



Ecological Impact Assessment

Knocklyon to Ballyboden
Active and Sustainable
Travel Scheme





DOCUMENT DETAILS

Client: **South Dublin County Council (SDCC)**

Project Title: **Knocklyon to Ballyboden Active and Sustainable Travel Scheme**

Project Number: **251045**

Document Title: **Ecological Impact Assessment**

Document File Name: **EcIA - F - 251045 - 2026.01.15**

Prepared By:
MKO
Tuam Road
Galway
Ireland
H91 VW84



Rev	Status	Date	Author(s)	Approved By
01	Draft	05/12/2025	DM	CK
02	Draft	18/12/2025	DM	SF
03	Final	15.01.2026	DM	SF

TABLE OF CONTENTS

1.	INTRODUCTION	3
1.1	Background.....	3
1.2	Statement of Authority.....	3
1.3	Relevant Guidance	3
2.	DESCRIPTION OF PROPOSED DEVELOPMENT	5
2.1	Site Location.....	5
2.2	Characteristics of Proposed Development.....	5
2.2.1	Objectives of the Scheme	5
2.2.2	Development Description.....	6
2.2.3	Landscape and Public Realm.....	10
3.	METHODOLOGY	13
3.1	Desk Study.....	13
3.1.1	Designated Sites.....	13
3.1.1.1	<i>Identification of the Designated Sites</i>	13
3.2	Field Surveys.....	14
3.2.1	Multi-disciplinary ecological walkover surveys.....	14
3.3	Methodology for Assessment of Impacts and Effects	16
3.3.1	Determining Importance of Ecological Receptors.....	16
3.3.2	Characterisation of Impacts and Effects.....	16
3.3.3	Determining the Significance of Effects.....	17
3.4	Limitations.....	17
4.	DESK STUDY	18
4.1	Hydrological Desk Study	18
4.1.1	EPA Water Quality Data.....	18
4.2	Designated Sites.....	19
4.3	Protected Habitats.....	31
4.4	Protected Flora	31
4.5	Protected Fauna	33
4.5.1	Non-Volant Fauna.....	33
4.5.2	Bats.....	34
4.5.3	Birds.....	35
4.6	Invasive Species.....	36
5.	FIELD STUDY	38
5.1	Habitats within the Proposed Development Boundary.....	38
5.1.1	Flower Beds and Borders (BC4).....	38
5.1.2	Stone Walls and other stonework (BL1).....	39
5.1.3	Buildings and Artificial Surfaces (BL3).....	41
5.1.4	Improved Amenity Grassland (GA2).....	43
5.1.5	Dry Meadows and Grassy Verges (GS2).....	45
5.1.6	Mixed Broadleaved Woodland (WD1).....	45
5.1.7	Scattered Trees and Parkland (WD5).....	47
5.1.8	Hedgerows (WL1).....	47
5.1.9	Treelines (WL2).....	49
5.1.10	Scrub (WS2).....	51
5.2	Protected Species.....	57
5.2.1	Non-volant Mammals.....	57
5.2.2	Bats.....	57
5.2.3	Birds.....	58
5.3	Invasive Species.....	59

5.4	Identification of Key Ecological Receptors.....	62
6.	ECOLOGICAL IMPACT ASSESSMENT.....	67
6.1	Do Nothing Impact	67
6.2	Likely Significant Effects During Construction Phase	67
6.2.1	Effects on Habitats during Construction.....	67
6.2.2	Effects on Water Quality.....	68
6.2.3	Effects on Fauna during Construction	69
6.2.3.1	Assessments of Potential Impacts on Birds.....	70
6.3	Likely Significant Effects During Operational Phase	70
6.4	Impacts on Designated Sites	70
6.4.1	European Designated Sites.....	70
6.4.2	Impacts on Nationally Designated Sites	71
7.	CUMULATIVE IMPACT ASSESSMENT.....	72
7.1	Assessment of Plans.....	72
7.2	Assessment of Projects	81
7.3	Conclusion of Cumulative Assessment.....	83
8.	CONCLUSION.....	84
9.	REFERENCES	85
10.	APPENDICES	
	Appendix 1: General Arrangement Drawings (<i>Part VIII Planning Application</i>).....	87

1. INTRODUCTION

1.1 Background

The Knocklyon to Ballyboden Active and Sustainable Travel Scheme is a project to be delivered by South Dublin County Council (SDCC), funded by the National Transport Authority (NTA). MKO has been commissioned by SDCC to conduct an Ecological Impact Assessment (EcIA) of the proposed Active Travel Scheme between Tallaght and Knocklyon in South Dublin County. The Proposed Development, which will be submitted under Part VIII of the Planning and Development Regulations (2001), as amended, and Part XI of the Planning and Development Act (2000), as amended, consists of new and upgraded cycle lanes and footpaths constructed on existing roadways.

The Proposed Development consists of improvements to the public realm, walking and cycling infrastructure along Firhouse Road, Knocklyon Road, Templeroean Road, Ballyboden Way, Ballyboden Road and Scholarstown Road and several secondary links connecting the main corridor with residential streets and local trip attractors.

The EcIA includes an accurate description of all aspects of the Proposed Development during construction and operation. It then provides a comprehensive description of the baseline ecological environment, which is based on an appropriate level of survey work that was carried out in accordance with the most appropriate guidelines and methodologies. The EcIA then completes a thorough assessment of the impacts of the Proposed Development on biodiversity. Where likely ecologically significant effects are identified, measures are prescribed to avoid or minimise or compensate for such effects.

The Knocklyon to Ballyboden Active and Sustainable Travel Scheme is referenced as follows:

- For the purpose of this report, the term 'Study Area' or 'Site' refers to the red line boundary, comprising the entire area shown in **Figure 2-1**.
- The proposed Active Travel Scheme Development, including all ancillary works, is referred to as 'the Active Travel Scheme' or 'the Proposed Development'.

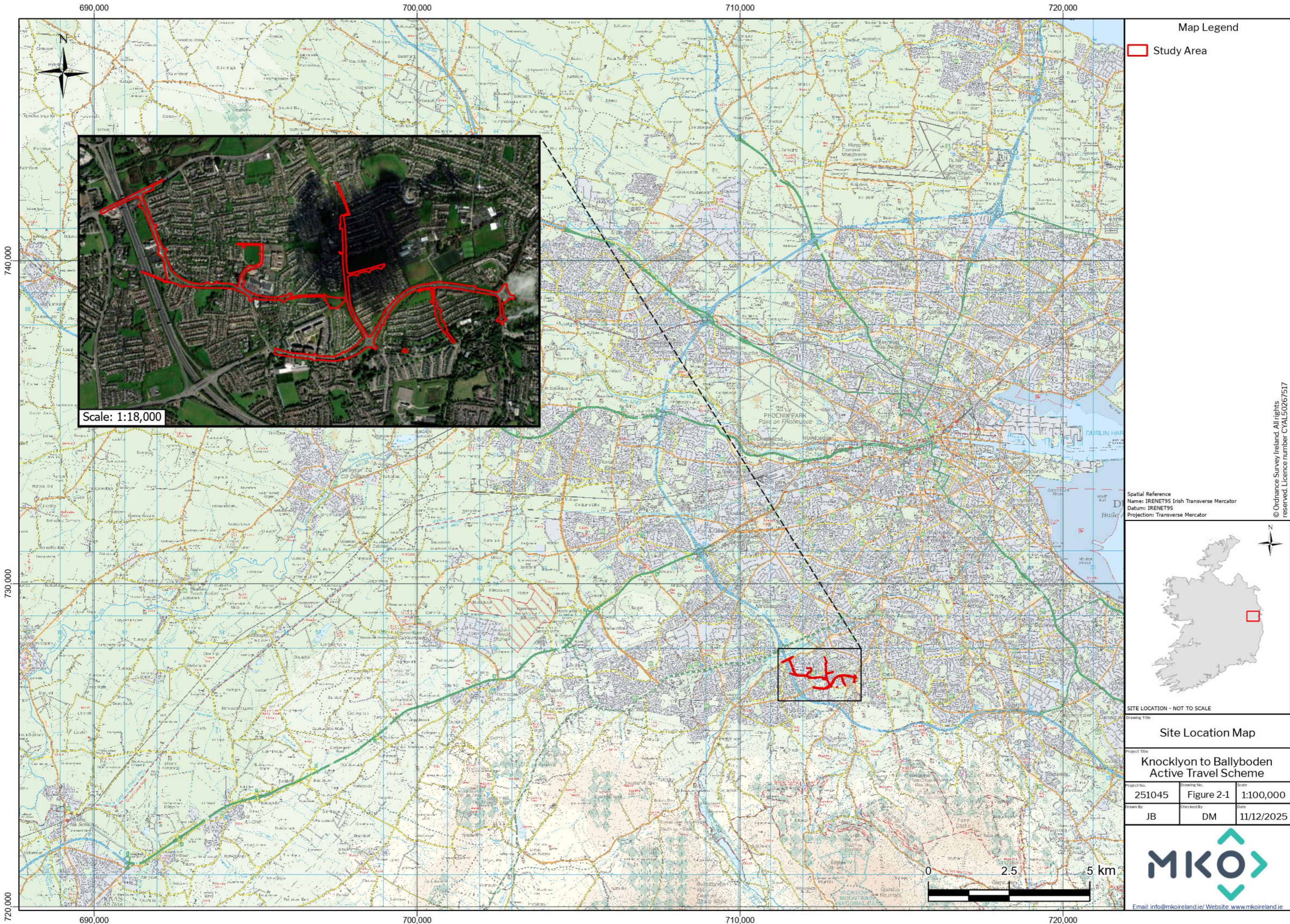
1.2 Statement of Authority

This report has been prepared by David Mesarcik and reviewed by Sara Fissolo. David has 2 years of experience in ecological consultancy and holds a B.Sc. in Ecology and Evolutionary Biology and an Honours Degree in Terrestrial Ecology. Sara is a Project Ecologist at MKO with over 5 years of ecological consultancy experience and holds a B.Sc. in Ecology and Environmental Biology. This assessment was based on ecological surveys conducted by David Mesarcik of MKO in November 2025.

1.3 Relevant Guidance

In addition, the guidelines listed below were consulted in the preparation of this document to provide the scope, structure and content of the assessment:

- Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018).
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022).
- Guidelines for Assessment of Ecological Impacts of National Road Schemes, (TII, 2009).
- Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester (CIEEM, 2017).



2. DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 Site Location

The Proposed Development is located in South Dublin, spanning the suburban areas of Firhouse, Ballyboden, and Knocklyon. The primary route of the scheme begins to the west at Firhouse Road and continues through Knocklyon Road, Dargle Wood Park, Templeroan Road, Scholarstown Road, Ballyboden Way and terminates to the east at the junction between Scholarstown and Edmondstown Road. The Active Travel Scheme consists of 4 km of mainline improvements and over 1.5 km of secondary link improvements through residential roads. The scheme will enhance sustainable travel links between these well-established communities and integrate with South Dublin's wider active travel network. The location of the Proposed Development is shown in **Figure 2-1**.

2.2 Characteristics of Proposed Development

2.2.1 Objectives of the Scheme

The purpose of the Active Travel Scheme, as set out by SDCC, is to improve the public realm and create a safer and more attractive environment for residents by implementing traffic calming measures and neighbourhood enhancement. Additionally, the scheme aims to make the area more accessible and liveable by improving pedestrian and cyclist accessibility, linking residential communities in Tallaght, Firhouse, Knocklyon and Ballyboden to trip generators such as schools and educational centres, recreation zones, employment and business hubs, and “third spaces.”

There will also be links to the wider active travel network in the county by enhancing walking and cycling facilities. Upgrades will be made to existing junctions along the main route and secondary links, providing segregated cycling facilities through the junctions in addition to enhanced pedestrian crossings.

When the project is delivered, it will enhance the streetscape of the area, provide continuous walking and cycling infrastructure, and improve safety for all road users. The provision of safe, continuous, legible active travel infrastructure will be a catalyst for an increased number of journeys being made by walking, cycling, and public transport by:

- Encouraging modal shift by improving the public realm and fostering a safer, more attractive environment for residents through traffic calming measures and neighbourhood enhancement.
- Encouraging modal shift to walking and cycling as safe and convenient means of making local trips (work, school, college, recreation etc.) and creating a network of high-quality walking and cycling facilities.
- Developing secondary links in the vicinity of the main scheme to increase the usability of the main route by improving access and destination options.
- Improving the landscape along the route to enhance biodiversity and create a more pleasant environment for walking and cycling.
- Installing safe school treatments outside schools to create safe and welcoming environments that encourage walking and cycling to school and promote positive social interaction at the school gate.

- Ensuring the delivery of high-quality linkages between residential areas and key trip attractors (e.g., schools, colleges, sports clubs, shopping centres), as well as other planned and existing cycle and walking routes.
- Reprioritising crossings of side roads by tightening corner radii and providing raised entry treatments that allow for pedestrian and cyclist priority through junctions and encourage slower vehicle speeds.
- Developing signalised junctions that cater for all pedestrian and cyclist movements, providing segregated and kerb-protected cycle facilities along with single-movement pedestrian crossings on each junction arm.
- Upgrading bus stops to limit conflict between pedestrians and cyclists, and between cyclists and stopping buses, by routing cyclists around the bus stop and providing permeability between bus stops and destinations.
- Improving safety for pedestrians and cyclists in accordance with the Cycle Design Manual (CDM) and the Design Manual for Urban Roads and Streets (DMURS).

2.2.2 Development Description

The primary route of the scheme begins to the west at Firhouse Road and continues through Knocklyon Road, Dargle Wood, Templeroan Road, Scholarstown Road, Ballyboden Way and terminates to the east at the junction between Scholarstown and Edmondstown Road. The Active Travel Scheme consists of 4km of mainline improvements and over 1.5km of secondary link improvements through residential roads.

The design of the scheme adopts the design principles of the Design Manual for Urban Roads and Streets (DMURS) and the Cycle Design Manual (CDM), following a hierarchy outlined in DMURS that prioritises pedestrians, followed by cyclists, public transport, and lastly private motor vehicles. While the scheme adopts this hierarchy, it also recognises that private car trips remain an essential part of daily life, and therefore, impacts on private car journeys will be minimised as far as practical while still achieving the project objectives.

Segregated cycle lanes with kerb protection will be provided along the majority of the scheme. Existing shared surfaces will be utilised on Knocklyon Road (outside SuperValu) and through Dargle Wood Park. The secondary links will comprise small interventions such as the removal of kissing gates, raised entry treatments with continuous footpaths at side roads, new trees and grass planting, and Safe Routes to School (SRTS) treatments.

It is intended to use shared streets on secondary links. To facilitate this safely, the streets will be designed to ensure the 85th percentile speed limit is below 30 km/h, as per the requirements of the Design Manual for Urban Roads and Streets (DMURS).

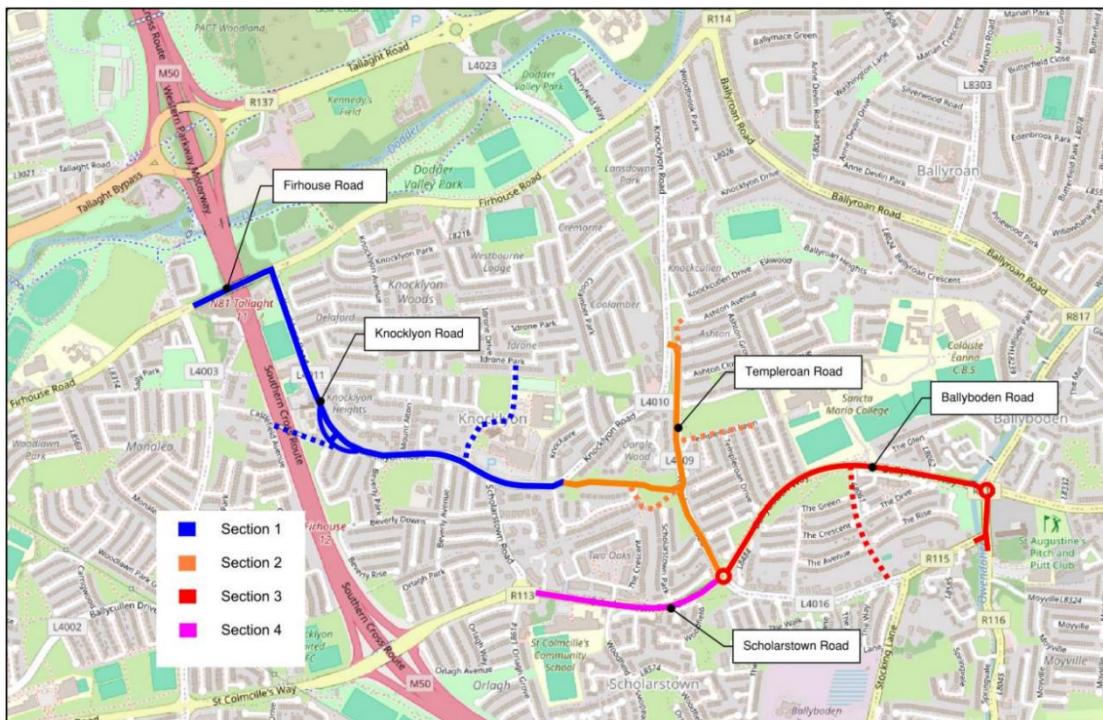


Figure 2-2: Knocklyon to Ballyboden Active and Sustainable Travel Scheme Sections

For the purpose of this report, the route has been divided into several sections, as shown in **Figure 2-2**. The works proposed for each subsection are described in the summary below. Full detail of the proposed works are provided in the General Arrangement Drawings (*O2B-ARU-XX-XX-DR-C-0100*) included in **Appendix 1**.

- **Section 1** – Firhouse Road & Knocklyon Road (between Firhouse Road and Dargle Wood Park)
- **Section 2** – Dargle Wood Park & Templeroan Road
- **Section 3** – Ballyboden Way & Ballyboden Road (between Scholarstown Roundabout and Scholarstown Road)
- **Section 4** – Scholarstown Road (between Orlagh Roundabout and Scholarstown Roundabout)

Section 1 – Firhouse Road & Knocklyon Road

This section of the proposed route, between Firhouse Road and Dargle Wood Park, will be upgraded with raised and kerb-protected cycle tracks in both directions, new and improved pedestrian and cyclist crossings, and shared streets in low-traffic environments. At the eastern end of this section, the Active Travel Scheme will connect with the Firhouse Road Active Travel Improvement Scheme, which will be delivered in advance of the Active Travel Scheme. Several secondary links have been identified, creating connections between the mainline, residential streets and local trip attractors.

The M50 bridge has footpaths on both sides, and the existing cycling infrastructure includes an eastbound cycle track adjacent to and level with the footpath. The current westbound cycling provision consists of on-road mandatory cycle lanes, which terminate at the approach to the bridge, requiring cyclists to share space with buses.

To provide continuous cycle tracks along the M50 bridge in both directions, the carriageway lane width will be reduced to a maximum of 3.0 m. The reclaimed space will be used to provide 1.5 m cycle tracks and 1.8 m footpaths where site constraints do not allow wider dimensions.

The T-junction connecting Firhouse Road with Knocklyon Road currently has limited cycling infrastructure. It will be upgraded to a protected T-junction with segregated and protected crossings for cyclists and pedestrians.

The proposed scheme will retain the existing footpaths on Knocklyon Road and provide kerb-protected and raised cycle tracks in both directions between Firhouse Road and the existing shared space outside Knocklyon Shopping Centre. The minimum cycle track width is 1.5 m at constrained locations such as the M50 bridge. Where feasible, a 2.0 m width will be provided. At locations where residential boundaries or mature trees constrain available space, widths will be adjusted accordingly.

Carriageway lanes will be reduced to 3.0 m along Knocklyon Road. This reduction allows improvements to walking and cycling facilities and encourages reduced vehicular speeds. Safe Routes to School (SRTS) design principles will be applied outside Gaelscoil Chnoc Liamhna. The existing school set-down will be relocated approximately 100 m north of its current location, pencil bollards will be installed along the full school zone, and high-friction surfacing will be provided at crossing approaches. The existing uncontrolled crossing will be upgraded to a raised zebra crossing with Belisha beacons.

On Idrone Avenue outside St. Colmcille's Senior and Junior National Schools, SRTS treatments will also be implemented. The carriageway will be narrowed to 6.0 m, and the reclaimed space will be used to widen the footpath on the eastern side. Existing crossings will be upgraded: the warden crossing south of Knocklyon Grove will become a raised zebra crossing, and the crossing between the school and the green area opposite will also be upgraded to a zebra crossing. A new 3.0 m shared surface will link the school to the laneway at the top of Knocklyon Grove.

Section 2 – Dargle Wood Park & Templeroan Road

The existing route through Dargle Wood Park consists of a paved footpath. To provide a safe and accessible link between Knocklyon Road and Ballyboden, this route will be upgraded to a 3.0 m wide shared space for pedestrians and cyclists. Kissing gates at both ends will be removed to improve accessibility. A new 3.0 m shared surface will be provided between the main park route, Scholarstown Park, and the Two Oaks development, following an existing desire line.

Currently, Templeroan Road has no formal cycling provision and limited pedestrian crossing facilities. Cyclists must share the carriageway or use the footpath, and side roads have large corner radii, contributing to higher vehicle speeds. The scheme proposes reducing Templeroan Road to 6.0 m (3.0 m per lane) and using the reclaimed space to provide a protected two-way cycle track on the eastern side. As the existing road is 9.0 m wide, a 3.0 m cycle track (including protection kerb) can be constructed while retaining existing kerb lines. This approach preserves drainage infrastructure and avoids tree removal.

The junction between Templeroan Road and Templeroan Lawn will be upgraded to a signalised junction with a new parallel crossing across Templeroan Lawn and a 3.0 m crossing across Templeroan Road, linking to Sancta Maria College and nearby estates. Corner radii will be tightened, and raised crossings installed along side roads between the new signalised crossing and Sancta Maria College.

North of Templeroan Road, the two-way cycle track and footpath will merge into a 3.0m shared surface connecting Templeroan Road with Ashton Avenue and Knockcullen Rise. Segregated pedestrian and cycle crossings will be provided between the two-way cycle track and Dargle Wood Park. To the south, the cycle track will connect into the proposed protected roundabout.

All existing crossing facilities will be retained or upgraded, and side roads will incorporate speed-reduction measures such as continuous raised crossings.

Section 3 – Ballyboden Way & Ballyboden Road

The section of Ballyboden Way consists of a 9.0 m carriageway with adjacent parallel footpath and cycle track, separated from the carriageway by a landscaped verge. The combined path width varies between 2–3 m and is affected in places by hedge overgrowth. Active travel infrastructure at the roundabouts is limited: Scholarstown Road roundabout has unprotected on-road cycle lanes, and Taylor’s Lane roundabout has no cycling facilities. Both were designed for high-speed vehicle movement.

As part of the scheme, both roundabouts will be upgraded to protected roundabouts with pedestrian and cyclist priority. The available space enables adaptation of the CDM standard detail (TL701) to a more cost-effective layout while maintaining safety and continuity. Narrower carriageways and tighter radii will reduce vehicle speeds. Retaining much of the existing road surface will reduce construction cost and disruption.

Carriageway width on Ballyboden Way will be reduced to 6.0 m (3.0 m per lane). The reclaimed space will accommodate a 3.0 m westbound bus lane for approximately 150 m between Scholarstown Road roundabout and bus stop 7446, and an eastbound bus lane for approximately 650 m between bus stop 7446 and the Taylor’s Lane roundabout. Bus lane placement has been informed by observed delays to bus operations.

The existing parallel cycle track and footpath will be retained and tied into the new protected roundabout layouts. Local vegetation clearance will restore full cycle track width. A raised delineator kerb will be installed between the footpath and cycle track at conflict points to aid visually impaired users.

Bus stops along Ballyboden Way will be upgraded with clear delineation between the cycle track and shared boarding areas, using pavement changes, markings, and tactile paving. Stops 7443 and 7446 will be relocated by approximately 15m to accommodate the bus lane transition and a proposed signalised crossing. Bus stop 7442 will be removed, with route 15B instead serving stops 7974 and 7909.

Two new permeability links will be created between Ballyboden Way and The Lawn, Boden Park, and Templeroan Green to improve access to bus routes and the walking/cycling network. A pedestrian crossing will be introduced between bus stops 7443 and 7446.

Additionally, a secondary link was identified, which will create an active travel link between Ballyboden Way and Scholarstown Road through Boden Park Green, along an existing route. The works associated with establishing this secondary link would include new crossings and the widening of existing footpaths to 3.0 m to create a shared space.

On Ballyboden Road, existing on-road mandatory cycle lanes will be replaced with 2.0 m raised and kerb-protected cycle tracks. The carriageway will be reduced to 6.0m (3.0 m per lane) and the existing grass verge removed to accommodate the cycle tracks.

The junction of Ballyboden Road and Scholarstown Road will be upgraded to a fully signal-controlled protected junction, incorporating access to the proposed residential development at Taylors Lane and Edmondstown Road.

