Rathcoole Housing

Part 10 Application

October 2026

Contents

1. Landscape Introduction

2. Landscape Context

3. Existing Landscape

4. Landscape Design Development

5. Landscape Plan

6. Planting Strategy

7. Proposed Materials

1. Landscape Introduction

1.1 Introduction

This Landscape submission for South Dublin County Council for the planning application of Rathcoole Residential Development.

South Dublin County Council has commissioned Metropolitan Workshop to lead the multidisciplinary team to develop phase 1 of Rathcoole residential development. This report section outlines the landscape observations during this stage 2b design development.

The phase 1 proposal follows local, domestic and international guidelines such as:

- The South Dublin County Council Development Plan 2022-2028 Development in Urban Areas, and the provisions of the Urban Design Manual-A Best Practice Guide
- DoEHLG Urban Design Manual- for Urban Roads and Streets (2013)
- NAD-Building for Everyone: A Universal Design Approach
- Ready, Steady, Play! A National Play Policy.

The overriding design intention is to create an inclusive and coherent new community based on best practice urban planning principles, giving residents a sense of place, ownership and identity.

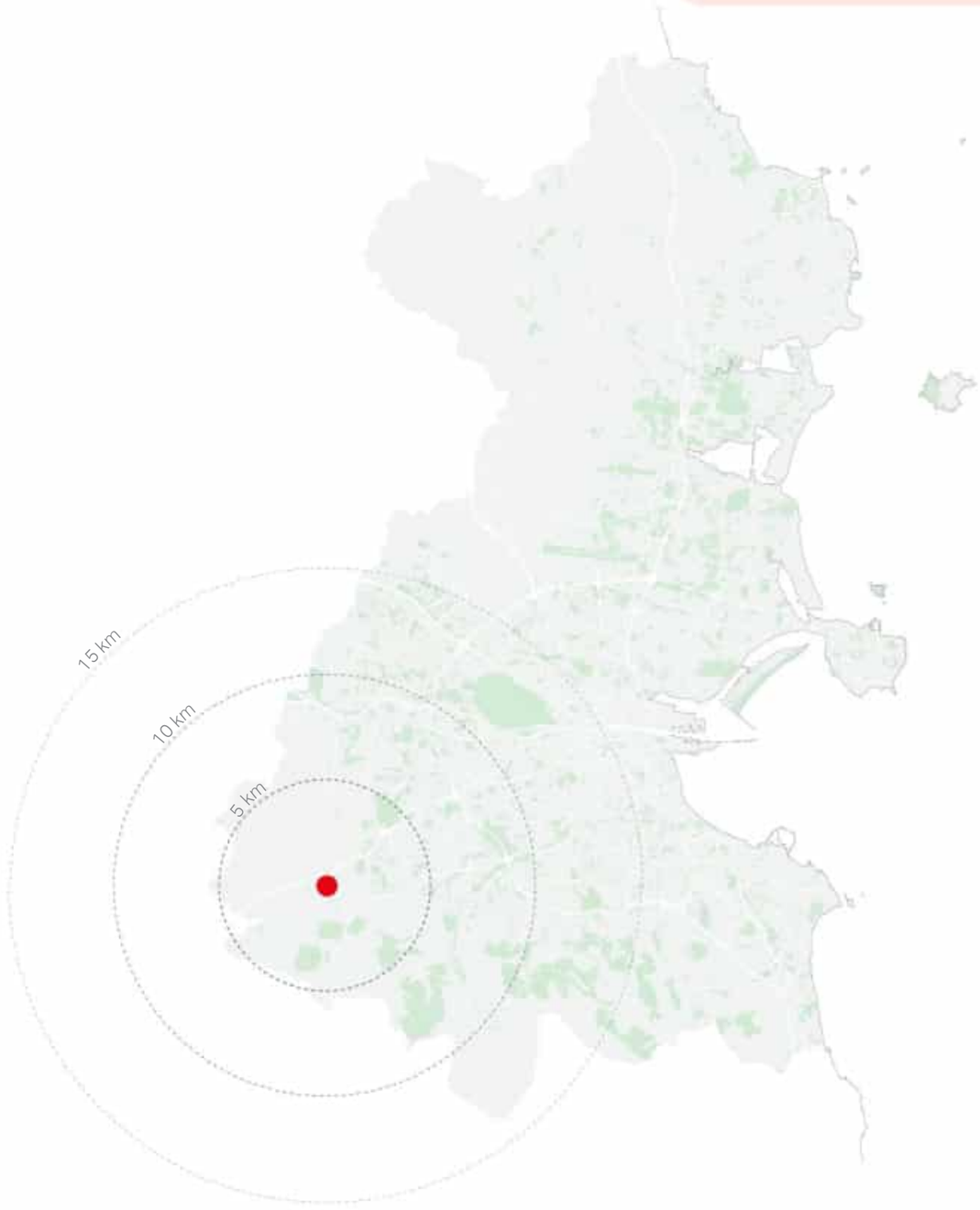


Figure 1; Wider Context of Rathcoole in the Greater Dublin Region

Figure source: AECOM

2. Landscape Context

2.1 Planning Context

The South Dublin County Development Plan 2022–2028 outlines comprehensive policies guiding landscape design and housing development in Rathcoole. These policies aim to balance sustainable growth with the preservation of natural and built heritage.

