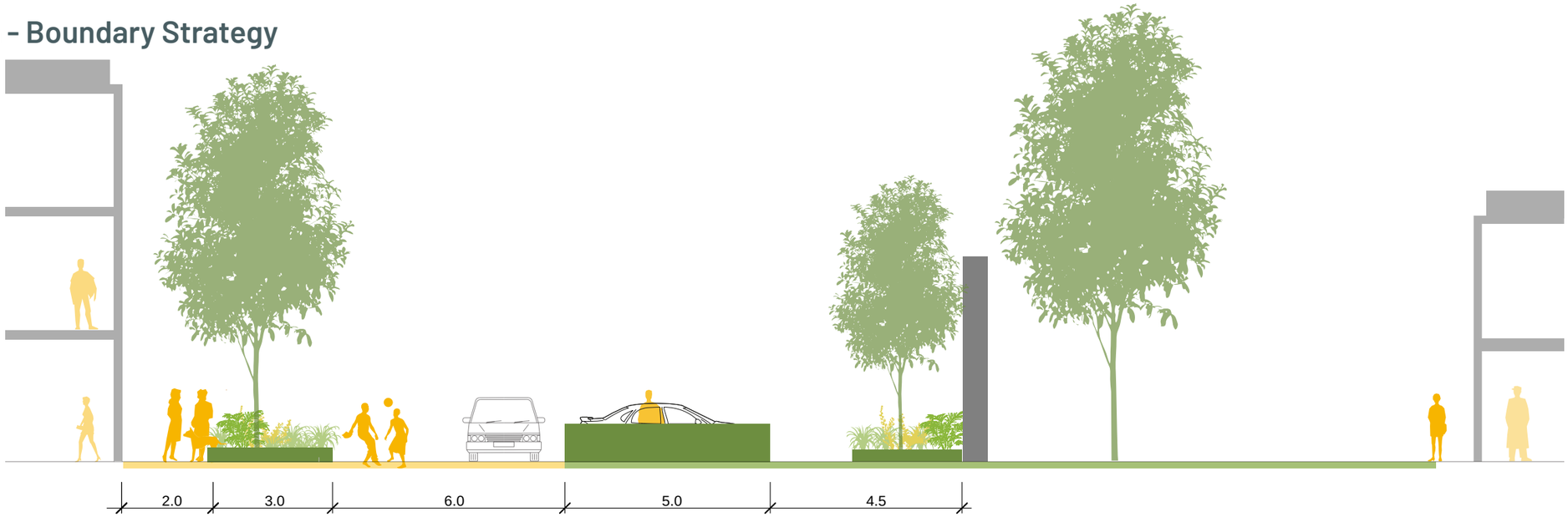


Figure 219 : Section e' - ee' Farm Character Area Eastern Boundary Section

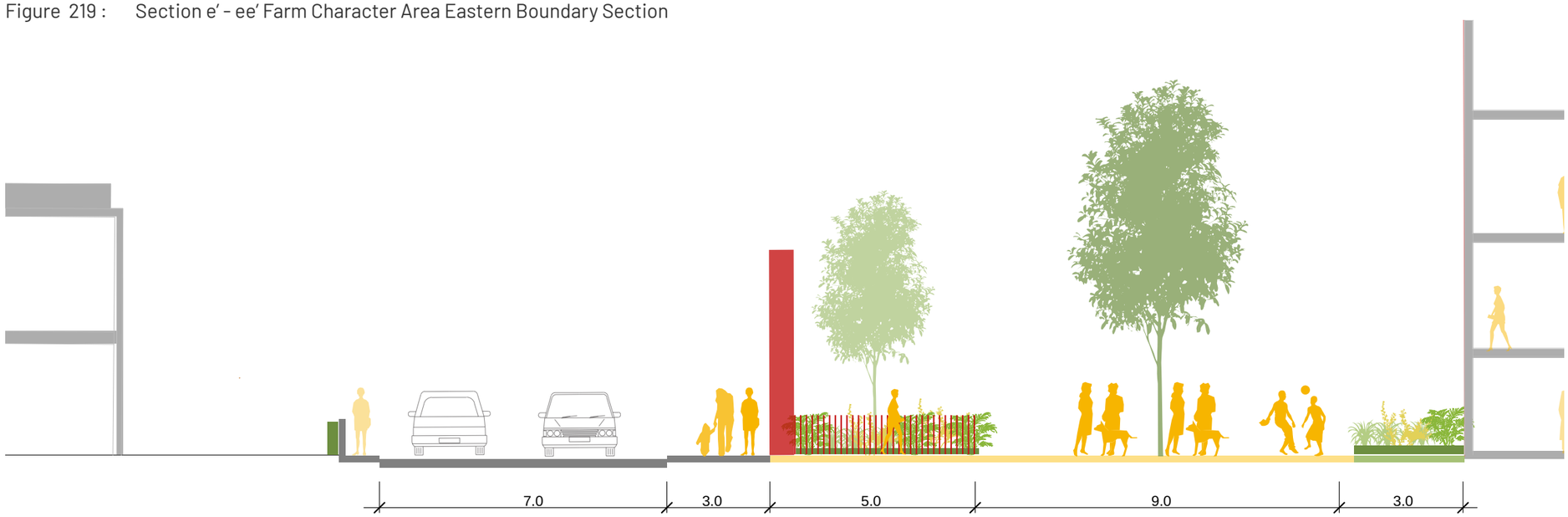


Figure 220 : Section g' gg' Dundrum Road Section

9.13 LANDSCAPE & OPEN SPACES

Environmental Strategy

Water bodies and ponds are vital habitats for frogs, toads, newts and a variety of insects including dragonflies.

Meadow planting and species rich grasslands provide habitats and food for insects and bees. Other opportunities include:

- Open bonded brickwork within detailing of infrastructure buildings allows for bat roosting;
- Nest boxes provide enclosures for birds and other mammalian species to nest in;
- Log piles simulate fallen trees, and are valuable habitat for mosses, lichens and fungi, as well as many insects; and
- Crushed aggregate pathways along secondary pathways allows water to permeate naturally through the soil, without the need for drainage channels and associated infrastructure.

Figure 221 : Meadow planting and woodland creation

Figure 222 : Retention ponds

Figure 223 : Wild areas management practices

Figure 224 : Bat roost incorporated within service buildings

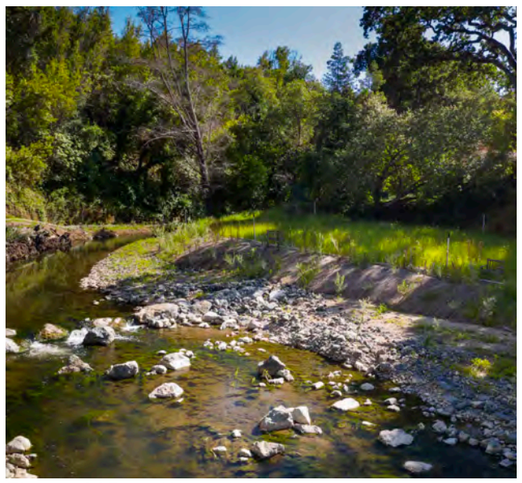


Figure 225 : Water habitat features

9.14 SOFT LANDSCAPING

Softworks Palette

A variety of open space and softworks currently exists on the site. These elements function as part of the green space, provide visual aesthetic as well as offering opportunities for rest and recreation.
The existing site offers a variety of softworks elements which have been categorised into 6 groups, Specimen Trees, Street Trees, Shrubs and Underplanting, Meadow and Wild Areas, Amenity Lawn and Wetland Areas.