Section 4 – Scholarstown Road

Limited interventions are proposed for Scholarstown Road due to recently constructed infrastructure at the Two Oaks development. Approximately 200 m of roadway between the roundabout and the existing shared surface will be modified to include 2.0 m raised and kerb-protected cycle tracks in both directions. The carriageway will be reduced to 6.0 m (3.0 m per lane).

The existing bus stop will be upgraded to include a cycle bypass, and new shelters will be installed at each stop. A 2.4 m signal-controlled crossing will also be provided to create a formal link between the two bus stops.

At the western end of Scholarstown Road, near Orlagh roundabout, raised crossings with continuous footpath surfaces will be provided at access roads to create a seamless link between the Two Oaks shared surface and Orlagh roundabout.

2.2.3 Landscape and Public Realm

Overview of Landscaping and Urban Realm

One of the key objectives of the Active Travel Scheme is to create an attractive environment for residents and make the area more accessible and liveable. Enhancements to the public realm and landscape along the scheme will play a crucial role in achieving these goals, helping to create a balanced streetscape that encourages active modes of transport.

As part of the Part VIII planning application, several placemaking locations have been identified and will be further developed in the next design stage. These interventions will incorporate materials that stand out from standard road infrastructure, along with new planting, trees, and Sustainable Urban Drainage (SuDS) features to improve ambience and enhance the overall character of the area.

General landscape improvements will be implemented throughout the scheme, with several specific focus areas described below.

Access to the M50 Pedestrian Bridge Laneway from Knockfield Manor

- The roadway at Knockfield Manor will be narrowed, with the reclaimed space used to widen the adjacent footpath.
- A section of the laneway will be treated with resin-bound gravel or a similar material to distinguish it from the main road and to signal to drivers that it is a shared space.
- Low-level lighting will be included along the laneway to improve safety and accessibility.
- Access to the laneway and adjacent properties will be facilitated through a dropped kerb, allowing vehicles to mount the footpath before entering the lane.
- Natural boulders will be positioned to delineate vehicular access, prevent parking on the footpath, and provide informal seating opportunities.

Access to Dargle Wood Park from Knocklyon Road and Templeroan Road

- Access to Dargle Wood Park from both Knocklyon Road and Templeroan Road will be modified to provide a more cycle-friendly arrangement.
- The existing kissing gate will be removed and replaced with a new opening in the boundary wall.
- Existing stonework and steelwork will be modified to accommodate the upgraded layout.
- A pedestrian guardrail or stone-clad baffle wall will be set back from the wall opening, helping to slow cyclists as they approach while maintaining seamless and unobstructed access. This concept design will be further developed in the next design stage.

Tree Planting in Dargle Wood Park and Along the Scheme

- **64 cherry trees** (*Prunus accolade*) are proposed along both sides of the shared path through Dargle Wood Park, contributing to biodiversity and enhancing the visual character of the area.

- **67 street trees** will be planted along various roadway sections to complement the existing environment, improve local biodiversity, and create a sense of enclosure that encourages lower driving speeds.
- **A total of 131 trees** will be planted across the scheme. Full locations and species details are provided in the General Arrangement Drawings (*O2B-ARU-XX-XX-DR-C-0100*) included in **Appendix 1**.

Grassland Adjacent to Knockcullen Rise

- A raingarden is proposed on the grassed area between Knockcullen Rise and Knocklyon Road.
- The raingarden will function as a SuDS feature, providing an attractive, low-maintenance system for managing rainwater.
- The feature will slow stormwater runoff, allowing natural infiltration into the ground.
- It will enhance local biodiversity by creating habitats for wildlife.
- Opportunities for additional planting and seating will also be explored.

Taylor's Lane Roundabout

- The proposed concept landscape design will complement and integrate with the planned landscape design for the adjacent housing development.
- Native trees with clear stems will be introduced to maintain visibility while providing greenery.
- Opportunities for SuDS features will be incorporated, using water-tolerant native herbaceous species and suitable tree planting.
- Landscape mounding will be used to provide a visual buffer from the road, planted with native seed mixes or herbaceous perennials.
- Public realm enhancements will include seating opportunities and contribute to the overall attractiveness of the area.

Hedgerows along Ballyboden Way and Proposed Pedestrian Links

As part of the proposed Active Travel Scheme, sections of hedgerow along Ballyboden Way will be selectively cut back to facilitate the provision of the cycle path. In this location, existing hedgerows are overgrown and encroach onto the current footpaths. Where required, hedgerows will be trimmed back to the original footpath boundaries. These works constitute routine maintenance and will be limited to the pruning of lateral growth. No removal of hedgerow trees is proposed.

In addition, limited sections of hedgerow will be removed at the two proposed connections between Ballyboden Way and Templeroan Avenue, and between Ballyboden Way and The Lawn, Boden Park, to facilitate the provision of new pedestrian linkages. This will result in the removal of approximately 4 m of hedgerow at each location.

An overgrown *Hypericum* hedgerow located along the verge between the carriageway and the cycle path on the northern side of Ballyboden Way will also be trimmed in both height and width. The hedgerow is currently approximately 2 m in height and will be reduced to approximately 1 m to improve visibility and sightlines along the adjacent cycle lane.

Any hedgerow enhancement or replanting will utilise native, pollinator-friendly species.

Arboricultural Assessment & New Tree Planting

An Arboricultural Assessment Report was prepared based on a detailed tree survey along the proposed route, following the requirements of *BS5837:2012 Trees in relation to design, demolition and*

construction – Recommendations. The assessment was completed for the Old Bawn to Ballyboden Active Travel Scheme, which comprises three projects described in Section 1.1 of this report.

The report documents the nature, quality, and condition of existing trees along and adjacent to the route, identifies potential impacts of the proposed works, and recommends which trees should be removed or protected. It also identifies trees that require protection during construction and details appropriate mitigation measures.

The assessment concluded that many ash trees along the route show symptoms of ash dieback (*Hymenoscyphus fraxineus*), while some elm trees show symptoms of Dutch elm disease. Within the Knocklyon to Ballyboden Active and Sustainable Travel Scheme area, 20 trees are expected to deteriorate due to disease and are recommended for removal. An additional 31 trees were originally identified for removal due to their proximity to the works.

Since the assessment was completed, the design has been revised to incorporate updated standards and reduce the impact on existing trees. As a result, **24 of the 31 trees previously proposed for removal will be retained.** In total:

- 10 trees will be removed due to construction impacts
- 20 trees will be removed due to disease
- 133 new trees will be planted along the route
- This results in a **net increase of 103 trees.**

3. METHODOLOGY

The following sections describe the methodologies followed to establish the baseline ecological condition of the Proposed Development site and the surrounding area. Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological Baseline conditions are those existing in the absence of proposed activities (CIEEM, 2018).

3.1 Desk Study

A comprehensive desk study was undertaken to inform this ecological impact assessment. This study includes a thorough review of available information that is relevant to the ecology of the site of the Proposed Development. This information provides valuable existing data and also helps in assessing the requirement for additional ecological surveys.

The following list describes the sources of data consulted:

- Review of online web-mappers: National Parks and Wildlife Service (NPWS), Environmental Protection Agency (EPA)
- NPWS records (data request)
- Review of the Bat Conservation Ireland (BCI) Private Database
- Review of the publicly available National Biodiversity Data Centre web-mapper
- Records from the NPWS web-mapper and review of specially requested records from the NPWS Rare and Protected Species Database for the hectads which overlap with the study area
- Review of Ecological Impact Assessment Report: Tallaght to Knocklyon Cycle Route, *JBA Ltd.*, 2022 (unpublished)
- Review of Appropriate Assessment Screening Report: Tallaght to Knocklyon Cycle Route, *JBA Ltd.*, 2021 (unpublished)
- Review of Appropriate Assessment Report: Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme, (*Bus Connects*), *Scott Cawley Ltd.*, 2022
- Review of Appropriate Assessment Report: Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme, (*Bus Connects*), *Scott Cawley Ltd.*, 2022

3.1.1 Designated Sites

3.1.1.1 ***Identification of the Designated Sites within the Likely Zone of Influence (ZoI) of the Proposed Development***

The potential for the Proposed Development to impact on sites that are designated for nature conservation was considered in this EcIA.

Special Areas of Conservation (SACs) and Special Protection Areas for Birds (SPAs) are designated under the EU Habitats Directive and EU Birds Directive, respectively and are collectively known as 'European Sites'. The potential for significant effects and/or adverse impacts on the integrity of European Sites is fully assessed in the AA Screening Report that accompanies this application.

Natural Heritage Areas (NHAs) are designated under Section 18 the Wildlife (Amendment) Act 2000 and their management and protection is provided for by this legislation and planning policy.

Proposed Natural Heritage Areas (pNHAs) were designated on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. However, the potential for effects on these designated sites is fully considered in this assessment.

The following methodology was used to establish which sites, that are designated for nature conservation, have the potential to be impacted by the Proposed Development:

- > All designated sites within the vicinity of the Proposed development site were identified. In addition, the potential for connectivity with European or Nationally designated sites at greater distances from the Proposed development site was also considered in this initial assessment.
- > The designation features of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report.
- > Where a potential source-pathway-receptor chain for Significant Effect is identified, the site is included within the Likely Zone of Influence (ZoI) and further assessment is required.

3.2 Field Surveys

3.2.1 Multi-disciplinary ecological walkover surveys

A multi-disciplinary ecological walkover survey of the entire site was undertaken by David Mesarcik of MKO on the 18th and 19th of November 2025, in accordance with TII Guidelines on Ecological Surveying Techniques for Protected Flora and Fauna on National Road Schemes (TII, 2008). This survey provided baseline data on the ecology of the study area. Walkover surveys are designed to detect the presence or suitable habitat for a range of protected faunal species that may occur in the vicinity of the Proposed Development.

Habitats were classified in accordance with the Heritage Council's '*Guide to Habitats in Ireland*' (Fossitt, 2000). Habitat mapping was undertaken with regard to guidance set out in '*Best Practice Guidance for Habitat Survey and Mapping*' (Smith et al., 2011).

During the multidisciplinary surveys, a search for Invasive Alien Species (IAS), with a focus on those listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2015) or under the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No 374 of 2024), was also conducted.

The study area was also assessed for its suitability to support roosting, foraging, and/or commuting bats during the walkover survey. Connectivity with the wider landscape was also considered. Suitability was assessed according to the protocol set out in *BCT Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.)* (Collins, 2023). The survey aimed to identify if the study area provided suitable habitat for bats and to guide further survey efforts. The grading protocol, subdivided into *None*, *Negligible*, *Low*, *Moderate*, and *High*, is described fully in **Table 3-1** below.

Preliminary Bat Roost Assessments were carried out to assess the bat roost potential of trees proposed for removal as part of the proposed Active Travel Scheme. Trees were visually assessed from ground level, for natural features of high value to roosting bats, including knot holes, trunk hollows, splits/cracks in branches and areas of flaking bark and also for signs indicating possible bat use including droppings, staining and scratching of bark and any other potential roost features (PRFs) identified by Andrews (2018). Suitability for roosting was assessed according to Collins (2023) as outlined below.

PRFs in trees were either categorised as PRF-Is; those features that are only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats; or PRF-Ms; features that could support multiple bats and may therefore be used as maternity colonies.

Table 3-1 Protocol for assessing the suitability of habitats within the Proposed Development site for bats (abridged, Collins, 2023).

Suitability	Roosting Habitats	Commuting and Foraging Habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year. (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/ protection for flight-lines, or generate/ shelter insect populations available to foraging bats).
Negligible	Negligible habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats, i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats.	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status which is established after presence is confirmed.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

3.3 Methodology for Assessment of Impacts and Effects

3.3.1 Determining Importance of Ecological Receptors

The importance of the ecological features identified within the study area was determined with reference to a defined geographical context. This was undertaken following a methodology that is set out in Chapter 3 of the 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (TII, 2009). These guidelines set out the context for the determination of value on a geographic basis, with a hierarchy assigned in relation to the importance of any particular receptor. The guidelines provide a basis for the determination of whether any particular receptor is of importance on the following scales:

- International
- National
- County
- Local Importance (Higher Value)
- Local Importance (Lower Value)

The Guidelines clearly set out the criteria by which each geographic level of importance can be assigned. Locally Important (lower value) receptors contain habitats and species that are widespread and of low ecological significance, and of any importance only in the local area. Internationally Important sites are either designated for conservation as part of the Natura 2000 Network (SAC or SPA) or provide the best examples of habitats or internationally important populations of protected flora and fauna. Specific criteria for assigning each of the other levels of importance are set out in the guidelines and have been followed in this assessment. Where appropriate, the geographic frame of reference set out above was adapted to suit local circumstances. In addition, and where appropriate, the conservation status of habitats and species is considered when determining the significance of ecological receptors.

Any ecological receptors that are determined to be of Local Importance (Higher Value), County, National or International importance following the criteria set out in TII (2009) are considered to be Key Ecological Receptors (KERs) for the purposes of ecological impact assessment if there is a pathway for effects thereon. Any receptors that are determined to be of Local Importance (Lower Value) are not considered to be Key Ecological Receptors.

3.3.2 Characterisation of Impacts and Effects

The Proposed Development will result in a number of impacts. The ecological effects of these impacts are characterised as per the CIEEM 'Guidelines for Ecological Impact Assessment in the UK and Ireland (2018). The headings under which the impacts are characterised follow those listed in the guidance document and are applied where relevant. A summary of the impact characteristics considered in the assessment is provided below:

- **Positive or Negative.** Assessment of whether the Proposed Development result in a positive or negative effect on the ecological receptor.
- **Extent.** Description of the spatial area over which the effect has the potential to occur.
- **Magnitude** to size, amount, intensity and volume. It should be quantified if possible and expressed in absolute or relative terms e.g. the amount of habitat lost, percentage change to habitat area, percentage decline in a species population.
- **Duration** is defined in relation to ecological characteristics (such as the lifecycle of a species) as well as human timeframes. For example, five years, which might seem short-term in the human context or that of other long-lived species, would span at least five generations of some invertebrate species.

- **Frequency and Timing.** This relates to the number of times that an impact occurs and its frequency. A small-scale impact can have a significant effect if it is repeated on numerous occasions over a long period.
- **Reversibility.** This is a consideration of whether an effect is reversible within a ‘reasonable’ timescale. What is considered to be a reasonable timescale can vary between receptors and is justified where appropriate in the impact assessment section of this report.

3.3.3 Determining the Significance of Effects

The ecological significance of the effects of the Proposed Development are determined following the precautionary principle and in accordance with the methodology set out in Section 5 of CIEEM (2018).

For the purpose of EcIA, ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local (CIEEM, 2018).

When determining significance, consideration is given to whether:

- Any processes or key characteristics of key ecological receptors will be removed or changed.
- There will be an effect on the nature, extent, structure and function of important ecological features.
- There is an effect on the average population size and viability of ecologically important species.
- There is an effect on the conservation status of important ecological habitats and species.

The EPA *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022) and the *Guidelines for assessment of Ecological Impacts of National Road Schemes*, (TII, 2009) were also considered when determining significance.

3.4 Limitations

The information provided in this document accurately and comprehensively describes the baseline ecological environment and provides an accurate prediction of the likely impacts of the Proposed Development on biodiversity, and on any Designated Sites. Ecological surveys were undertaken at the site outside the optimal survey season for botanical assessments and outside the bird breeding season; however, this is not considered to have resulted in limitations to the assessment, due to the nature of the site, which consists of highly urbanised areas along roadsides in South Dublin County, and the scale of the Proposed Development, which is retaining the ecological function of the site. No significant limitations in the scope, scale or context of the assessment have been identified.

4. DESK STUDY

4.1 Hydrological Desk Study

4.1.1 EPA Water Quality Data

The EPA web-mapper¹ was consulted on the 11th November 2025 regarding the water quality and status of waterbodies that are located downstream of the Proposed Development site.

The proposed Active Travel Scheme is situated entirely within the WFD Catchment 09, Liffey and Dublin Bay³. The site is located in the Dodder_SC_010 sub-catchment. Existing surface water drainage within the proposed Active Travel Scheme Area is conveyed via stormwater drains, which ultimately discharge into the River Dodder (IE_EA_09D010620).

The Active Travel Scheme crosses over two watercourses, the 2nd order Orlagh Stream (IE_EA_09D010620) to the northwest, along Firhouse Rd and the Owenadoher River (IE_EA_09O011700) to the southeast, along Edmondstown Rd. Both of these watercourses flow downstream into the River Dodder, which flows roughly parallel to the proposed site. The Orlagh Stream is culverted under the M50 motorway, and two existing bridges, which form part of the proposed scheme, cross the Owenadoher River, at Ballyboden Way and Scholarstown Road. The River Dodder flows closest to the proposed scheme at the northwest section along Firhouse Rd, (Approx 140m).

The Water Framework Directive (WFD) Transitional Waterbody risk score for the section of Liffey and Dublin Bay closest to the development site, known as Liffey Estuary Lower, has been assessed as “Intermediate”.

The site is located within the Dublin (IE_EA_G_008) groundwater catchment. The Water Framework Directive (WFD) Groundwater Monitoring Programme (2019-2024) assigned the groundwater catchment as having ‘good’ status.

The Biotic Index of Water Quality (BIWQ) was developed in Ireland by the Environmental Protection Agency (EPA). Q-values are assigned using a combination of habitat characteristics and structure of the macro-invertebrate community within the waterbody. Individual macro-invertebrate families are classified according to their sensitivity to organic pollution, and the Q-value is assessed based primarily on their relative abundance within a sample. The EPA sampling station result provides a baseline against which any water quality changes occurring in the future can be measured. Q-values of downstream monitoring stations of the study area were available for the Owenadoher River, and the River Dodder, and are presented in **Table 4-1** below.

Table 4-1: Q-values at downstream monitoring stations for the Owenadoher and River Dodder

River Waterbody	Monitoring Station	Year	River/ Stream section	Q values with Status
Owenadoher River	Scholarstown Road Br, (RS09O011300)	2010	Owenadoher_010	4, Good
	Br u/s Dodder R confl, (RS09O011700)	2022	Owenadoher_010	3-4, Moderate
River Dodder	Dodder - Footbridge Firhouse (Balroth Weir) (RS09D010400)	1984	Dodder_050	3-4, Moderate

¹ <https://gis.epa.ie/EPAMaps/>

	New Br, Firhouse (RS09D010420)	1998	Dodder_050	4, Good
	Dodder - New Br u/s Templeogue Br (RS09D010430)	2002	Dodder_050	3, Poor
	Dodder - Templeogue Br (RS09D010500)	1991	Dodder_050	3, Poor
	Dodder - Springfield Crescent (RS09D010600)	1988	Dodder_050	2-3, Poor
	Br on Springfield Ave (RS09D010620)	2022	Dodder_050	3-4 Moderate
	Dodder - Dodder Rd d/s Weir (RS09D010700)	1991	Dodder_050	2-3, Poor

4.2

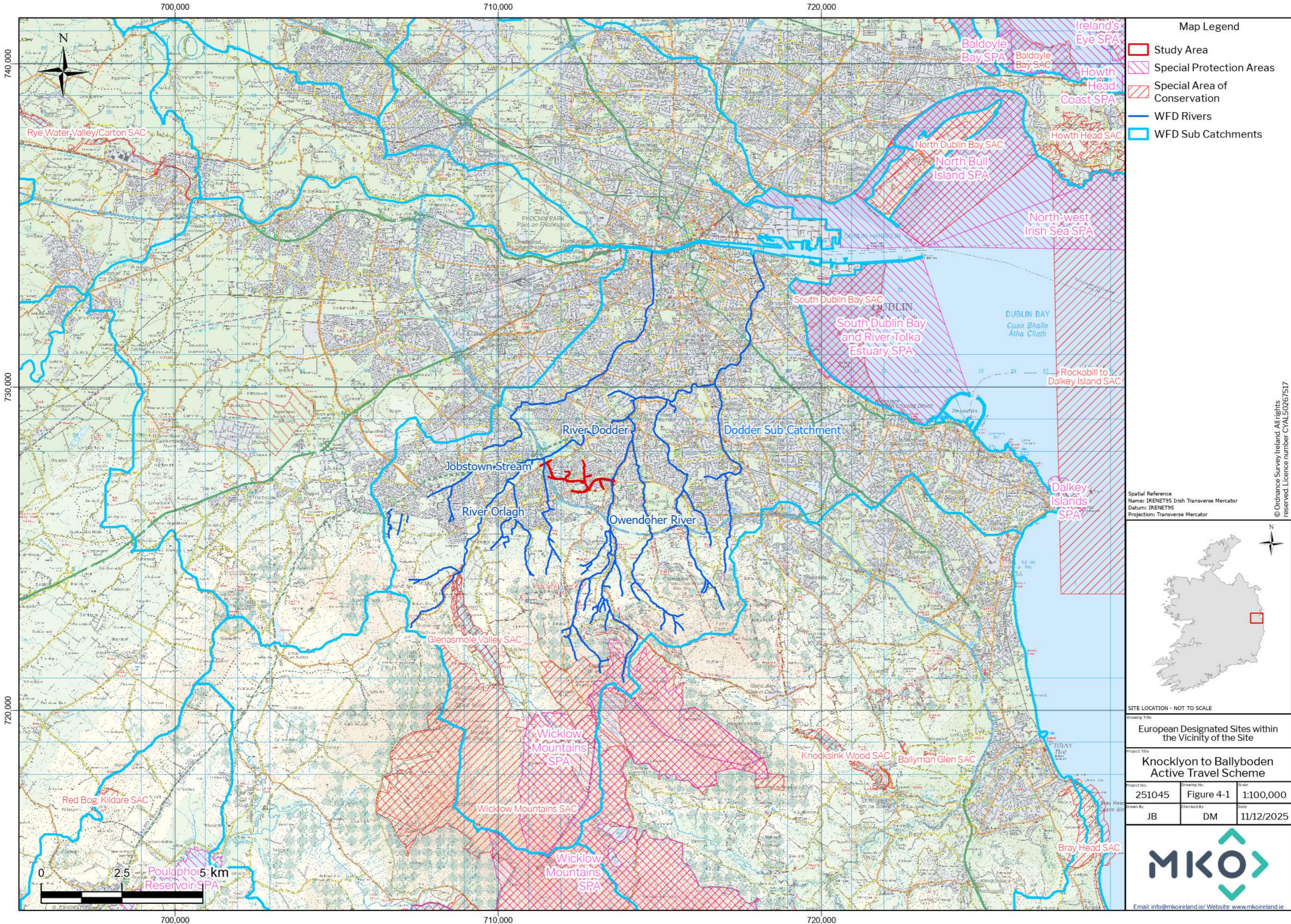
Designated Sites

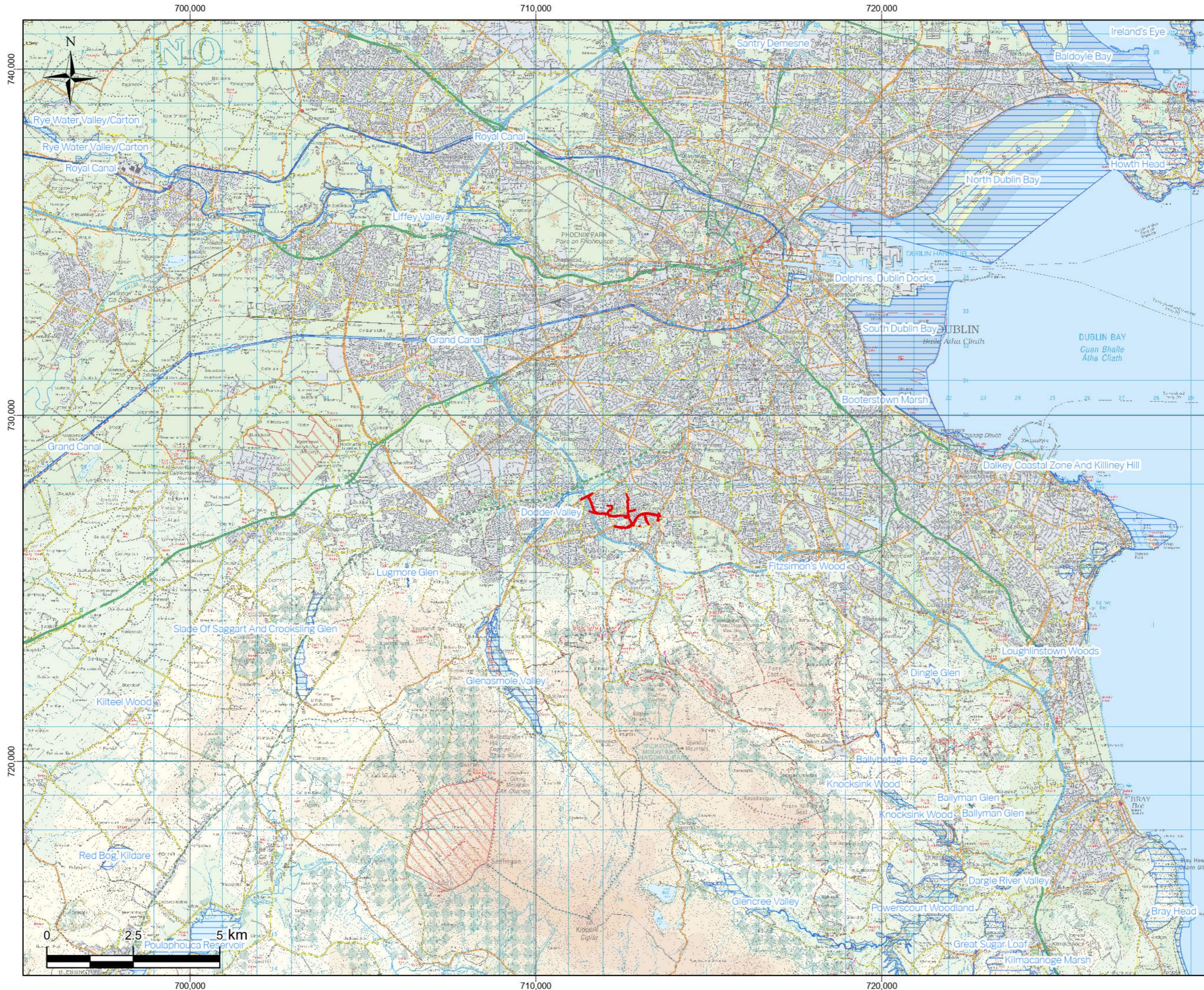
The location of the site of the proposed Active Travel Scheme in relation to European Sites is provided in **Figure 4-1**. The location of the site of the proposed Active Travel Scheme in relation to National Sites is provided in **Figure 4-2**.