Landscape Design and Green Infrastructure

The Development Plan emphasizes the integration of green infrastructure (GI) into urban planning to enhance biodiversity, manage water sustainably, and improve public amenities.

Key policies include:

Protection of Natural Features:

The plan recognizes that elements like trees and hedgerows significantly contribute to the county's GI network. These features are vital in defining community character and supporting ecological health.

Sustainable Drainage Systems (SuDS):

SDCC has introduced a 'Sustainable Drainage Explanatory, Design and Evaluation Guide 2022' to promote SuDS in new developments. This approach mimics natural drainage processes, managing rainfall and surface water to reduce flooding and water pollution while enhancing the landscape.

Design and Placemaking:

New housing developments are encouraged to incorporate high-quality design principles that promote healthy place-making. This includes considerations for community infrastructure, access, and the integration of green spaces to enhance the living environment.

The key objectives relevant to this phase 2 landscape development are as follows:

- Maximise pedestrian and cyclist connectivity through site, minimising opportunities of anti-social behaviour;
- Ensure any pedestrian routes have appropriate avoidance and mitigation measures to environmental assets on site;
- Incorporate Sustainable Urban Drainage Systems (SUDS);
- Integrate green infrastructure on site, connecting into existing green network (Such as the Grand Canal & Griffeen Valley Park). Use native tree species and hedgerow as a method of integration;
- Create multifunctional amenity areas with enhanced biodiversity value.

Housing Development in Rathcoole:

Rathcoole is identified as a key area for residential development, with specific objectives to ensure sustainable and well-integrated growth:

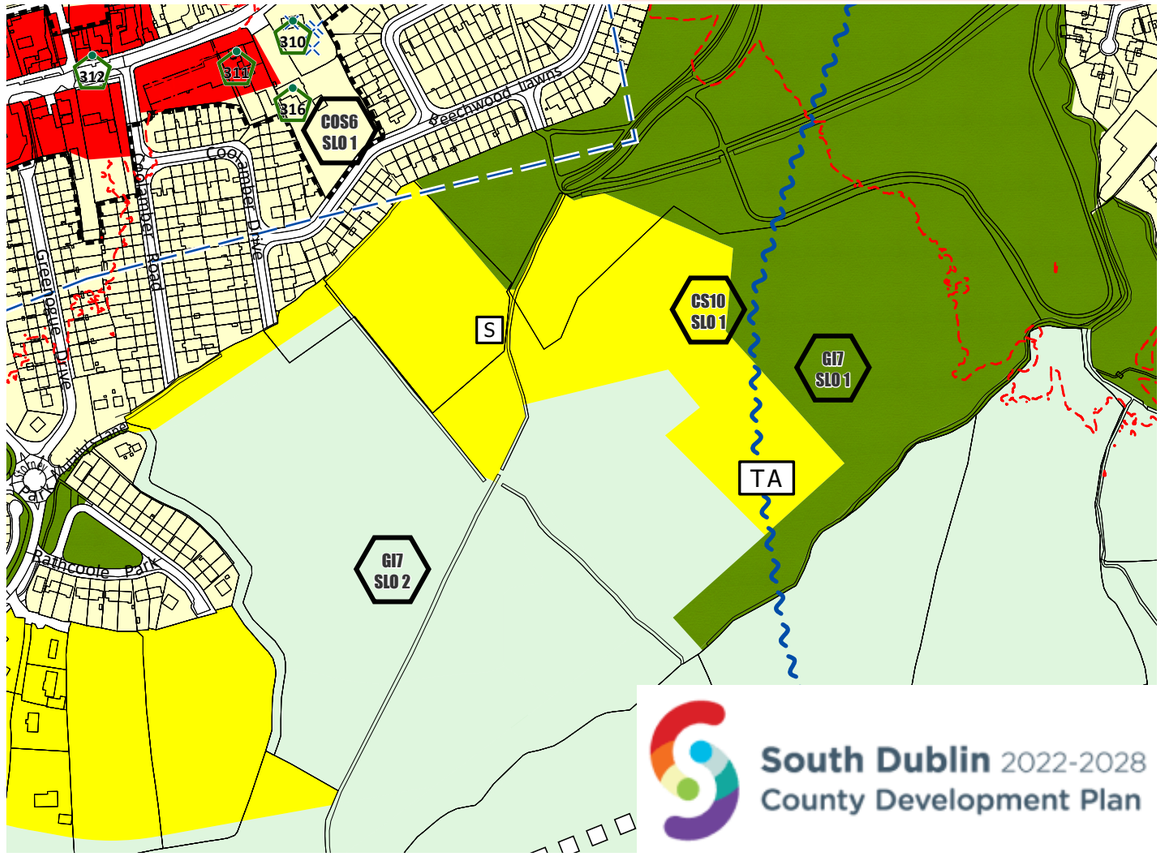


Figure 2; SDCC Map 81-Zoning

Land Use Zoning:

The development site comprises of four objectives.

SLO Ref: CS10. To ensure that the provision of a primary school, library hub, 2 full sized GAA pitches and 1 junior pitch and associated pavilion, access road and open space is provided in tandem with new residential development having regard to the provisions of GI7 SLO2.

SLO Ref: G17.1 The current green wildlife corridor between Saggart and Rathcoole be maintained and the need to preserve this wildlife corridor be incorporated into the design and development plans for Rathcoole park.

SLO Ref: G17.2 To ensure the adequate protection and augmentation of the identified Alluvial Rathcoole Woodlands within the zoning RU, and in recognising their value as green infrastructure and the potential linkages to Lugg Woods and Slade Valley and other amenity areas, provide for sensitive passive amenity uses which have regard to their Annex 1 status

OBJECTID 3: To Provide For Traveller Accommodation

Figure source: South Dublin County Development Plan 2022-2028

2.2 SDCC Play Policy

South Dublin County Council (SDCC) places significant emphasis on the provision and enhancement of play spaces as integral components of community infrastructure. The policies outlined in the South Dublin County Development Plan 2022–2028 reflect a commitment to creating inclusive, accessible, and high-quality play environments that cater to the diverse needs of the county's population.

Key Objectives and Policies

1. Inclusive and Universal Design

SDCC adopts a universal design approach in the development of play spaces, ensuring that facilities are accessible to individuals of all abilities. This approach promotes integrated play experiences, moving away from segregated equipment for specific needs. The council's policy emphasizes that play spaces should be designed to accommodate everyone, fostering social inclusion and community cohesion.

2. Integration with Green Infrastructure

Play spaces are considered vital elements of the county's green infrastructure network. They are designed to support biodiversity, sustainable water management, and carbon sequestration. The development plan mandates that public open spaces, including play areas, contribute to the wider planning and environmental objectives of the county.

3. Quality and Accessibility Standards

The council requires that public open spaces, encompassing play areas, are of high quality, providing for both active and passive recreation. Design considerations include:

- Ensuring spaces are fit for purpose and enhance the identity and amenity of the area;
- Accommodating use by people of all ages and abilities;
- Supporting lifelong activity and promoting health and well-being;
- Creating a sense of security and minimizing opportunities for anti-social behaviour.

Access points to parks and play areas should be maximized to increase usage and improve safety.

4. Community Engagement and Playful Streets

SDCC encourages community-led initiatives such as the "Playful Streets" program, which allows residents to temporarily close streets to vehicular traffic, creating safe and accessible play environments in urban settings. This initiative aims to foster community interaction and provide children with opportunities for outdoor play in their neighbourhoods.



Figure 3; Tymon Park Source: SDCC



Figure 4; Hermitage Park Playground Source: SDCC



Figure 5; Harpur Green, Leixlip, County Kildare. Passive play Source: SDCC

2.3 Benchmark project: Airlie Park

Client:	South Dublin County Council (SDCC)
Landscape Architect:	Dermot Foley
Value:	6.95M (Plus Additional Funding)
Size:	109,500m.sq
Completion:	2023

Airlie Park provides a strong benchmark for the proposed Rathcoole development. The project demonstrates a successful approach to managing residential boundaries and park security while delivering an attractive and high-quality public realm.

The scheme carefully addresses the interface between private residential properties and public open space. Boundary treatments are designed to balance security and visual permeability, ensuring clear definition without creating a defensive or overly engineered character.

Security has been sensitively integrated into the landscape through subtle design interventions, including vehicular control measures that prevent unauthorised car access while maintaining welcoming pedestrian entrances. Gateway features and boundary strategies are particularly relevant to the Rathcoole development, offering precedents for:

- Controlled access points;
- Passive surveillance from adjoining residential areas;
- Robust yet aesthetically coherent edge treatments;
- Integrated vehicle deterrence without visual clutter;

Importantly, the park provides high-quality amenities that cater to multiple age groups, demonstrating how recreational provision, safety, and landscape design can work cohesively within a residential setting.

