



BOHERBOY LRD

LARGE-SCALE RESIDENTIAL DEVELOPMENT – SOUTH DUBLIN Co. County Council:

Job number: 20002.3

Contact

T: 01 478 8700
W: mcorrm.com

Dublin

No 1 Grantham Street,
Dublin 8. D08 A49Y

Tullamore

Block 6, Central Business Park,
Tullamore, Co. Offaly. R35 F8KC

M'CORM
ARCHITECTURE
AND URBAN DESIGN

ARCHITECTURAL & URBAN DESIGN STATEMENT

LRD STAGE 3

DECEMBER 2025

Page left blank intentionally

DAVEY + SMITH
ARCHITECTS

M'CORM
ARCHITECTURE
AND URBAN DESIGN

APPLICANT:



ARCHITECTS:



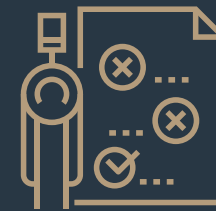
CONTENTS

1.	INTRODUCTION & PLANNING FRAMEWORK	5	4.	SUNLIGHT, DAYLIGHT & OVERSHADOWING	37
1.1	PURPOSE OF REPORT	6	4.1	SUNLIGHT, DAYLIGHT & OVERSHADOWING	38
1.2	DEVELOPMENT DESCRIPTION	6	4.1.1	Impact on neighbouring buildings	
1.3	PLANNING FRAMEWORK	7		38 4.1.2 Daylight within the proposed	
1.4	CONSIDERATION OF FORMER LAP OBJECTIVES	8		development	38
1.5	RELEVANT DOCUMENTS, TECHNICAL GUIDANCE & DESIGN STANDARDS	9	4.1.3	Sunlight with proposed development	39
2.	SITE CONTEXT	10	4.1.4	Sunlight to amenity within the proposed development	39
2.1	RELATIONTIONSHP WITH REGIONAL LOCAL CONTEXT	11	5.	OTHER DESIGN PARTICULARS	40
2.2	SITE DESCRIPTION & PHOTOGRAPHS	12	5.1	SCHEDULE OF ACCOMODATION	41
2.3	SITE ANALYSIS: CONSTRAINTS & OPPORTUNITIES	13	5.2	DETAIL OF BIN STORE & SUBSTATION	42
3.	URBAN DESIGN RATIONALE	14	5.3	DETAIL OF BIKE STORE	43
3.1	DENSITY RATIONALE AND CALCULATION	15	5.4	DETAIL OF BIN STORE	44
3.1.1	Net Density Calculation & Site Layout Considerations	16	5.5	APPLICATION OF UNIVERSAL DESIGN	45
3.2	SUSTAINABLE & EFFICIENT MOVEMENT	17	5.6	UNIVERSAL DESIGN	46
3.2.1	Strategic connections	17	5.7	ADAPTABILITY	47
3.2.2	Street network: permeability	18	5.8	PART V	48
3.2.3	Street network: hierarchy and design (DMURS)	18	5.9	DETAILS OF MATERIALS & FINISHES	49
3.3	MIX OF LAND USES	19	5.10	CAR & BICYCLE PARKING	50
3.3.1	Appropriate mix of uses and intensities	19	5.11	NON-RESIDENTIAL SPACES	51
3.3.2	Housing variety and mix	19	5.12	SUSTAINABILITY	52
3.4	GREEN AND BLUE INFRASTRUCTURE	20	6.	CONCLUSION	53
3.4.1	Integration of nature and biodiversity	20	6.1	CONCLUSION	54
3.4.2	Open Space Network	20	6.2	CGIS	55
3.4.3	Nature-based Urban Drainage (SUDS)	21	6.3	CGIS	56
3.4.4	Marsh Translocation	21			
3.5	RESPONSIVE BUILT FORM	22			
3.5.1	Layout coherence and legibility	22			
3.5.2	Interface of buildings and the public realm	22			
3.5.3	Heights strategy	23			
3.5.4	Typological diversity	24			
3.5.5	Site-Specific Typologies	25			
3.5.6	Distinctiveness and detail design	26			
3.5.7	Creche Facility	33			
3.5.8	Site Sections	34			
		5.5			

FIGURES

Figure 1-1. Conceptual diagram of proposed development.	
Figure 1-2. Location of proposed development with indicative ownership of applicants.	
Figure 1-3. Location and indicative extent of proposed development within SDCDP zoning map.	
Figure 1-4. Integration of former LAP objectives and main vehicular and non-vehicular networks.	
Figure 1-5. Key Indicators of Quality Design & Placemaking. Source: Department Housing, Local Government and Heritage, 2024.	
Figure 2-1. Spatial context – Dublin Metropolitan Area.	
Figure 2-2. Site photographs illustrating the biodiversity and topography of the site.	
Figure 2-3. Site constraints diagram	
Figure 3-1. Diagram showing areas considered for net residential density calculation.	
Figure 3-2. Extract from the Fortunestown LAP – pp21 – Accessibility & Movement Framework	
Figure 3-3. Extract from the Fortunestown LAP – pp40 – Boherboy Accessibility & Movement Strategy	
Figure 3-4. Extract from South Dublin County Development Plan 2022-2028, with 6 year road proposed indicated through the proposed site.	
Figure 3-5. Site's strategic connections and main internal routes	
Figure 3-6. Diagram presenting the proposed street hierarchy of the scheme	
Figure 3-7. Street sections illustrating the detailed design for local streets and homezones	
Figure 3-8. Site's unit mix	
Figure 3-9. Diagram presenting the proposed open spaces throughout the site.	
Figure 3-10. Indicative bioswale integrated in public open space	
Figure 3-11. Indicative tree pits dealing with run off from roads and other hard-landscaped public realm areas	
Figure 3-12. Indicative permeable paving at front gardens	
Figure 3-13. Diagram and images illustrating development strategy for SUDS	
Figure 4-1 Marsh Translocation – Gannon & Associates Landscape Architecture	
Figure 3-14. Diagram presenting the proposed street hierarchy of the scheme.	
Figure 3-15. Elevation midway through the southern portion of the site, illustrating height variation between a 3-storey apartment building and the adjacent 2-storey houses	
Figure 3-16. Diagram illustrating the heights strategy of the development.	
Figure 3-17. Elevation midway through the central boundary line facing the EVARA plot, illustrating height of a 5-storey apartment building.	
Figure 3-18. Diagram presenting the typological variety of the development	
Figure 3-19. CGI image illustrating typological diversity	
Figure 3-20. Site layout of proposed development indicating the location and extent of the 5 proposed character areas.	
Each character area is identified and explained further in the following pages.	
Figure 3-21. Typical elevations and treatment of apartment blocks in character area 1.	
Figure 3-22. East-west avenue view looking west	
Figure 3-23. View from eastern riparian corridor looking northwest with Urban quarter in background	
Figure 3-24. View from eastern riparian corridor looking northwest with Urban quarter in background	
Figure 3-25. Typical elevations and treatments of character area 2.	
Figure 3-26. Typical elevations and treatments of character area 3.	
Figure 3-27. Typical elevations and treatments of character area 4.	
Figure 3-28. East-west avenue view looking west	
Figure 3-29. View from eastern riparian corridor looking northwest with Urban quarter in background	
Figure 4-2 Radiation map of amenity within the proposed development, showing available sunlight on 21st March. The scale represents the sunlight received from 0-8 hours	
Figure 4-3 Shadow diagrams 21 March 13:00 UTC	
Figure 4-4 Sunlight hours summary	
Figure 4-5 Daylight provision illuminance method IS EN 17037:2018	
Figure 4-6 Sunlight on the ground – Public & communal amenity	
Figure 5-1. Overall Summary of Accommodation	
Figure 5-2. Example of bin store for houses.	
Figure 5-3. Example of bin store & substation for the apartment blocks.	
Figure 5-4. Key plan of bin store & substation for the apartment blocks.	
Figure 5-5. Key plan of bin store & substation for the apartment blocks.	
6 Figure 5-6. Key plan of bike store for the apartment blocks.	43
7 Figure 4-7 Example of bin and bike store for the apartment blocks	43
7 Figure 4-8 Example of bin and bike store for the duplexes	43
8 Figure 5-7. UD apartment layout – ground floor Apartment Block A & B	45
9 Figure 4-9 Ground floor duplex blocks	46
11 Figure 3-10 Scheme material palette	49
12 Figure 5-8. Apartment block CGI	49
13 Figure 5-9. Sample image of biodiversity at sedum roof. Source MCORM 2024.	52
16 Figure 5-10. Sample image of biodiversity. Source MCORM 2024.	52
17 Figure 4-10 North-west facing CGI of Character Area 3	55
17 Figure 4-11 East facing CGI of Character Area 2	55
17 Figure 4-12 East facing CGI of Character Area 2	
17 55 Figure 4-13 North facing CGI through the center of the site at the Boherboy entrance to the site, showing Character Area 3	55
18 Figure 4-14 South-west facing CGI of Character Area 1	56
18 Figure 4-15 North facing CGI through the center of the site at the Boherboy entrance to the site, showing Character Area 3	56
19 Figure 4-16 South-west facing CGI of Character Area 3 & 5	56
20 Figure 4-17 West facing CGI of Character Area 1	56
21	
21	
21	
21	
21	
22	
23	
23	
23	
24	
24	
26	
27	
28	
28	
28	
29	
30	
31	
32	
32	
38	
39	
39	
39	
39	
41	
42	
42	
42	
43	

1. INTRODUCTION & PLANNING FRAMEWORK



ARCHITECTURAL AND URBAN DESIGN STATEMENT
BOHERBOY LRD

DAVEY + SMITH
ARCHITECTS

M[•]CORM
ARCHITECTURE
AND URBAN DESIGN

1.1 PURPOSE OF REPORT

Evava Developments Limited and Kelland Homes Ltd, in association with a multidisciplinary team, intend to apply for planning permission on the subject site located at Boherboy Road, Saggart, Co. Dublin.