The following methodology was used to establish which sites, that are designated for nature conservation, have the potential to be impacted by the proposed Active Travel Scheme:

- Initially, the most up-to-date GIS spatial datasets for Nationally designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie). The datasets were utilised to identify Designated Sites which could feasibly be affected by the proposed Active Travel Scheme.
- All Nationally Designated Sites that could potentially be affected were identified using a source-pathway-receptor model.
- Catchment mapping was used to establish or discount potential hydrological connectivity between the site of the proposed Active Travel Scheme and any Designated Sites.
- **Table 4-2** provides details of all relevant Nationally Designated Sites as identified in the preceding steps and assesses which are within the likely Zone of Influence.
- The site synopses and main reasons for designation of these sites, as per the NPWS website (www.npws.ie), were consulted where available.

All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme. No potential for Likely Significant Effects (LSEs) on any European site was identified as a result of the scheme, as concluded in the accompanying AASR.





Map Legend

Study Are

Proposed Natural Heritage Areas

Spatial Reference
Name: IRENET95 Irish Transverse Mercator
Datum: IRENET95
Projection: Transverse Mercator

© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517

SITE LOCATION - NOT TO SCALE

Nationally Designated Sites within the Vicinity of the Site

Project Title

Knocklyon to Ballyboden Active Travel Scheme

Project No.	Drawing No.	Scale
251045	Figure 4-2	1:100,000
Drawn By JB	Checked By DM	Date 11/12/2025

 MIKO

Email: info@mkoireland.ie / Website: www.mkoireland.ie

Table 4-2: Identification of Nationally Designated sites within the Likely Zone of Influence

Designated Sites and distance from Proposed Development	Likely Zone of Impact Determination
Proposed Natural Heritage Areas (pNHA)	
<p>Dodder Valley pNHA [000991]</p> <p>Approx. distance 171.00 m</p> <p>This pNHA represents the last remaining stretch of natural riverbank vegetation on the River Dodder in the built-up Greater Dublin Area and is designated on account of the riparian woodland, grassland habitats and pond which adjoin the river and the plant and bird species they support.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA as it is located upstream to the proposed Active Travel Scheme. The pNHA is located within the same groundwater catchment as the site, however, due to the nature and scale of the proposed works, which are limited to works on existing road infrastructure, no impacts on groundwater quality are anticipated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Glenasmole Valley pNHA [001209]</p> <p>Approx. distance: 3.89 km</p> <p>Glenasmole Valley pNHA overlaps with the European Designated Site Glenasmole Valley SAC [001209]. The site is considered to be likely designated for the same Annex I habitats as the SAC: calcareous grassland, <i>Molinia</i> meadows and petrifying springs. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR), which</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, there is no potential for indirect effects on this pNHA, including the fauna species for which it is designated. No surface water connectivity exists from the site of the Proposed Development to the pNHA. The pNHA is located within the same groundwater catchment as the site, however, due to the nature and scale of the proposed works, which are limited to works on existing road infrastructure, no impacts on groundwater quality are anticipated. This pNHA is designated for otter, and the site lies within the species' known foraging range (Marnell et al., 2011). However, the habitats recorded within the proposed Active Travel Scheme boundary are not considered suitable to support otter. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>

<p>accompanies the planning application for the proposed Active Travel Scheme. Areas of semi-natural woodland also occur within the site and it supports a number of rare and protected species, including a range of bat species, otter and kingfisher.</p>	
<p>Fitzsimon's Woods pNHA [001753]</p> <p>Approx. distance: 4.24 km</p> <p>Fitzsimon's Wood pNHA is designated for the presence of old oak woodland habitat. Marshy areas are also present within the woodland.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. The pNHA is located within the same groundwater catchment as the site, however, due to the nature and scale of the proposed works, which are limited to works on existing road infrastructure, no impacts on groundwater quality are anticipated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Grand Canal pNHA [002104]</p> <p>Approx. distance: 5.03 km</p> <p>Grand Canal pNHA is designated for the diversity of species it supports along its linear length, including otter, opposite-leaved pondweed, smooth newt and habitats such as hedgerow, tall herbs, calcareous grassland, reed fringe, open water, scrub and woodland.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. The pNHA is located within the same groundwater catchment as the site, however, due to the nature and scale of the proposed works, which are limited to works on existing road infrastructure, no impacts on groundwater quality are anticipated. This pNHA is designated for otter, and the site lies within the species' known foraging range (Marnell et al., 2011). However, the habitats recorded within the proposed Active Travel Scheme boundary are not considered suitable to support otter. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development, and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p>

	<p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Lugmore Glen pNHA [001212]</p> <p>Approx. distance: 5.34 km</p> <p>Lugmore Glen pNHA is designated for the presence of a semi-natural woodland within a narrow valley cut in glacial drift, which is rare in the surrounding landscape in Co. Dublin. It is considered to be a fine example of a wooded glen with a good representation of woodland plants.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>The site is designated for woodland habitat, therefore due to the intervening distance there is no potential for indirect effects on this pNHA. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Booterstown Marsh pNHA [001205]</p> <p>Approx. distance 7.18 km</p> <p>Booterstown Marsh pNHA is designated for the presence of saltmarsh habitat and for a range of waders and gulls, as well as kingfisher. The pNHA overlaps with South Dublin Bay and River Tolka Estuary SPA [004024], which is also designated for a range of waders and gull species. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>The Proposed Development crosses two watercourses with direct surface water connectivity to Dublin Bay: the 2nd order Orlagh Stream (IE_EA_09D010620) to the northwest, along Firhouse Rd and the Owenadoher River (IE_EA_09O011700) to the southeast along Edmondstown Rd. The intervening hydrological distance between these crossing points and the downstream environment in Dublin Bay is approximately 10.9km. In addition, the pNHA is located within the same groundwater catchment as the site, which drains into Dublin Bay.</p> <p>Existing surface water drainage within the proposed Active Travel Scheme Area is conveyed via stormwater drains into adjacent watercourses, which discharge into the River Dodder (IE_EA_09D010620); as such, indirect connectivity with the pNHA exists via this watercourse. However, due to the nature and scale of the proposed works, which are comparable in scale, methodology, and duration to typical road resurfacing or routine operational road maintenance activities, no potential for significant effects on water quality is anticipated.</p> <p>The proposed development site does not provide suitable supporting habitat for the bird species for which the pNHA is designated. Due to the intervening distance of over 7 km from the pNHA, and the nature and scale of the project, there is no potential for indirect effects on the bird species for which it is designated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p>

	<p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development, and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>South Dublin Bay pNHA [000210]</p> <p>Approx. distance: 7.21 km</p> <p>South Dublin Bay pNHA overlaps with both with South Dublin Bay and River Tolka Estuary SPA [004024] and South Dublin Bay SAC [000210] and is likely designated for the presence of the same intertidal habitats and avifauna. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>The Proposed Development crosses two watercourses with direct surface water connectivity to Dublin Bay: the 2nd order Orlagh Stream (IE_EA_09D010620) to the northwest, along Firhouse Rd and the Owenadoher River (IE_EA_09O011700) to the southeast along Edmonstown Rd. The intervening hydrological distance between these crossing points and the downstream environment in Dublin Bay is approximately 10.9km. In addition, the pNHA is located within the same groundwater catchment as the site, which drains into Dublin Bay.</p> <p>Existing surface water drainage within the proposed Active Travel Scheme Area is conveyed via stormwater drains into adjacent watercourses, which discharge into the River Dodder (IE_EA_09D010620); as such, indirect connectivity with the pNHA exists via this watercourse. However, due to the nature and scale of the proposed works, which are comparable in scale, methodology, and duration to typical road resurfacing or routine operational road maintenance activities, no potential for significant effects on water quality is anticipated.</p> <p>The proposed development site does not provide suitable supporting habitat for the bird species for which the pNHA is designated. Due to the intervening distance of over 7 km from the pNHA, and the nature and scale of the project, there is no potential for indirect effects on the bird species for which it is designated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Liffey Valley pNHA [000128]</p> <p>Approx. distance: 7.48 km</p> <p>Liffey Valley pNHA is designated for a range of terrestrial and aquatic habitats,</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA as it is located in a separate WFD subcatchment which lies upstream to the proposed Active Travel Scheme. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p>

<p>as well as a number of rare and threatened plant species. Habitat present within the pNHA include semi-natural woodland, marsh, and rivers. The river is also a Salmon river.</p>	<p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development, and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Slade of Saggart and Crooksling Glen pNHA [000211]</p> <p>Approx. distance: 8.14 km</p> <p>Slade of Saggart and Crooksling Glen pNHA is designated as it is a good example of a wooded river valley and a small wetland system and supports a rare plant, a rare invertebrate and a variety of wildfowl species.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. The pNHA is located within the same groundwater catchment as the site, however, due to the nature and scale of the proposed works, which are limited to works on existing road infrastructure, no impacts on groundwater quality are anticipated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Royal Canal pNHA [002103]</p> <p>Approx. distance: 8.15 km</p> <p>Royal Canal pNHA is designated for the diversity of species it supports along its linear length, including otter, opposite-leaved pondweed, and habitats such as hedgerow, tall herbs, calcareous grassland, reed fringe, open water, scrub and woodland.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. This pNHA is designated for otter. This pNHA is designated for otter, and the site lies within the species' known foraging range (Marnell et al., 2011). However, the habitats recorded within the proposed Active Travel Scheme boundary are not considered suitable to support otter. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>

<p>Ballybetagh Bog pNHA [001202]</p> <p>Approx. distance: 8.68 km</p> <p>Ballybetagh bog pNHA contains areas of fen and marsh habitat. Ballybetagh Bog has become a classical site of quaternary studies and is renowned for the number of skeletons of the extinct Giant Irish Deer.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Knocksink Wood pNHA [000725]</p> <p>Approx. distance: 9.41 km</p> <p>Knocksink Wood pNHA overlaps with the European Designated Site Knocksink Wood SAC [000725]. The site is considered to be likely designated for the same Annex I habitats as the SAC: alluvial woodland, old oak woodland and petrifying springs. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme. The site also supports a number of rare or threatened plants and invertebrates.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>

<p>Glencree Valley pNHA [001755]</p> <p>Approx. distance: 10.30 km</p> <p>Glencree Valley pNHA is designated for the presence of deciduous woodland, an upland river and boggy flushes.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. No hydrological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Loughlinstown Woods pNHA [001211]</p> <p>Approx. distance: 11.47 km</p> <p>Loughlinstown Woods pNHA is designated as it is a good example of demesne-type mixed woodland.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>The site is designated for woodland habitat, therefore due to the intervening distance there is no potential for indirect effects on this pNHA. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified. No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Dalkey Coastal Zone and Killiney Hill pNHA [001206]</p> <p>Approx. distance: 11.59 km</p> <p>Dalkey Coastal Zone and Killiney Hill pNHA overlaps with the European Designated Site Rockabill to Dalkey Island SAC [003000] and Dalkey Islands SPA [004172]. The site is considered to be likely designated for</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>The Proposed Development crosses two watercourses with direct surface water connectivity to Dublin Bay: the 2nd order Orlagh Stream (IE_EA_09D010620) to the northwest, along Firhouse Rd and the Owenadoher River (IE_EA_09O011700) to the southeast along Edmondstown Rd. The intervening hydrological distance between these crossing points and the downstream environment in Dublin Bay is approximately 10.9km. In addition, the pNHA is located within the same groundwater catchment as the site, which drains into Dublin Bay.</p> <p>Existing surface water drainage within the proposed Active Travel Scheme Area is conveyed via stormwater drains into adjacent watercourses, which discharge into the River Dodder (IE_EA_09D010620); as such, indirect connectivity with the pNHA exists via this watercourse. However, due to the nature and scale of the proposed works, which are comparable in scale, methodology, and duration to typical road resurfacing or routine operational road maintenance activities, no potential for significant effects on water quality is anticipated.</p>

<p>the same Annex I habitats, mammals and bird species as the SAC and SPA: reefs, harbour porpoise and tern species. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme. This site represents a fine example of a coastal system with habitats ranging from the sub-littoral to coastal heath. The flora is well developed and includes some scarce species. The islands are important bird sites. The site also has geological importance.</p>	<p>The proposed development site does not provide suitable supporting habitat for the bird species for which the pNHA is designated. Due to the intervening distance of over 11 km from the pNHA, and the nature and scale of the project, there is no potential for indirect effects on the bird species for which it is designated. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
<p>Ballyman Glen pNHA [000713]</p> <p>Approx. distance: 11.85 km</p> <p>Ballyman Glen pNHA overlaps with the Ballyman Glen SAC [000713]. The site is considered to be likely designated for the same Annex I habitats as the SAC: petrifying springs and alkaline fens. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>

<p>Rye Water Valley/Carton pNHA [001398]</p> <p>Approx. distance: 13.5 km</p> <p>Rye Water Valley/Carton pNHA overlaps with the Rye Water Valley/Carton SAC [001398].</p> <p>The site is considered to be likely designated for the same Annex I habitats as the SAC (petrifying springs), as well as the Annex II species narrow-mouthed whorl snail and Desmoulin's whorl snail. All European Designated Sites are fully described and assessed in the Appropriate Assessment Screening Report (AASR) accompanying the planning application for the proposed Active Travel Scheme.</p>	<p>The Proposed Development is located outside the boundary of this pNHA and as such there is no potential for direct effect.</p> <p>Due to the intervening distance and the nature and scale of the proposed works, which are limited to works on existing road infrastructure, there is no potential for indirect effects on this pNHA. No surface water connectivity exists from the site of the Proposed Development to the pNHA as it is located in a separate WFD subcatchment which lies upstream to the proposed Active Travel Scheme. No hydrogeological connectivity exists from the site of the Proposed Development to the pNHA, as they are located in different groundwater catchments. Therefore, no pathway for potential significant indirect effects on the pNHA has been identified.</p> <p>No source-pathway-receptor chain for impact was identified between the site of the Proposed Development and this designated site. As such, potential for direct or indirect impact on this Nationally Designated Site can be excluded.</p> <p>Therefore, this Nationally Designated Site is not within the likely zone of impact, and no further assessment is required.</p>
---	--

4.3

Protected Habitats

A review of the Article 17 datasets for *Annex I* habitats and *Annex II* species, for habitats and species reported by the NPWS under *Article 17 of the Habitats Directive* (92/42/EEC), was undertaken.

Other habitat datasets provided by NPWS, including the Heath, Bogs and Mires, Irish Semi-Natural Grassland Survey datasets, National Survey of Native Woodlands and Ancient and Long Established Woodland datasets were also reviewed prior to undertaking the multi-disciplinary walkover survey.

Available NPWS datasets were downloaded and overlain on the Proposed Development study area.

No mapped habitats listed under *Annex I* of the *EU Habitats Directive 92/43/EEC* are recorded within the potential Active Travel Scheme boundary.

4.4

Protected Flora

A search of the New Atlas of the British & Irish Flora (Preston et al., 2002) was undertaken to investigate whether any rare or unusual plant species listed under *Annex II* of the *Habitats Directive*, or, those listed as rare on the *Red Data List* (Curtis and McGough 1988) or protected under the *Flora (Protection) Order 2022* had been recorded in the relevant hectad in which the study site is situated (O12), during the 1987-1999 atlas survey.

A search of the NPWS web-mapper for records for Vascular Plants, Charophytes and Lichens listed in and legally protected under the *Flora (Protection) Order 2022* was also undertaken. NPWS online records were searched on 11th November 2025 for records of any rare or protected species of flora or fauna within the 10-kilometre grid square, O12, in which the study area lies. A data request was also sent to the NPWS in relation to the grid square O12 on the 14th November 2025, and data was received on the 17th November 2025.

Table 4-3 below lists the rare and protected floral species records obtained from both the New Atlas of the British & Irish Flora and the NPWS during this study.

Additionally, the previous Ecological Impact Assessment Report prepared by *JBA* for the scheme in 2022 (*JBA*, 2022, unpublished), was consulted, and no protected floral species were recorded by *JBA* ecologists during the ecological walkover surveys of the proposed site in 2021. The Appropriate Assessment Report compiled by *Scott Cawley Ltd.* in 2022 for the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme, (Bus Connects) was consulted, and no protected floral species were recorded within the Study Area by *Scott Cawley* ecologists during their surveys.

There were no records of rare or protected floral species within the boundary of the proposed Active Travel Scheme.

Table 4-3: Records of the rare and protected floral species for Hectad O12.

Common Name	Scientific Name	Status	Data Source	Sample Location
Alpine Clubmoss	<i>Diphasiastrum alpinum</i>	NT	NPWS	Cruagh Mountain
Black Henbane	<i>Hyoscyamus niger</i>	NT	New Atlas	Hectad O12
Black Henbane	<i>Hyoscyamus niger</i>	NT	NPWS	Leopardstown, Co. Dublin
Bog Orchid	<i>Hammarbya paludosa</i>	NT	NPWS	Glenasmole Valley, Co. Dublin
Borrer's Saltmarsh Grass	<i>Puccinellia fasciculata</i>	NT	New Atlas	Hectad O12
Brackish Water-crowfoot	<i>Ranunculus baudotii</i>	NT	New Atlas	Hectad O12
Bur Chervil	<i>Anthriscus caucalis</i>	NT	New Atlas	Hectad O12
Corn Marigold	<i>Chrysanthemum segetum</i>	NT	New Atlas	Hectad O12
Fiddle Dock	<i>Rumex pulcher</i>	VU	New Atlas	Hectad O12
Greater Broomrape	<i>Orobanche rapum-genistae</i>	NT	NPWS	S. of Rathfarnham, Co. Dublin
Greater Knapweed	<i>Centaurea scabiosa</i>	NT	New Atlas	Hectad O12
Green-winged Orchid	<i>Orchis morio</i>	VU	NPWS	Bohernabreena, Co. Dublin
Irish Whitebeam	<i>Sorbus hibernica</i>	VU	NPWS	NW of Sandyford Industrial Estate
Ivy-leaved Bellflower	<i>Wahlenbergia hederacea</i>	NT	NPWS	Glencullen Valley, South side
Knotted Hedge-parsley	<i>Torilis nodosa</i>	NT	New Atlas	Hectad O12
Little Robin	<i>Geranium purpureum</i>	NT	New Atlas	Hectad O12
Opposite-leaved Pondweed	<i>Groenlandia densa</i>	NT	NPWS	Grand Canal
Pale Flax	<i>Linum bienne</i>	NT	New Atlas	Hectad O12
Pale Toadflax	<i>Linaria repens</i>	NT	NPWS	Bushy Park Road, Rathgar, Co. Dublin
Red Hemp-nettle	<i>Galeopsis angustifolia</i>	VU	NPWS	Between Three Rock road and Two Rock Mountain
Sea Kale	<i>Crambe maritima</i>	NT	New Atlas	Hectad O12
Slender Thistle	<i>Carduus tenuiflorus</i>	NT	New Atlas	Hectad O12
Small Cudweed	<i>Filago minima</i>	NT	NPWS	Three Rock Mountain
Small White Orchid	<i>Pseudorchis albida</i>	VU	NPWS	Three Rock Mountain
Upright Brome	<i>Bromopsis erecta</i>	NT	NPWS	Flora of County Dublin district record
Weasel's Snout	<i>Misopates orontium</i>	EN	NPWS	Ballawley Park
Yellow Horned Poppy	<i>Glaucium flavum</i>	NT	New Atlas	Hectad O12

RE - Regionally Extinct, CR - Critically Endangered, EN - Endangered, VU - Vulnerable, NT - Near Threatened, LC - Least Concern, DD - Data Deficient, WL - Waiting List. Ireland Red List No. 10: Vascular Plants (NPWS. 2019).

4.5 Protected Fauna

4.5.1 Non-Volant Fauna

The National Biodiversity Data Centre (NBDC) database was accessed, and NPWS online records were searched on 11th November 2025 for records of any rare or protected fauna within the hectad, O12, in which the study area lies. A data request was also sent to the NPWS in relation to the grid square O12 on the 14th November 2025, and data was received on the 17th November 2025. **Table 4-4** lists the rare and protected species records obtained from the NPWS and NBDC during this study.

Additionally, the previous Ecological Impact Assessment Report prepared by *JBA* for the scheme in 2022 (*JBA*, 2022, unpublished), was consulted, and mammal paths and fresh digging (snuffle holes) likely belonging to badger were recorded in an area near Knocklyon road, which is not within the Study Area of the proposed Active Travel Scheme. This shows that badger are known to occur in the wider area. No other signs of protected mammal species were recorded by *JBA* ecologists during the ecological walkover surveys of the proposed site in 2021.

The Appropriate Assessment Report compiled by *Scott Cawley Ltd* in 2022 for the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (Bus Connects) was consulted. *Scott Cawley* ecologists noted evidence of otter in the form of spraints and potential slides were recorded throughout the Owenadoher River in their 2020, 2021 and 2022 field surveys. Evidence of a holt within the roots of a sycamore tree was identified along the Owenadoher River, approximately 200m northeast of the proposed Active Travel Scheme, at Butterfield Avenue during multidisciplinary surveys in 2021 and during aquatic surveys conducted by *Triturus Environmental Ltd.* in 2020. This holt site was subsequently monitored under NPWS licence issued to *Scott Cawley Ltd.* using a camera trap for a period of two months, with no otter activity observed at that time.

Table 4-4: Records for rare and protected non-volant faunal species for Hectad O12, NBDC, NPWS

Common Name	Scientific Name	Status	Data Source
Non-volant Mammals			
European Otter	<i>Lutra lutra</i>	Annex II, IV, WA	NPWS, NBDC
Irish Hare	<i>Lepus timidus subsp. <i>hibernicus</i></i>	Annex V, WA	NPWS, NBDC
Pine Marten	<i>Martes martes</i>	Annex V, WA	NPWS, NBDC
Brown Hare	<i>Lepus europaeus</i>	WA	NPWS
Eurasian Badger	<i>Meles meles</i>	WA	NPWS, NBDC
Hedgehog	<i>Erinaceus europaeus</i>	WA	NPWS, NBDC
Pygmy Shrew	<i>Sorex minutus</i>	WA	NPWS, NBDC
Red Deer	<i>Cervus elaphus</i>	WA	NBDC
Red Squirrel	<i>Sciurus vulgaris</i>	WA	NPWS, NBDC
Stoat	<i>Mustela erminea subsp. <i>hibernica</i></i>	WA	NPWS, NBDC

Amphibians			
Common Frog	<i>Rana temporaria</i>	Annex V, WA	NPWS, NBDC
Smooth Newt	<i>Lissotriton vulgaris</i>	WA	NPWS, NBDC
Reptiles			
Common Lizard	<i>Lacerta vivipara</i>	WA	NPWS, NBDC
Invertebrates			
Freshwater White-clawed Crayfish	<i>Austropotamobius pallipes</i>	WA, Annex II & V	NPWS
Marsh Fritillary	<i>Euphydryas aurinia</i>	Annex II	NBDC

Annex II, Annex IV, Annex V – of EU Habitats Directive, WA – Irish Wildlife Acts (1976-2017).

4.5.2

Bats

A review of the National Biodiversity Data Centre (NBDC) online database was made on 11th November 2025, to search for records of bats within hectad O12. Details of the results are provided in **Table 4-5** below. A data request was also sent to the NPWS in relation to the grid square O12 on the 14th November 2025, and data was received on the 17th November 2025. There were no NPWS bat roost records for the hectad O12.