Airlie Park stands as a valuable reference project in achieving secure, inclusive and well-designed neighbourhood parkland.



Figure 6; View on carpark with metal bollards protective barrier



Figure 7; Concrete vehicle protection along the road side



Figure 8; Metal fence around the park with view on the residential area



Figure 9; Main entrance with protective barriers

Figures source: AECOM



Figure 10; Environmentally sensitive and protected area behind the metal boundaries



Figure 11; Multifunctional concrete barriers to protect against the cars



Figure 12; Metal barriers along the main road to prevent car access



Figure 13; Metal fence and wooden sticks to protect canal and wildflowers area



Figure 14; Safety barrier to prevent unauthorised car access



Figure 15; The main entrance with different types of protective barriers



Figure 16; Concrete barriers



Figure 17; An example of materials mix: a concrete path connected to asphalt, concrete sets and gravel



Figure 18; Concrete benches on the slope of the pitch and steps with metal handrails



Figure 19; Hardlandscape material selection at the main entrance

Figures source: AECOM

3. Existing Landscape

3.1 Existing Site Photos





Figure 20; Rathcoole Park along River Corridor



Figure 21; Rathcoole Park to Beechwood Lawns

Aerial photo source: ArcGIS
Figures source: AECOM



Figure 22; Rathcoole Park to Four Districts Woodlands



Figure 23; Four Districts Woodlands



Figure 24; Four Districts Woodlands



Figure 25; Millrace entrance to Rathcoole Park



Figure 26; Four Districts Woodlands



Figure 27; Four Districts Woodlands



Figure 28; Mullally's Lane



Figure 29; Millrace entrance to Rathcoole Park

Figures source: AECOM

4. Landscape Design Development

Landscape assessment for housing, school, amenities, and supporting infrastructure in the context of the existing community and natural habitat.

Strengths of the Site:

1. Proximity to Community: Located near existing neighbourhoods and infrastructure.
2. Adjacent Amenities: Borders Rathcoole Park.
3. Natural Features: Contains a network of traversing waterways.
4. Geography: Features existing woodland habitats and gentle topography.

Weaknesses of the Site:

5. Limited Connectivity: Poor integration with existing communities and amenities.
6. Lack of Passive Surveillance: Rear boundaries of nearby homes face the site, increasing risk of antisocial behaviour.
7. Restricted Access: Dense woodland limits visibility and public access.

Opportunities for development:

8. Improved Permeability: New pedestrian routes can enhance site connectivity.
9. Green/Blue Infrastructure: Potential for riparian corridors to support walkways and cycleways, linking to the Greater Dublin Cycle Network and surrounding trails.
10. Sustainable Integration: Opportunity to embed housing, education, and recreation within the natural landscape.
11. Inclusive Public Spaces: Topography supports universally accessible amenities.
12. Biodiversity & Amenity Enhancement: High-quality soft landscaping can boost ecological value.
13. Strategic Facility Placement: School could be sited within woodland and near pitches with changing facilities.
14. Community-Oriented Housing: New homes can be located near Rathcoole Village, adjacent to the park and school.
15. Improved Surveillance: New street frontages can replace rear boundaries, enhancing natural surveillance of public areas.