Combined, these elements provide an open space network which defines the existing site and assets which have potential to be include within the proposals on site.

Specimen Trees

Many impressive specimen trees currently exist on site punctuating the lawns and open space. More will be added to the landscape to further enhance views, enclose spaces, improve canopy connectivity and enhance species resilience on site. A tree survey will also be carried out in advance of construction to determine the health and root protection areas of existing trees and provide information on maintenance going forward.

Figure 226 : Existing pine trees on site

9.14 SOFT LANDSCAPING

Street trees
Street trees line the area adjacent to the church and offer a sense of arrival and a feeling of avenue and enclosure to this space. New and augmented roads where appropriate will be lined with trees to continue the positive function and aesthetic they provide.

Figure 227 : Street trees within pavement

Figure 230 : Roadside swale and tree planting

Shrubs and Underplanting
A distinctive palette of underplanting will be proposed on site. There are numerous existing vegetated area on site currently that provide a sense of place and opportunity to be retained and enhance as part of the new proposal open space.

Figure 228 : Shrub and danderplanting

Amenity Lawn
Amenity lawns make up a large portion of the open space on site and provides residents of the site the opportunity for rest and recreation.

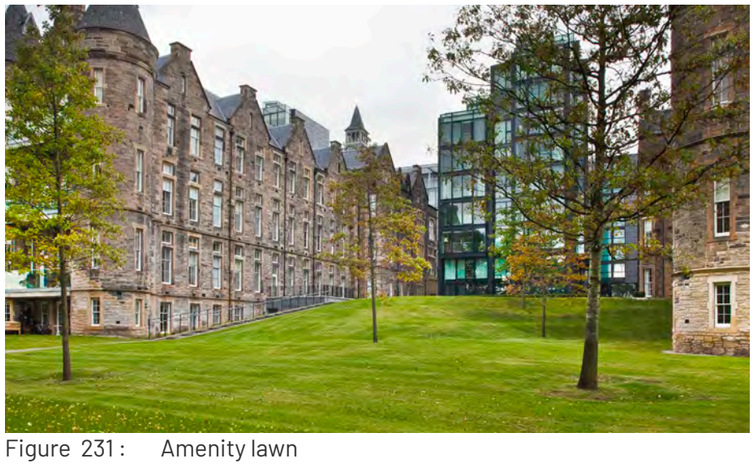


Figure 231 : Amenity lawn

Meadow and Wild Areas
Wild areas and verges which are left to grow are increasingly popular aesthetically but importantly due to their benefits to biodiversity and lower maintenance costs. These areas can be used to frame and define amenity and recreation space.

Figure 229 : Meadow planting

Wetland Areas
There are a number of wet areas and ditches on site, and proposals for an attenuation pond. These areas have the potential to form important habitats for local wildlife, and educational tools for local children.

Figure 232 : Wetland meadow planting

9.15 HARD LANDSCAPING

Hardworks Material

The hardworks palette has been chosen to enhance the hard surfaces and network of plaza's, roads and paths which link and connect the development.

Demonstrated opposite, a hierarchical categorisation of paving and finishes are described for the application throughout Dundrum Central.

The success of any paving structure is dependent on the appropriate associated structural build-up, bedding and jointing associated with the surface material. The full specification of these structural elements must be detailed by suitably qualified engineers, and constructed in accordance with capable and experienced design contractors.

Historic Landscape / Amenity Trails
A self bound gravel in buff colour. This surface will form the main surface on the central park , offering an opportunity for walking and recreation. High quality granite setts will be provided to accent areas/focal points

Figure 233 : Self bound gravel

Figure 235 : Accent granite sets to focal areas

Public Squares
The vision for the public squares is to create a high quality public realm spaces using a palette of robust materials to create a sense of place for each of these spaces.

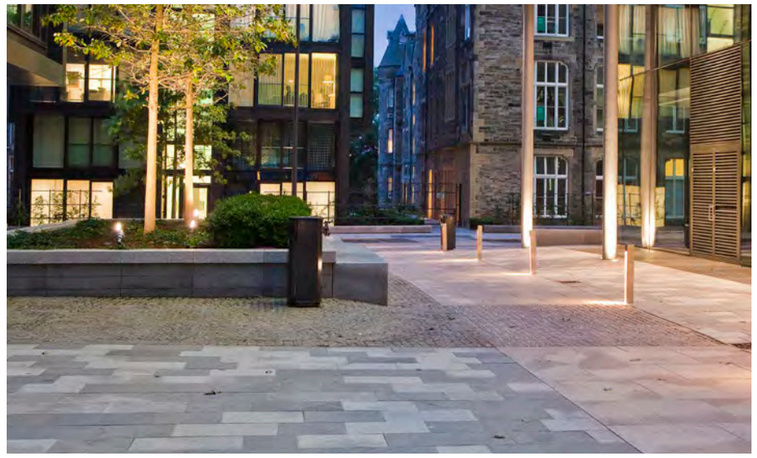


Figure 234 : Greater variety of materials within public squares

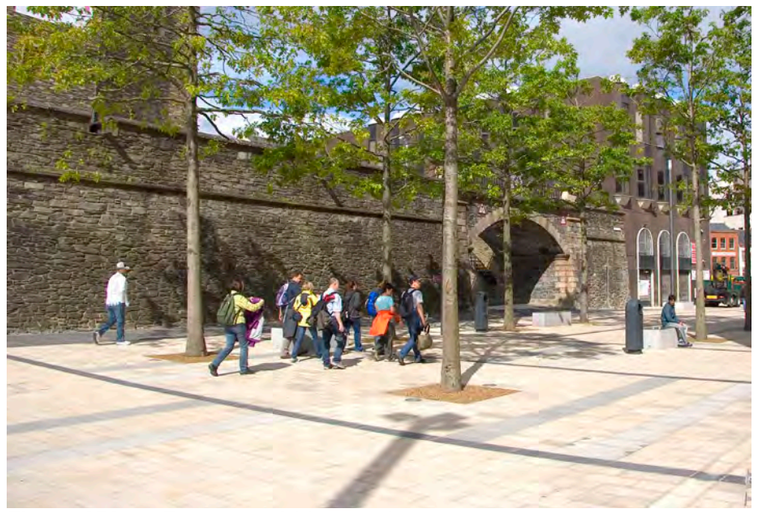


Figure 236 : Trees set within paved areas

9.15 HARD LANDSCAPING

Parks & Open Space
A self bound gravel in buff colour. This surface will form the main surface on the parks , offering opportunities for walking and recreation. Feature natural stone elements will form key accents within the surfacing.