MCORM Architecture and Urban Design and Davey Smith Architects have been jointly appointed to design a residential scheme for these lands.

Our Design Rationale for the proposed development is set out in this document in the form of an Architectural and Urban Design Statement including an appraisal to the current planning framework and appropriate density, analysis of site characteristics and development proposal in terms of concept and strategy, movement and connections, housing mix, green and blue infrastructure, and built form, among other design particulars.

1.2 DEVELOPMENT DESCRIPTION

Kelland Homes Ltd. and Evava Developments Ltd. wish to apply for permission for a Large-scale Residential Development (LRD) on a site located at Boherboy, Saggart, County Dublin. To the immediate north of the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate and Carrigmore Park, while to the south is the Boherboy Road.

The proposed development consists of 611 no. dwellings, comprised of 306 no. 2, 3, 4 & 4-5 bed, 2 & 3 storey, detached, semi-detached & terraced houses, 133 no. 1, 2 & 3 bed duplex units in 12 no. 2-3 storey blocks, and 172 no. 1, 2 & 3 bed apartments in 5 no. buildings ranging in height from 4-5 & 5 storeys. The proposed development also includes a 2-storey crèche (c.630m²).

Access to the development will be via one no. new vehicular access point from the Boherboy Road, along with new vehicular connections to adjoining developments at Corbally Heath to the east and Carrigmore Green to the north. Ten no. houses in the south-east part of the site will be accessed from Corbally Glade to the east. The proposed development includes for pedestrian and cyclist connections throughout the proposed development and accesses into adjoining lands at Carrigmore Park, Corbally Heath and Corbally Glade to the east and Carrigmore Green to the north.

Private amenity space for the residential units is provided in the form of rear gardens for houses and ground floor terraces / upper floor balconies for apartments and duplex units. The proposed development provides for a total of c. 2.3Ha of public open space, and c. 4,750sq.m of communal open space associated with proposed development.

The proposed development provides for (i) all associated site development works above and below ground, including surface water attenuation & an underground foul sewerage pumping station at the northern end of the site, (ii) public open spaces (c. 2.3Ha), (iii) communal open spaces (c. 4,750sq.m), (iv) hard & soft landscaping and boundary treatments, (v) surface car parking (861 no. car parking spaces), (vi) bicycle parking (711 no. bicycle parking spaces), (vii) bin & bicycle storage, (viii) diversion of all existing overhead ESB lines underground, (ix) public lighting, and (x), plant / PV panels (M&E), utility services & 8 no. ESB sub-stations, all on an overall application site area of c.18.7Hha. In accordance with the South Dublin County Development Plan (2022-2028), an area of c.1.03Ha within the site is reserved as a future school site.

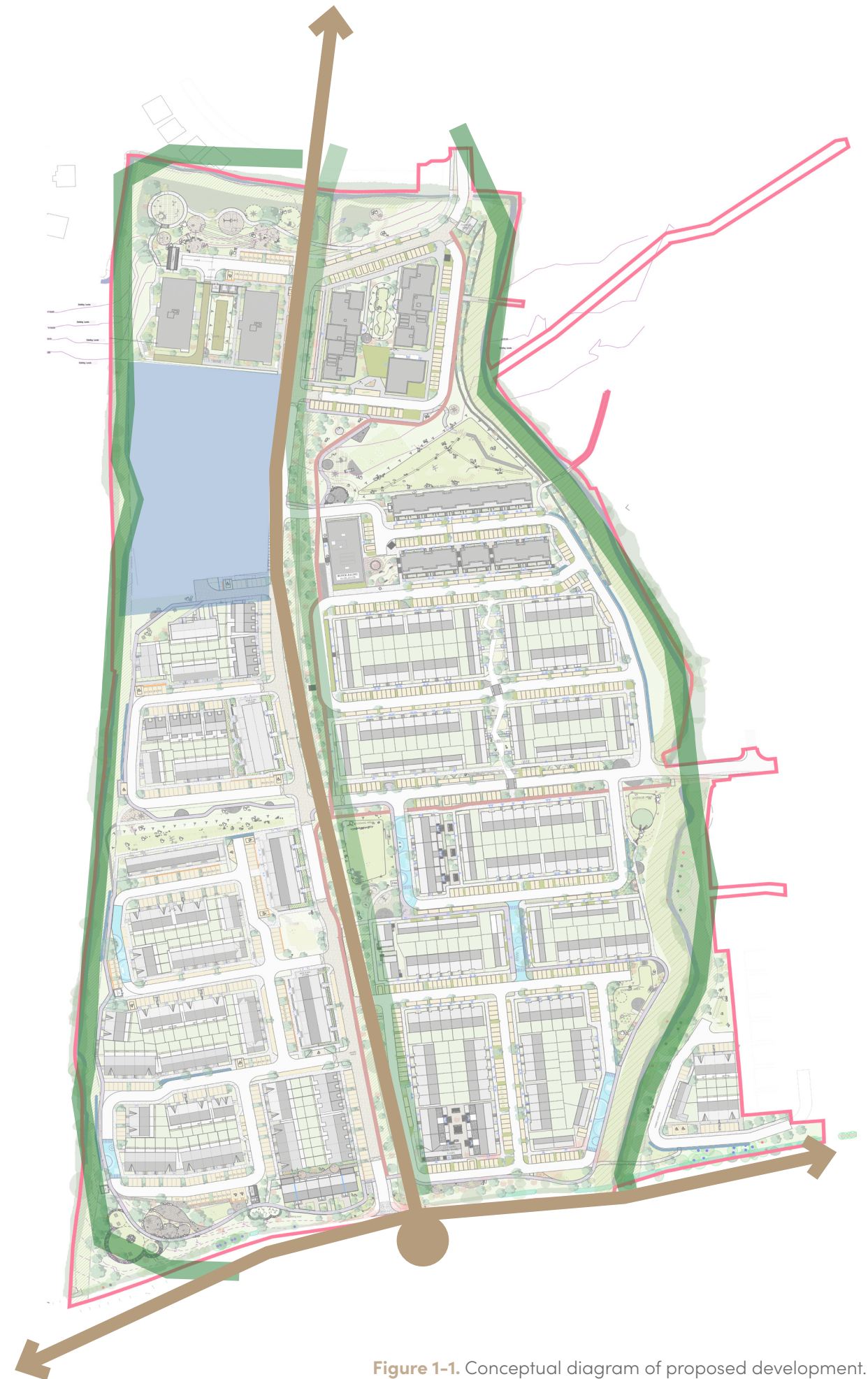


Figure 1-1. Conceptual diagram of proposed development.



Figure 1-2. Location of proposed development with indicative ownership of applicants.

1.3 PLANNING FRAMEWORK

The Lands are currently zoned objective RES-N: “To provide for new residential communities in accordance with approved area plans” in the 2022-2028 South Dublin County Development Plan.

These two sites identified as the Boherboy neighbourhood are located on the Northern side of the Boherboy Road, to the west of Corbally and Verschoyle residential estates (Saggart Abbey) with the Carrigmore residential estate and District Park (Carrigmore Park) to the north. Saggart village is located further west; with Citywest Shopping Centre and the Luas rail line approximately 600m to the north of the site.

Images hereby provided show the land ownership split between Evara Developments Limited and Kelland Homes Ltd with Evara Developments Limited owning the Western side and Kelland the eastern side of the overall development site. Although the ownership is split, this is a single Planning Application co-ordinated between the two landowners. Please refer to the planning drawings pack for detailed information of location and identification of the subject sites and the application's site boundary.