Threats to the development

16. The site contains an extensive network of waterways and associated flood zones.

Proximity to Community



Strengths

Lack of Passive Surveillance



Weaknesses

Green/Blue Infrastructure



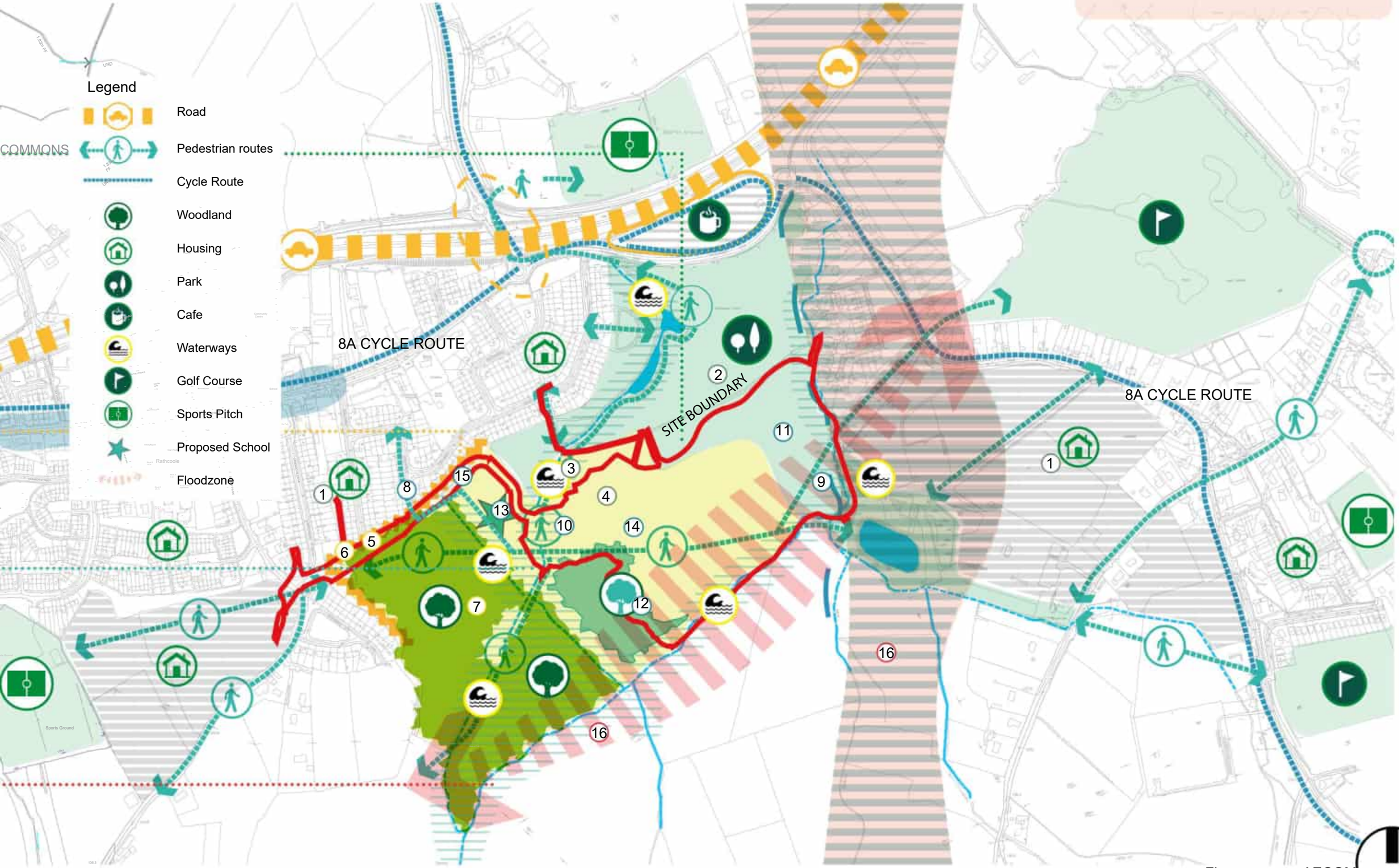
Opportunities

Floodzones



Threats

Figures source: AECOM & Adobe Stock



Note: Numbers in the diagram relate to the SWOT Analysis on Page 10

Figure source: AECOM

Figure 30; Strengths, Weaknesses, Opportunities, Threats Base Plan

4.1 Landscape Strategy

The design intention is to create an inclusive and coherent new community based on best practice urban planning and landscape design principles, giving residents a sense of place, ownership and identity.
The design concept responds to the sites existing landscape, and the SDCC development plan.

The landscape strategy is as follows:

① Preservation and Enhancement of the Riparian Corridor:
Protect and enhance the existing network of waterways to create new Riparian Walking and Cycle Routes. These routes will connect the existing Camac River Greenway with the Slade Valley Trails, improving connectivity and access to natural amenities.

② Protection and Management of Existing Woodland:
Retain and sustainably manage the existing Alluvial Woodland to preserve and nurture native woodland habitat for future generations.

③ Integration of Green Fingers and Local Parks:
Introduce green corridors and local parks throughout the development to provide high-quality, accessible open spaces. These areas will support passive surveillance, enhance biodiversity through high-quality planting schemes, and utilize locally sourced seed banks to enrich ecological value. The parkland character of Rathcoole Park will be extended into the proposed development, forming a continuous green infrastructure spine through the site.

④ Provision of Semi-Private and Private Green Spaces:
Landscaped green spaces will be integrated with residential dwellings, offering residents accessible and attractive semi-private and private outdoor areas.

⑤ Enhanced Permeability through Green Links:
Establish a comprehensive network of pedestrian and cyclist routes connecting key areas within the development and linking to the wider area, including the Greater Dublin Cycle Network (Routes 8A and 9D). All public open spaces will be universally accessible.

⑥ Active Recreation Areas:
Provide active recreation facilities, including three GAA pitches and a public parking area, serving both the development and the surrounding community.

⑦ Integration of Sustainable Drainage Systems (SuDS):
Incorporate surface water management into the landscape design as a visual and functional amenity, aligning with SuDS best practices.