Streets
Roadside pathways will consist of a modular paved system. Offering some accent to the palette of materials used. These paths will run alongside the road network and offer routes for pedestrians and cyclists. Macadam surface will incorporate buff textured aggregate to compliments path surfaces. Blister paving will be provided at crossing to ensure legibility for the visually impaired.

Streets / Home Zones
Residential Streets and Homezones with make use of block paving, permeable block paving where appropriate and Resin Bound Gravel, to create a more informal environment and character which is pedestrian and children focused.


Figure 237 : Soft natural edges with buff gravel pathway


Figure 238 : Integration of cylce infrastructure to streets


Figure 239 : Carriageway designed to reduce vehicular priority


Figure 240 : Play surface to kids paly areas

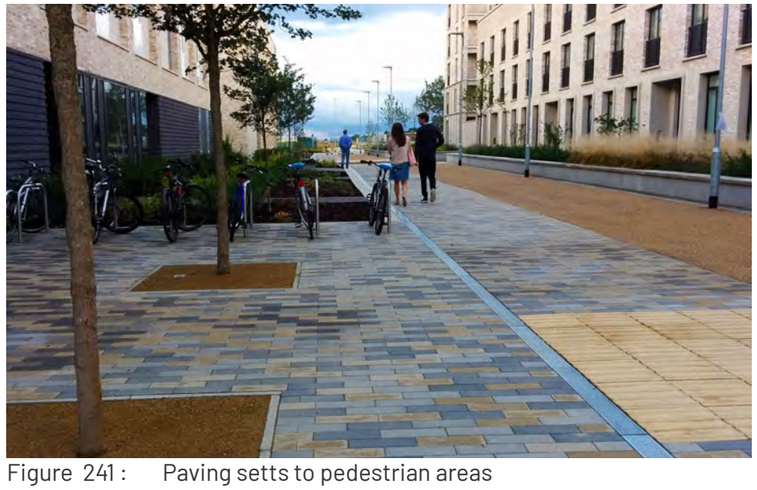


Figure 241 : Paving setts to pedestrian areas


Figure 242 : Pedestrian and cycling priority to homezone areas

10

ENGINEERING SERVICES

10 INFRASTRUCTURE

The development will be serviced by significant new infrastructure comprising buried services and utilities to meet the significant requirements of a large-scale residential development.

This section of the report considers the main elements of infrastructure as follows:

- Surface Water
- SuDS Measures (Sustainable Urban Drainage Systems)
- Foul Water (Wastewater)
- Water Supply
- Electrical Infrastructure
- Comms

Surface Water
A buried surface water drainage system will be provided on site to take rainwater falling on new impermeable roof and pavement surfaces. The drainage will be discharged into a suitable public sewer or watercourse.

SuDS Measures (Sustainable Urban Drainage Systems)
These measures tied into the surface water drainage system, will be provided as part of the green infrastructure of the site and will treat rainwater falling on site at source and will reduce its outflow off site. These measures are tied in with the lanscaping design and have additional amenity and biodiversity benefits.

Foul Water (Wastewater)
A buried foul water drainage system will be provided on site to take wastewater from all uses on site (principally residential). This drainage system connects into the Uisce Éireann sewer system outside of the site. This connection is subject to agreement with them.

Water Supply
A buried watermain system will be provided on site, providing potable water to each building and to fire hydrants around the site. The system will connect to the Uisce Éireann public watermain system outside of the site, subject to agreement with Uisce Éireann.
Uisce Éireann have confirmed that connection to their system is feasible without upgrades to the system.

Electrical Infrastructure
The site will contain a new ESB supply serving the new residential and community blocks as well as the main hospital and other buildings being retained. Each apartment block will contain at least 1 substation, however, larger blocks will contain 2 substations. The new site will consist of a new ESB MV network connected to all the new substations. ESB Networks is currently conducting a feasibility study to determine the capacity required to facilitate the various blocks and houses.

Comms
Connections to Virgin and Eir are available. New comms rooms have been allocated to each apartment block, complete with a side-wide underground ducting network allowing for interconnectivity throughout the site.

10.1 DRAINAGE STRATEGY

The sections below outline the drainage strategy for the site covering the following:

- SuDS Strategy
- Surface Water Drainage
- Foul Water (wastewater) drainage
- Water Supply

SuDS Strategy

The green infrastructure concept involves the planning, management and engineering of green spaces in order to provide specific benefits to society. It is a network of green spaces, habitats and ecosystems within a defined geographic area and comprises of wild, semi natural and developed environments.

The proposal seeks to create a positive receiving environment and access in conveyance of water surface run off, which creates a better sense of place and a more aesthetically pleasing landscape. Sustainable drainage systems slow down the flow of rainwater entering drainage systems, they filter out pollutants, immediately improving water quality and allow groundwater to recharge.

The smaller western portion of the site adjacent to the Dundrum Road will drain by gravity to a surface water sewer which connects to the River Slang.

Designing streetscapes, green space and public realm with a sufficient green infrastructure strategy that works well during all seasons of the year can provide valuable community recreational space as well as important environmental infrastructure. The team have set out some SUD's measures that will be incorporated into the scheme.

Surface water drainage: this follows the natural drainage of the site with the main portion of the site draining by gravity to the open drain/ watercourse (Elm Park stream) on the east boundary of the site subject to discussion with DLRCC drainage. This will likely require localised works in the site strip outside of the perimeter wall on the east side.

SuDS measures:
- green roofs (>70% coverage to dlr requirements) – intensive on podiums and extensive/sedum on upper roofs.
- bio-retention areas/rain gardens
- infiltration trenches/soakaways
- permeable paving

Surface water drainage:
Surface water drainage is pipe drainage provided to take rainwater falling on impermeable roof & pavement surfaces. The drainage is discharged into a suitable public sewer or watercourse. The paragraphs below describe the existing and proposed infrastructure.

Existing Surface Water Drainage on site:
Rainwater on the existing hospital buildings and hard standing areas on the site appears to drain by gravity to the 300mm diameter combined sewer on the Dundrum Road. The exit manhole is located at the existing site entrance just inside of the gate. Flow monitoring and CCTV surveys have confirmed the layout.

Site Topography:
The main part of the site slopes towards the low point at the north-east corner, with a 6 metre level difference diagonally across the site from the south-west corner to the north-east corner, equating to an average fall of 1 in 75 over 450 metres approx.. The natural drainage for this area is to the Elm Park stream on the eastern boundary, i.e. this area is part of its catchment.
The western part of the site adjacent to the Dundrum Road falls towards the northwest corner, to the low point at the main entrance, the area highlighted in yellow in Photo 1. The natural drainage route for this is into the River Slang.

Existing Surface Water Drainage in the vicinity of the site:

A. The River Slang: The River Slang runs from south of Dundrum Village northwards down to the River Dodder and passes approximately 70 metres west of the western site boundary at the Dundrum Road. This river is 1.5 metres approx. lower than the lowest point of the site at the existing Dundrum Road entrance. It is prone to flooding. Predicted floods, for storms with 1 in 10, 1 in 100 and 1 in 1000 year return periods are shown on the OPW CFRAMS Flood Maps. This flooding does not encroach on the subject site.