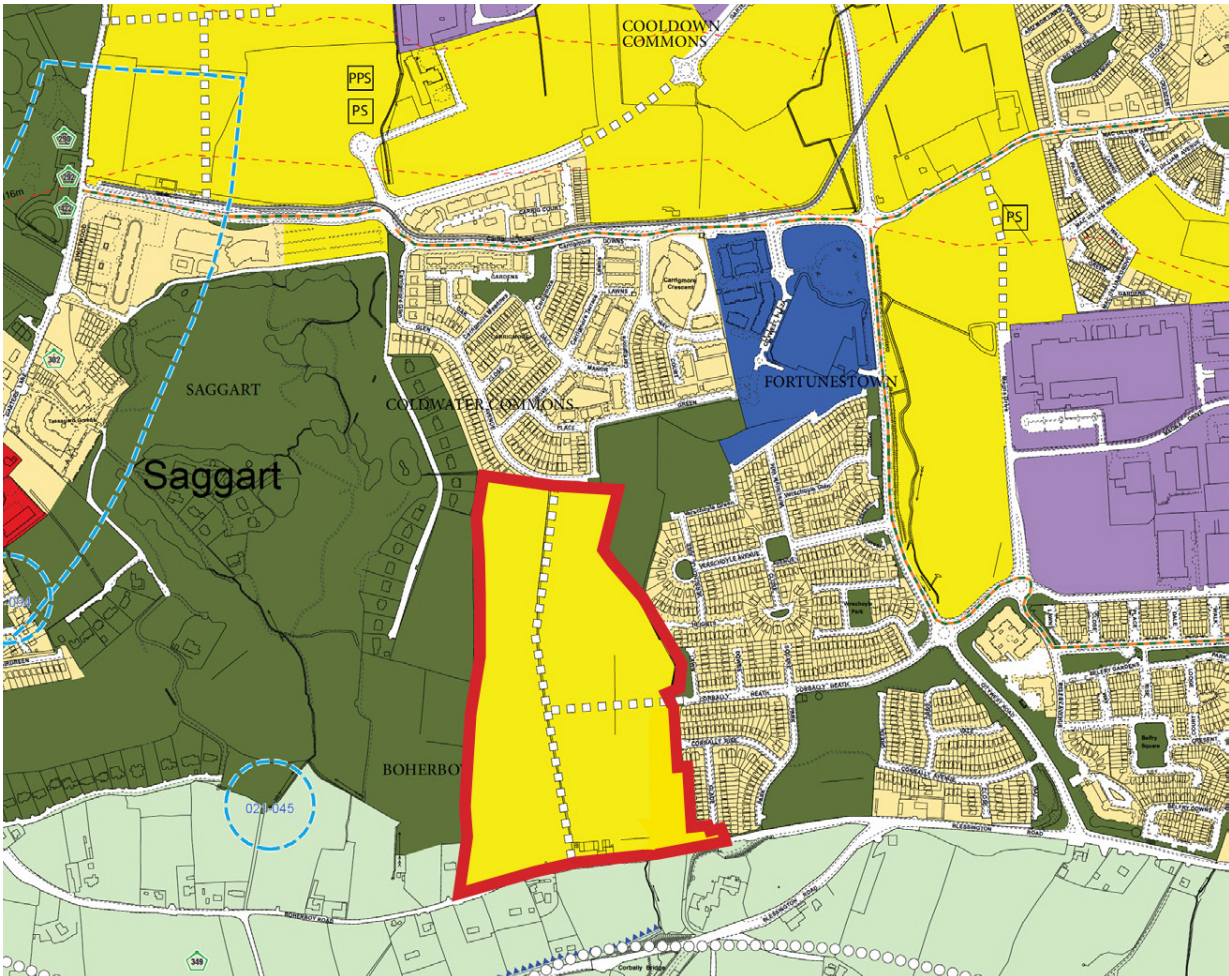


Figure 1-3. Location and indicative extent of proposed development within SDCDP zoning map.

Whilst the 2012 Fortonestown Local Area Plan (LAP) has expired, it has been used as a guidance document in the formulation and evolution of the site layout and design of the scheme, as indicated right.

Compliance with Objective BN2 & BN3 of the Local Area Plan
- Provision of cyclist and pedestrian links into the district park
from the Boherboy Road

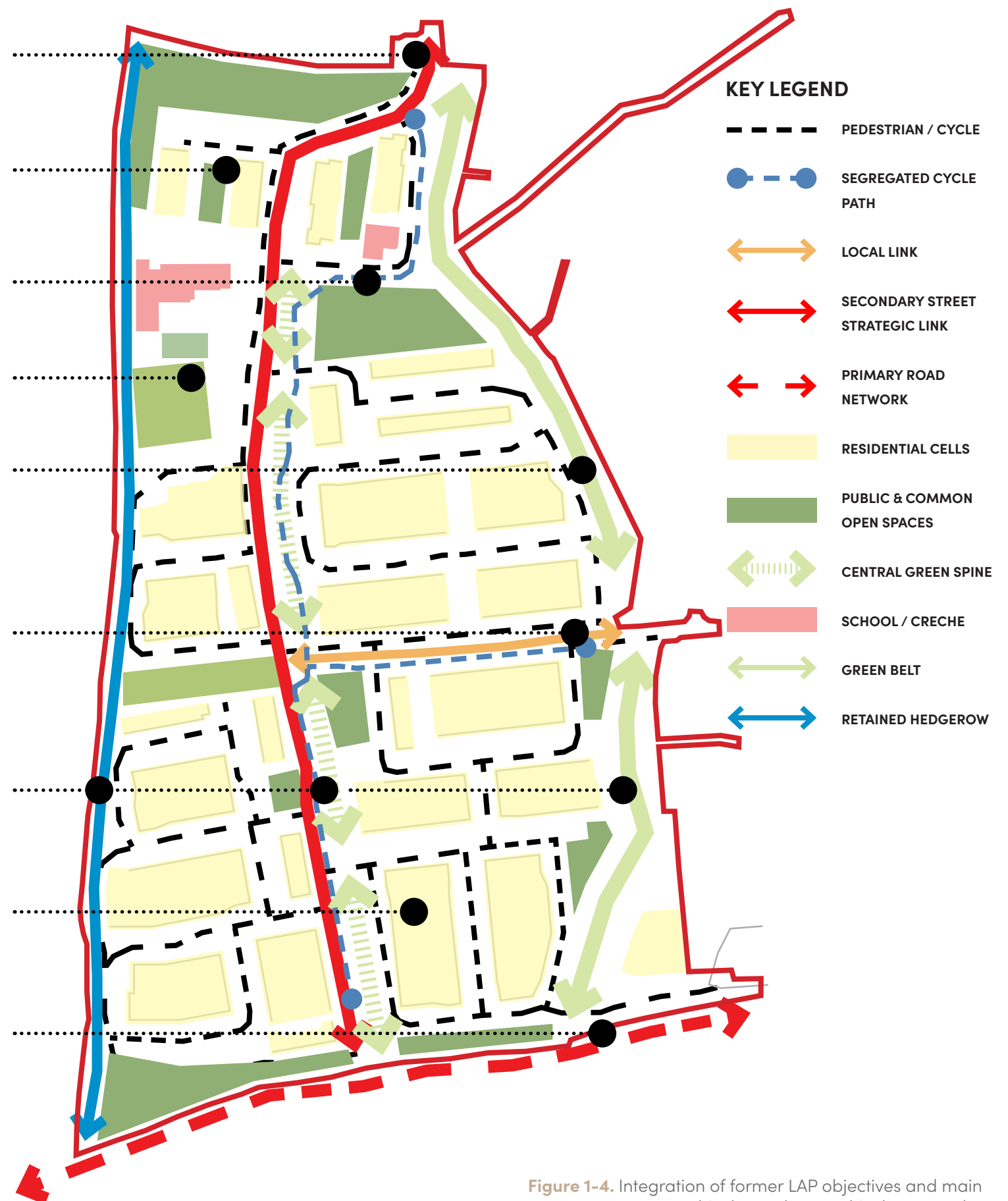


Figure 1-4. Integration of former LAP objectives and main vehicular and non-vehicular networks.

1.5 RELEVANT DOCUMENTS, TECHNICAL GUIDANCE & DESIGN STANDARDS

The Design Rationale for the proposed Boherboy Neighbourhood residential Neighbourhood has had regard to the following technical guidance documents:

- South Dublin County Council Development Plan 2022-2028
- ‘Best Practice Guidelines for Delivering Homes Sustaining Communities’
- ‘Quality Housing for Sustainable Communities’ 2007
- ‘Design Manual for Urban Roads and Streets’
- Sustainable Residential Development and Compact Settlements Guidelines (2024)
- Sustainable Urban Housing: Design Standards for New Apartments (2023)
- Planning Design Standards for Apartments (2025)
- Urban Development and Building Heights Guidelines for Planning Authorities
- Childcare Facilities, Guidelines for Planning Authorities

The proposal responds to the South Dublin County Council Development Plan 2022-2028 zoning for the site and has been designed with reference to the technical guidance documents listed above. Please refer to Armstrong Fenton Associates Planning Consultants Statement of consistency accompanying this application on how the proposal’s design parameters is consistent with the technical guidance documents listed above. Also refer to the submitted Planning Statement which also provides a detailed description of the proposed development

The layout of the new residential neighbourhood has been informed by a number of criteria and with the design parameters set out in the Fortunestown LAP and South Dublin County Council Development Plan 2022-2028 :

- The site's topography
- The need to protect the eastern and western site boundary and to maintain the central hedgerow, as well as the hedgerow along the Boherboy road .
- The design principles as set out in the design manual of Urban Roads and streets (DMURS). Please refer to Pinnacle Consulting Engineers reports and drawings accompanying this application for further details on DMURS compliance.
- Provision of through vehicular, pedestrian and cycle routes throughout the site connecting adjacent and neighbouring lands, and the District Park.
- Reservation of a site for the provision of a future primary school



Figure 1-5. Key Indicators of Quality Design & Placemaking. Source: Department Housing, Local Government and Heritage, 2024.

2. SITE CONTEXT



ARCHITECTURAL AND URBAN DESIGN STATEMENT
BOHERBOY LRD

DAVEY + SMITH
ARCHITECTS

M[•]CORM
ARCHITECTURE
AND URBAN DESIGN



2.1 RELATIONSHIP WITH REGIONAL AND LOCAL CONTEXT

The subject site is located to the east of Saggart, to the south of Citywest and sits just within the Dublin Metropolitan Green Belt. The Boherboy Road, which forms the main access to the site connects with the N81 from Saggart and leads into Dublin City. The site is located approximately 15km from Dublin City Centre and c. 600m from the nearest Luas stop at Fortunestown station. The 77 and 65 Dublin Bus services link the subject site and the city centre with a stop located 850m to the east of the southern entrance. The N81 leads on to the M50 at Junction 11 approximately 6.5km from the proposed site entrance.