⑧ Street Tree Planting and Urban Integration:
Implement extensive native street tree planting to reinforce the landscape character. The existing young woodland will be integrated with proposed schools, housing, and sports facilities. Tree-lined streets will further embed the road network within the landscape, while a clearly defined urban edge will be established at Rathcoole's fringe using public open spaces and tree-lined boundaries.

Existing Site



Woodland Walks



Riparian Way



Pitches in Meadow Grassland



Figures source: AECOM & Adobe Stock

Legend

- Boundary Line
- Department of Education Lands
- Rathcoole Park
- ProposedHousing
- Proposed Green Fingers
- Proposed Woodland Edge
- Local Parks
- Courtyard
- Proposed Pitch Location
- Green Links
- Protected Woodland
- Camac River Corridor

RIVER CORRIDOR

RIPARIAN RIVE

Green Fingers

CAMAC RIVER CORRIDOR

Aerial photo source: ArcGIS
Figure source: AECOM

Figure 31; Landscape Strategy

4.2 Tree Survey

HEDGEROW 4
HEDGEROW 3
HEDGEROW 5
MINOR AREA OF SCRUB
HEDGEROW 8
HEDGEROW 7
VEGETATION AREA 1 – GS2/WS1 GRASSLAND SCRUB MOSAIC
HEDGEROW 6
VEGETATION AREA 2 – WS2 IMMATURE WOODLAND
ANNEX 1 HABITAT/WOODLAND – SEE ECOLOGIST'S REPORT FOR FURTHER
MINOR AREA OF SCRUB
HEDGEROW 2
HEDGEROW 1

LEGEND

TREE CONDITION CATEGORIES

A TREES OF HIGH VALUE AND QUALITY

B TREES OF MODERATE VALUE AND QUALITY

C TREES OF LOW QUALITY AND VALUE

U DEAD TREES FOR REMOVAL

HEDGEROW

VEGETATION AREA

WOODLAND AREA

TREE CONSTRAINTS

DRAWING TO BE INTERPRETED WITH REFERENCE TO TREE SURVEY DOCUMENT

TREE CONSTRAINTS SHOWN ARE CALCULATED FROM GUIDELINES CONTAINED WITHIN BS5837 (2012) WITH DIMENSIONS CONTAINED WITHIN SECTION 8 OF THE TREE SURVEY DOCUMENT. THIS OUTLINE SHOULD NOT BE INTERPRETED AS THE EXACT EXTENT OF ROOT SPREAD HOWEVER IT IS CONSIDERED THE OPTIMAL AREA TO BE RETAINED FREE OF DEVELOPMENTAL IMPACTS.
NATURAL AND/OR MAN MADE BARRIERS SUCH AS WATERLOGGED SOIL OR BUILDINGS MAY RESTRICT THE SPREAD OF TREE ROOTS. CROWN SPREADS MAY ALSO PROVE TO BE A CONSTRAINT PARTICULARLY WHERE CROWN REDUCTION MAY NOT BE POSSIBLE. THE CONSTRAINTS LINES SHOWN ON THIS DRAWING ARE THEREFORE A GUIDE ONLY. AN ON-SITE ASSESSMENT SHOULD BE UNDERTAKEN IN THE EVENT OF ANY DEVELOPMENTS BEING PLANNED WITHIN THE AREAS SHOWN FOR RETAINED TREES.

REV	DATE	COMMENT
	15/08/25	FOR REVIEW AND COMMENT

PROJECT: RATHCOOLE MASTERPLAN
JOB NO. TRATH006
DRAWING: TREE SURVEY & CONSTRAINTS - SITE OVERALL
SCALE: 1:1500 @A1
DRA N B LAUREN MCCOLGAN
STATUS PLANNING
DRAWING No: TRATH006-DR-00-CMK-ARB-001

NOTES
Do Not Scale. Use Figured Dimensions Only.
Not for Construction Purposes unless Specifically Marked.

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CMK Urban Forestry Consultants

North
ITM SURVEY GRID

Figure 32; Tree Survey undertaken by CMK Arborist on 15/08/2025

4.3 Protected Landscape



Figure 33; Protective Landscape in Development

Aerial photo source: ArcGIS
Figure source: AECOM

4.4 Landscape Management of Protected Landscape

The proposed development is situated within a landscape containing a number of ecologically sensitive features, including EU-designated habitats, established boundary vegetation, and areas of transitional woodland identified for retention. These valuable landscape and ecological assets have informed the development of the landscape strategy, with the proposed planting design drawing directly from the existing character, structure and species composition of the site to create a cohesive, site-responsive landscape framework.

Further information relating to the ecological value of the site, designated habitats and proposed mitigation measures is provided within the Ecological Report.

The Annex I hay meadow will be protected, with the development footprint and site boundary positioned outside this designated habitat. A managed mown meadow corridor is proposed adjacent to the retained habitat to provide a clear pedestrian desire line while avoiding encroachment into the protected area.