The Appropriate Assessment Report compiled by *Scott Cawley Ltd* in 2022 for the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme, (Bus Connects) was consulted. *Scott Cawley* ecologists conducted bat surveys within 500 m of Firhouse Road as part of the BusConnects Templeogue/Rathfarnham to City Centre Scheme in 2021. These surveys recorded the following species along Tallaght Road (R137); Leisler's bat (*Nyctalus leisleri*), soprano pipistrelle (*Pipistrellus pygmaeus*), and common pipistrelle (*Pipistrellus pipistrellus*). Potential roosting features were also noted in trees along a proposed compound opposite the Dodder Valley car park.

Additionally, the previous Ecological Impact Assessment Report prepared by *JBA* for the scheme in 2022 (*JBA*, 2022, unpublished) was consulted; however, no dedicated bat surveys were conducted as part of that study.

Table 4-5: Bat Records within 10km of Proposed Development (hectad O12).

Common Name	Scientific Name	Protection Status	Data Source
Daubenton's Bat	<i>Myotis daubentonii</i>	Annex IV, WA	NBDC
Natterer's Bat	<i>Myotis nattereri</i>	Annex IV, WA	NBDC
Leisler's Bat	<i>Nyctalus leisleri</i>	Annex IV, WA	NPWS, NBDC
Soprano Pipistrelle Bat	<i>Pipistrellus pygmaeus</i>	Annex IV, WA	NBDC
Brown Long-eared Bat	<i>Plecotus auritus</i>	Annex IV, WA	NPWS, NBDC
Nathusius's Pipistrelle Bat	<i>Pipistrellus nathusii</i>	Annex IV, WA	NBDC
Pipistrelle Bat	<i>Pipistrellus pipistrellus sensu lato</i>	Annex IV, WA	NBDC
Whiskered Bat	<i>Myotis mystacinus</i>	Annex IV, WA	NBDC

4.5.3 Birds

The National Biodiversity Data Centre (NBDC) was searched for records of protected bird species listed in hectad O12. **Table 4-6** lists all the bird species that have been recorded within the hectad and their protection status.

Table 4-6: NBDC records for Protected Bird Species listed in hectad O12

Common Name	Scientific Name	Status
Corncrake	<i>Crex crex</i>	Annex I, BoCCI Red, AEWA
Golden Plover	<i>Pluvialis apricaria</i>	Annex I, BoCCI Red, AEWA
Hen Harrier	<i>Circus cyaneus</i>	Annex I
Kingfisher	<i>Alcedo atthis</i>	Annex I
Little Egret	<i>Egretta garzetta</i>	Annex I, AEWA
Mediterranean Gull	<i>Ichthyaetus melanocephalus</i>	Annex I, AEWA
Peregrine	<i>Falco peregrinus</i>	Annex I
Red Kite	<i>Milvus milvus</i>	Annex I, BoCCI Red
Whooper Swan	<i>Cygnus cygnus</i>	Annex I, AEWA
Barn Owl	<i>Tyto alba</i>	BoCCI Red
Curlew	<i>Numenius arquata</i>	BoCCI Red, AEWA
Eider	<i>Somateria mollissima</i>	BoCCI Red, AEWA
Goldeneye	<i>Bucephala clangula</i>	BoCCI Red, AEWA
Grey Partridge	<i>Perdix perdix</i>	BoCCI Red
Grey Wagtail	<i>Motacilla cinerea</i>	BoCCI Red
Kestrel	<i>Falco tinnunculus</i>	BoCCI Red
Lapwing	<i>Vanellus vanellus</i>	BoCCI Red, AEWA
Meadow Pipit	<i>Anthus pratensis</i>	BoCCI Red
Oystercatcher	<i>Haematopus ostralegus</i>	BoCCI Red, AEWA
Red Grouse	<i>Lagopus lagopus</i>	BoCCI Red
Redshank	<i>Tringa totanus</i>	BoCCI Red, AEWA
Redwing	<i>Turdus iliacus</i>	BoCCI Red
Ring Ouzel	<i>Turdus torquatus</i>	BoCCI Red
Scaup	<i>Aythya marila</i>	BoCCI Red, AEWA
Shoveler	<i>Spatula clypeata</i>	BoCCI Red, AEWA
Snipe	<i>Gallinago gallinago</i>	BoCCI Red
Snowy Owl	<i>Bubo scandiacus</i>	BoCCI Red
Stock Dove	<i>Columba oenas</i>	BoCCI Red

Common Name	Scientific Name	Status
Swift	<i>Apus apus</i>	BoCCI Red
Whinchat	<i>Saxicola rubetra</i>	BoCCI Red
Wood Warbler	<i>Phylloscopus sibilatrix</i>	BoCCI Red
Woodcock	<i>Scolopax rusticola</i>	BoCCI Red, AEWA
Yellowhammer	<i>Emberiza citrinella</i>	BoCCI Red

Annex I of the EU Birds Directive, WA – Irish Wildlife Acts (1976-2017), Red Data List (Curtis and McGough, 1988), BoCCI Red List – Birds of Conservation Concern in Ireland (Gilbert, Stanbury & Lewis, 2021), AEWA - Agreement on the Conservation of African-Eurasian Migratory Waterbirds (United Nations Environment Programme, 1999).

4.6

Invasive Species

The National Biodiversity Data Centre (NBDC) database was accessed on the 11th November 2025 and searched for records of non-native, invasive species of flora or fauna listed under the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* (S.I. 477 of 2015) or under the First Schedule of the *European Union (Invasive Alien Species) Regulations 2024* (S.I. No 374 of 2024), within the hectad in which the Proposed Development site is situated. There are no records of these invasive species within the proposed Active Travel Scheme boundary. **Table 4-7** lists the non-native, invasive species recorded within the hectad, O12.

Additionally, the previous Ecological Impact Assessment Report prepared by *JBA* for the scheme in 2022 (*JBA*, 2022, unpublished), was consulted and although invasive species were recorded during their surveys, no species listed under the Third Schedule of the *European Communities Regulations 2011* (S.I. 477 of 2015) were recorded within the Study Area by *JBA* ecologists during the ecological walkover surveys in 2021.

The Appropriate Assessment Report compiled by *Scott Cawley Ltd.* in 2022 for the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme, (Bus Connects) was consulted. *Scott Cawley* ecologists had recorded Japanese knotweed (*Reynoutria japonica*) on the northern bank of Owenadoher River, approximately 200m northeast of the proposed Active Travel Scheme boundary.

Table 4.7: NBDC records for Invasive species for Hectad O12

Common Name	Scientific Name	Status
Plants		
American skunk-cabbage	<i>Lysichiton americanus</i>	<i>Third/First Schedule</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>	<i>Third/First Schedule</i>
Giant-rhubarb	<i>Gunnera tinctoria</i>	<i>Third/First Schedule</i>
Himalayan balsam	<i>Impatiens glandulifera</i>	<i>Third/First Schedule</i>
Himalayan knotweed	<i>Persicaria wallichii</i>	<i>Third/First Schedule</i>
Japanese knotweed	<i>Fallopia japonica (syn. Reynoutria japonica)</i>	<i>Third/First Schedule</i>
Parrot's feather	<i>Myriophyllum aquaticum</i>	<i>Third/First Schedule</i>
Spanish bluebell	<i>Hyacinthoides hispanica</i>	<i>Third/First Schedule</i>
Three-cornered leek	<i>Allium triquetrum</i>	<i>Third/First Schedule</i>
Water fern	<i>Azolla filiculoides</i>	<i>Third/First Schedule</i>
Non-volant Mammals		
Fallow deer	<i>Dama dama</i>	<i>First Schedule</i>
Grey squirrel	<i>Sciurus carolinensis</i>	<i>Third/First Schedule</i>
Sika deer	<i>Cervus nippon</i>	<i>Third/First Schedule</i>
Birds		
Greylag goose	<i>Anser anser</i>	<i>Third/First Schedule</i>
Amphibians		
Common toad	<i>Bufo bufo</i>	<i>Third/First Schedule</i>
Invertebrates		
Harlequin ladybird	<i>Harmonia axyridis</i>	<i>Third/First Schedule</i>

Third - Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2015); First - First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No 374 of 2024)

5. FIELD STUDY

5.1 Habitats within the Proposed Development Boundary

Habitats recorded during the multi-disciplinary ecological walkover survey are described below, and a habitat map is provided in **Figure 5-2**. Photographs taken of representative habitats across the Proposed Development are also included in the following section. No habitats considered to be of ecological significance and having the potential to correspond to those listed in Annex I of the EU Habitats Directive 92/43/EEC were identified during the surveys undertaken.

The proposed Active Travel Scheme crosses two watercourses, the Orlagh Stream (IE_EA_09D010620) to the northwest, and the Owenadoher River (IE_EA_09O011700) to the southeast of the Study Area. The watercourse crossings associated with the proposed scheme comprise existing infrastructure: the Orlagh Stream is culverted under the M50 motorway, and two existing bridges, which form part of the proposed scheme, cross the Owenadoher River, at Ballyboden Way and Scholarstown Road, (see **Figure 5-2**). The Proposed Development Site does not include any aquatic habitats, and no interaction with such habitats is anticipated.

Habitat descriptions below are in the past tense to reflect their accuracy at a point in the recent past.

Table 5-1: Habitats recorded within the site during surveys undertaken in November 2025

Habitat Type	Fossitt Code
Flower Beds and Borders	BC4
Stone Walls and other stonework	BL1
Buildings and Artificial Surfaces	BL3
Improved Amenity Grassland	GA2
Dry Meadows and Grassy Verges	GS2
(Mixed) Broadleaved Woodland	WD1
Scattered Trees and Parkland	WD5
Hedgerows	WL1
Treelines	WL2
Scrub	WS1

5.1.1 Flower Beds and Borders (BC4)

Ornamental **Flower Beds and Borders (BC4)** occur at several locations along pedestrian paths across the proposed Active Travel Scheme (**Plate 5-1**). These are usually associated with gardens and parks, on roadsides and roundabouts, and in front of various buildings. The majority have been deliberately planted for decorative or landscaping purposes and are regularly maintained. They typically contain a high proportion of non-native species such as, but not limited to, New Zealand broadleaf (*Griselinia littoralis*), Australian bottlebrush (*Callistemon* spp.) and verbena (*Verbena* spp.), as well as other common species such as broom (*Cytisus scoparius*), dogwood (*Cornus* spp.) and rugosa rose (*Rosa rugosa*). These planted habitats are very small, isolated and highly modified, comprising a high proportion of non-native, ornamental species with limited potential to support biodiversity.



Plate 5-1: Ornamental planted **flower beds and borders (BC4)** containing dogwood, rugosa rose, holly and cleavers in front of the Gaelscoil Chnoc Liamhna Primary School on Knocklyon Road, to the west of the proposed scheme.

5.1.2

Stone Walls and other stonework (BL1)

A number of low stone walls were recorded across the proposed Active Travel Scheme (Plates 5-2 – 5-3). These built structures can be colonised by ivy (*Hedera helix* / *H. hibernica*) and red valerian (*Centranthus ruber*) and were classified as **Stone Walls and other stonework (BL1)**. They are modified artificial habitats with low potential to support biodiversity.



Plate 5.2: **Stone Wall (BL1)** habitat colonised with bryophytes on bridge crossing the Owenadoher River along Scholarstown Road to the southeast of the scheme.



Plate 5.3: Low **Stone Wall (BL1)** with ivy recorded along Ballyboden Road to the east of the scheme.

5.1.3

Buildings and Artificial Surfaces (BL3)

The proposed Active Travel Scheme is proposed to be constructed along existing roads and pedestrian walkways, which comprise **Buildings and Artificial Surfaces (BL3)** (Plates 5-4 – 5-6). This habitat comprises the majority of the Proposed Development area and is made up of domestic dwellings, schools, hotels/guesthouses, abandoned buildings, concrete bridges and tarmac roadways. These built surfaces are modified artificial habitats with negligible potential to support biodiversity.



Plate 5-4: Roads and pedestrian walkways classified as **Buildings and Artificial Surfaces (BL3)** along Firhouse Road at the northwest of the scheme.



Plate 5-5: Roads, pedestrian crossing and walkways classified as **Buildings and Artificial Surfaces (BL3)** at Knocklyon Road, opposite the shopping centre at the west of the scheme.



Plate 5-6: Roads, bus lane and existing cycle lane classified as **Buildings and Artificial Surfaces (BL3)** along Taylor's Lane at the eastern edge of the scheme.

5.1.4

Improved Amenity Grassland (GA2)

Patches of **Amenity Grassland (GA2)** were very common along roadsides throughout the proposed Active Travel Scheme (**Plates 5-7 – 5-8**). Many patches were associated with gardens along with road verges and grassed amenity areas, as well as lawns in public parks where the proposed cycle route will pass, including Beverly Park, Ballyboden Park and Dargle Wood (**Plate 5-9**). This habitat was actively managed and was characterised by a low sward height and low species diversity. Amenity grasslands within the proposed Active Travel Scheme area were characterised by common species such as Yorkshire-fog (*Holcus lanatus*), perennial rye-grass (*Lolium perenne*), and creeping bent (*Agrostis stolonifera*), meadow grasses (*Poa spp.*), and abundant common daisy (*Bellis perennis*), dandelion (*Taraxacum officinale agg.*), ribwort plantain (*Plantago lanceolata*), and white clover (*Trifolium repens*). Often, species such as creeping buttercup (*Ranunculus repens*), and common yarrow (*Achillea millefolium*) were frequent with occasional lesser knapweed (*Centaurea nigra*), field-speedwell (*Veronica persica*) and greater plantain (*Plantago major*). These areas were almost always short and homogenous in appearance, with limited ecological value.



Plate 5-7: Patch of short-mown **Improved Amenity Grassland (GA2)** dominated by perennial ryegrass, Yorkshire fog and annual meadow grass with lime treeline recorded along Knocklyon Road to the west of the proposed scheme.



Plate 5-8: Patch of **Improved Amenity Grassland (GA2)** along Firhouse Road at the northwest of the scheme.



Plate 5-9: Short-mown **Improved Amenity Grassland (GA2)** perennial ryegrass-dominated field within Dargle Wood Park, bordered with sycamore treelines.

5.1.5

Dry Meadows and Grassy Verges (GS2)

Grassy verges (GS2) were recorded throughout the site along roadsides and within public parks (**Plate 5-10**). These areas are not mown regularly. Species characteristic of this habitat type include cock's-foot (*Dactylis glomerata*), creeping thistle (*Cirsium arvense*), creeping and meadow buttercup (*Ranunculus repens*, *R. acris*), tansy ragwort (*Jacobaea vulgaris*), broadleaf dock (*Rumex obtusifolius*), bramble (*Rubus fruticosus* agg.), hedge bindweed (*Calystegia sepium*), field-speedwell, red clover (*Trifolium pratense*), hawksbeard (*Crepis* spp.), white clover, perennial ryegrass, Yorkshire fog, dandelion, ribwort plantain and nettle (*Urtica dioica*). These areas were left unmown with variable sward height, which creates ecological niches for a number of faunal species. Despite being small, these habitat patches were widespread in this urban environment, providing ecological value to species and improving ecological connectivity for wildlife in this urban environment.



Plate 5-10: Unmown **Grassy Verge (GS2)** dominated by creeping buttercup, nettle, broad-leaved dock and dandelion along the pedestrian path connecting Scholarstown Road and Ballyboden Way to the west of the proposed scheme.

5.1.6

Mixed Broadleaved Woodland (WD1)

Areas of **Mixed Broadleaved Woodland (WD1)** were recorded in several locations across the scheme (**Plates 5-11 – 5-12**). These woodland areas include a mix of species, including poplar (*Populus* spp.), sycamore (*Acer pseudoplatanus*), beech (*Fagus sylvatica*), silver birch (*Betula pendula*), ash (*Fraxinus excelsior*), lime (*Tilia* spp.), Italian alder (*Alnus cordata*), hawthorn (*Crataegus* spp.), willow (*Salix* spp.), with occasional aspen (*Populus tremula*), Norway maple (*Acer platanoides*) and Scots pine (*Pinus sylvestris*). The understorey varies between the woodlands and often includes ivy (*Hedera helix*), hazel (*Corylus avellana*), elder (*Sambucus nigra*), dogwood (*Cornus sanguinea*), bramble and holly, with the ground flora often dominated by ivy, common hogweed (*Heracleum sphondylium*), cow parsley (*Anthriscus sylvestris*), cocksfoot and bramble and occasional wood avens (*Geum urbanum*), hedge bindweed, willowherb (*Epilobium hirsutum*) and herb robert (*Geranium robertianum*). This habitat comprises some of the only unmanaged patches of biodiversity within the highly urbanised environment. Although these areas of woodland are relatively small and isolated, they provide an important refuge for faunal species in this urban landscape.



Plate 5-11: An area of **Mixed Broadleaved Woodland (WD1)** dominated by beech with occasional hazel, sycamore and silver birch recorded along Templeroad Road to the south of the scheme.



Plate 5-12: **Mixed Broadleaved Woodland (WD1)** patch along Firhouse Road at the westernmost edge of the site, dominated by grey willow, with frequent silver birch, Norway maple and occasional sycamore and dogwood/hazel understorey.

5.1.7

Scattered Trees and Parkland (WD5)

Areas of **Scattered trees and Parkland (WD5)** were recorded throughout the Proposed Scheme and were commonly associated with public amenity areas within residential neighbourhoods (**Plate 5-13**). They were generally comprised of a well-managed amenity grassland sward with tree species including beech (*Fagus sylvatica*), sycamore (*Acer pseudoplatanus*), pedunculate oak (*Quercus robur*), hornbeam (*Carpinus betulus*), horse-chestnut (*Aesculus hippocastanum*) and lime (*Tilia cordata*) scattered throughout. These habitats are fairly widespread in the environment and provide a refuge for a range of species in this urban landscape.



Plate 5-13: Area of **Scattered alder trees (WD5)** within amenity grassland field opposite St. Colmcille's Senior National School at the west of the scheme.

5.1.8

Hedgerows (WL1)

Hedgerows (WL1) were recorded frequently throughout the Proposed Scheme, with the general species composition and management varying throughout. Hedgerows were most frequently recorded along the boundaries of private dwellings, comprising predominantly ornamental shrub species with some native hedgerow species present (**Plate 5-14 – 5-15**).

Common non-native / ornamental shrub hedgerow species included New Zealand broadleaf (*Griselinia littoralis*), spotted laurel (*Aucuba japonica*), privet (*Ligustrum* spp.), cherry laurel (*Prunus laurocerasus*), *Cotoneaster* spp., *Hypericum* spp., red tip photinia (*Photinia x fraseri*), and cypress hedging (*Cupressus* spp.). Native hedgerow species included hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), bramble, willow (*Salix* spp.), with bracken (*Pteridium aquilinum*) and ivy frequently present in the ground flora.

Hedgerows act as strips of linear woodland that serve to connect isolated habitat patches and provide ecological corridors for species to move across the urban environment. They have the potential to support high levels of biodiversity and provide habitat for many floral and faunal species in the highly urbanised environment.



Plate 5-14: Hawthorn **Hedgerow (WL1)** with ivy and bramble dominated understory along fence running parallel to existing cycle lane on Ballyboden Way to the south of the scheme.



Plate 5-15: Non-native New Zealand broadleaf **Hedgerow (WL1)** recorded on Knocklyon Road to the west of the scheme.

5.1.9

Treelines (WL2)

Treelines (WL2) were recorded frequently throughout the proposed Active Travel Scheme. The general mix of species within treelines and the management regimes for the treelines varied. Treelines were most commonly recorded adjacent to roadways and associated with areas of amenity grassland (**Plates 5-16 – 5-18**).

Treelines comprised a mix of native and non-native species, including lime, ash, sycamore, birch, alder (*Alnus glutinosa*), beech, rowan (*Sorbus aucuparia*), sitka spruce (*Picea sitchensis*), hornbeam (*Carpinus spp.*) and cypress (*Cupressus*) species. Native treelines provide important ecological value to the urban environment, creating ecological corridors for species to move across the landscape.

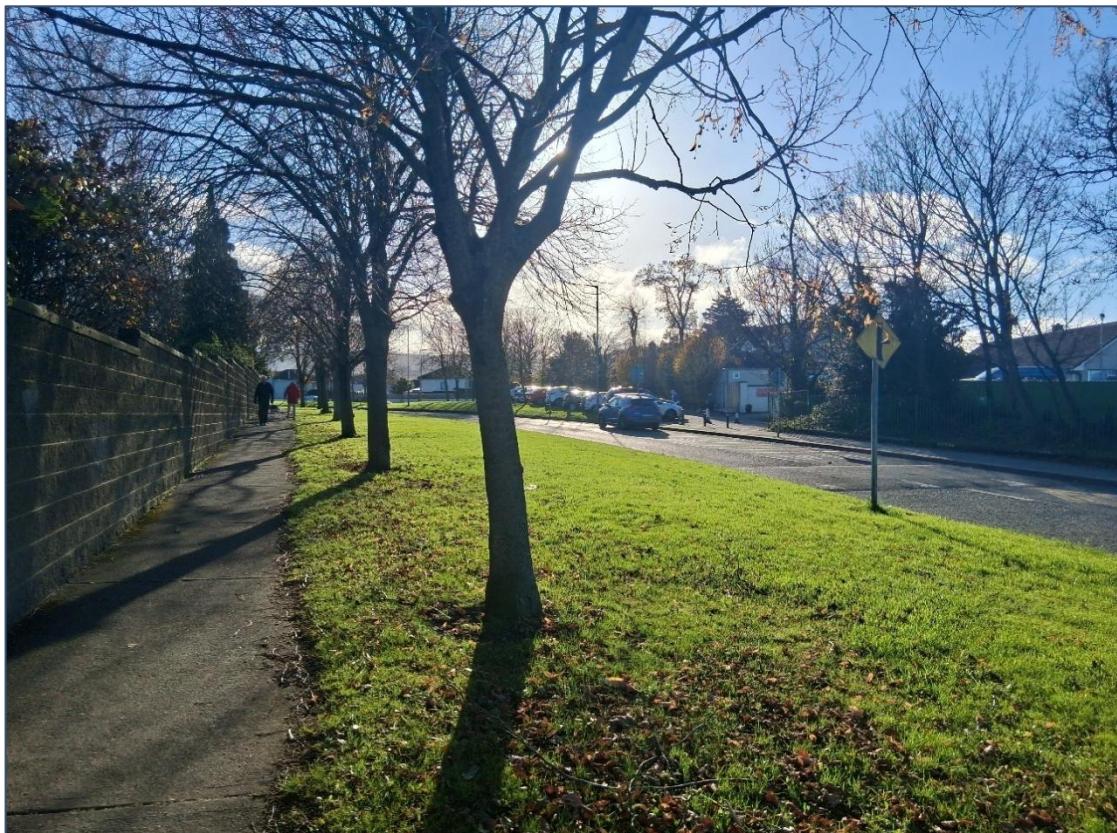


Plate 5-16: Lime **Treeline (WL2)** over amenity grassland along Knocklyon Road to the northwest of the scheme



Plate 5-17: Immature beech **Treeline (WL2)** along Templeroan Road to the north of the scheme.



Plate 5-18: Mature Sycamore **Treeline (WL2)** with occasional Norway maple and blackthorn/dogwood understorey recorded at the edge of amenity grassland field opposite St. Colmcille's Senior National School at the west of the scheme.

5.1.10 Scrub (WS2)

Areas of **Scrub (WS2)** occur in a few locations, with bramble often the dominant species, and frequent broadleaf dock, hedge bindweed, hawthorn, creeping thistle, cock's-foot, false oatgrass (*Arrhenatherum elatius*), colt's-foot (*Tussilago farfara*) and tufted vetch (*Vicia cracca*). Non-native buddleja (*Buddleja davidii*) is also common in scrub patches, especially on disturbed land or waste ground (**Plate 5-19**). Patches of unmanaged native scrub provide biodiversity value within the highly urbanised environment. Although they are relatively small and isolated, they provide ecological refugia for faunal species in this urban landscape.



Plate 5-19: Area of buddleja scrub with cow parsnip, cock's-foot and colt's foot recorded behind stone wall on Ballyboden Road to the east of the scheme.

5.2 Protected Species

The multi-disciplinary ecological walkover surveys did not record any protected fauna or floral species.

5.2.1 Non-volant Mammals

The Study Area was surveyed for all potential badger signs (latrines, badger prints, mammal tracks and setts). Although the patches of broadleaved woodland had the potential to provide a foraging resource for badger, the site is situated in an urban locality and is not well-connected to more suitable breeding/foraging grounds. No signs of badger were recorded at any location on the Proposed Scheme during the multi-disciplinary walkover survey.

Whilst the results of the desk study undertaken indicates that otter are known to occur in the wider vicinity of the proposed scheme, including the Owenadoher River (see Section 4.4.1), the habitats within the proposed Active Travel Scheme boundary are not deemed suitable to support otter, and there was no evidence of otter recorded during the walkover survey.