The subject site sits in close proximity to Blessington via the N81 to the south east and the Dublin Mountains to the south west. With the fortunestown luas in such close proximity from the north end of the site it is an ideal location for residential development. Tallaght and Citywest are urban centres and allayed with the Citywest business campus to the north east and Magna Business Park to the east will allow for local employment opportunities for residents and support the proposed development in establishing a local community.

The site will form a connection from the Boherboy Road to the south side on through Carrigmore to the north. The South Dublin County Council zoning map includes a 6-year road scheme from south to north of the site and linking to the east into Corbally. These connections are key for the future growth of the local area and to allow active travel connections through from the south onwards to Citywest and Fortunestown Luas. The lands at present, being a green field site, are only accessible from the south via Boherboy Road and by providing connections into the neighbouring areas, the development will quickly integrate into the wider local fabric.

The local area is characterised primarily by low to medium density housing to the east and north and agricultural fields to the west between the subject site and Saggart, 1.6km to the west. Carrigmore Park to the north east provides ample Public open space with playing fields and play facilities.

Figure 2-1. Spatial context – Dublin Metropolitan Area.



IMAGE 1: Lower area of the site with a backdrop of northern neighbouring estates.



IMAGE 2: Open area to the north with western hedgerow.



A set of photographs is provided to show the current status of the site. Refer to the key plan above to identify the points at which these photographs were taken.



IMAGE 3: Eastern stream and hedgerow



IMAGE 4: Hedgerow along Boherboy Road

Figure 2-2. Site photographs illustrating the biodiversity and topography of the site.

2.2 SITE DESCRIPTION & PHOTOGRAPHS

The site is a greenfield site characterised by a rural setting. Approaching from the south via the Boherboy Road, an existing hedgerow separates the site from the road. Divided into two landholdings by a hedgerow which runs north south through the middle of the site, a natural division exists between the east and west side of the landholdings. To the West, the site is bound by another hedgerow and ditch and narrows in the middle before expanding as you move downhill to the North. To the East, the site expands towards the middle heading downhill and constricts as the eastern boundary follows the Corbally stream watercourse acting as a natural barrier to the homes to the East in the Corbally estate.

A third area in the site is located to the south east on the far side of Corbally Stream and accessed via Corbally Glade. Again bound by the stream to the west and existing hedges to Boherboy Road, this triangular site has the potential to feel both separate and a part of the proposal site.

Being used as agricultural land as it has been, several modifications to the natural water movement on what is a steeply sloping site have been carried out over the years to ensure the land was usable for cattle grazing. This is covered further in the Gannons landscaping report.

The very nature of the site with three rich north south biodiversity links lends itself to retaining these links and enhancing the potential biodiversity gain. It is this approach which has remained central to the design throughout.

2.3 SITE ANALYSIS: CONSTRAINTS AND OPPORTUNITIES

The subject site has very particular characteristics and a number of physical constraints that have influenced the final design solution. It is a steeply sloping site with considerable topographical challenges for laying out an accessible residential scheme, as shown in section below. A number of significant services wayleaves also traverse the site.

Therefore, the impact of the constraints outlined on the actual developable area is significant. The combination of difficult topography, hedgerow retention, maintaining open watercourses, road/footpath improvements and wayleave provisions has reduced the actual developable area of the site to 12 hectares. This equates to approximately 66% of the overall area of the combined Evara and Kelland sites.

A number of natural features include hedgerows, streams and biodiversity shall be retained and integrated into the overall green and blue networks, and open space/amenity strategy, as outlined below:

- A green link along the eastern boundary of the site is provided for with a minimum 10m biodiversity strip maintained. Protection of the stream and the heritage of the townland/barony/parish boundary by creating a riverside park to further enhance green linkages and provide pedestrian/cyclist linkages along this green strip, to the District Park and on to the broader environs of the site.
- The existing western hedge and tree line is being retained and enhanced and part of this green amenity is being used as a linear woodland park offering pedestrian and cycle connections to the west of housing cells.
- The existing central hedge line will be maintained, with exception to required linkages for permeability and required SUDS features along same, and developed as a central green avenue which will provide a strong North-South axis. This central hedge line will become the main access spine of the development with the main vehicular link road running alongside to the west and a landscaped pedestrian route to the east.
- The Northern Boundary flood risk zones have been kept free of any building or roads. The proposed apartment blocks in proximity to this flood risk zone have a finished floor level of 120.500m placing them above the peak 100 year flood level. Refer to the Site Specific Flood Risk Assessment (SSFRA) prepared by Kilgallen & Partners consulting engineers for details.
- 1 Ha has been allocated for the future provision of a primary school
- There are 2 existing water supply pipe wayleaves running through the site. These have been maintained free from development as required.

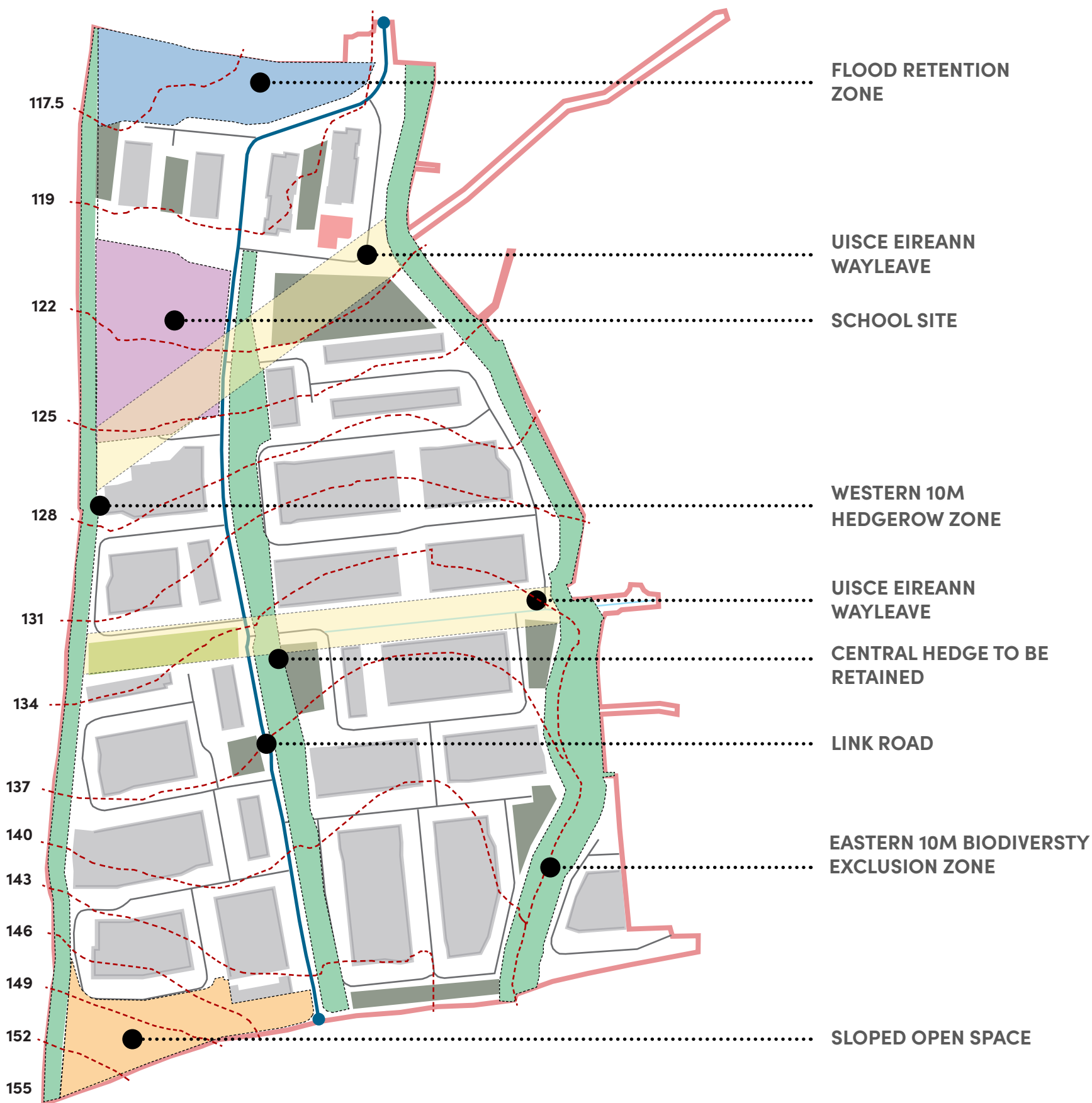


Figure 2-3. Site constraints diagram.