B. Public Sewer and Watercourse on the south and east boundary: A 525mm diameter surface water sewer enters the south side of the site from Rosemount Green. Refer to Image 10.1. This connects into an open drainage ditch which runs along eastwards the south edge of the walled garden and discharges through a grated opening in the boundary wall (Location B1 in Image 10.2) where it continues as an open watercourse running northwards just along and outside of the eastern perimeter wall. PRA maps indicate that the watercourse is in third party ownership along the outside of the wall. This watercourse appears to be the beginning of the Elm Park Stream which runs through UCD and Elm Park Golf Course out to the sea at Merrion Gates.

Figure 242 : Existing Manhole

10.1 DRAINAGE STRATEGY

There is a drainage connection from the site to this watercourse via another grated wall opening in the northeast corner of the site, Location B2 in Image 10.1 below. This is at a low point of the site and appears to take site land drainage only.

Image 10.1 - Existing Surface water outflow (Location B2)

Riparian Rights and Responsibilities: All three surface water connection locations involve discharge into watercourses. Riparian rights exist to allow connections to be made into a watercourse even if it is in 3rd party ownership downstream. The watercourse in third party ownership along the eastern boundary of the site is overgrown and desktop research of satellite imagery would suggest that this area appears not to be maintained, although this remains subject to confirmation via on-site visual inspection. The OPW 2020 document 'Living near Watercourses. A Guide to the Rights and Responsibilities of Owners', which can be downloaded, sets out the responsibilities of an owner to maintain flow in the watercourse to avoid flooding. These will need to be discussed with the owner.

Figure 243 : Drainage Strategy

10.1 DRAINAGE STRATEGY

Proposed Surface Water Drainage:
It is proposed to provide a fully separate surface water drainage system on site draining by gravity to the watercourses on the east and west sides of the site at connection Locations A, B1 and B2, all as identified above. A detailed report examining these connection options has been prepared by Barrett Mahony Consulting Engineers.

Image 10.1 - Existing Surface water outflow (Location B2)

watercourses is the responsibility of the Local Authority, in this case DLRCC. Discussions have taken place with the DLRCC Drainage Department in relation to the site SuDS strategy and surface water discharge strategy. Further discussions will take place prior to construction.

Image 10.2 - Existing Surface water outflow (Location B1)

Foul water drainage:
Proposed: It is proposed that foul water from the new development will continue to drain into the combined sewer In the Dundrum Road by gravity in a new separate system, i.e. a system with foul water flow only, no surface water.

Uisce Éireann are responsible for the wastewater (foul drainage) sewer network. They have confirmed that connection to their system is feasible without upgrades to the system. A pumping station will be provided on site to ensure a controlled wastewater outflow to the combined sewer on the Dundrum road as per UE requirements.