An area of existing meadow located to the south of the proposed pitches will also be retained and managed to enhance its ecological value over time, contributing to the establishment of a connected semi-natural habitat network across the site.

Watercourses are located predominantly outside the development boundary. A short section passes beneath the main site access road; however, this area will remain inaccessible to visitors, ensuring that the watercourse and its associated habitats are protected from disturbance.

The retained transitional woodland and riparian corridors located along the northern and eastern extents of the site form important ecological corridors within the wider landscape and will be safeguarded as part of the proposed development. These areas will be enclosed with a 1.1 m high post-and-rail fence to clearly define and protect the ecological buffer zones while allowing the habitats to develop naturally with minimal management intervention. All pedestrian routes and areas of public access have been positioned outside these protected zones to minimise disturbance and maintain the ecological integrity of these sensitive habitats.



Figure 34; Hayfield Meadow



Figure 35; Protected Woodland



Figure 36; Riparian Corridor



Figure 37; 1.1m high post and rail proposed around riparian corridor on site. (Refer to Boundaries plan)

Figures source: AECOM & Adobe Stock

4.5 SuDs Strategy



Figure source: AECOM

Figure 38; SuDs Strategy

Sustainable Urban Drainage Management Train

The proposed scheme incorporates a comprehensive Sustainable Urban Drainage System (SuDS) management train, designed to manage surface water through a combination of collection, conveyance, attenuation, and treatment features. This system will integrate with the existing SuDS infrastructure and contribute to a resilient and sustainable drainage strategy. The proposed SuDS components include:

- Green roofs on duplexes and villa buildings to reduce runoff and enhance biodiversity
- Permeable paving in car parking areas to allow for on-site infiltration and surface water control.
- Rain gardens and bioretention areas integrated into street verges and street tree pits, providing localised water treatment and amenity value.
- Swales located within open space areas to convey and temporarily store surface water.
- Rainwater harvesting within semi-private and private green spaces, supporting water reuse and reducing demand on potable supplies.



Figure 39; Green Roofs collecting rainwater



Figure 40; Permeable paving to parking bays

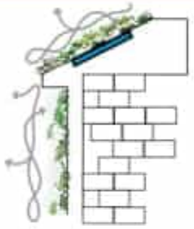


Figure 41; Rain gardens along the road



Figure 42; Rainwater harvesting in semi private green spaces

Figures source: AECOM & Adobe Stock

Type	Description	Setting	Required Area	Precedent	Symbol
 Green Roofs	A planted soil layer is constructed on the roof of a building to create a living surface. Water is stored in the soil layer and absorbed by vegetation.	 Building	Building integrated		
 Rainwater Harvesting	Rainwater can be captured in water butts from apartment buildings and used for communal gardens in semi private courtyards.	 Street/Open Space	Water storage (overground)		
 Permeable Paving	Paving which allows water to soak through. Can be in the form of paving blocks with gaps between solid blocks or porous paving where water filters through the block itself. Water can be stored in the sub-base beneath or allowed to infiltrate into ground below.	 Street/Open Space	Water storage (underground or above ground)		
 Bioretention/ Rainwater Garden	Rain garden/Bio retention pits are proposed throughout the streetscape. A vegetated area with gravel and sand layers below designed to channel, filter and cleanse water vertically. Water can infiltrate into the ground below or drain to a perforated pipe to be conveyed.	 Street/Open Space	Typically surface area is 5-10% of drained area with storage below.		
 Swale	Swales are vegetated shallow depressions designed to convey and filter water. These can be 'wet' where water gathers above the surface, or 'dry' where water gathers in a gravel layer beneath. Can be lined or unlined to allow infiltration.	 Street/Open Space	Account for width to allow safe maintenance typically 2-3 metres wide		

Figures source: AECOM & Adobe Stock

4.6 Streetscapes

Proposed Streetscape

Refer to AECOM transport report for an outline on the differing streetscape typologies.