3. URBAN DESIGN RATIONALE



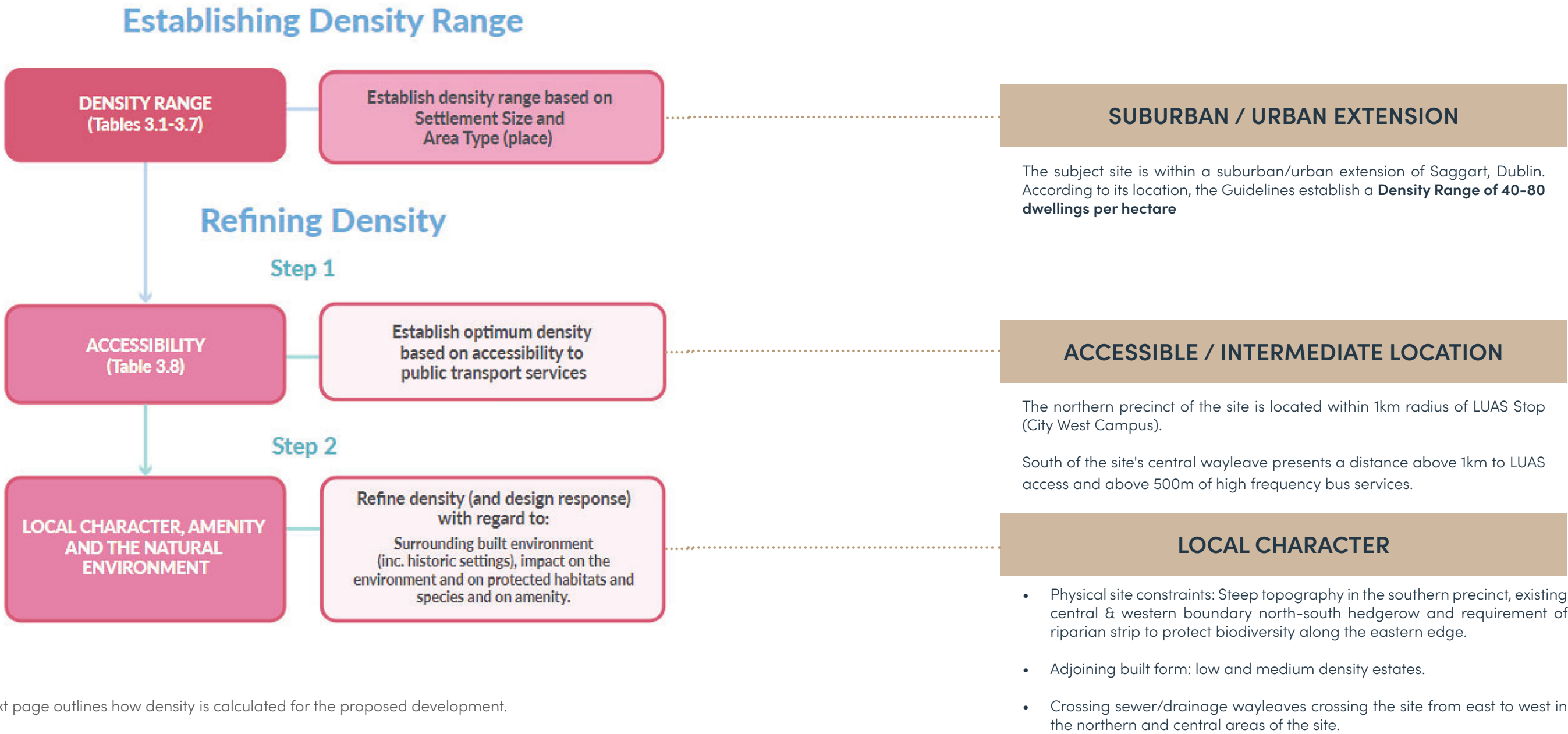
ARCHITECTURAL AND URBAN DESIGN STATEMENT
BOHERBOY LRD

DAVEY + SMITH
ARCHITECTS

M[•]CORM
ARCHITECTURE
AND URBAN DESIGN

3.1 DENSITY RATIONALE AND CALCULATION

The final refined density as proposed in this document and accompanying planning reports has been arrived as following the methodological steps set out in the Sustainable Residential Development and Compact Settlements – Guidelines for Local Authorities (2024). This comprised the establishment of an initial density range based on the Settlement Size and location which was then refined firstly on the basis of the accessibility of the site and thereafter on the character of the site including amenities and the natural environment. This refinement led to a suitable design response for the site which gives rise to a density at the lower end of the initial recommended range for suburban neighbourhood.



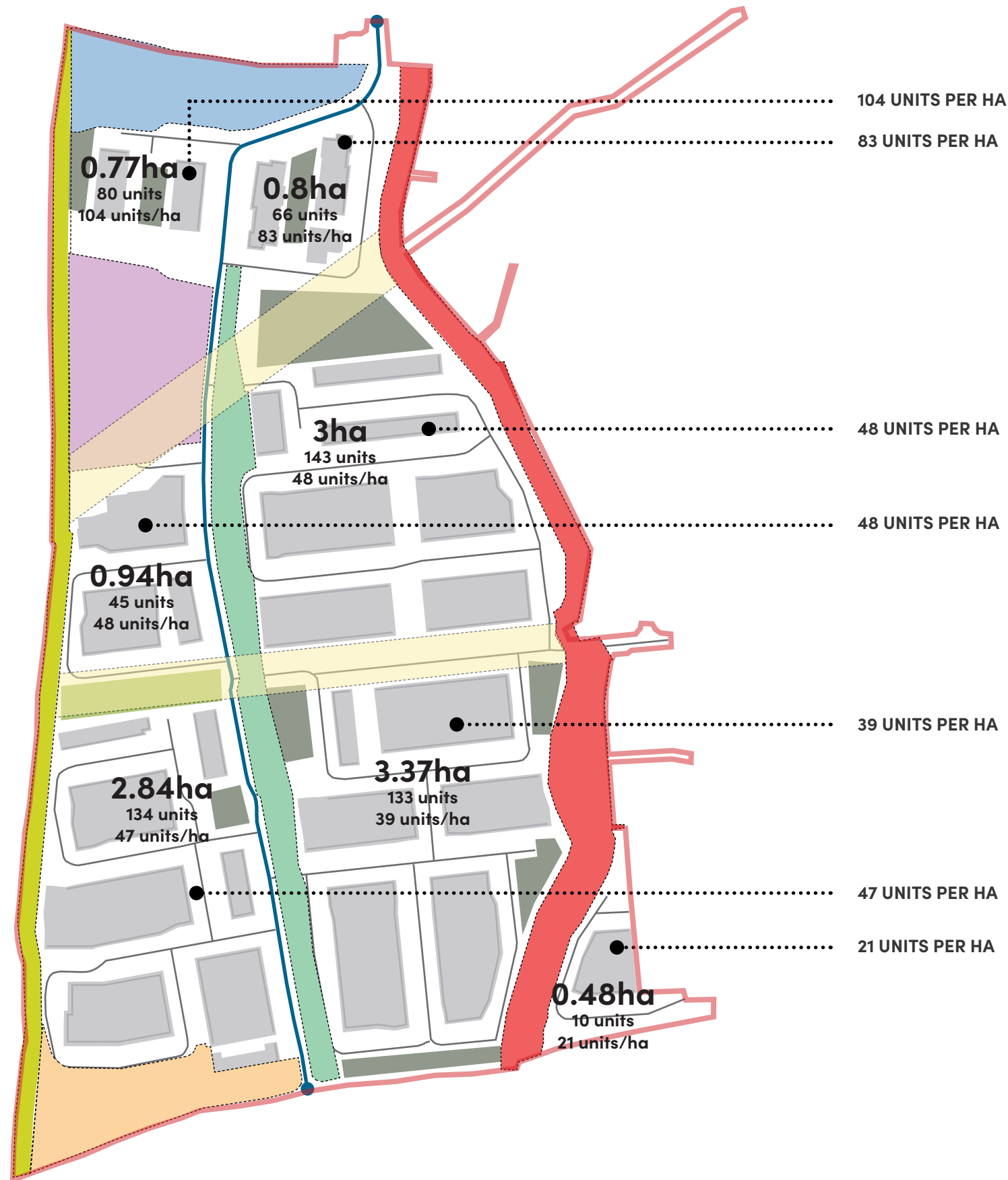


Figure 3-1. Diagram showing areas considered for net residential density calculation.

3.1.1 Net Density Calculation & Site Layout Considerations

The area used for net residential density calculations, highlighted in white in the adjacent diagram—excludes the following site features:

- Land reserved for a future school
- Designated flood zone
- Two wayleave areas
- Steeply sloped South-western portion of the site
- Hedgerow along the western boundary, with a recommended 10m buffer zone
- 10m buffer from the top of the stream bank along the eastern boundary
- The centrally located north-south "Link Street"

Based on these parameters, the proposed development proposes a net density of 50 dwellings per hectare across the entire site. This aligns with the Sustainable Development and Compact Settlement Guidelines, which recommend a range of 40–80 dwellings per hectare.

The southern section of the site (located south of the central wayleave) achieves a net density of 41 dwellings per hectare, offering a sensitive transition to the adjacent low-to-medium density, low-rise housing to the east, while also introducing a more compact residential form.

The northern section of the site (located north of the central wayleave) supports higher density living, delivering 60 dwellings per hectare. Here, apartments and duplexes are strategically placed at the site's northern edge, presenting a strong architectural frontage that capitalizes on proximity to the LUAS Red Line.

In summary, the proposed scheme represents an efficient and considered use of land, reflecting the physical constraints of the site, which are described further in following sections.