The desk study indicates that hedgehogs are known to occur in the wider vicinity of the proposed scheme (see Section 4.4.1). No signs of hedgehogs were recorded within the Study Area during surveys; however, the habitats present have the potential to provide suitable breeding, hibernation, and foraging resources, and the mosaic of habitats within the scheme may support this species.

Pine martens and red squirrels are also known to occur locally (see Section 4.4.1). While the broadleaf woodland habitats on site offer some suitability, these species are highly elusive and dependent on large, well-connected woodlands. Given the urban context of the Study Area, it is unlikely that they are present.

Pygmy shrews are similarly known to occur in the wider area, but the well-manicured habitats within the site offer limited potential. While this species is unlikely to be present on site, it may occur in adjacent hedgerows and private gardens.

5.2.2 Bats

During the walkover surveys on the 18th and 19th of November 2025, features and habitats within the proposed Active Travel Scheme were assessed for their suitability to support bats. Habitats recorded during the walkover survey are listed in **Table 5-2** below, together with their assessment regarding foraging and commuting bats.

With regard to foraging and commuting bats, areas of **Flower Beds and Borders (BC4)**, **Stone Walls and other stonework (BL1)**, **Buildings and Artificial Surfaces (BL3)**, **Improved Amenity Grassland (GA2)**, and **Dry Meadows and Grassy verges (GS2)** were considered to have *Negligible* suitability for commuting and foraging bats. **Scrub (WS1)** and **Scattered Trees and Parkland (WD5)** habitats were considered to have *Low* suitability, i.e., habitat that could be used by small numbers of commuting or foraging bats. The **(Mixed) Broadleaved Woodland (WD1)** was assigned *Moderate* suitability, i.e., high-quality habitat that is well connected to the wider landscape, that is likely to be used regularly by foraging bats. The **Hedgerows (WL1)** and **Treelines (WL2)** within the proposed Active Travel Scheme were assigned *Moderate* suitability for commuting and foraging bats, i.e., continuous habitat connected to the wider landscape that could be used by bats for flight paths.

Overall, the proposed Active Travel Scheme was regarded as having *Low* suitability for commuting bats, primarily due to the presence of linear habitats that provide connectivity within the landscape to

more suitable habitats along the River Dodder to the north of the scheme. Overall, the site was assigned *Low* suitability for foraging bats as it primarily consists of highly modified habitats.

Table 5.2 - Habitats recorded within the Study Area and their suitability classification for foraging and commuting bats.

Habitat	Code	Foraging and Commuting Suitability
Flower Beds and Borders	BC4	Negligible
Stone Walls and other stonework	BL1	Negligible
Buildings and Artificial Surfaces	BL3	Negligible
Improved Amenity Grassland	GA2	Negligible
Dry Meadows and Grassy Verges	GS2	Negligible
(Mixed) Broadleaved Woodland	WD1	Moderate
Scattered Trees and Parkland	WD5	Low
Hedgerows	WL1	Moderate
Treelines	WL2	Moderate
Scrub	WS1	Low

With regard to roosting habitat suitability, all trees that were designated for removal to facilitate the proposed Active Travel Scheme infrastructure were assessed for their potential to support roosting bats. None of the trees surveyed within the Study Area supported any potential roost features (PRFs) as they were semi-mature in nature and/or in good condition (i.e. Few dead branches/ rot holes, etc.).

A treeline of four mature sycamore trees with dense ivy was recorded within a site off Edmondstown Road at the southeastern edge of the scheme. These trees were also assessed by an ecologist during the dedicated bat surveys in support of a planning application for a proposed housing development at this site (Planning Ref: LRD23A/0002, see Section 7.2), and it was determined that they did not contain any PRFs that could provide roosting opportunities to bat species. Overall, the proposed Active Travel Scheme was regarded as having *Negligible* bat roosting suitability.

5.2.3

Birds

The broadleaf woodland, treelines, hedgerows and scrub habitats within the proposed Active Travel Scheme provide suitable nesting habitat for a variety of common garden and woodland bird species (i.e. wren, blackbird, great and blue tit, house sparrow). The areas of amenity grassland recorded along the road verges across the study area were generally too small to offer any winter foraging resource to bird species, including those associated with nearby protected sites.

The following birds were recorded during the walkover survey: hooded crow (*Corvus cornix*), rook (*Corvus frugilegus*), jackdaw (*Corvus monedula*), magpie (*Pica pica*), herring gull (*Larus argentatus*), black-headed gull (*Chroicocephalus ridibundus*), and wood pigeon (*Columba palumbus*). No significant numbers of birds were recorded.

5.3

Invasive Species

No invasive species listed under the Third Schedule of the *European Communities Regulations 2011* (S.I. 477 of 2015) or under the First Schedule of the *European Union (Invasive Alien Species) Regulations 2024* (S.I. No 374 of 2024) were recorded during the multi-disciplinary ecological walkover surveys. Several invasive plant species of both high and medium ecological impact were recorded across the Proposed Development Site, in accordance with *Transport Infrastructure Ireland (TII)* guidance² on invasive species management. High-impact species have the potential to cause significant ecological and structural impacts if not managed appropriately, while medium-impact species are capable of spreading and affecting native habitats, though generally to a lesser extent. These non-native species can often spread quickly, forming large, dense monocultures, excluding native vegetation (TII, 2020).

Cherry laurel (*Prunus laurocerasus*), snowberry (*Symporicarpos albus*), New Zealand broadleaf, *Cotoneaster* spp., buddleja (*Buddleja davidii*) and winter heliotrope (*Petasites pyrenaicus*), were recorded within hedgerows and scrub in a number of locations across the proposed Active Travel Scheme (Plates 5-20 – 5-24). Cherry laurel was the most abundant across the scheme, with dense stands recorded mostly in residential areas and along public park boundaries. Snowberry was recorded predominantly on the banks of watercourses, notably on the banks of the Owenadoher River along Ballyboden Way and at the river crossing on Scholarstown Road. Snowberry was also recorded in a hedgerow along Knocklyon Road. Winter heliotrope was common in areas of scrub and on disturbed ground along roadsides, notably within the road verge on Knocklyon Road.



Plate 5-20: Large patch of cherry laurel recorded on the edge of housing along Knockfield Manor Road.

² Transport Infrastructure Ireland (TII) (2020). GE-ENV-01104: The Management of Invasive Alien Plant Species on National Roads. TII, Dublin. Available at https://invasives.ie/app/uploads/2024/03/ManagementofIAPSOnNationalRoads_TII_STANDARD_Dec2020_GE-ENV-01104.pdf



Plate 5.21: Dense patch of invasive snowberry recorded along the banks of the Owenadoher River at the roundabout on Ballyboden Way.



Plate 5.22: Non-native New Zealand broadleaf hedgerow recorded along the fence of a residential estate on Knocklyon Road to the west of the scheme.



Plate 5-23: Cotoneaster recorded within a beech hedgerow along a footpath on Ballyboden Way.

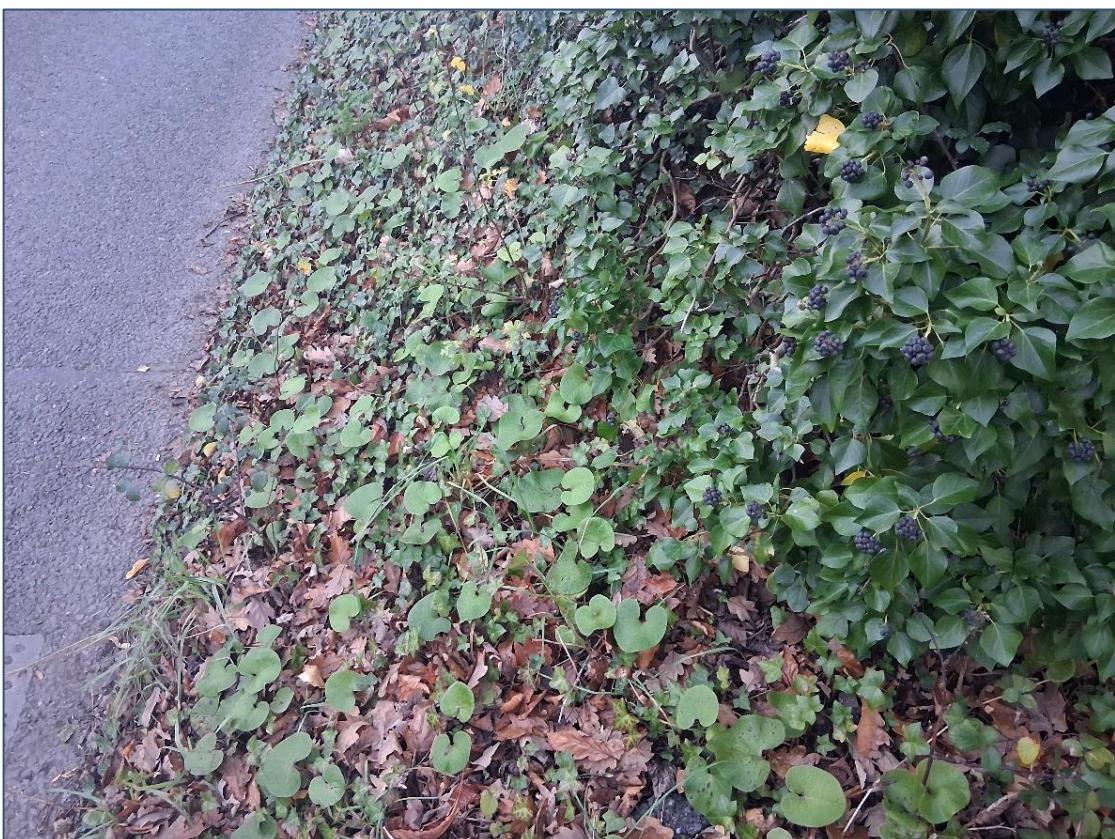
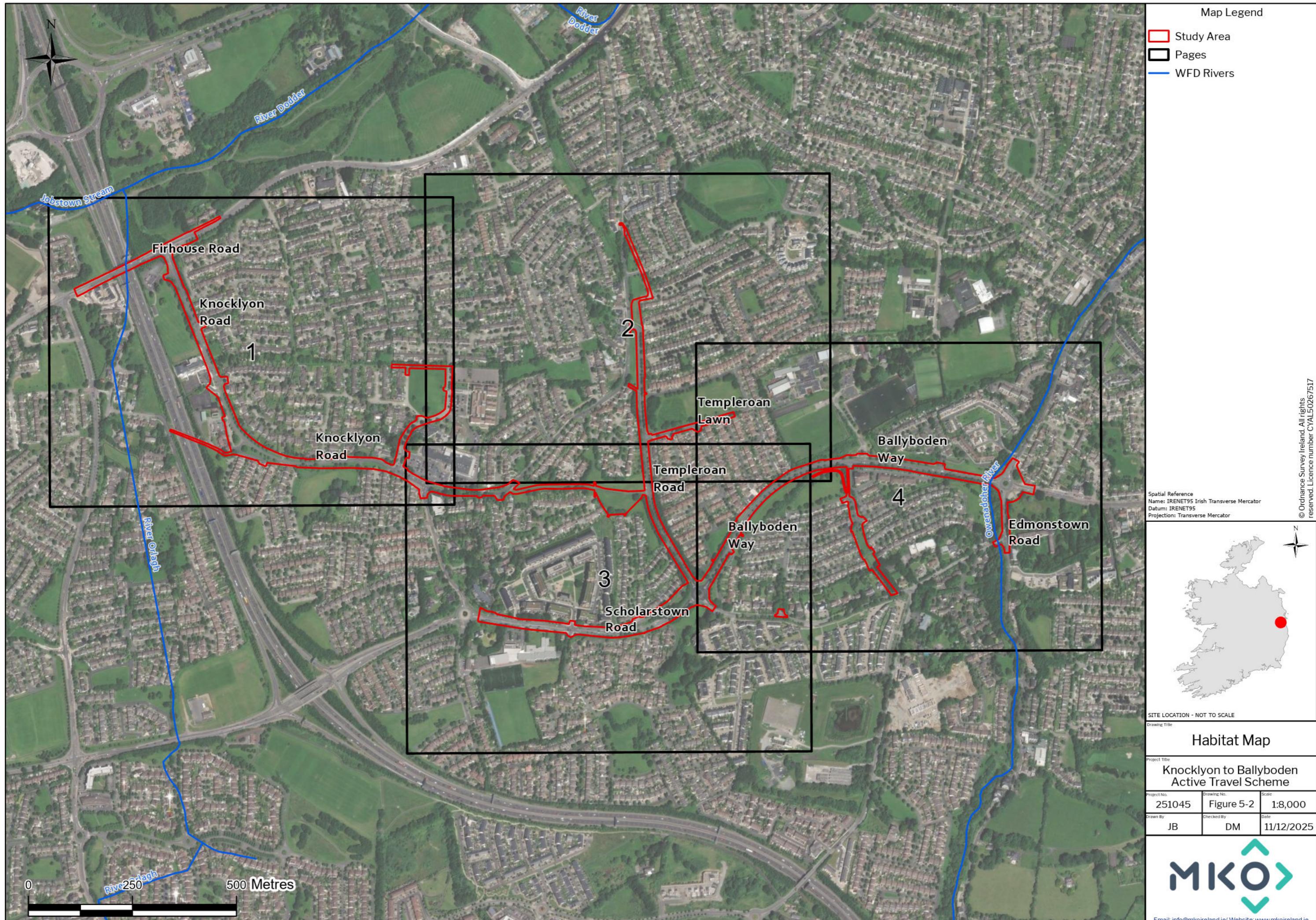
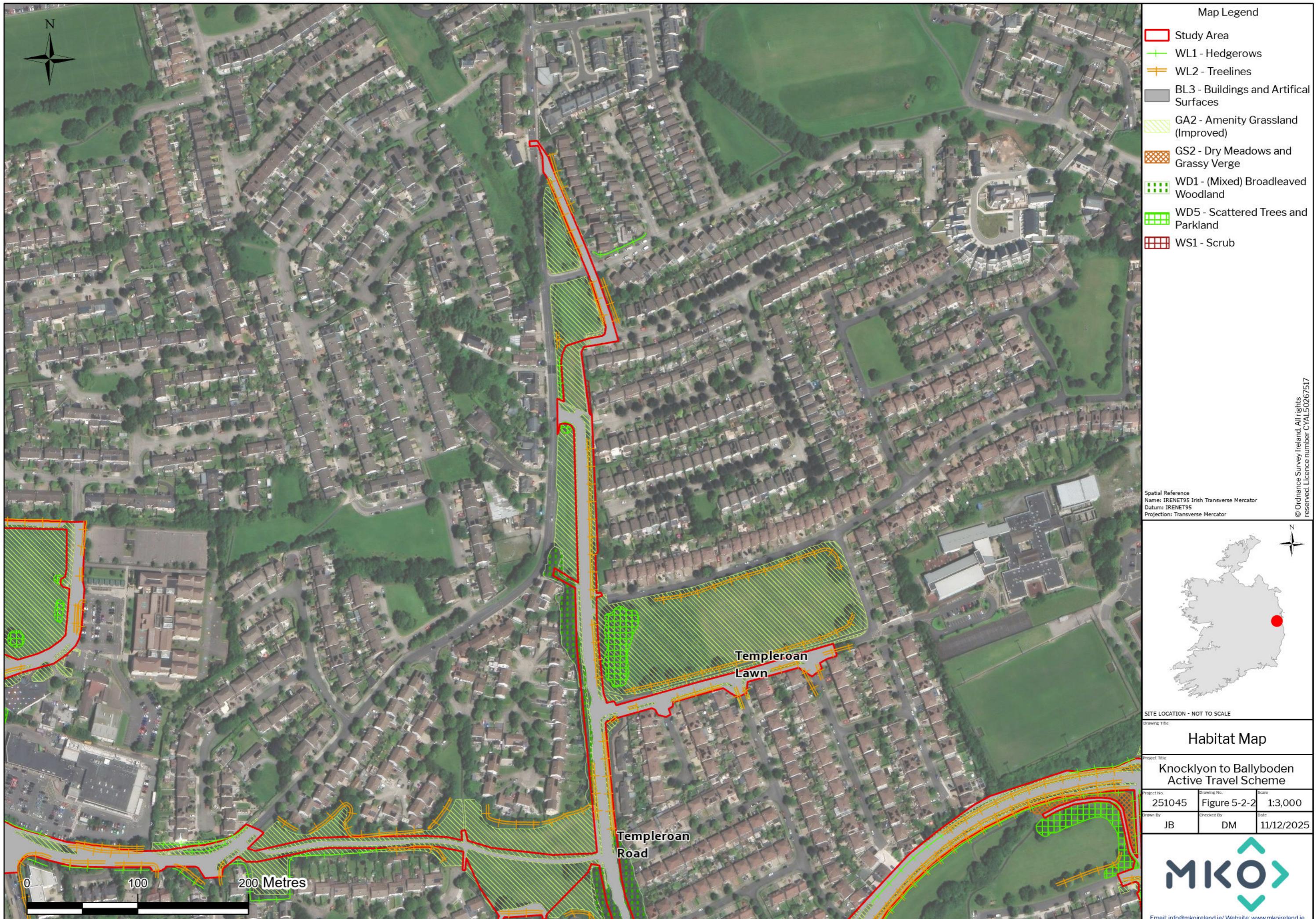
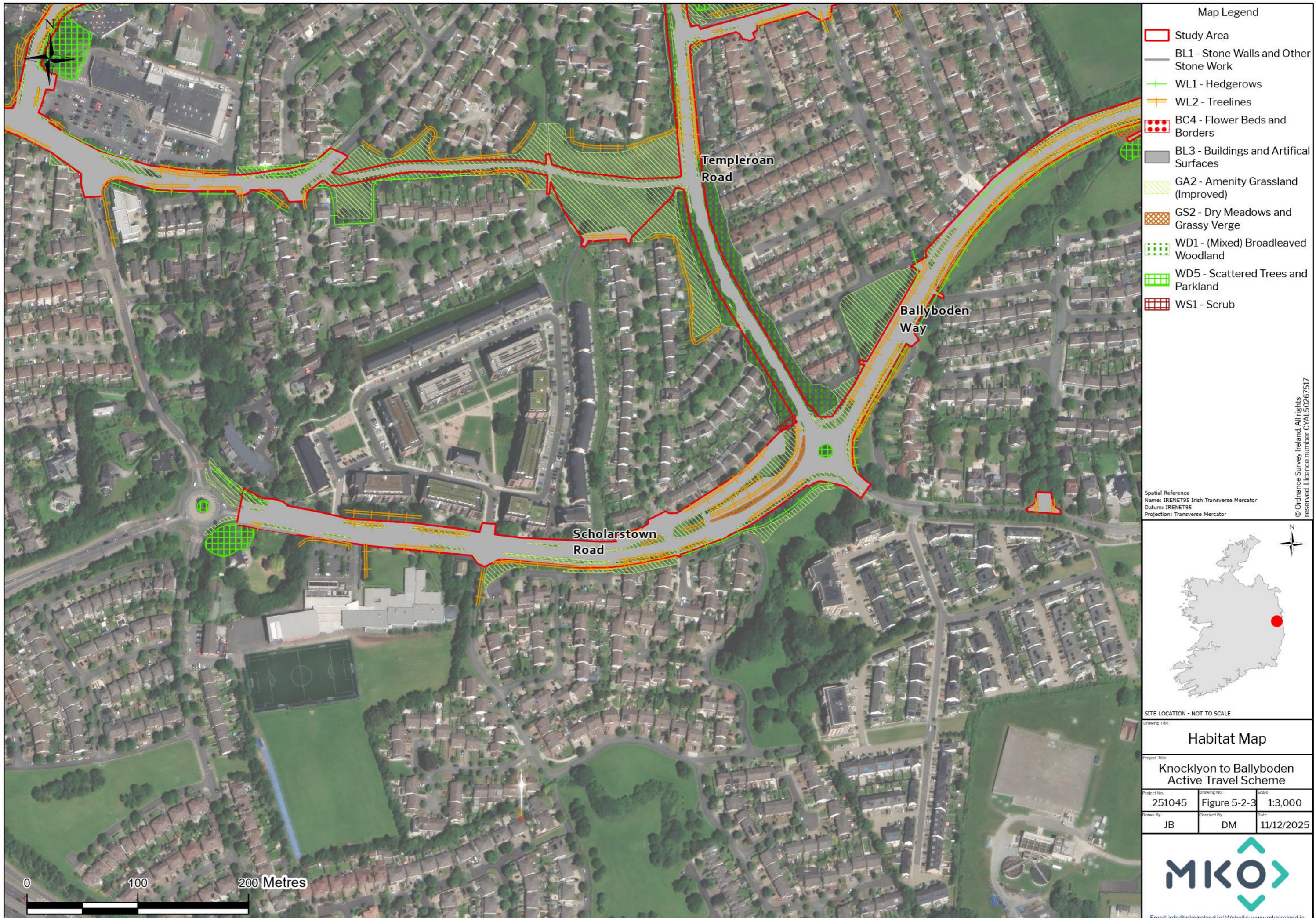


Plate 5-24: patch of winter heliotrope recorded on the road verge beneath a treeline along Knocklyon Road to the west of the scheme.











5.4

Identification of Key Ecological Receptors

Table 5-3 lists all identified Key Ecological Receptors (KERs) and assigns them an ecological importance in accordance with the Guidelines for Assessment of Ecological Impacts on National Road Schemes (TII, 2009). This table also provides the rationale for this determination.