10.1 SURFACE WATER

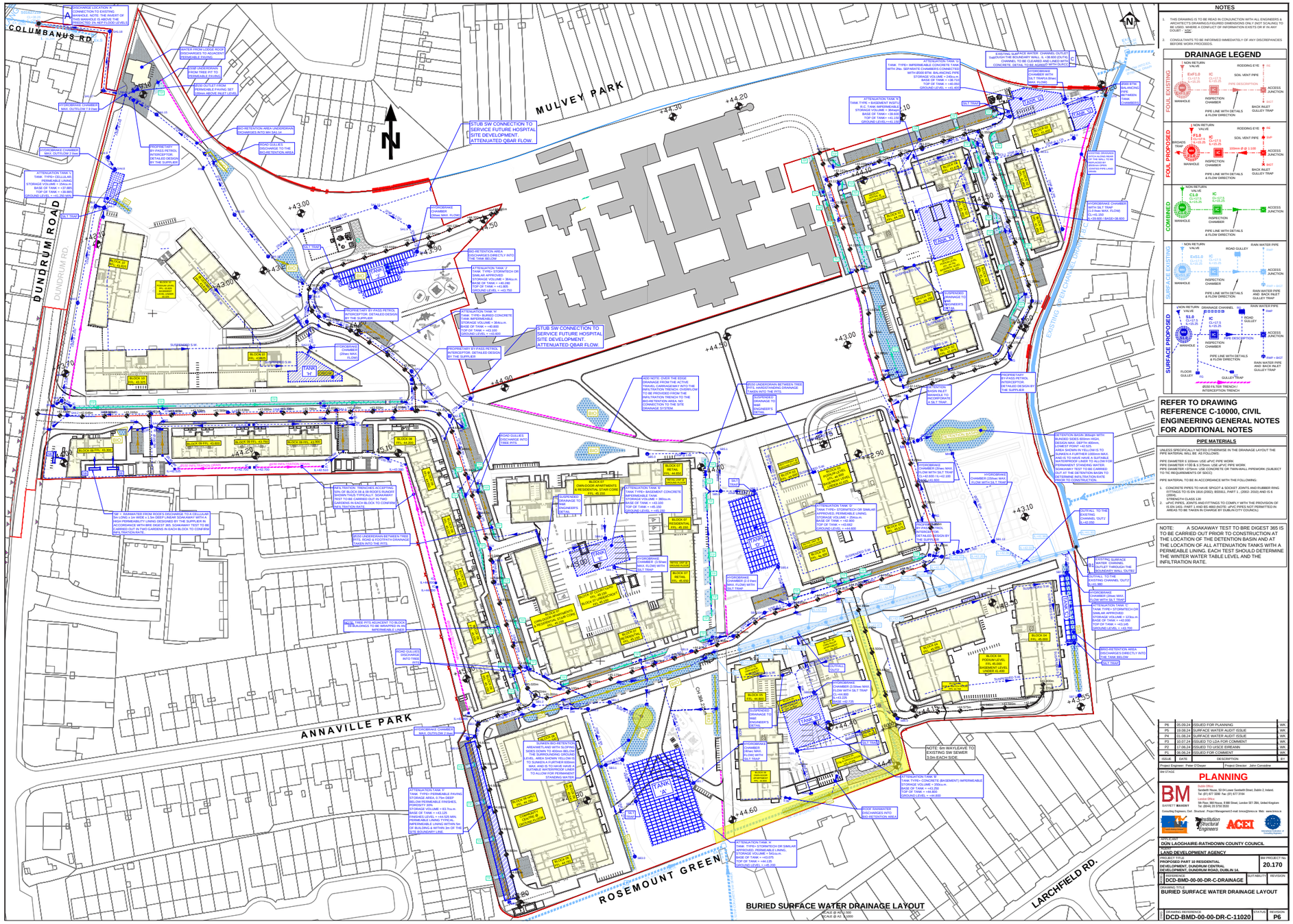


Figure 244 : Surface Water Drainage Layout

Green Roof

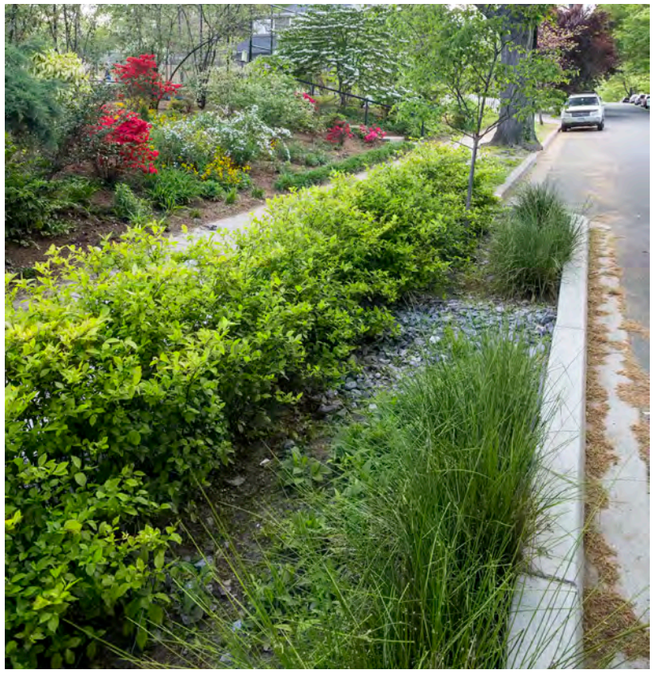
planted flat roof system

Rain Garden

trees/shrubs/perennials

Swale

grasses/perennials



Retention Pond

marginal planting

Permeable Surfacing

paving/asphalt/resin

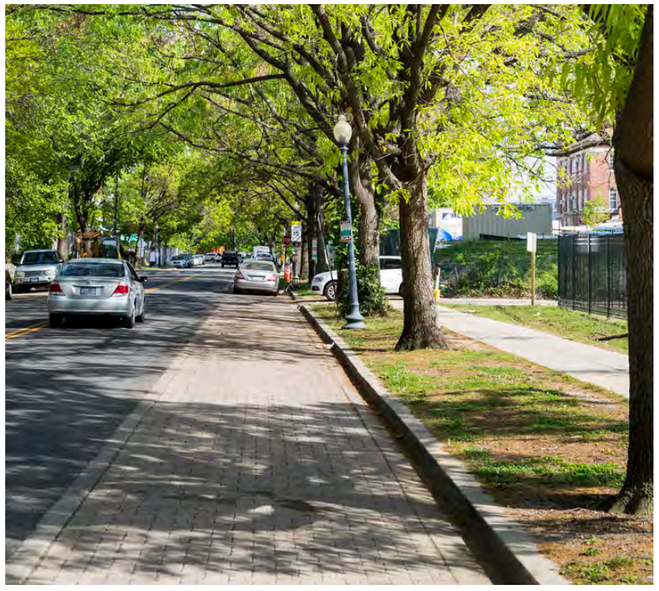


Figure 245 : SUD's features

10.2 WATER SUPPLY

The site watermain network will connect to the 355mm diameter public watermain on the Dundrum Road as shown in the drawing extract opposite.

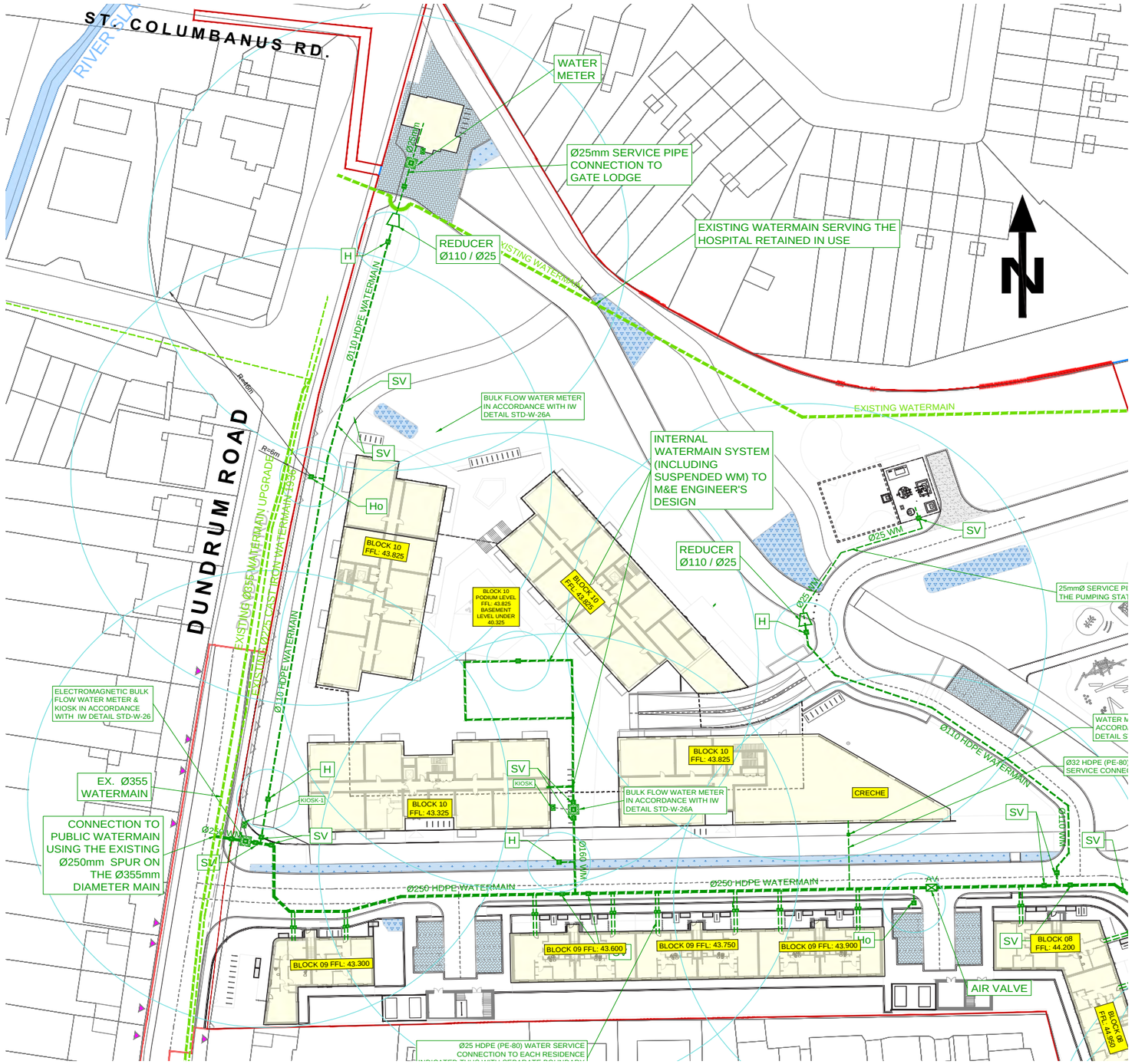


Figure 246 : Water main layout drawing extract showing the connection to the public water main on the Dundrum Road