3.2 SUSTAINABLE & EFFICIENT MOVEMENT

The urban design rationale outlined below identifies the key issues considered in the design process for the proposed residential scheme on the site, with regards to the 4 indicators set out in The Compact Settlement Guidelines, as follows:

3.2.1 Strategic connections

The expired LAP, as mentioned previously, has informed the primary accessibility and movement principles for the subject site are set out in the Fortunestown Local Area Plan. Extracts of the relevant diagrams are included below. These connections are:

- Pedestrian & Cycle link to the centre & east of the site linking the Boherboy road, the subject site, Carrigmore District park, Fortunestown LUAS and Citywest District Centre.
- Secondary Street Network for vehicular traffic linking the Boherboy Road in the south, the subject site, Carrigmore to the north and Corbally to the east. Permeability and design of the proposed street network within the development, along with how the same promotes sustainable movement are further detailed overleaf.

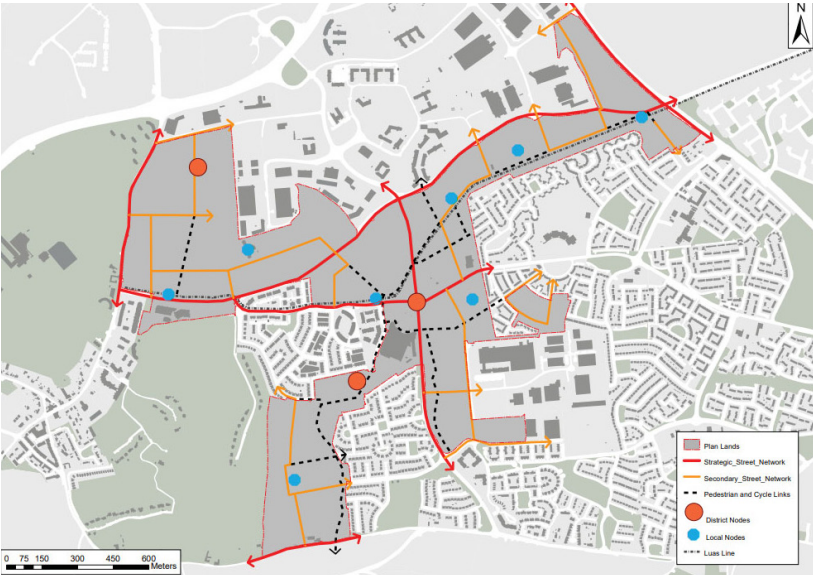


Figure 3-2. Extract from the Fortunestown LAP - pp21 - Accessibility & Movement Framework.

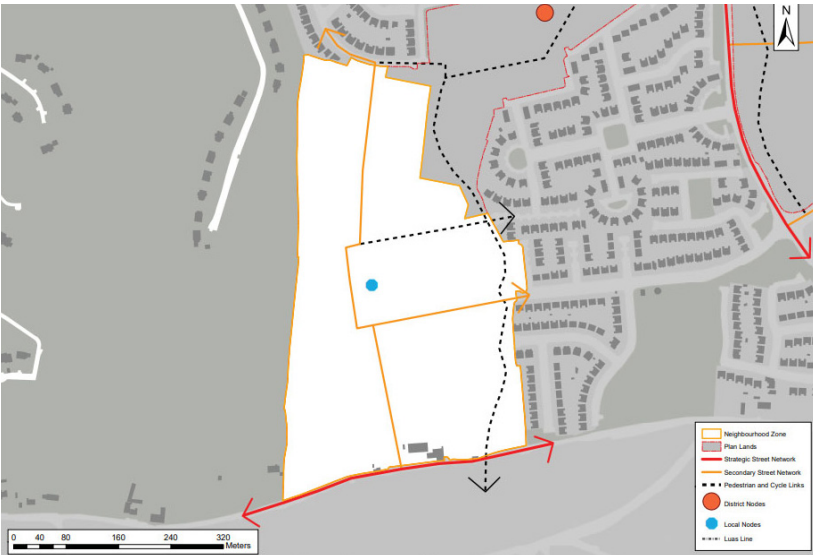


Figure 3-3. Extract from the Fortunestown LAP - pp40 - Boherboy Accessibility & Movement Strategy.

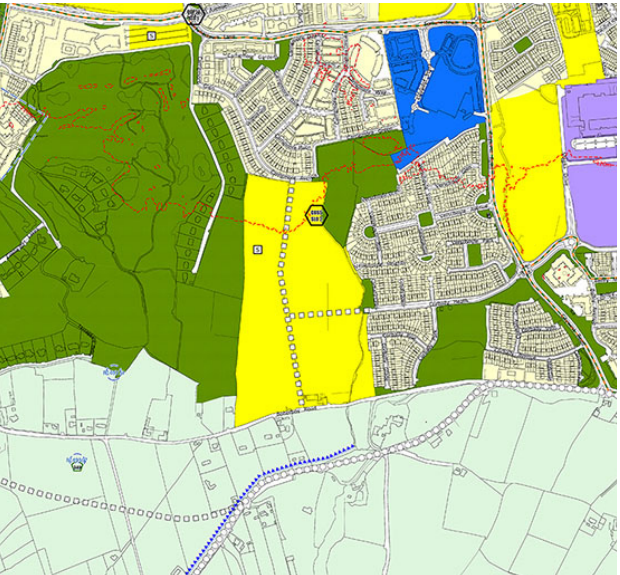


Figure 3-4. Extract from South Dublin County Development Plan 2022-2028, with 6 year road proposed indicated through the proposed site.



Figure 3-5. Site's strategic connections and main internal routes.



Figure 3-6. Diagram presenting the proposed street hierarchy of the scheme.

3.2.2 Street network: permeability

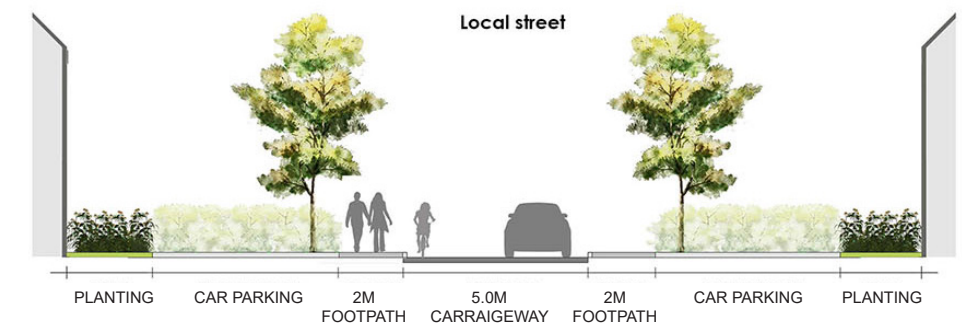
As highlighted in the opposite diagram the development is structured along a North-South primary street that gives access to a permeable layout of traffic-calmed link streets and homezones, generating an overall permeable built environment optimises sustainable movement favouring pedestrian and cycling modes. Clear linkages to the primary access streets are provided, connecting to the northern and southern main gateways (junction with Boherboy Road). In addition, local streets (secondary level as explained below) connect to adjoining estates to the east.

3.2.3 Street network: hierarchy and design (DMURS)

All streets, including carriageways, footpaths and the proposed cycle track, have been designed in accordance with DMURS aiming to calm traffic within the development, enabling safe and comfortable movement of vulnerable users. In addition to the primary access road, secondary link streets and homezones configure the street layout of the development, as follows:

LOCAL STREETS:

The primary local access avenue feeds the secondary residential streets connecting the Boherboy Road to the apartments/duplex blocks, and dwellings. These streets typically have access to terraced or semi-detached houses. These streets provide for off street parking on curtilage and have a 5m wide carriageway which is segregated by a raised kerb and a 2m wide footpath either side. Tree planting is proposed at the edge within the front garden boundary. Driveways are typically 5m long and have approx. 1.2m landscape buffer between the façade of the dwelling.



HOMEZONES:

These are smaller streets with a shared surface treatment, designed to favour the pedestrian and cyclist. Provision for these homezones maximise pedestrian and cycle permeability throughout the development. A 4.8m wide carriageway with flush 1.2m wide pedestrian refuge zone to one side is intended to slow motorists and create quiet community streets. Tree planting is proposed to be located in the front gardens and refuge zones to locally narrow the road to help reduce speed on these roads.

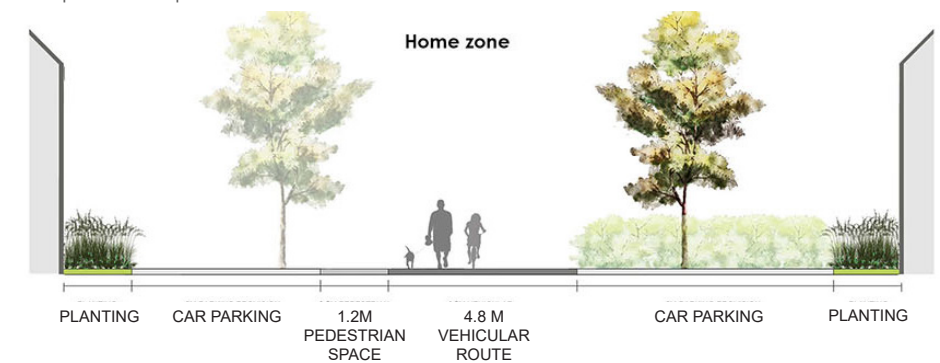


Figure 3-7. Street sections illustrating the detailed design for local streets and homezones.