Table 5-3: Importance of Ecological Receptors

Ecological Receptor	Rationale	KER (Y/N)
Designated Sites		
European Designated Sites	<p>No potential pathway for significant effects has been identified (see also the Appropriate Assessment Screening Report that accompanies the application).</p> <p>No potential for significant effects on European Sites has been identified, and these sites will therefore not be considered further within this EcIA.</p>	No
Nationally Designated Sites	No potential for significant effects on Nationally Designated Sites has been identified, and these sites will therefore not be considered further within this EcIA.	No
Habitats, Flora and Fauna		
Habitats of Local Importance (Higher value) (Mixed) Broadleaved Woodland (WD1)	This habitat is assessed as being of Local Importance (Higher value) given its capacity to provide for nesting, foraging and refuge for local fauna. However, due to the isolated nature of this habitat, and as the Proposed Development will not result in a loss of this habitat, this habitat has not been identified as a KER.	No
Habitats of Local Importance (Higher value) Scattered Trees and Parkland (WD5)	This habitat is assessed as being of Local Importance (Higher value) given its capacity to provide for nesting, foraging and refuge for local fauna. However, due to the relatively small area of this habitat, and as the Proposed Development will not result in a loss of this habitat, this habitat has not been identified as a KER.	No
Habitats of Local Importance (Higher value) Treelines (WL2)	This habitat is assessed as being of Local Importance (Higher value) , given the important ecological value it provides to the urban environment, creating ecological corridors for species to move across the landscape. The proposed Active Travel scheme will result in some loss of trees scattered along roadsides. On a precautionary basis, it has been included as a KER.	Yes

Habitats of Local Importance (Higher value) Hedgerows (WL1)	This habitat is assessed as being of Local Importance (Higher value) , given the ecological value it provides to the urban environment, creating ecological corridors for species to move across the landscape. The proposed Active Travel scheme will include for the maintenance and cutback of hedgerows, particularly along Ballyboden Way and the removal of small sections of hedgerow along the two proposed links off Ballyboden Way to Templeroan and The Lawn, Boden Park. Therefore, hedgerows have been included as a KER .	Yes
Habitats of Local Importance (Lower value) Improved Amenity Grassland (GA2)	This habitat is assessed as being of Local Importance (Lower value) as it is highly modified and widespread in the wider landscape. The Proposed Development will see the temporary, partial removal of this habitat and subsequent reinstatement, with minimal loss as a result of the proposed infrastructure footprint. It has not been identified as a KER.	No
Habitats of Local Importance (Lower value) Dry meadows and Grassy Verges (GS2)	This habitat is assessed as being of Local Importance (Lower value) as it is a semi-natural habitat and is widespread in the wider landscape. It has not been identified as a KER.	No
Habitats of Local Importance (Lower value) Scrub (WS1)	This habitat is assessed as being of Local Importance (Lower value) given its capacity to provide for nesting, foraging and refuge for local fauna. However, due to the relatively small area and isolated nature of this habitat, it has not been identified as a KER.	No
Habitats of Local Importance (Lower value) Buildings and artificial surfaces (BL3)	These habitats are assessed as being of Local Importance (Lower value) as this habitat is highly modified as well as being common and widespread in the local and wider landscape. For these reasons, this habitat has not been identified as a KER.	No
Habitats of Local Importance (Lower value) Stone Walls (BL1)	These habitats are assessed as being of Local Importance (Lower value) as this habitat is highly modified as well as being common and widespread in the local and wider landscape. For these reasons, this habitat has not been identified as a KER.	No
Habitats of Local Importance (Lower value) Flower Beds and Borders (BC4)	These habitats are assessed as being of Local Importance (Lower value) as this habitat is highly modified as well as being common in the local and wider landscape. Due to the relatively small area of this habitat, and its modified nature, this habitat has not been identified as a KER.	No

<p>Bats – Local Importance (Higher value)</p>	<p>Overall, the proposed Active Travel Scheme was regarded as having <i>Low</i> suitability for commuting bats, primarily due to the presence of linear habitats that provide connectivity within the landscape. The site was assigned <i>Low</i> suitability for foraging bats as it primarily consists of modified artificial habitats.</p> <p>No PRFs were recorded within any of the trees designated for removal during the ecological walkover of the Proposed Scheme. Therefore, the site was regarded as having <i>Negligible</i> bat roosting suitability.</p> <p>Based on the results of the desktop study, it is likely that one or more bat species – such as soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), common pipistrelle (<i>Pipistrellus pipistrellus</i> sensu lato), and Leisler's bat (<i>Nyctalus leisleri</i>) – which are common in urban areas, are utilising the site for foraging and commuting. As such, bat species have been identified as of Local Importance (Higher Value).</p> <p>During the operational phase, the proposed Active Travel Scheme is not expected to result in any significant changes to existing lighting conditions. The route will primarily utilise standard street lighting already in place along roads, designed to provide safe visibility for pedestrians, cyclists, and vehicles while complying with Irish national standards for public road lighting. No additional or intensively illuminated structures are proposed, and therefore, no significant impacts on local amenity or ecological receptors are anticipated.</p> <p>No significant effects on bats are anticipated as a result of the proposed Active Travel Scheme. There will be minimal tree removal, and no features of high importance for bats were identified within the site. For these reasons, bats have not been identified as a KER.</p>	<p>No</p>
<p>Birds – Local Importance (Higher value)</p>	<p>Based on the information identified within the desk study, and the assessment of the habitats during the multidisciplinary walkover survey, bird species have been identified as of Local Importance (Higher Value).</p> <p>The broadleaf woodland, scrub, scattered trees and parkland and treeline/hedgerow habitats within the scheme provide suitable nesting habitat for birds.</p> <p>The proposed Active Travel Scheme will result in the temporary loss of amenity grassland habitats, which provide some foraging resources for local bird populations. In addition, there will be minor losses of hedgerow habitats and approximately 30 trees, primarily within roadside treelines. All hedgerows scheduled for removal will be replanted with native species, and treelines will be supplemented with the planting of 133 new trees along the route during the construction phase. If vegetation or tree removal were to occur during the bird breeding season, there is potential for disturbance or mortality, which could affect breeding success.</p>	<p>Yes</p>

	<p>Temporary construction activities may also cause indirect effects on birds through habitat displacement or disturbance from increased noise and visual activity. Birds are therefore included as a KER for further assessment.</p>	
Other Fauna	<p>No breeding or resting sites for protected mammal species were identified within the Proposed Development site, and no evidence of their presence was recorded during surveys.</p> <p>While construction activities may temporarily increase noise and human activity in the area, the Proposed Development is located in an urban environment along busy roads, where any local fauna are likely habituated to regular anthropogenic noise.</p> <p>Given the temporary nature and limited scale of the works, any disturbance to mammals is expected to be minimal and not significant. Therefore, no impacts to protected mammal species are predicted, and they have not been identified as Key Ecological Receptors (KERs).</p>	No
Invasive Species	<p>No invasive species listed under the Third Schedule of the <i>European Communities Regulations 2011</i> (S.I. 477 of 2015) or the First Schedule of the <i>European Union (Invasive Alien Species) Regulations 2024</i> (S.I. No. 374 of 2024) were recorded during surveys. Several invasive plant species of high and medium ecological impact (as per TII guidance) were present within the Study Area.</p> <p>Although there is no statutory requirement to manage these species, they are capable of spreading quickly, forming large, dense monocultures, excluding native vegetation; however, given the temporary nature and limited scale of the works, the risk of spread is negligible. Therefore, no impacts to native habitats are predicted, and invasive species have not been identified as Key Ecological Receptors (KERs).</p>	No
Water Quality		
Local Importance (Higher value)	<p>The proposed Active Travel Scheme construction will consist of minor road realignment works, paving and the introduction of a barrier for the protection of vulnerable road users. It will be used by non-motorised traffic during operation.</p> <p>Existing surface water drainage within the proposed Active Travel Scheme is conveyed via stormwater drains, which discharge to adjacent watercourses. The proposed works will tie into the existing stormwater infrastructure, and surface water will continue to be discharged via the existing drainage network. During works, construction depths and drainage excavations will be limited to the existing construction formation and drainage levels.</p>	Yes

	<p>Whilst the proposed construction works do not have the potential to significantly impact on water quality or on aquatic receptors in proximity to the Site, including the two watercourses crossed by the Proposed Scheme, water quality has been considered further.</p> <p>On a precautionary basis, water quality has been included as a KER.</p>	
--	--	--

6. ECOLOGICAL IMPACT ASSESSMENT

6.1 Do Nothing Impact

The Study Area currently comprises of *Buildings and Artificial Surfaces (BL3)*, *Improved Amenity Grassland (GA2)*, *Dry Meadows and Grassy Verges (GS2)*, *Flower Beds and Borders (BC4)*, *Stone Walls (BL1)*, *(Mixed) Broadleaved Woodland (WD1)*, *Scattered Trees and Parkland (WD5)*, *Hedgerows (WL1)*, *Treelines (WL2)*, and *Scrub (WS1)* habitats. If the proposed Active Travel Scheme were not to proceed, the area would likely remain in a very similar condition, maintained as managed urban habitats, and the ecological value of the site would remain much unchanged.

6.2 Likely Significant Effects During Construction Phase

6.2.1 Effects on Habitats during Construction

The proposed works will take place within areas of the site that comprise existing patches of *Improved amenity grassland (GA2)* with areas of *Dry meadows and grassy verges (GS2)*, *Hedgerows (WL1)*, and *Treelines (WL2)* also present. None of the habitats within the works areas corresponds to habitats listed on Annex I of the EU Habitats Directive.

The proposed Active Travel Scheme will result in the loss of 30 trees, predominantly scattered within treelines along roadsides. This will result in a small temporary degradation of the habitat during construction. However, 133 new trees will be planted along the route during the construction phase, to bolster existing treelines or create new ones along road verges. No significant effects on these habitats are anticipated as a result of the Proposed Development.

As part of the delivery of the proposed Active Travel Scheme, sections of hedgerow along Ballyboden Way will be selectively cut back to facilitate the provision of the cycle path. In this location, existing hedgerows are overgrown and encroach onto the current footpaths. Where required, hedgerows will be trimmed back to the original footpath boundaries. These works are comparable to routine maintenance and will be limited to the pruning of lateral growth. No removal of hedgerow trees is proposed. Additionally, an overgrown *Hypericum* hedgerow located along the verge between the carriageway and the cycle path on the northern side of Ballyboden Way will also be trimmed in both height and width. The hedgerow is currently approximately 2 m in height and will be reduced to approximately 1 m to improve visibility and sightlines along the adjacent cycle lane.

In addition, limited sections of hedgerow will be removed at the two proposed connections between Ballyboden Way and Templeroan Avenue, and between Ballyboden Way and The Lawn, Boden Park, to facilitate the provision of new pedestrian linkages. This will result in the removal of approximately 4 m of hedgerow at each location (refer to Drawing *O2B-ARU-XX-XX-DR-C0100-19*, **Appendix 1**). The hedgerows at these locations were dense, scrubby and comprised hawthorn with abundant bramble and ivy, frequent immature beech and sycamore, and occasional sections of non-native cherry laurel, with ground flora largely absent, apart from sparse ivy and bramble.

Any hedgerow enhancement or replanting will utilise native, pollinator-friendly species selected to provide nectar resources for a range of pollinating insects and to enhance overall biodiversity within the Study Area, in accordance with the objectives of the *All-Ireland Pollinator Plan 2021–2025* (NBDC, 2021). No significant long-term effects arising from the proposed maintenance of hedgerows within the site are anticipated.

The Proposed Development will result in the permanent removal of approximately 8 m of hedgerow habitat, in two 4 m sections along Ballyboden Way. This loss of hedgerow habitat, within its urban context, is not considered significant at any geographical scale.

Overall, there will be neutral effects on all the habitats identified within the Study Area, as minimal losses are anticipated, with positive effects expected on treelines and scattered trees and parkland habitats in the long term, as 133 new trees will be planted along the route, resulting in a net increase of 103 trees.

6.2.2 Effects on Water Quality

The Proposed Development will include the construction of cycle lanes and upgraded footpaths within existing road curtilage, as well as some road realignments.

The proposed construction works are expected to be comparable in nature, scale, methodology, and duration to typical road resurfacing or routine operational road maintenance activities. All works will employ conventional construction plant and equipment, with appropriate traffic management and environmental protection measures in place to minimise impacts on surrounding areas, including noise, dust, and temporary disruption to users.

Construction depth and drainage excavation will be limited to existing construction formation and drainage levels on existing roads. All works are designed to prevent direct surface water runoff to adjacent watercourses. Permeability links constructed through grass verges will involve shallow excavations, as these areas are intended for pedestrian and cyclist use only and not for vehicular traffic. Where the proposed route crosses rivers, existing bridges will be utilised, avoiding any in-stream construction or disturbance.

Existing surface water drainage within the proposed Active Travel Scheme Area is conveyed via stormwater drains, which discharge to adjacent watercourses – the Orlagh Stream (IE_EA_09D010620) and the Owenadoher River (IE_EA_09O011700) – which in turn, discharge into the River Dodder (IE_EA_09D010620). The proposed works will tie into the existing stormwater infrastructure, and surface water will continue to be discharged via the existing drainage network. The incorporation of Sustainable Drainage Systems (SuDS) within the development design will help manage surface water runoff, reducing infiltration and percolation to the existing drainage network.

Any potential effects anticipated on surface water quality as a result of the Proposed Development construction will be minor and temporary in nature. No significant effects are anticipated on any aquatic receptors, including the two watercourses crossed by the Scheme. On a precautionary basis, the following pollution prevention measures will be implemented, in line with best practice, to reduce any potential impacts on water quality:

Environmental Monitoring

- The contractor will assign a member of the site staff as the environmental officer. Any environmental incidents or non-compliance issues will immediately be reported to the project team.

Pollution Prevention

- Excavated spoil (if any) will be stockpiled and contained entirely within the confines of the site boundaries.
- During earthwork activities, the following mitigations will be adhered to:
 - Material that is not re-used will be transported off site to a designated waste facility.
 - Stockpiling will be limited to areas where the ground is stable and well drained. Stockpiles will be located where the risk of water quality deterioration is minimal and will also have an adequate buffer (>10 m) from aquatic zones.
 - Exposed surfaces will be re-vegetated as soon as possible following construction.

- Earthworks will not be carried out in close proximity to watercourses during periods of heavy rainfall.
- All excavated material will be removed to suitable stockpile areas. The volume of material to be managed is anticipated to be minor due to the nature and extent of works.
- Daily monitoring and inspections of site drainage during construction will be completed by the appointed environmental officer;
- Good construction practices, such as wheel washers and regular plant maintenance, will ensure minimal risk. The Construction Industry Research and Information Association (CIRIA) provide guidance on the control and management of water pollution from construction sites (*Control of Water Pollution from Construction Sites, guidance for consultants and contractors*, CIRIA, 2001), which provides information on these issues. This will ensure that surface water arising during the course of construction activities will contain minimal sediment.

Cement Based Products

- No batching of wet-cement products will occur on site.
- Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place.
- Where possible, pre-cast elements for concrete works will be used.
- Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible.
- No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed.
- Use weather forecasting to plan dry days for pouring concrete.
- Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.

Waste Management

- All waste will be collected in skips, and the site will be kept tidy and free of debris at all times.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or recycling.
- All construction waste materials will be stored within the confines of the site, prior to removal from the site to a permitted waste facility.

Wastewater Disposal

- A self-contained port-a-loo with an integrated waste holding tank will be used at the site compounds, maintained by the providing contractor, and removed from site on completion of the construction works; No foul water will be discharged on-site during the construction.

Applicable guidance to be followed

Good practice guidelines on the control of water pollution from construction sites developed by CIRIA in particular; *Masters-Williams et al. (2001). Control of Water Pollution from Construction Sites, guidance for consultants and contractors, C532 Construction Industry Research and Information*.

Whilst no significant impacts on water quality are anticipated due to the nature and scale of the Proposed Development, the implementation of the preventive measures described above will minimise the risk of any potential impacts on water quality. No significant residual effects are anticipated on water quality as a result of the construction of the proposed Active Travel Scheme.

6.2.3

Effects on Fauna during Construction

The effects of habitat loss and disturbance to faunal KER species during the construction phase of the development is considered in this section. The following faunal species have been identified as KERs

for further assessment in the following subsections:

➤ **Birds**

6.2.3.1 **Assessments of Potential Impacts on Birds**

The construction of the proposed Active Travel Scheme will result in the temporary loss of amenity grassland habitats that provide some foraging resource for local birds, as well as the loss of hedgerow habitat and individual trees across the scheme. These habitats are common and widespread in the land surrounding the site and the temporary loss of nesting and foraging habitat is not considered significant at any geographic scale as it is likely that birds currently utilising the Study Area would simply be displaced to available suitable habitat in the wider area for the duration of construction. However, if vegetation clearance coincided with the bird nesting season (March – September), there is a potential for direct mortality to nesting birds to occur. This would be significant at a local geographic scale.

6.2.3.1.1 **Mitigation**

To avoid mortality and/or disturbance impacts to nesting birds, vegetation clearance will be undertaken outside the bird nesting season which runs from the 1st of March to the 31st of August. Any cutting/ pruning or clearance of woody or scrubby vegetation that may be required outside the season described above will be preceded by a pre-commencement survey by a suitably qualified ecologist to ensure that no bird nests are present. Should nesting birds be encountered, the trees/vegetation will be left until nesting activity has ceased.

With the implementation of mitigation measures outlined above, no significant residual effects are anticipated on local bird populations as a result of the construction of the proposed Active Travel Scheme.

6.3

Likely Significant Effects During Operational Phase

There will be no additional habitat loss associated with the operational phase of the proposed Active Travel Scheme. No direct or indirect impacts on adjacent habitats are considered likely as a result of the operational phase of the proposed Active Travel Scheme. No wastewater will be produced and any surface water will be comparable with the existing baseline, as the scheme is aimed at non-motorised traffic. The operation of the proposal, therefore, will not have a significant impact on habitats and species at any geographic scale.

6.4

Impacts on Designated Sites

6.4.1

European Designated Sites

The proposed Active Travel Scheme is located completely outside the boundary of any European site.

In relation to European sites, an Appropriate Assessment Screening Report has been prepared to provide the competent authorities with the information necessary to complete an Appropriate Assessment for the proposed Active Travel Scheme in compliance with Article 6(3) of the Habitats Directive.

The AASR concluded as follows: *'Following an examination, analysis and evaluation of the relevant data and information set out within this Screening Report, it can be concluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light*

of the conservation objectives of the relevant European sites, that the proposed Active Travel Scheme, individually or in combination with other plans and projects, will not have any significant effect on any European Designated Sites'.

Given that no potential pathway for significant effects on European Sites has been identified, there is no requirement for Appropriate Assessment or the preparation of a Natura Impact Statement (NIS).

6.4.2 **Impacts on Nationally Designated Sites**

Impacts on nationally designated sites including NHAs and pNHAs are considered in this section of the report. Where such sites are also designated as SACs or SPAs (European Sites) they have been assessed and considered under that designation.

There are no NHAs within the potential zone of influence of the proposed Active Travel Scheme. There is no potential for direct or indirect effects on pNHA as no pathways for effect were identified as a result of the proposed Active Travel Scheme. Significant effects on Nationally Designated Sites are not anticipated.

7. CUMULATIVE IMPACT ASSESSMENT

The Proposed development site was considered in combination with other plans and projects in the area that could result in cumulative impacts on the KERs identified in Section 5.4 of this report, including European Designated Sites and Nationally designated sites. This included a review of online Planning Registers and served to identify past, present and future plans and projects, their activities and their predicted environmental effects.

7.1 Assessment of Plans

The following development plans have been reviewed and taken into consideration as part of this assessment:

- South Dublin County Council Development Plan 2022-2028
- Regional Spatial and Economic Strategy 2019 - 2031
- 4th National Biodiversity Action Plan 2023-2027

The review focused on policies and objectives that relate to designated sites for nature conservation, biodiversity and protected species. An overview of the search results with regard to plans is provided in **Table 7-1**.

Potential for in-combination effects in relation to European Sites are considered within the AA Screening Report that accompanies this application.

Table 7-1: Assessment of Development Plans

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
South Dublin County Council Development Plan 2022 - 2028	<p>Policy SM1: Overarching – Transport and Movement</p> <ul style="list-style-type: none"> SM1 Objective 1: To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets. <p>Policy SM2: Walking and Cycling</p> <ul style="list-style-type: none"> SM2 Objective 2: To create a comprehensive and legible County-wide network of safe cycling and walking routes that link communities to key destinations, amenities and leisure activities through implementation of the Cycle South Dublin project, the recommendations of the Sustainable Movement Studies and other permeability measures. SM2 Objective 3: To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced by promoting compact growth and permeability in the design and layout of new development areas. SM2 Objective 4: To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced in existing built-up areas, by removing barriers to movement and providing active travel facilities in order to increase access to local shops, schools, public transport services and other amenities, while also taking account of existing patterns of anti-social behaviour and other unintended consequences of removal of such barriers. SM2 Objective 6: To ensure that facilities for pedestrians and cyclists are designed in accordance with the principles, approaches and standards contained in the National Cycle Manual or any updated guidance and to promote off-road cycle infrastructure where feasible, subject to any design having regard to environmental sensitivities. SM2 Objective 14: To ensure that all walking and cycling routes have regard to environmental conditions and sensitivities including biodiversity, protected species and designated sites and to incorporate appropriate avoidance and mitigation measures as part of any environmental assessments. <p>Policy NCBH2: Biodiversity</p> <ul style="list-style-type: none"> NCBH2 Objective 1: To support the implementation of the National Biodiversity Action Plan (2017- 2021) and the All-Ireland Pollinator Plan (2021-2025) and to support the adoption and implementation of the South Dublin County Biodiversity Action Plan (2020-2026) and Pollinator Action Plan (2021-2025) and any superseding plans. 	<p>The development plan was reviewed, with particular reference to Policies and Objectives that relate to biodiversity, protected species and designated sites. All relevant biodiversity legislation is being adhered to, and there will be no impact on biodiversity as a result of the Proposed Development. A comprehensive Screening for Appropriate Assessment has been submitted along with this application in which cumulative impacts with regard to European Sites is assessed.</p> <p>No potential for cumulative impacts on ecological receptors when considered in conjunction with the Proposed Development were identified.</p> <p>No potential for significant in-combination effects on biodiversity was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects.</p>

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<ul style="list-style-type: none"> NCBH2 Objective 2: To ensure the protection of designated sites in compliance with relevant EU Directives and applicable national legislation. NCBH2 Objective 3: To protect and conserve the natural heritage of the County, and to conserve and manage EU and nationally designated sites and non-designated locally important areas which act as ‘stepping stones’ for the purposes of green infrastructure and Article 10 of the Habitats Directive. NCBH2 Objective 4: To protect our rivers and in particular to avoid overdevelopment which could have an adverse effect on the biodiversity and ecosystems of the river. <p>Policy NCBH3: Natura 2000 Sites</p> <ul style="list-style-type: none"> NCBH3 Objective 1: To prevent development and activities that would adversely affect the integrity of any Natura 2000 site located within or adjacent to the County and promote the favourable conservation status of the habitats and species integral to these sites. NCBH3 Objective 2: To ensure that plans, including land use plans, will only be adopted, if they either individually or in combination with existing and / or proposed plans or projects, will not have a significant adverse effect on a European Site, or where such a plan is likely or might have such a significant adverse effect (either alone or in combination), South Dublin County Council will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92 / 43 / EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the plan will not adversely affect the integrity of any European site, will South Dublin County Council adopt the plan, incorporating any necessary mitigation measures. A plan which could adversely affect the integrity of a European site may only be adopted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation. NCBH3 Objective 3: To ensure that planning permission will only be granted for a development proposal that, either individually or in combination with existing and / or proposed plans or projects, will not have a significant adverse effect on a European Site, or where such a development proposal is likely or might have such a significant adverse effect (either alone or in combination), the planning authority will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92 / 43 / EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the development proposal will not adversely affect the integrity of any European site, will the planning authority agree to 	

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<p>the development and impose appropriate mitigation measures in the form of planning conditions. A development proposal which could adversely affect the integrity of a European site may only be permitted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation.</p> <p>Policy NCBH4: Proposed Natural Heritage Areas</p> <ul style="list-style-type: none"> • NCBH4 Objective 1: To ensure that any proposal for development within or adjacent to a proposed Natural Heritage Area (pNHA) is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the pNHA particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats. • NCBH4 Objective 2: To restrict development within or adjacent to a proposed Natural Heritage Area to development that is directly related to the area's amenity potential subject to the protection and enhancement of natural heritage and visual amenities including biodiversity and landscapes. Such developments will be required to submit an Ecological Impact Assessment prepared by a suitably qualified professional. • NCBH4 SL01: To promote opportunities to improve the habitat relating to the Lugmore Glen pNHA and to ensure that any proposals for development have full regard to the sensitivities of the area within the pNHA and along the Tallaght Stream. <p>Policy NCBH5: Protection of Habitats and Species Outside of Designated Areas</p> <p>Protect and promote the conservation of biodiversity outside of designated areas and ensure that species and habitats that are protected under the Wildlife Acts 1976 to 2018, the Birds Directive 1979 and the Habitats Directive 1992, the Flora (Protection) Order 2015, and wildlife corridors are adequately protected.</p> <ul style="list-style-type: none"> • NCBH5 Objective 1: To ensure that development does not have a significant adverse impact on biodiversity, including known rare and threatened species, and that biodiversity enhancement measures are included in all development proposals. • NCBH5 Objective 2: To ensure that an Ecological Impact Assessment is undertaken for developments proposed in areas that support, or have the potential to support, protected species or features of biodiversity importance, and that appropriate avoidance and mitigation measures are incorporated into all development proposals. 	

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<p>Policy NCBH10: Invasive Species</p> <p>Protect against and prevent the introduction and spread of invasive species within the County and require landowners and developers to adhere to best practice guidance in relation to the control of invasive species.</p> <ul style="list-style-type: none"> • NCBH10 Objective 1: To ensure that development proposals do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, applicants should submit a control and management programme with measures to prevent, control and/or eradicate the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I. 477 / 2011). • NCBH10 Objective 2: To ensure that the Council promptly and appropriately treats invasive species such as Japanese Knotweed, including where notified by members of the public that such species, located on public lands, pose a potential threat to property. <p>Policy NCBH11: Tree Preservation Orders and Other Tree / Hedgerow Protections</p> <p>Review Tree Preservation Orders (TPO) within the County and maintain the conservation value of trees and groups of trees that are the subject of a Tree Preservation Order while also recognising the value of and protecting trees and hedgerows which are not subject to a TPO.</p> <ul style="list-style-type: none"> • NCBH11 Objective 1: To review Tree Preservation Orders within the County and maintain the conservation value of trees and groups of trees that are the subject of any Tree Preservation Order. • NCBH11 Objective 2: To regularly evaluate and identify trees of amenity value within the County with a view to making them the subject of Tree Preservation Orders or otherwise protecting them and to furnish information to the public in this regard. • NCBH11 Objective 3: To protect and retain existing trees, hedgerows, and woodlands which are of amenity and / or biodiversity and / or carbon sequestration value and / or contribute to landscape character and ensure that proper provision is made for their protection and management taking into account Living with Trees: South Dublin County Council's Tree Management Policy (2015-2020) or any superseding document and to ensure that where retention is not possible that a high value biodiversity provision is secured as part of the phasing of any development to protect the amenity of the area. 	