10.2 WASTEWATER DRAINAGE

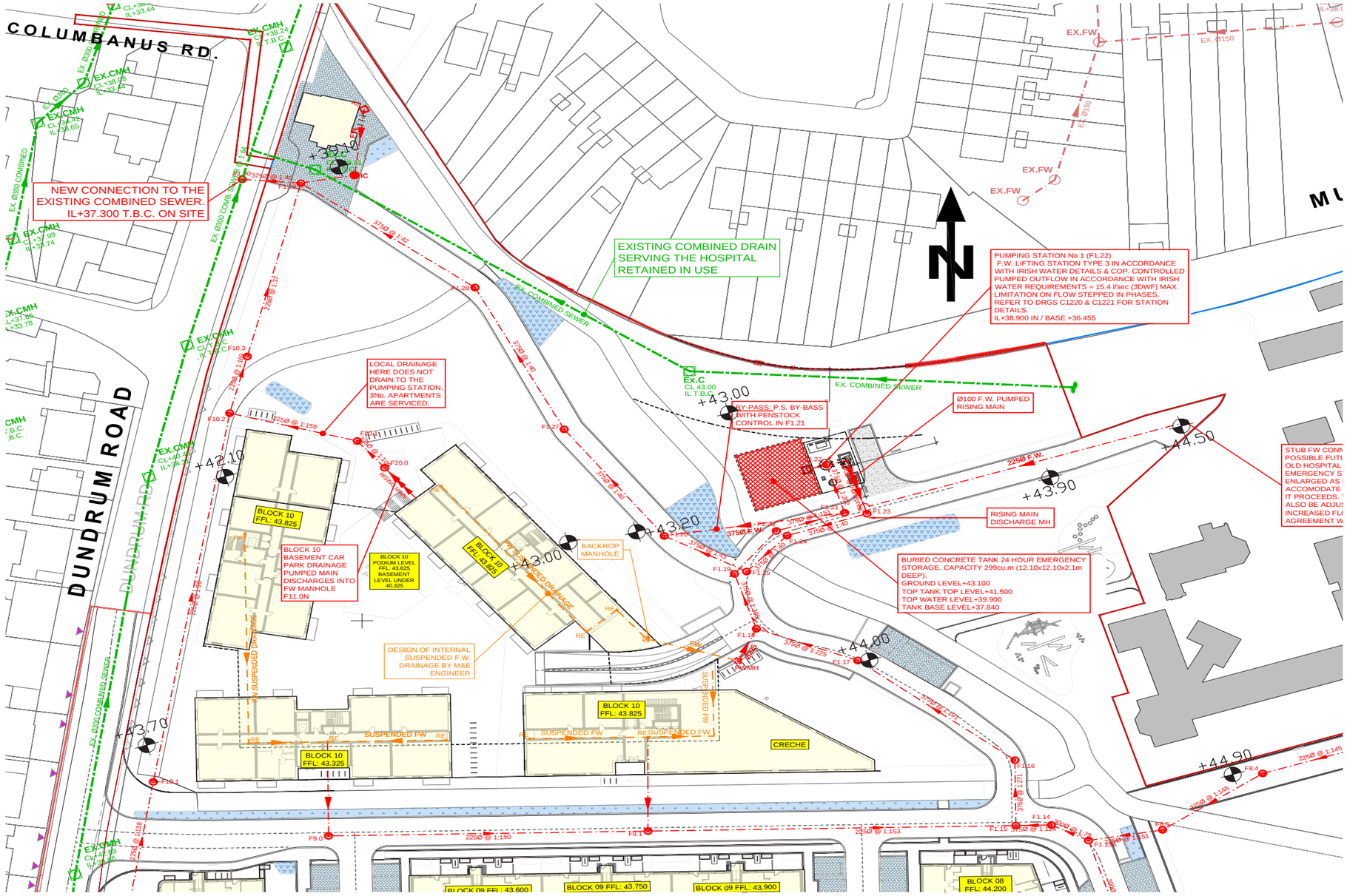


Figure 247 : Foul drainage (wastewater) layout drawing extract showing the connection to the sewer on the Dundrum Road

The site foul drainage system discharges to the 300mm diameter combined sewer in the Dundrum Road via a new pumping station shown shaded in red in the drawing extract opposite. The pumping station will ensure a controlled flow rate to the combined sewer.

11

PHASING AND DELIVERY

11.1 PHASING CONSIDERATIONS

The phasing strategy has been considered at an early stage to inform the masterplan It's noted that the phasing plan will be the subject of future engagement and liaison with the Local authority to ensure the sustainable and viable development of the lands. The following criteria were used in evaluating the preferred approach:

Construction and Resident Safety
Safety is a primary consideration of the proposed phasing strategy. The phasing strategy intends to separate construction and residential traffic, avoiding crossover of vehicles wherever possible. Mitigation measures will be implemented to reduce any impact of noise and dust with clear separation provided between public areas and the locations within the builders' control.

Open Space & Landscape Design
The Masterplan proposes approximately 28% publicly accessible open space across the development. When establishing the preferred phasing approach, consideration was given to all Options in maximising the quality and amount of public realm available to the new residents and the surrounding community. It is intended that high quality public spaces are delivered with each phase of development to compliment the communal and private spaces provided at the new residences.

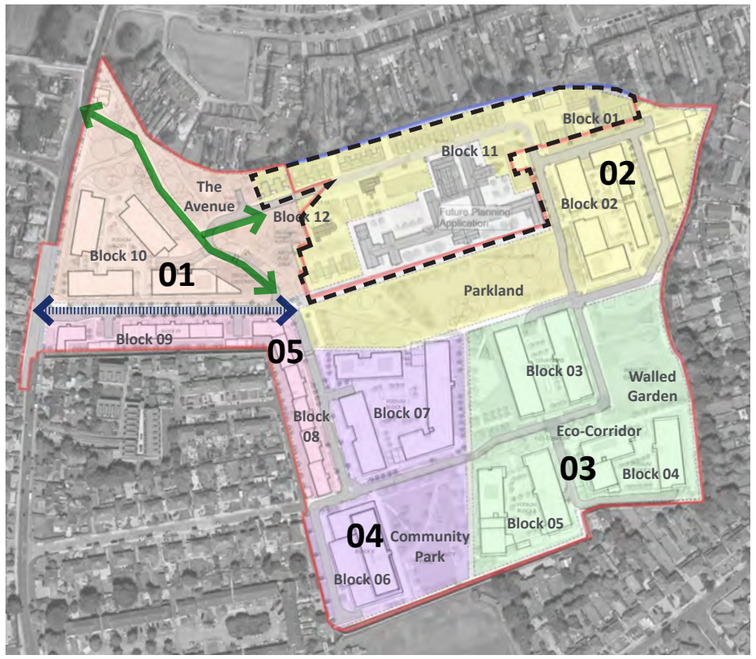
Utilities and Servicing
The provision of ESB, Water and Energy Utilities was an important consideration for the phasing plan. ESB substations are proposed per block with water and energy infrastructure coordinated across the masterplan for logical connections.

Visual Impact & Mitigation
The Masterplan has been developed with careful consideration of sunlight, daylight and visual impact to and from surrounding properties. This has been further developed when considering any potential phased impact both within the new neighbourhood and at surrounding properties. The boundaries between phases will be detailed to ensure a pleasant public realm throughout the construction period.