3.3 MIX OF LAND USES

3.3.1 Appropriate mix of uses and intensities

- The proposed scheme makes the most of the potential that the site offers, in particular:
- Delivering an appropriate residential density. The proposed scheme delivers 611 homes, representing an appropriate net density of 41 dwellings per hectare in the southern site and 62 dwellings per hectare in the northern site (separated by the cental wayleave). Given the existing constraints within the site, this is a compact built fabric that features an efficient use of land.
 - Providing a primary access link street - including cycle lanes - providing connections to the secondary street layout, towards adjoining schemes in the east and Boherboy Road to the south.
 - The scheme offers a good mix of different unit sizes and accommodation choices to cater for a range of differing households, as illustrated below and explained in the opposite diagram.

3.3.2 Housing variety and mix

It is submitted that the proposed development includes a variety of residential components that will attract a wide range of households into the new community.

A low-rise compact residential environment is proposed, including housing cells at central and southern areas, while placing compact development facing the north-south green spine (duplexes highlighted in pink) and northern precinct, which is the most proximate to the LUAS stop, featuring apartment buildings (highlighted in brown) and duplex buildings, ranging in height from 3 to 5 storeys, and a range of dwelling sizes from 1 to 3-bed dwellings at this location.

The mix of traditional 2 and 3-storey housing typologies provides for a range of 2 to 5-bed dwellings, which will cater for a diversity of households. In addition, typological variety includes deep-plan terraced and semi-detached dwellings, along with wide-frontage houses to maximise frontage and passive surveillance at landscaped open spaces and other public realm areas.

The table below outlines the overall proposed housing mix:

Unit Type	1 bed	2 bed	3 bed	4 bed	Total No.	% Mix
Houses	0	30	241	35	306	50%
Duplexes	11	46	76	0	133	22%
Apartments	47	123	2	0	172	28%
Total No.	58	199	319	35	611	100%
% Mix	9%	32%	54%	5%	100%	

KEY LEGEND

2-bed / 2-storey house

3-bed / 2-storey house (5p)

4-bed / 2-storey house

4-bed / 3-storey house

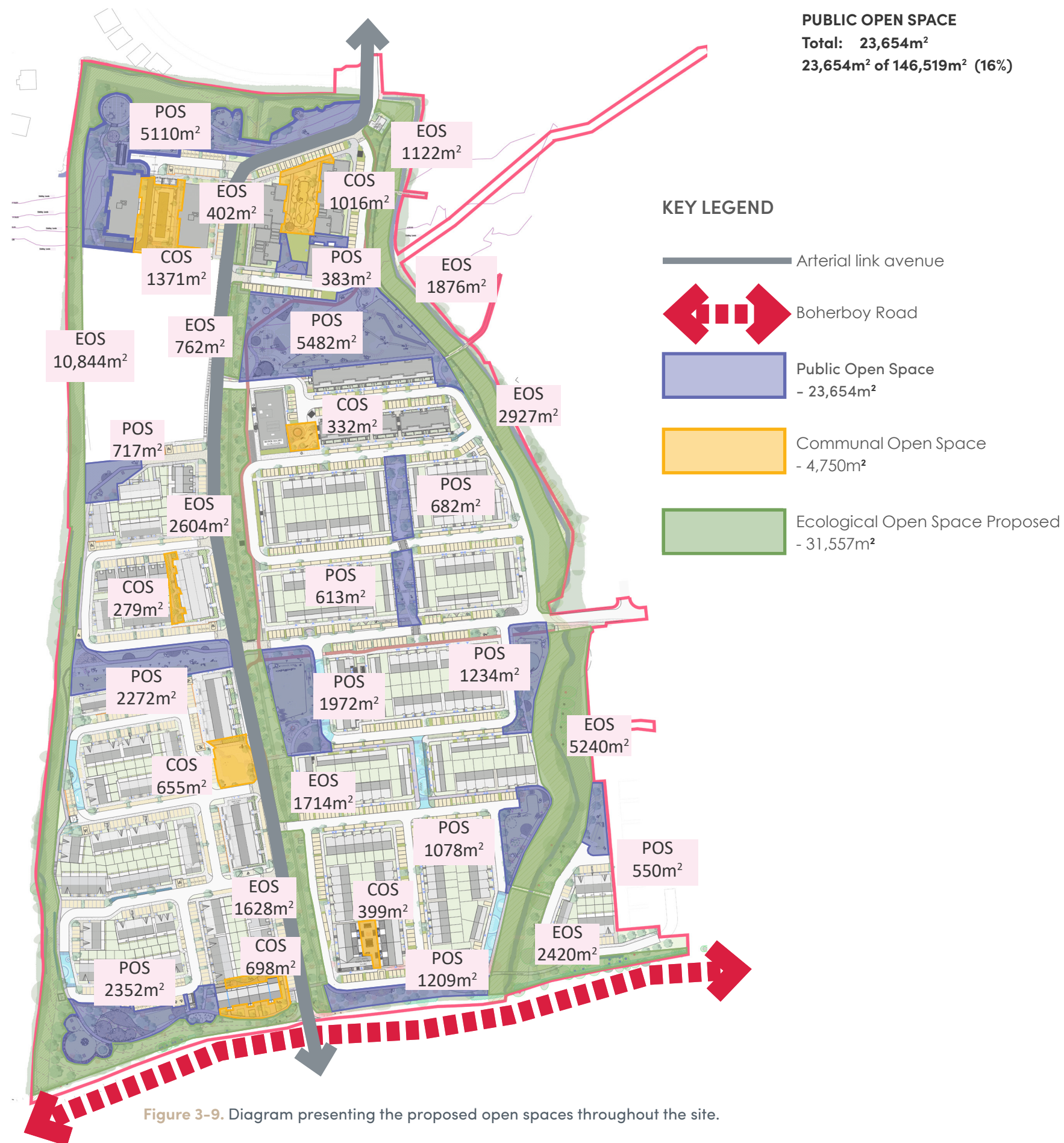
1,2 & 3-bed / 3 & 4-storey duplex

1,2 & 3-bed / 4 & 5-storey apt. block

Crèche - 2 storey



Figure 3-8. Sites unit mix



3.4 GREEN AND BLUE INFRASTRUCTURE

The site layout plan is led by the integration of landscaping and SUDS proposal. This has evolved from the coordinated landscape and natural based SUDS strategy.

The constraints and opportunities of the blue and green infrastructure have informed the development since initial stages of design. The layout proposed is well-informed by a multidisciplinary design team of consultants and specialists with an essential input on how nature is integrated in the overall layout, with an attractive and well connected network of landscaped open spaces and a careful approach addressing sustainable urban drainage in both the public realm and private/semi-private outdoor and indoor areas.

3.4.1 Integration of nature and biodiversity

The Public Open Space provision is both contingent on landscaped open spaces within the residential built fabric and maximising retention of hedgerows and biodiversity corridors to maximise preservation of green and blue systems while delivering a scheme with an efficient use of land.

3.4.2 Open Space Network

The Open Space Network is conceived beyond the 15% requirement applicable as the site is rich in green features that shall be integrated in the overall landscaping strategy, as submitted by G+A Landscape Architects.

The Open Space Network is therefore structured mainly north-south according to biodiversity corridors that allow for sylvan amenity areas including pedestrian and cycling routes along the site. These corridors give access to inner public open spaces of a more human intimate scale provided in a balanced distribution throughout the site, as highlighted in the opposite diagram.

Excluding the required riparian strip along the eastern boundary and areas required to protect and integrate hedgerows, public open space provided within net area considered is:

Total area within red boundary (Net area - excluding riparian strips, existing hedgerows, buffer zones, school site)

c. 146,519sq m (c. 14.65 ha.*)

Public Open Space Provided: 16% (approx. 23,654sqm)

Please refer to G+A Landscape Architects for the proposed Landscape Design Rationale and drawings in the overall landscape open space network and details on parks and other amenity areas.

3.4.3 Nature-based Urban Drainage (SUDS)

The multidisciplinary design team has collaborated along the design process of the proposed development, which presents a layout that allows for and integrates an overall nature-based drainage strategy and SUDS features that contribute to same. The following criteria, set by Roger Mullarkey & Associates Consulting Structural and Civil Engineers, summarise the proposed drainage strategy and SUDS provision:

- The interception storage will be within the stone base of the permeable paving, in the stone below the filter drain pipework and swales/bioretention areas/rain gardens, in the sub-strata of the green roof systems and in the detention basins. In accordance with the GDSDS, the volume of interception storage provided is greater than that generated by 5mm of rainfall on the site and up to 10mm if possible.
- Calculations of the interception volumes are provided in Engineers reports.
- Replicating the natural characteristics and providing amenity/biodiversity will be encouraged by creating the roadside grassed swales, green roofs, rain garden planters, bio-retention areas, grassed detention basins and the centrally located open course/conveyance swale.
- The surface water runoff rate has been restricted to the greenfield runoff rate, Qbar and calculations for same can be viewed in Engineer's reports.
- Drainage layout and SUDS features details are provided in Engineer's drawings, and a sample of same is provided opposite.
- In providing the above noted rain garden planters, roadside filter swales, tree pits, bioretention area, permeable paving systems, catchpits, detention basin attenuation storage, greenfield run off vortex control and petrol interceptors it is proposed that the SUDS treatment of the run-off has been adequately addressed. The above noted proposals have been discussed and agreed in principle with SDCC EWCC Dept. during the pre-planning process.