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<ul style="list-style-type: none"> NCBH11 Objective 4: To protect the hedgerows of the County, acknowledging their role as wildlife habitats, biodiversity corridors, links within the County's green infrastructure network, their visual amenity and landscape character value and their significance as demarcations of historic field patterns and townland boundaries. (Refer also to Chapter 4: Green Infrastructure). NCBH11 Objective 5: To ensure that intact hedgerows / trees will be maintained above the 120m contour line within the County ensuring that the strong rural character will not be diluted and that important heritage features and potential wildlife corridors are protected. <p>Policy GI1: Green Infrastructure - Overarching: Protect, enhance and further develop a multifunctional GI network, using an ecosystem services approach, protecting, enhancing and further developing the identified interconnected network of parks, open spaces, natural features, protected areas, and rivers and streams that provide a shared space for amenity and recreation, biodiversity protection, water quality, flood management and adaptation to climate change.</p> <ul style="list-style-type: none"> GI1 Objective 1: To establish a coherent, integrated and evolving GI Network across South Dublin County with parks, open spaces, hedgerows, trees including public street trees and native mini woodlands (Miyawaki-Style), grasslands, protected areas and rivers and streams and other green and blue assets forming strategic links and to integrate and incorporate the objectives of the GI Strategy throughout all relevant land use plans and development in the County GI1 Objective 3: To facilitate the development and enhancement of sensitive access to and connectivity between areas of interest for residents, wildlife and biodiversity, and other distinctive landscapes as focal features for linkages between natural, semi natural and formalised green spaces where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of Natura 2000 sites and protected habitats outside of Natura 2000 sites. <p>Policy GI2: Biodiversity: Strengthen the existing Green Infrastructure (GI) network and ensure all new developments contribute towards GI, in order to protect and enhance biodiversity across the County as part of South Dublin County Council's commitment to the National Biodiversity Action Plan 2021-2025 and the South Dublin County Council Biodiversity Action Plan, 2020-2026, the National Planning Framework (NPF) and the Eastern and Midlands Region Spatial and Economic Strategy (RSES).</p>	

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<ul style="list-style-type: none"> GI2 Objective 1: To reduce fragmentation and enhance South Dublin County's GI network by strengthening ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional network by connecting all new developments into the wider GI Network. GI2 Objective 2: To protect and enhance the biodiversity and ecological value of the existing GI network by protecting where feasible (and mitigating where removal is unavoidable) existing ecological features including tree stands, woodlands, hedgerows and watercourses in all new developments as an essential part of the design and construction process, such proactive approach to include provision to inspect development sites post construction to ensure hedgerow coverage has been protected as per the plan. GI2 Objective 5: To protect and enhance the County's hedgerow network, in particular hedgerows that form townland, parish and barony boundaries recognising their historic and cultural importance in addition to their ecological importance and increase hedgerow coverage using locally native species including a commitment for no net loss of hedgerows on any development site and to take a proactive approach to protection and enforcement. GI2 Objective 7: To enhance the biodiversity value of publicly owned hard infrastructure areas by incorporating the planting of new trees, grasses and other species, thereby integrating this infrastructure into the overall GI network. 	
Regional Spatial and Economic Strategy 2019 - 2031	<p>Biodiversity and Natural Heritage</p> <p>RPO 7.16: Support the implementation of the Habitats Directives in achieving an improvement in the conservation status of protected species and habitats in the Region and to ensure alignment between the core objectives of the EU Birds and Habitats Directives and local authority development plans.</p> <p>RPO 7.17: Facilitate cross boundary co-ordination between local authorities and the relevant agencies in the Region to provide clear governance arrangements and coordination mechanisms to support the development of ecological networks and enhanced connectivity between protected sites whilst also addressing the need for management of alien invasive species and the conservation of native species.</p> <p>RPO 7.18: Work with local authorities and state agencies to promote the development of all aspects of park management in the Wicklow National Park and the Slieve Bloom Mountains.</p>	<p>The development plan was reviewed, with particular reference to Policies and Objectives that relate to the biodiversity, protected species and designated sites. All relevant biodiversity legislation is being adhered to, and there will be no impact on biodiversity as a result of the Proposed Development. A comprehensive Screening for Appropriate Assessment has been submitted along with this application in which cumulative impacts with regard to European Sites is assessed.</p> <p>No potential for cumulative impacts when considered in conjunction with the Proposed Development were identified.</p>

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<p>RPO 7.19: Support the consideration of designating a National Park for the peatlands area in the Midlands.</p> <p>RPO 7.20: Promote the development of improved visitor experiences, nature conservation and sustainable development activities within the Dublin Bay Biosphere in cooperation with the Dublin Bay UNESCO Biosphere Partnership.</p> <p>RPO 7.22: Local authority development plan and local area plans, shall identify, protect, enhance, provide and manage Green Infrastructure in an integrated and coherent manner and should also have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species.</p>	<p>No potential for significant in-combination effects on biodiversity was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects.</p>
4th National Biodiversity Action Plan 2023-2027	<p>Ireland's 4th National Biodiversity Action Plan 2023-2030 (Department of Housing, Local Government and Heritage, 2024) (the "NBAP"). The NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. It demonstrates Ireland's continuing commitment to meeting and acting on its obligations to protect Ireland's biodiversity for the benefit of future generations and will implement this through a number of key targets, actions and objectives. The Wildlife (Amendment) Act 2023 introduced a new public sector duty on biodiversity. The legislation provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the NBAP. The NBAP sets out five key objectives as follows.</p> <p>Objective 1: Adopt a Whole-of Government, Whole of Society Approach to Biodiversity. Proposed actions include capacity and resource reviews across Government; determining responsibilities for the expanding biodiversity agenda providing support for communities, citizen scientists and business; and mechanisms for the governance and review of this National Biodiversity Action Plan.</p> <p>Objective 2: Meet Urgent Conservation and Restoration Needs. Supporting actions will build on existing conservation measures. Efforts to tackle Invasive Alien Species will be elevated. The protected area network will be expanded to include the Marine Protected Areas. The ambition of the EU Biodiversity Strategy will be considered as part of an evolving work programme across Government</p>	<p>The objectives set out in the NBAP aim to protect and enhance and promote biodiversity, nature restoration on the Island of Ireland and also contribute to International biodiversity initiative.</p> <p>No potential for cumulative impacts were identified upon review of the Plan in conjunction with the Proposed development.</p> <p>No potential for significant in-combination effects on biodiversity was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects.</p>

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on Ecological Receptors and Protected Sites
	<p>Objective 3: Secure Nature's Contribution to People. Actions highlight the relationship between nature and people in Ireland. These include recognising the tangible and intangible values of biodiversity, promoting nature's importance to our culture and heritage and recognising how biodiversity supports our society and our economy.</p> <p>Objective 4: Enhance the Evidence Base for Action on Biodiversity. This objective focuses on biodiversity research needs, as well as the development and strengthening of long-term monitoring programmes that will underpin and strengthen future decision-making. Action will also focus on collaboration to advance ecosystem accounting that will contribute towards natural capital accounts.</p> <p>Objective DS 10 – Impacts of Developments on Protected Sites Have regard to any impacts of development on or near existing and proposed Natural Heritage Areas, Special Protection Areas and Special Areas of Conservation, Nature Reserves, Ramsar Sites, Wildfowl Sanctuaries, Salmonoid Waters, Refuges for Flora and Fauna, Conamara National Park, shellfish waters, freshwater pearl mussel catchments and any other designated sites, including future designations.</p> <p>Objective 5: Strengthen Ireland's Contribution to International Biodiversity Initiatives. Collaboration with other countries and across the island of Ireland will play a key role in the realisation of this Objective. Ireland will strengthen its contribution to international biodiversity initiatives and international governance processes, such as the United Nations Convention on Biological Diversity.</p>	

7.2

Assessment of Projects

The Knocklyon to Ballyboden Active and Sustainable Travel Scheme forms part of a wider initiative to deliver a comprehensive walking and cycling route between Tallaght and Ballyboden. This active travel network comprises three interconnecting projects (Firhouse Road Active Travel Improvement Scheme; Knocklyon to Ballyboden Active and Sustainable Travel Scheme; Old Bawn Road Active Travel Scheme). Upon completion, these schemes will link directly to create a unified active travel network. It is noted that the three schemes, subject to planning, will be delivered separately.

The nature, scale and design of each of the three schemes are similar, consisting of localised, linear active travel improvements within the existing urban road network. In light of the staggered delivery of the projects, their comparable characteristics, and the lack of potential for significant effects identified for Knocklyon to Ballyboden Active and Sustainable Travel Scheme, no potential for significant cumulative effects on ecological receptors has been identified when considered alongside the other two Active Travel Schemes.

A search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings was undertaken and served to identify past and future projects, their activities, and their environmental impacts. All relevant projects were considered in relation to the potential for cumulative effects. All relevant data was reviewed (e.g., individual EISs/EIARs, layouts, drawings etc.) for all relevant projects where available. The projects considered include extensions to houses, retention permission, change of use, small alterations and the following:

- **Planning Ref: SD25A/0150** – Permission for: a) The demolition of the 4 no. existing shed structures on site within the curtilage of the protected structure. b) The retention, alteration and conversion of Scholarstown House (Protected Structure) into two no. residential units comprised of 1 no. 2-bed and 1 no. 3-bed units served by private open space in the form of ground floor terraces. The proposed works to Scholarstown House include but are not limited to internal re-configuration; the re-location of the staircase to its original location within the house; the removal of non-original features including the closing up of non-original openings; and the creation of a new door opening within the existing alcove, and the blocking up of a window opening both located on the northern elevation. c) The construction of an apartment block ranging in height from 3 to 5 storeys containing 55 no. apartment units comprised of 16 no. 1-bed apartments, 26 no. 2-bed apartments, and 13 no. 3-bed apartments all served by private open space in the form of balconies and/or ground floor terraces. d) The Proposed Development also includes residential amenities, car and cycle parking accessed via a new pedestrian and vehicular access off Orlagh Grove with the existing entrances on Scholarstown Road and Orlagh Grove being re-configured to provide for pedestrian and cycle access and all ancillary development works required to facilitate the development including but not limited to, plant rooms, a substation, bin stores, landscaping, boundary treatments and lighting. The Proposed Development comprises the carrying out of works to a protected structure: Scholarstown House (RPS Ref: 322). Decision due date 18/12/2025 (Active application). The AASR and EcIA for this development were consulted and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site – overlapping Proposed Development area.
- **Planning Ref: LRD23A/0002** – The development will consist of the demolition of the existing former Institutional buildings and associated outbuildings (c.5,231 sq.m) and construction of a new residential development comprising 402 no. apartments (39 no. 1 beds, 302 no. 2 beds and 61 no. 3 beds) within 3 no. blocks ranging in height from 2 to 5 storeys over basement/lower ground floor. All residential units will be provided with associated private balconies/ terraces to the north/ south/ east/ west elevations. The development will include the following: Block A up to 5 storeys over basement/lower ground floor providing 118 no. units. Block B up to 5 storeys over basement providing 123 no. units. Block C up to 5 storeys over basement/lower ground floor providing 161 no. units. The development will also include a creche (c.656 sq.m) and 2 no. retail units (c.262 sq.m and c.97 sq.m) all located within Block A, along with c.322 sq.m of internal residential communal space located in Block C. The

development will include the provision of a new public park in the north of the site along Taylor's Lane. The development will include 290 no. car parking spaces and 1,054 no. cycle parking spaces provided at basement/surface level. The development will include for a revised vehicular access from Edmondstown Road and an emergency vehicular access from Taylor's Lane along with pedestrian/cyclist accesses to/from the site. The development will include for road improvement works along Edmondstown Road including the existing junction of Scholarstown Road/ Edmondstown Road. The development will include for all associated site development works, open spaces, landscaping, SuDs features, boundary treatments, plant areas, waste management areas/bin stores, car/cycle parking areas (including EV parking), and services provision (including ESB substation/ kiosks). Permission granted after appeal on 23/09/2025. The AASR/NIS and EcIA for this development were consulted and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site – overlapping Proposed Development area.

- **Planning Ref: SD24A/0265** – The Retention Planning Permission for the following as built alterations (previously granted layout Ref. No. SD20A/0095): (i) Change of use from Store Areas and Stairs Access to First Floor Level to Retail Area. (ii) Change of use from previously permitted Seating Area to Stores Area, relocated stairs to First Floor Store and public toilets accessed from the Retail Area. (iii) As constructed layout of Offices and Strong Room. (iv) As constructed lift to First Floor Store. (v) Increase in size of permitted Post Office Unit. (vi) Change of use from Retail Area to Seating Area. (vii) New Fire Escape Door on the Northern Elevation. (viii) Relocation of the existing fire escape door on the Eastern Elevation. (ix) As Constructed Canopy for the "Click and collect" facility on the Eastern side of the SuperValu Unit. (x) Relocation of the existing fire escape door and omission of the part of the Glazing permitted on the Southern Elevation. (xi) First Floor External cladding on the Southern and Western Elevation. (xii) Additional Cladding on the Western Facade of the Shopping Centre. (xiii) As constructed mono pitched glazed wind barrier on the Western side of the Entrance Tower to the Supervalu Unit. (xiv) As constructed location of the Trolley Bay on the on the Western side of the Entrance Tower to the Supervalu Unit. Permission granted 25/03/2025. The relevant documentation for this project was consulted, and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site: <100m.
- **Planning Ref: SD19A/0115** – Completion of works previously granted (SD11A/0254) to include: the construction of a PE hall, changing rooms, wc's, ancillary plant and storage; stage and fly tower to the existing assembly hall; 2 hard courts; improvements to existing paths, internal roadways; parking and drop off facilities; new entrance signage; 23 car parking spaces; bicycle parking; covered walkway; fencing; landscaping and associated site development works which lies within the curtilage of St. Mary's Convent, a Protected Structure; making good external walls to ancillary buildings to St. Mary's Convent; upgrade of access road as part of the improved access to the school; Retention of the previously granted demolition of a 1947 classroom wing; water tower and prefabs. Permission granted 10/04/2024. The relevant documentation for this project was consulted, and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site: <100m.
- **Planning Ref: SD20A/0140** – Permission for the construction of 2 grass playing pitches: pitch No.1 will measure some 145m long by 90m wide and pitch No.2 will measure some 133m long by 80m wide; club facilities including 4 changing rooms measuring 51sq.m each; storage facilities; function rooms; meeting rooms; physiotherapy facilities; kitchen facilities; wc and circulation space; site works include removal of existing hedgerows and trees; replanting areas; formation of a new pedestrian and vehicular entrance on Firhouse road; 67 car parking spaces; 24 bicycle spaces; perimeter pathway; fencing and attendant landscaping works. Permission granted 20/07/2021. The AASR and Ecological Impact Statement for this development were consulted and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site: <100m.
- **Planning Ref: SD20A/0146** – Permission for the installation of a cluster of solar PV panels measuring approximately 65sq.m lying flat on the roof of the technology rooms measuring approximately 350sq.m. Permission granted 14/09/2020. The relevant documentation for this project was consulted, and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site: <100m.

> **Planning Ref: SHD3ABP-305878-19** – Permission for the Demolition of all existing structures on site which include a single storey dwelling known as 'Beechpark' (172sq.m), a 2 storey dwelling known as 'Maryfield' (182sq.m), with associated garage/shed (33.5sq.m) and associated outbuildings (47.1sq.m); and the construction of 590 residential units (480 Build-to-Rent apartment units and 110 Build-to-Sell duplex units and apartments), ancillary residential support facilities and commercial floorspace. The total gross floor space of the development is 51,252sq.m over a partial basement of 5,888sq.m (which principally provides car and bicycle parking, plant and bin stores). The 480 'Build-to-Rent' units will be provided in 8 blocks as follows: 7 blocks ranging in height from part 5 to part 6 storeys (Blocks B1-B5, C1 and C3) and 1 block ranging in height from part 4 to part 6 storeys (Block C2) and will comprise 246 one bed units and 234 two bed units. The 110 'Build-to-Sell' units will be provided in 9 duplex blocks which will be 3 storeys in height (Blocks A1-A9) and will comprise 55 two bed units and 55 three bed units. The development will also consist of the provision of a part 1 to part 2 storey ancillary amenity block (Block D1) (414sq.m) within the central open space which comprises a gymnasium, lobby, kitchenette and lounge at ground floor level and lounge at first floor level in addition to a roof terrace (facing north, south and west) to serve the 'Build-to-Rent' residents; a 2 storey retail/café/restaurant building(Block D2 - 657sq.m) comprising 2 retail units at ground floor level (328.5sq.m) and a café/restaurant unit at first floor level (328.5sq.m); a creche (438sq.m) within Block C2 at ground floor level; and a Management Suite (261sq.m) and café/restaurant (288sq.m) within Block C3 at ground floor level all at a 5.35 hectare site located north of Scholarstown Road incorporating dwellings known as 'Beechpark' and 'Maryfield', Scholarstown Road, Dublin 16, D16 X3X8 and D16 N6V6. Works are also proposed to Scholarstown Road and Woodfield junction including new traffic signals, the elimination of the left-turn slip-lane into Woodfield off Scholarstown Road, upgraded public lighting and upgraded cycle and pedestrian facilities on an area measuring 0.7 hectares, providing a total application site area of 6.05 hectares. Permission granted 09/03/2020. The EIAR and AASR/NIS for this development were consulted and it was determined that the Proposed Development combined with this project would not have the potential to result in any significant in-combination effects. Approx. distance from site – overlapping Proposed Development area.

7.3

Conclusion of Cumulative Assessment

Following the detailed assessment provided in the preceding sections, it is concluded that the proposed Active Travel Scheme will not result in any residual adverse effects on biodiversity or protected sites, their integrity or their conservation objectives when considered on its own. There is therefore no potential for the proposed Active Travel Scheme to contribute to any cumulative adverse effects when considered in combination with other plans and projects.

In the review of the projects that was undertaken, no connection that could potentially result in additional or cumulative impacts was identified. Neither was any potential for different (new) impacts resulting from the combination of the various projects and plans in association with the proposed Active Travel Scheme.

Taking into consideration the reported residual impacts from other plans and projects in the area and the predicted impacts with the current proposal, no residual cumulative impacts have been identified with regard to biodiversity.

8. CONCLUSION

Following consideration of the residual effects (post mitigation) it is concluded that the proposed Active Travel Scheme will not result in any significant effects on any of the identified KERs. No significant effects on receptors of International, National, County Importance or Local importance (higher value) were identified.

The potential for effects on the European Designated Sites is fully described in Appropriate Assessment Screening Report that accompanies this application. The AASR concludes that in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed Active Travel Scheme, individually or in combination with other plans and projects, will not have any significant effect on any European Designated Sites. Similarly, with the prescribed mitigations in place, there is no potential for impact on any nationally designated site.

Provided that the proposed Active Travel Scheme is constructed and operated in accordance with the design and best practice that is described within this application, significant individual or cumulative effects on ecology are not anticipated at the international, national, county, or local scales or on any of the identified KERs.

REFERENCES

Birds Directive (2009/47/EC) – http://ec.europa.eu/environment/naturelegislation/birdsdirective/index_en.htm

CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater and Coastal

CIRIA: Masters-Williams et al. (2001). Control of Water Pollution from Construction Sites, guidance for consultants and contractors, C532 Construction Industry Research and Information

Collins, J. (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust, London.

European Commission (2022). List of Invasive Alien Species of Union Concern (updated list under Regulation (EU) 1143/2014). https://ec.europa.eu/environment/invasivealien/list/index_en.htm

European Communities (Conservation of Wild Birds) Regulations, 1985, SI 291/1985 & amendments – <http://www.irishstatutebook.ie>.

European Communities (Environmental Impact Assessment) Regulations, 1989 to 2006.

European Communities (Natural Habitats) Regulations, SI 94/1997, SI 233/1998 & SI 378/2005 – <http://www.irishstatutebook.ie>.

European Union (2014). Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species. Official Journal of the European Union, L317, 35–55.

Fossitt, J. A. (2000). A Guide to Habitats in Ireland. Dublin: The Heritage Council.

Gilbert, G., Stanbury, A. & Lewis, L., (2021). Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds, 43, pp.1–22. BirdWatch Ireland & RSPB Northern Ireland.

IFI (2010) Biosecurity Protocol for Field Survey Work.
https://www.fisheriesireland.ie/sites/default/files/2021-06/research_biosecurity_biosecurity_for_fieldsurveys_2010.pdf

Irish Water (2023). Connection and Adoption Standards for Wastewater Infrastructure. Irish Water, Dublin.

Irish Water (2021) Ringsend Wastewater Treatment Plant Upgrade Project [online], Irish Water, available: <https://www.water.ie/projects-plans/ringsend/>

Irish Water (2018). Greater Dublin Strategic Drainage Study (GDSDS) Overview & Future Strategic Needs Asset Planning, May 2018. Connection and Adoption Standards for Wastewater Infrastructure. <https://www.leanala.ie/publicaccess/Case%20Documentation/312131/Greater%20Dublin%20Drainage%20Strategy%20Overview%20and%20Future%20Strategic%20Needs.pdf>

JBA Consulting Engineers and Scientists Limited. (2021). Appropriate Assessment Screening Report: Tallaght to Knocklyon Cycle Route. (unpublished).

JBA Consulting Engineers and Scientists Limited. (2022). Ecological Impact Assessment Report: Tallaght to Knocklyon Cycle Route. (unpublished).

Marnell, F., O'Neill, L. and Lynn, D. (2011). The Irish Red Data Book 2: Mammals. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

National Biodiversity Data Centre website <http://www.biodiversityireland.ie/>

National Biodiversity Data Centre (2021). All-Ireland Pollinator Plan 2021–2025. Series No. 28, Waterford, Ireland. <https://pollinators.ie/aipp-2021-2025/>

NPWS Protected Site Synopses available on <http://www.npws.ie/en/ProtectedSites/>.

Scott Cawley Ltd. (2022). Appropriate Assessment Report: Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme. (Bus Connects)

Scott Cawley Ltd. (2022). Appropriate Assessment Report: Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme. (Bus Connects).

Smith G.F., O'Donoghue, P., O'Hora, K. and E. Delaney (2011). Best practice guidance for habitat survey and mapping. The Heritage Council, Kilkenny.

TII (2020). The Management of Invasive Alien Plant Species on National Roads. TII, Dublin. <https://invasives.ie/app/uploads/2024/03/ManagementofIAPSOnNationalRoads>

TII (2008). Guidelines on Ecological Surveying Techniques for Protected Flora and Fauna on National Road Schemes, Transport Infrastructure Ireland, PE-ENV-01113.

TII (2009). Guidelines for Assessment of Ecological Impacts of National Road Schemes, Transport Infrastructure Ireland, PE-ENV-01112.

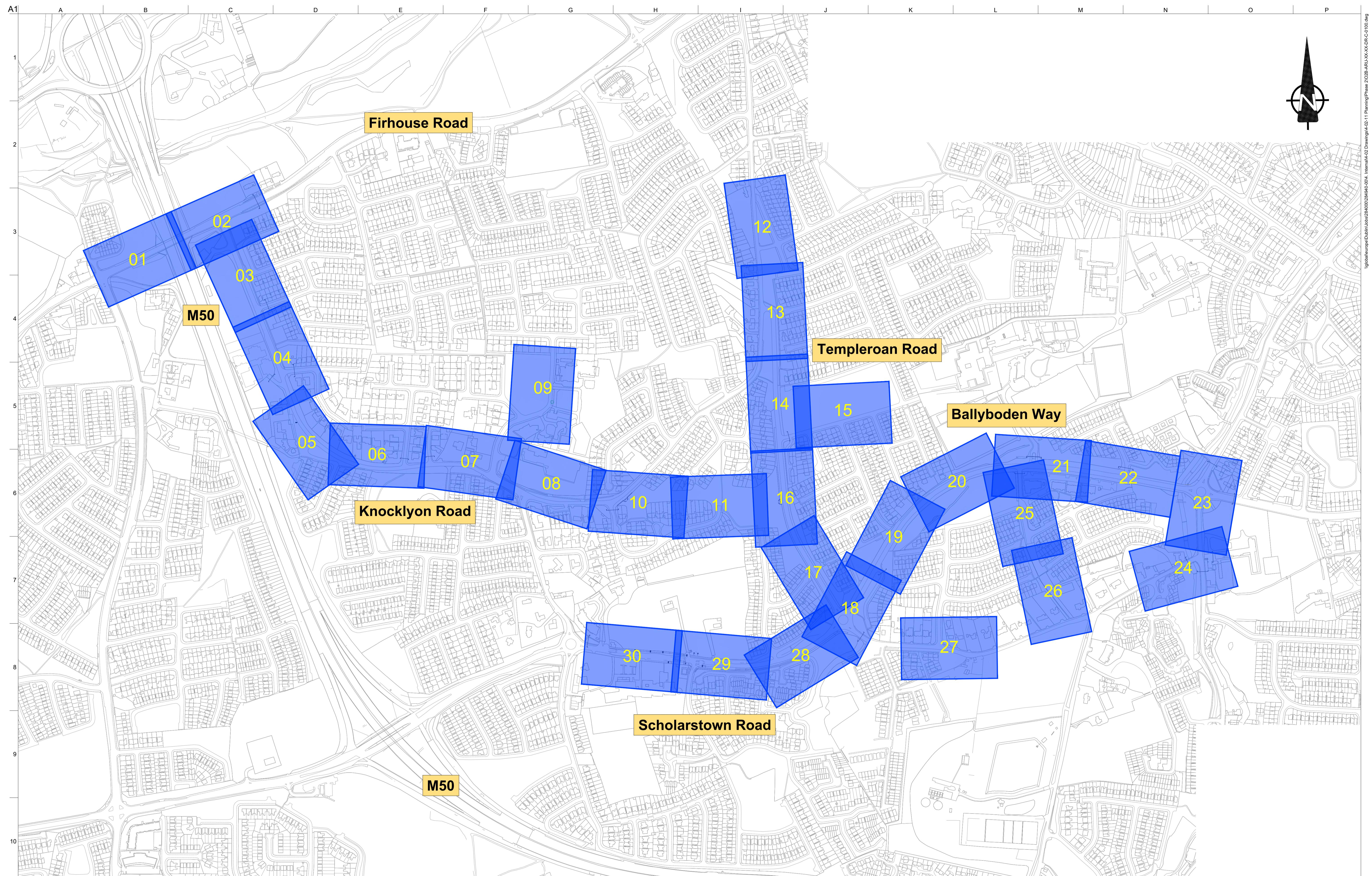
United Nations Environment Programme. (1999). Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). <https://www.unep-aewa.org/>

Wildlife Act 1976 and Wildlife (Amendment) Act 2023.