11.2 PHASING OPTIONS

Legend

Phase 01		Residents' Access
Phase 02		Construction Traffic
Phase 03		Area not part of Part 10 application
Phase 04		(subject to a future application)



Option A

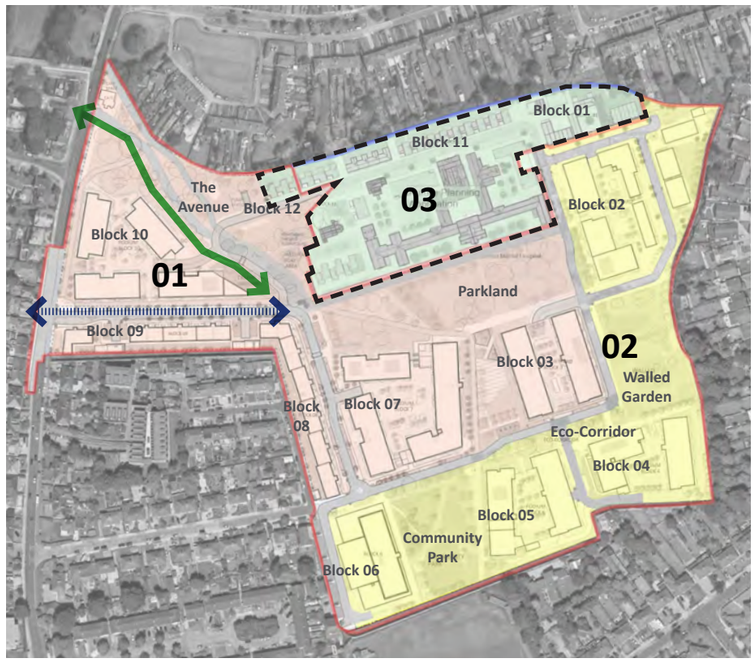
Phase 01 Total: 173 Dwellings

Phase 02 Total: 172 Dwellings*

Phase 03 Total: 362 Dwellings

Phase 04 Total: 255 Dwellings

Phase 05 Total: 40 Dwellings

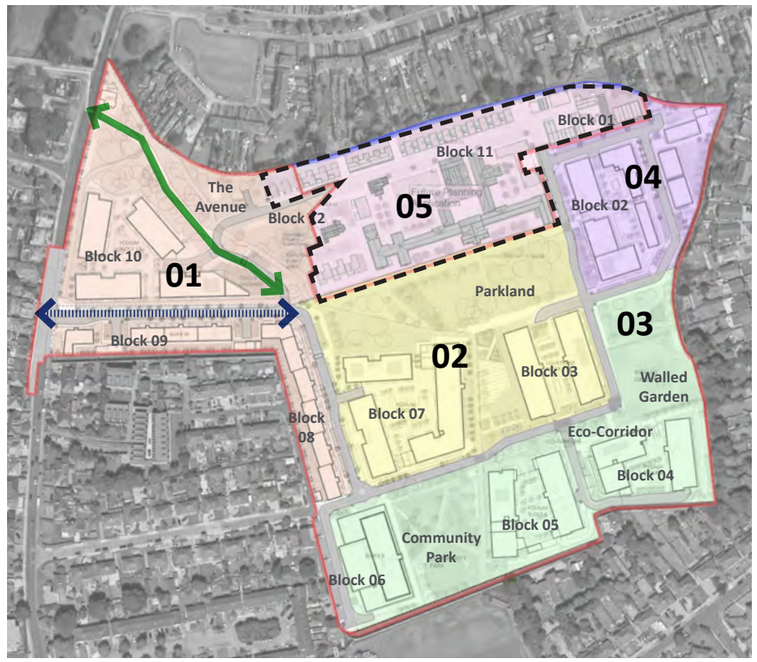


Option B - CURRENT

Phase 01 Total: 587 Dwellings

Phase 02 Total: 347 Dwellings

Phase 03 Total: 68 Dwellings*



Option C

Phase 01 Total: 213 Dwellings

Phase 02 Total: 374 Dwellings

Phase 03 Total: 243 Dwellings

Phase 04 Total: 104 Dwellings

Phase 05 Total: 68 Dwellings*

*Blocks 1, 11, and 12 figures TBC subject to future planning application

11.3 OUTLINE PHASING PLAN

(Option B)

Overall unit count: **1002 dwellings**

Phase 01

Roads, Drainage & Services

Block 10	173 Dwellings	(Apartments)
Block 09	16 Dwellings	(Apartments)
Block 08	24 Dwellings	(Apartments)
Block 07	218 Dwellings	(Apartments)
Block 03	156 Dwellings	(Apartments)

Total: 587 Dwellings (Phase 01)

Phase 02

Block 06	37 Dwellings	(Apartments)
Block 05	114 Dwellings	(Apartments)
Block 04	92 Dwellings	(Apartments)
Block 02	104 Dwellings	(Apartments / Duplexes)

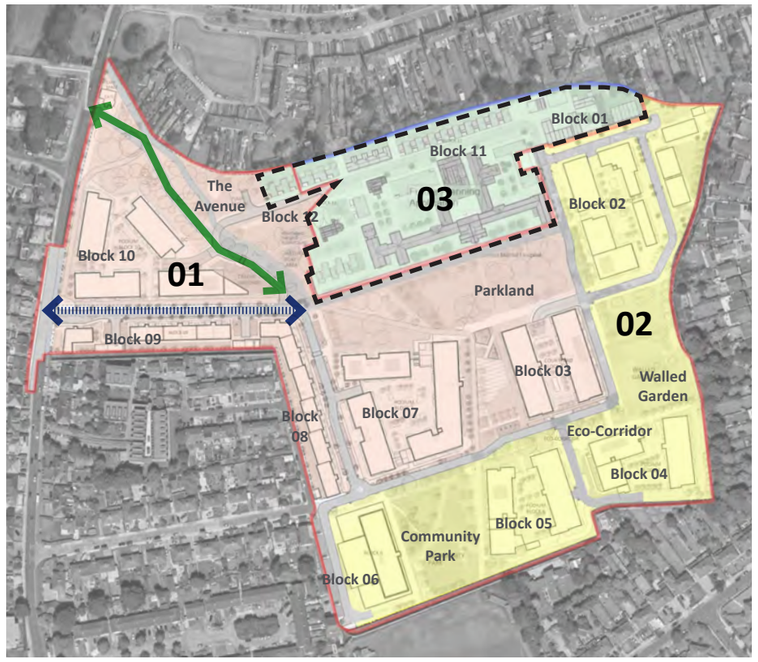
Total: 347 Dwellings (Phase 02)

Phase 03

Block 01	12 Dwellings	(Apartments / Houses)
Block 11	36 Dwellings	(Apts. / Houses)
Block 12	20 Dwellings	(Duplexes / Houses)

Total: 68 Dwellings (Phase 03)

Phase 03 figures are to be confirmed subject to future planning application.