3.4.4 Marsh Translocation

Through a careful analysis of the existing soil conditions, an area of marshy land was identified on site towards the North east. This was assessed on site in collaboration with South Dublin County Council and was agreed that this marshy ground would be translocated to the flood retention area in the northern open space to maintain the unique habitats found here.

The details of the translocation are contained in the "Marsh Translocation Report" prepared by Gannon & Associates Landscape Architecture accompanying this submission and involves a careful historical and hydrological and hydrogeological assessment carried out by DNV outlining the likely cause of the marshy ground and how best to ensure the soil once relocated will retain its characteristics.



Figure 3-10. INDICATIVE BIOSWALE INTEGRATED IN PUBLIC OPEN SPACE

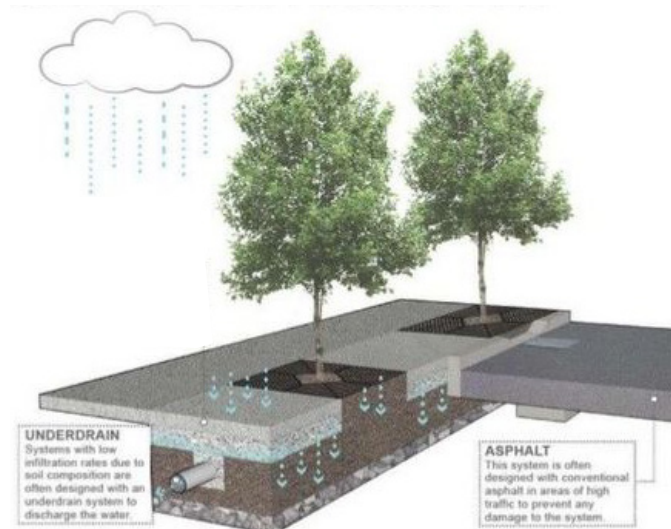


Figure 3-11. INDICATIVE TREE PITS DEALING WITH RUN OFF FROM ROADS AND OTHER HARD-LANDSCAPED PUBLIC REALM AREAS



Figure 3-12. INDICATIVE PERMEABLE PAVING AT FRONT GARDENS

KEY LEGEND

	MAIN BIODIVERSITY CORRIDORS	ECOLOGICAL OPEN SPACE PROPOSED (EOS)
	PUBLIC OPEN SPACE (POS)	ABOVE GROUND ATTENUATION STORAGE AREA
	COMMUNAL OPEN SPACE (COS)	BELOW GROUND ATTENUATION STORAGE AREA



Figure 3-13. Diagram and images illustrating development's strategy for SUDS

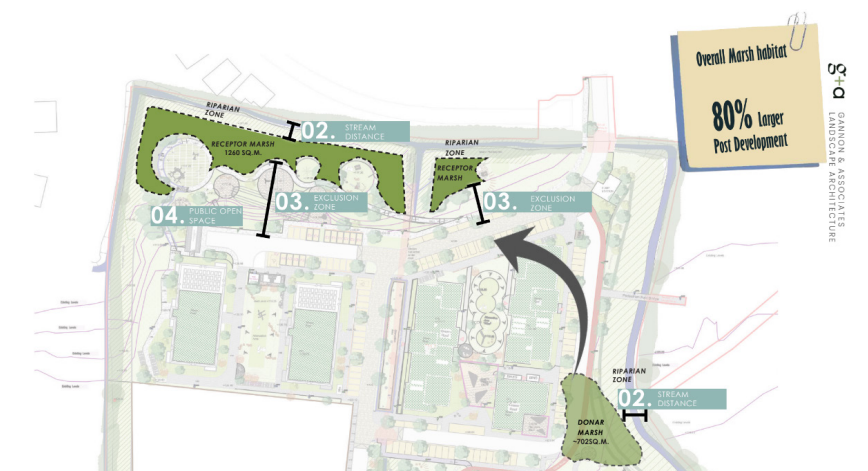


Figure 4-1. Marsh Translocation - Gannon & Associates Landscape Architecture



Figure 3-14. Diagram presenting the proposed street hierarchy of the scheme.

3.5 RESPONSIVE BUILT FORM

3.5.1 Layout coherence and legibility

The layout has been integrated with the established varied development patterns of the area and provides for numerous connections to the wider Saggart community, built form, density and green infrastructure. Within these parameters, the creation of active street frontages is achieved by designing a highly permeable layout which promotes passive surveillance and prioritises use by pedestrians and cyclists. The use of different treatments and typologies proposed within each character area creates distinctive areas within the scheme adding vibrancy and strong visual interest to the proposed scheme, creating a sense of place for this new neighbourhood.

An ordered series of urban residential cells is proposed across the scheme, connected by a hierarchy of streets and related open spaces. The new street network is legible and easy to navigate. It promotes permeability throughout the scheme itself and also provides easy connections to the neighbouring housing development areas and the District Centre, as well as the Luas. A series of secondary routes lead to quieter groupings of houses and homezones providing more pedestrian friendly streets. The character of these streets varies and traffic speeds are limited by design. All Housing cells are carefully considered and respond to their context and topography. The house facades overlook, supervise and define the edges of streets and public landscaped blocks. Rear gardens back onto rear gardens of adjoining properties providing legible blocks.

3.5.2 Interface of buildings and the public realm

The integration of traditional and contemporary architectural elements aims to create a cohesive streetscape that respects and follows the existing development pattern of the adjoining estates to the east while enhancing land-use, efficiency and relationship with inner public open spaces and the wider Saggart community. The traditional 2 and 3-storey houses provide a sense of continuity with the surrounding context, while prominent blocks to the northern and southern edges present the development when approaching from Boherboy Road or the N7. Particularly, the northern precinct of the site features the highest density and scale owing to its closer proximity to the LUAS red line station.

Efforts have been made to design the interface between buildings and the public realm to promote accessibility and usability while maximising passive surveillance and fronting of the same, as illustrated opposite. Footpaths, seating areas, and landscaping aim to enhance the pedestrian experience and encourage interaction among residents and visitors.



611no. Homes
306 no. Houses
133 no. Duplexes
172 no. Apartments



Car stats
861 parking spaces



POS Main Stats
2.3 ha
16%

3.5.3 Heights strategy

As illustrated in the opposite diagram, the proposed development responds to a coherent built environment of 2 to 3-storeys in nature with prominent components of 5-storey apartment cells to the north of the site.

3-storey elements, both duplex buildings and houses, are distributed homogeneously across the site and mainly located fronting on to proposed parks and along the central green spine.

5-storey buildings take advantage of the closest proximity to public transport services and present a consistent image of the development when accessing from the north along the main link avenue and therefore enhance diversity of typologies and range of tenure at this location.

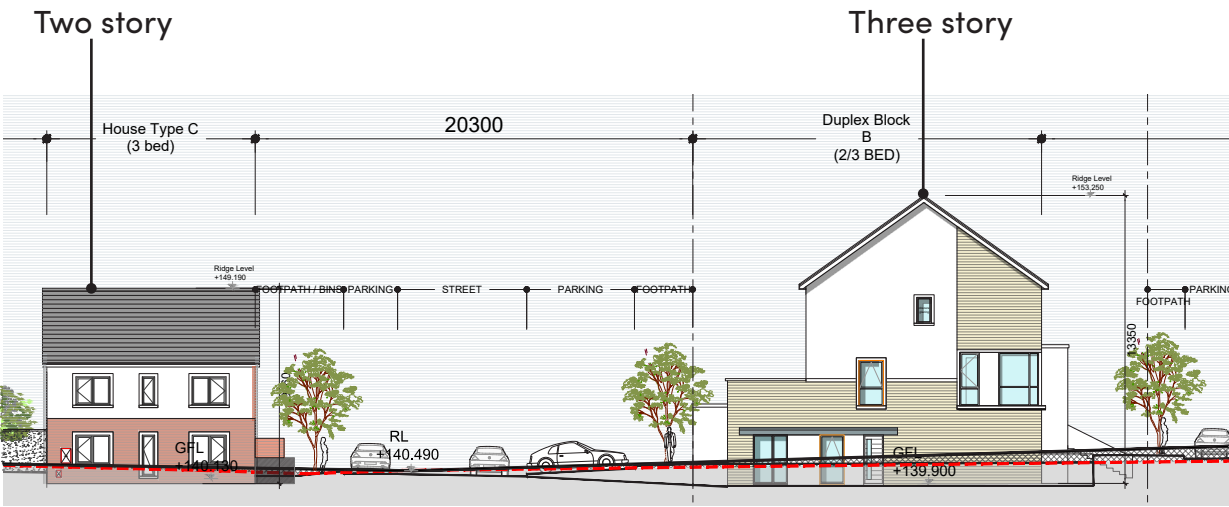


Figure 3-15. Elevation midway through the southern portion of the site, illustrating height variation between a 3-storey duplex building and the adjacent 2-storey houses.



Figure 3-17. Elevation midway through the central boundary line facing the EVARA plot, illustrating height of a 5-storey apartment building.



Figure 3-16. Diagram illustrating the heights strategy of the development.

- KEY LEGEND**
- 2 Storey
 - 3 Storey
 - 5 Storey
 - Main gateways