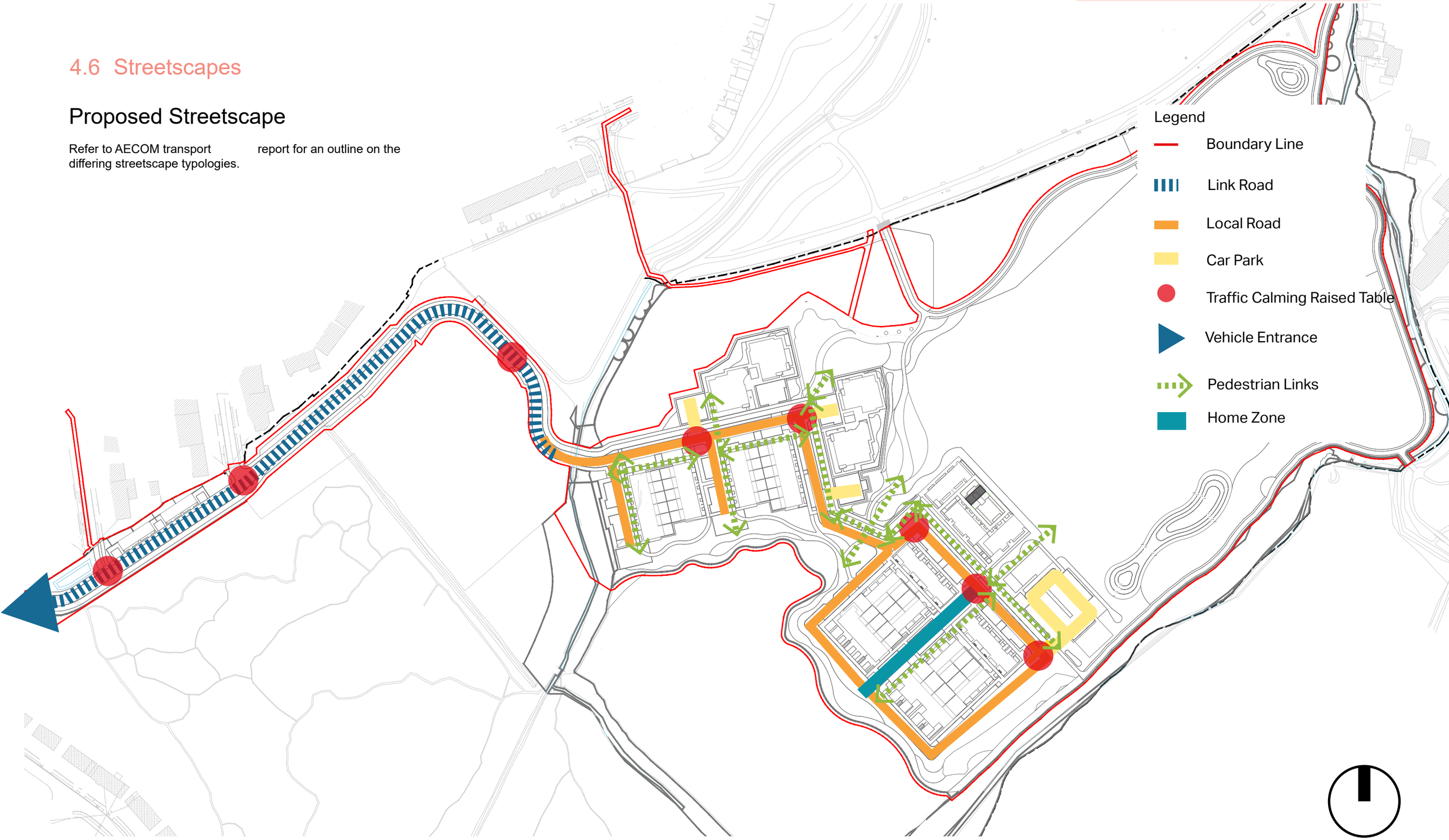


Figure 43; Streetscape Plan

Figure source: AECOM

Streetscape Design

The proposed streetscape strategy is designed to create a functional, attractive, and legible public realm that supports movement, enhances biodiversity, and fosters a strong sense of place. Key components include:

Residential Interface: Carefully considered transitions between private dwellings and the public realm, using planting, boundary treatments, and level changes to create clear but welcoming thresholds.

Transition Spaces: Semi-private zones such as front gardens, buffer strips, or shared forecourts that provide a soft edge between buildings and streets, encouraging passive surveillance and informal social interaction.

Pedestrian and Cyclist Connectivity: Prioritised routes for walking and cycling are seamlessly integrated into the street layout, enhancing permeability and promoting active travel throughout the site.

Parkland Thresholds: Streets adjacent to green infrastructure include landscape cues—such as widened verges, open views, and soft planting—to create a gradual and inviting transition into adjoining parkland or open space.

SuDS Integration: Streetscape design incorporates Sustainable Urban Drainage Systems such as rain gardens, swales, and permeable paving, contributing to surface water management while enhancing the visual and ecological quality of the streets.

Responsive Planting Strategy: A considered palette of street trees, understory planting, and privacy buffers is proposed to reflect microclimatic conditions, reinforce character areas, and provide seasonal interest and biodiversity. Identifiable tree species are used to help orient users and contribute to a coherent streetscape identity.









Figure 44; Precedent Project: Harpur Green, Leixlip, County Kildare. Residential interface, transition spaces, connectivity and thresholds. The scheme has a responsive planting strategy that rienforces character zones through the development.

Figure source: AECOM