Legend

- Phase 01
- Phase 02
- Phase 03
- Residents' Access
- Construction Traffic
- Area not part of Part 10 application (subject to a future application)

Phasing Option B has been chosen as the current preferred strategy for the implementation of the masterplan. Among other factors, the following criteria were used in evaluating the preferred approach:

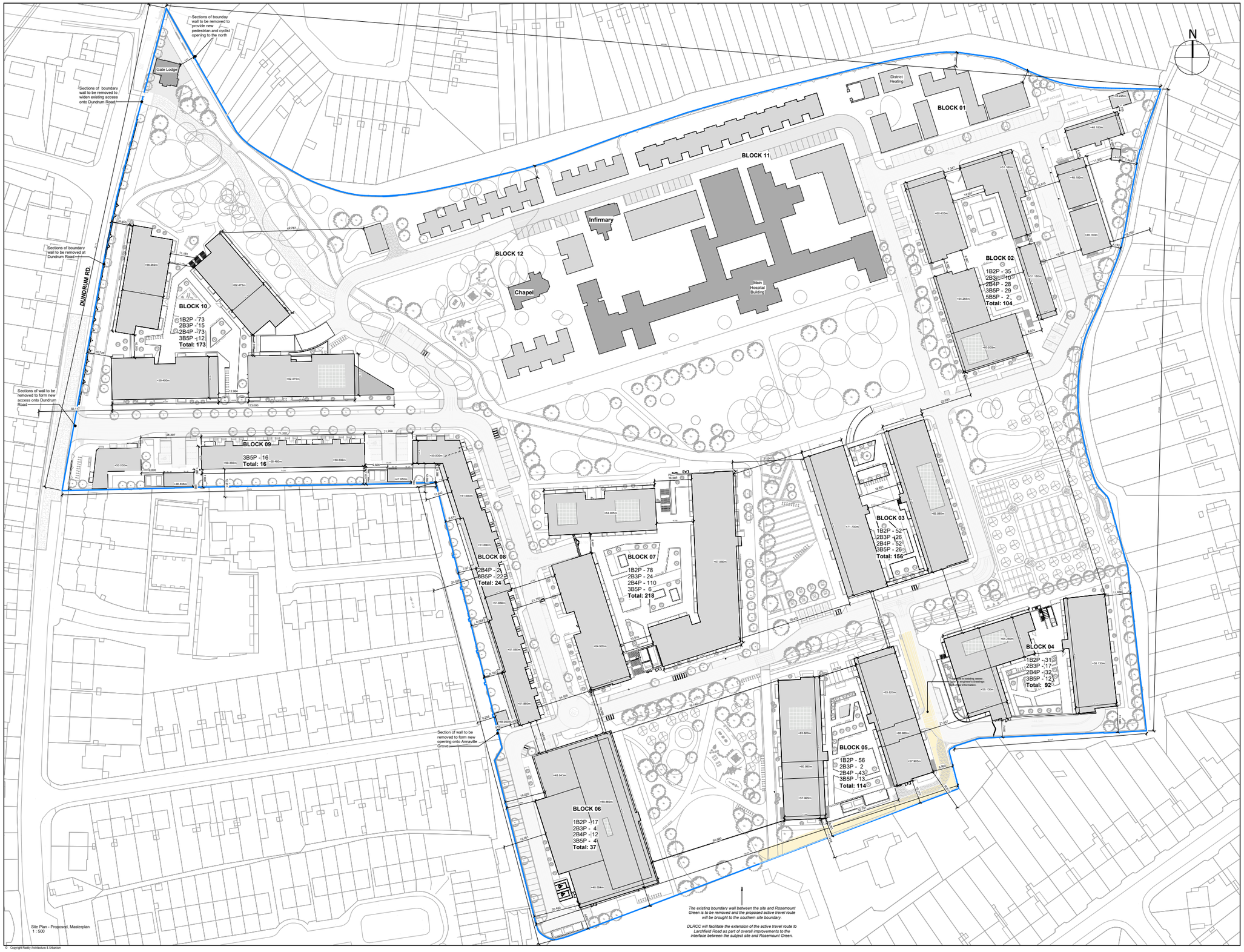
Construction and Resident Safety
The location of the proposed construction traffic route gives rise to the preferred phasing strategy by keeping as few new dwellings as possible in proximity to construction traffic with each phase.

Utilities and Servicing
The provision of new ESB substations is aligned with the phasing strategy; new substations will serve blocks in their respective phases as appropriate.

Visual Impact & Mitigation
In conjunction with the open space and landscape strategy as described above, this phasing option will ensure that impacts to existing visual amenity is mitigated with each complete phase.

Main Hospital Building
Due to the nature of the works required at the Main Hospital Building, it is proposed that these works take place at Phase 03.

APPENDICES



Site Plan - Proposed, Masterplan
1 : 500

Notes:

Do not scale from this drawing. Use figured dimensions in all cases.
Verify dimensions on site and report any discrepancies to the Architect immediately.
This drawing to be read in conjunction with the Architect's Specification.
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Drawing Notes:

PLANNING LEGEND

SYMBOL	DESCRIPTION
	Site Boundary Line
	Site Ownership Line
	Wayleave

For Information Only, Subject to further planning consent

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Projection / Spatial Reference:
Projection= IRENET95_Irish_Transverse_Mercator

Centre Point Coordinates:
X,Y= 717142.300532,729100.30992

Reference Index:
Map Series | Map Sheets
1:1,000 | 3329-22
1:1,000 | 3392-02

Rev.	Date	Drwn	Details of Issue / Revision
P3 S1	Sept 2024	KP	Part 10 Planning Application

Issues & Revisions

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Applicant Details:
Dún Laoghaire–Rathdown County Council

Agent Details:
Land Development Agency

Project Details:
Proposed Part 10 Residential Development,
Dundrum Central Development,
Dundrum Road,
Dublin14

Drawing Title:
Site Plan, Proposed, Masterplan

Job No.	Sheet Size	Scale @A3
P19-233D	A0_Landscape	1 : 500
Issue Date	**Drawn By**	**Reviewed By**
Sept 2024	B. Gil	R. Quinn
Status	**Purpose of Issue**	
P3	Part 10 Planning Application	

Project - System - Spatial Zone - Level - Type - Originator - Role - Number | Revision
DCD-02-SW-ZZZ-DR-RAU-AR-1050 | P3 S-1

CONCLUSION

CONCLUSION

This Masterplan provides a firm basis for the development of an accessible, permeable and environmentally sustainable neighbourhood of the highest quality, taking into consideration this site's unique location and heritage while balancing considerations of affordability, environmental sustainability, development standards and safety, mobility, conservation and placemaking.

As part of this, and in line with the requirements arising from the former Institutional nature of the lands, this Masterplan retains the open character of the lands and provides a significant quantum of high quality open space which incorporates a number of important landscape features unique to the former Central Mental Hospital lands.

The proposed development is predominantly residential in nature, with both new and established residential communities being supplemented and supported by new retail, local enterprise and community uses, a new market place at the heart of the site and new community facilities, with high quality open spaces linking these together and enhancing local permeability.

The proposed residential accomodation comprises a balanced mix of Social, Affordable for sale, Right Size for sale, and Cost Rental homes, with the latter model of housing related to affordability for low-middle income earners.

The intended procurement strategy would see the site's development being phased subject to planning permissions.