APPENDIX 1

**GENERAL ARRANGEMENT
DRAWINGS (PART VIII
PLANNING APPLICATION)**



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.

P03	26/06/25	JR	DC	DC
P01	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Ap

ARUP

Arup, 50 Ringsend Road
Dublin 4, D04 T6X0, Ireland
Tel +353(0)1 233 4455 Fax +353(0)1 668 3168
www.arup.com



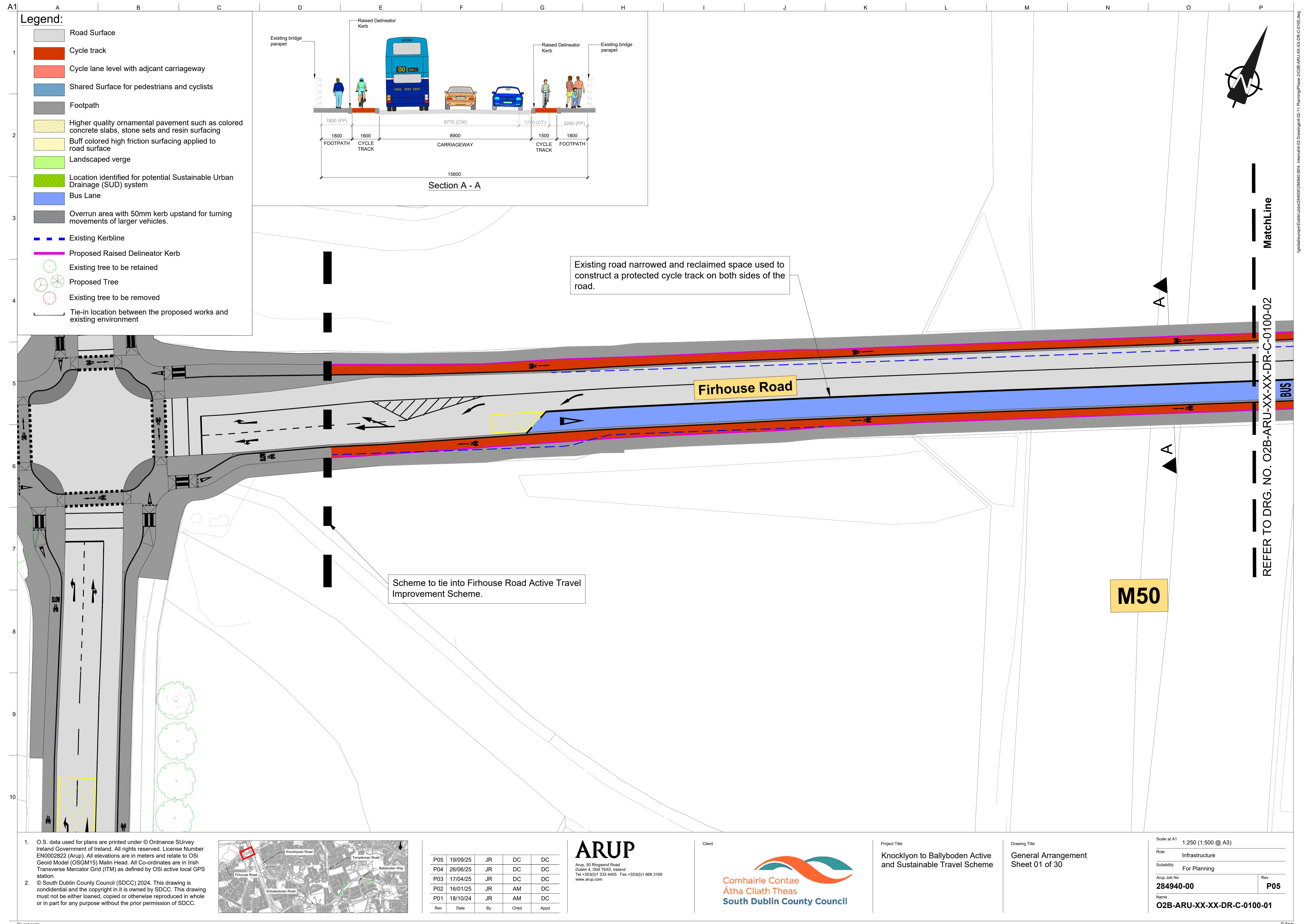
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

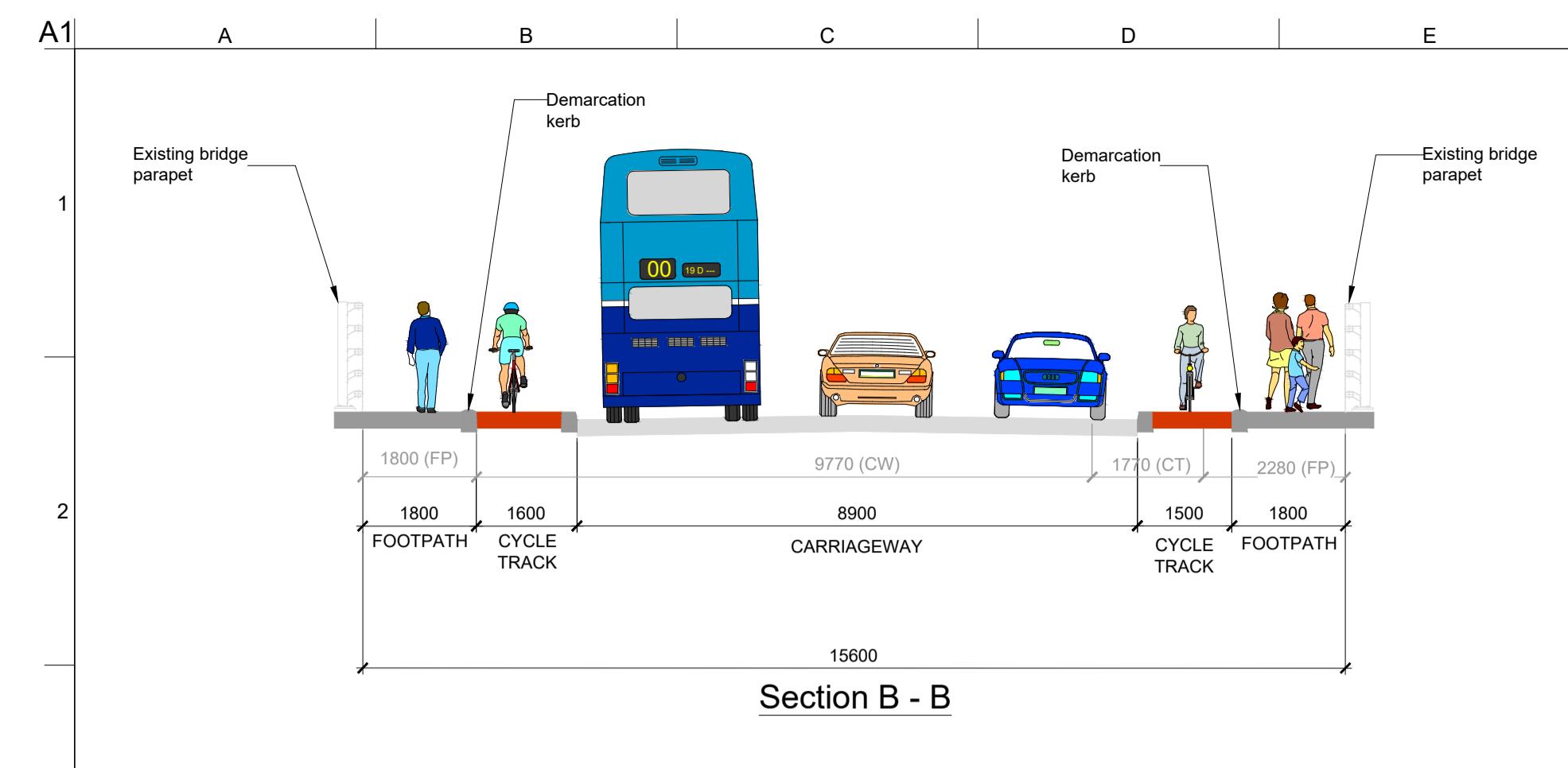
Project Title

Knocklyon to Ballyboden Active and Sustainable Travel Scheme

General Arrangement Keyplan

Scale at A1	1:3500 (1:7000 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P03
Name	
O2B-ARU-XX-XX-DR-C-0100-00	



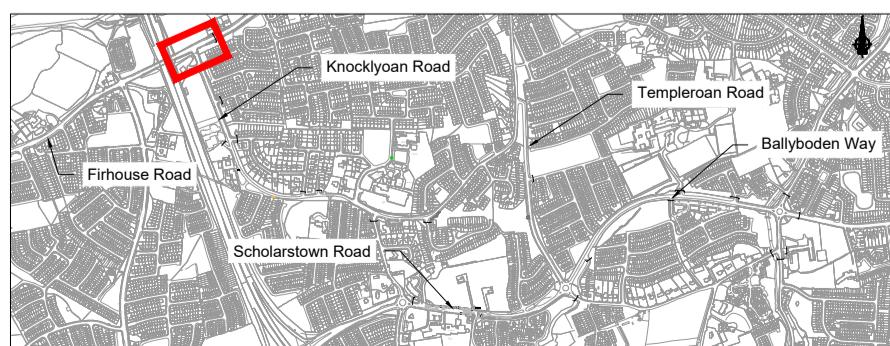


Existing cycle track locally raised to provide continuation and level crossing of driveway accesses, enhancing the cycling connection between the Proposed Scheme and Dodder Greenway. Driveway access will be retained and facilitated by beveled kerbs.

INSERT A

Firhouse Road

1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is



REFER TO DRG. NO. 02B-ARU-XX-XX-DR-C-0100-03

Project Status Report - Q1 2024				
Category	Task ID	Task Name	Progress (%)	Notes
P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Appd

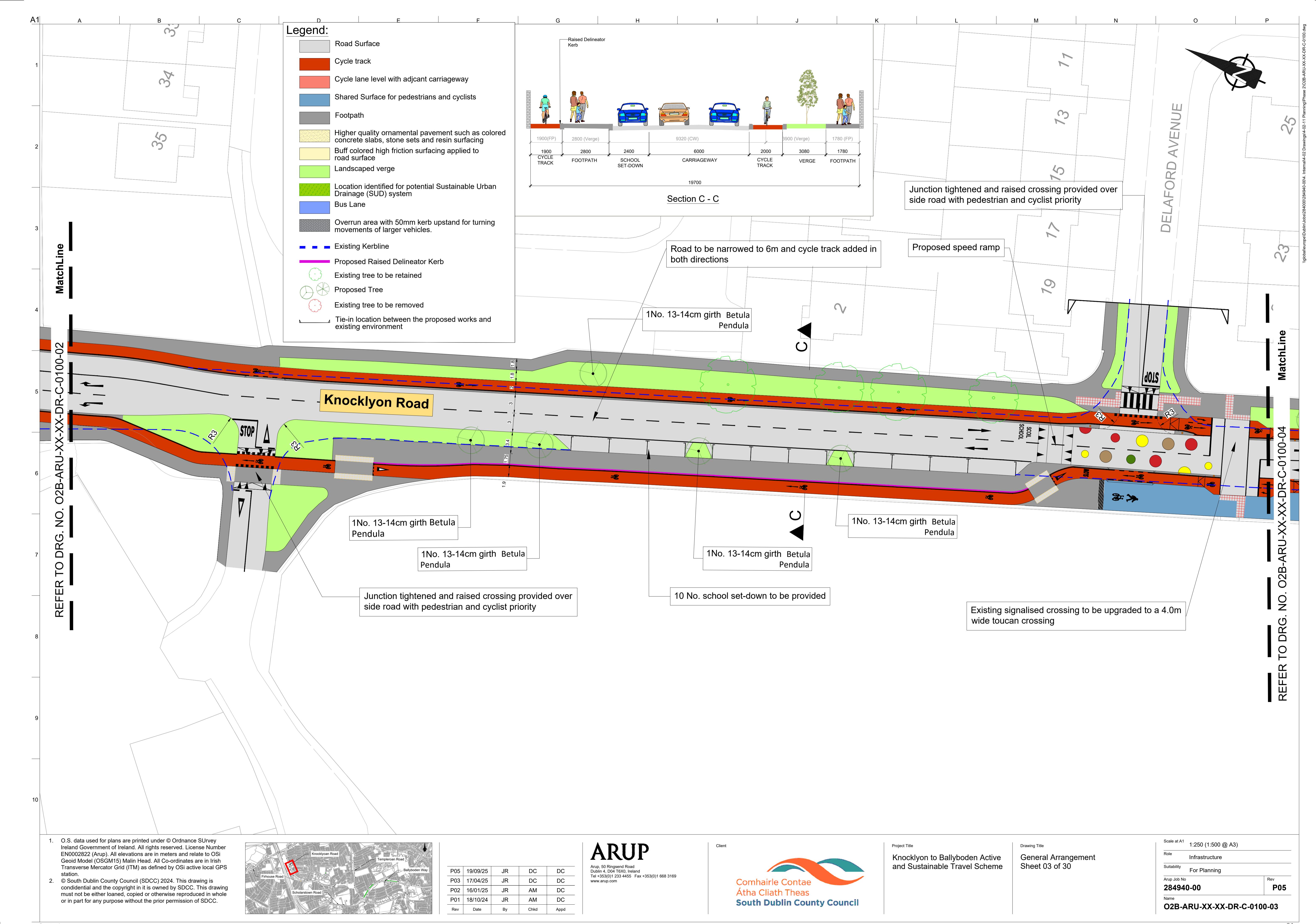
The logo for South Dublin County Council. It features a stylized infinity symbol composed of two interlocking curves, one orange and one teal. Below the symbol, the text 'Comhairle Contae Átha Cliath Theas' is written in a white, serif font. Underneath that, 'South Dublin County Council' is written in a bold, blue, sans-serif font.

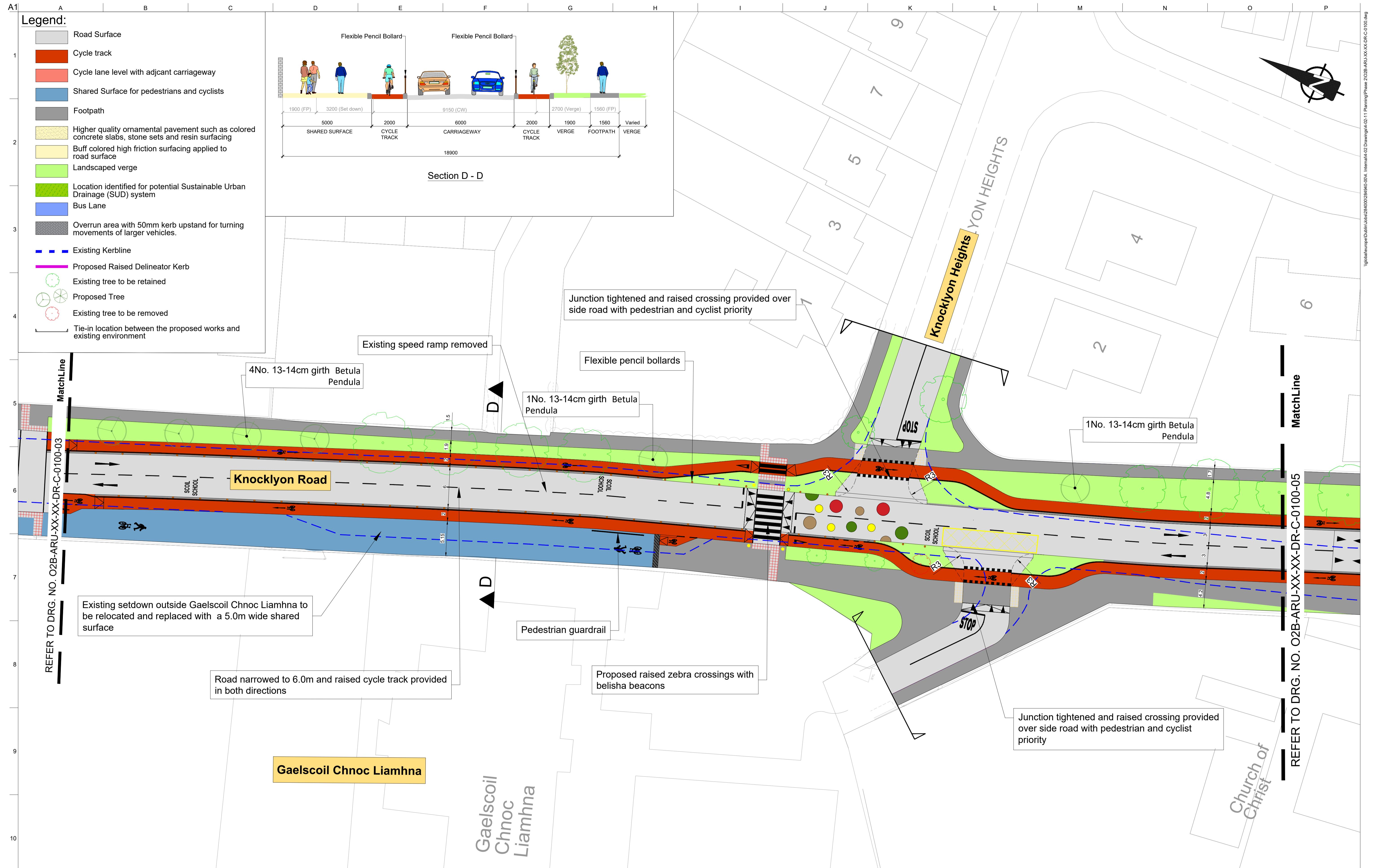
Project Title

Knocklyon to Ballyboden Active and Sustainable Travel Scheme

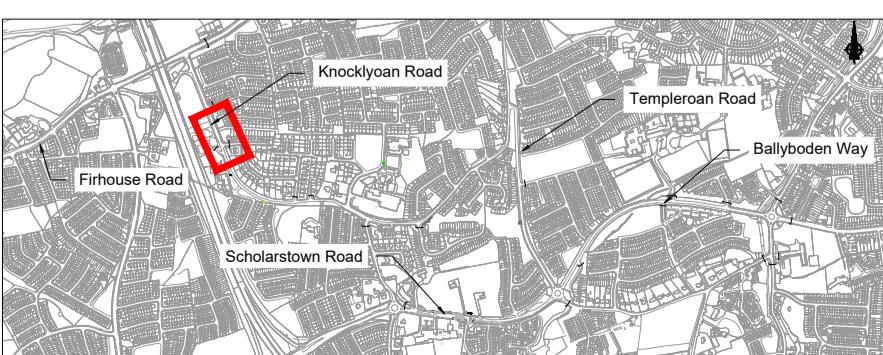
General Arrangement
Sheet 02 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-02	





- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



Rev Date By Chkd Appd

P04 26/06/25 JR DC DC

P03 17/04/25 JR DC DC

P02 16/01/25 JR AM DC

P01 18/10/24 JR AM DC

ARUP

Arup, 29 Bishopsgate
London EC2N 4DD, United Kingdom
Tel: +44 (0)123 4455 Fax: +44 (0)166 3169
www.arup.com

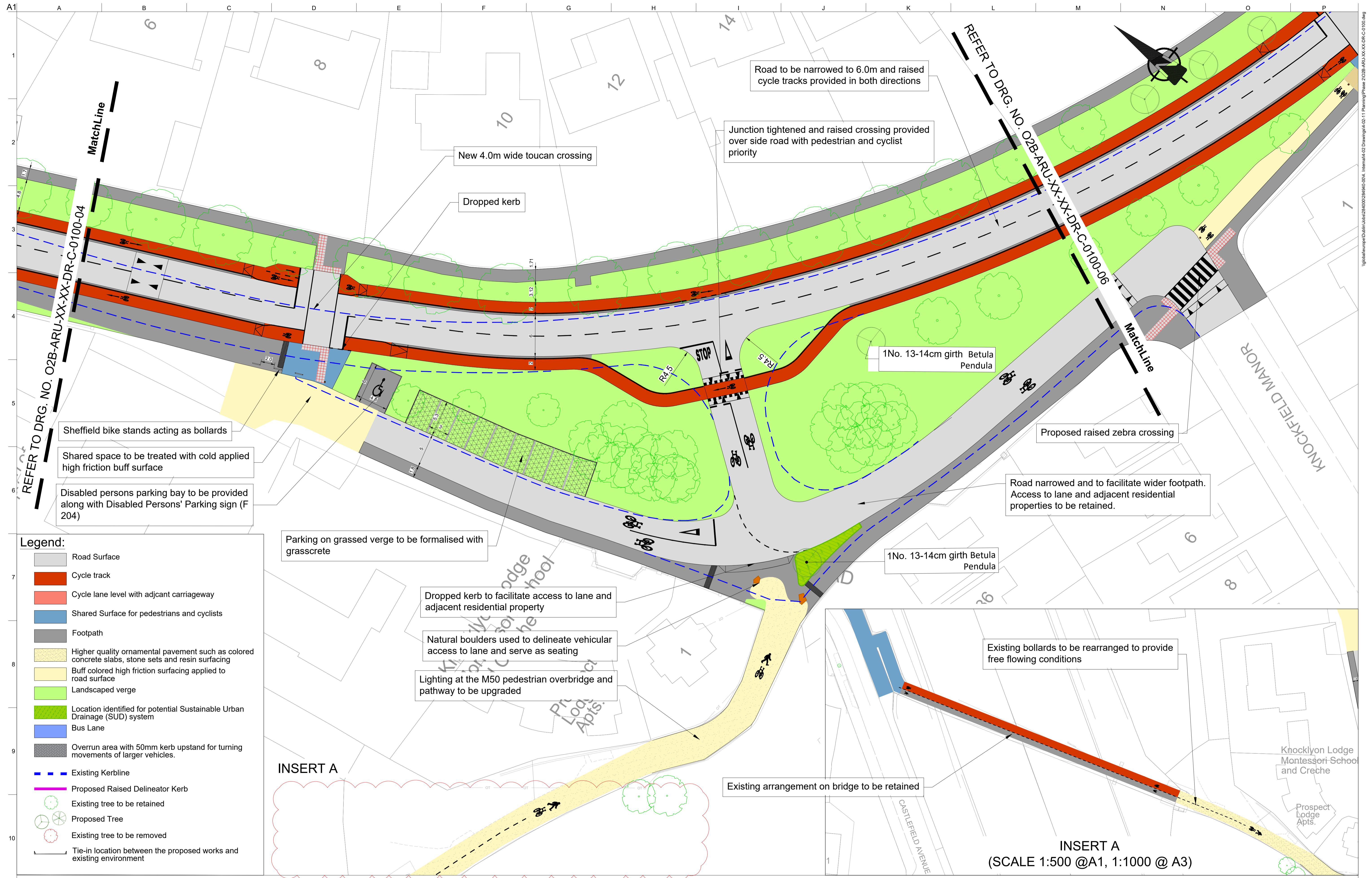
Comhairle Contae Átha Cliath Theas
South Dublin County Council

Client

Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

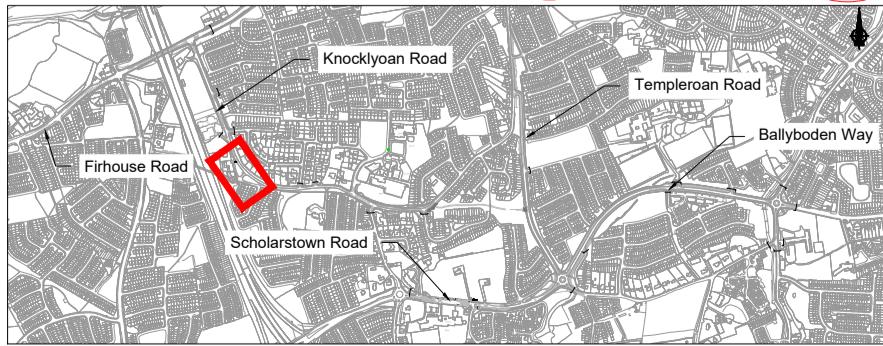
Drawing Title
General Arrangement
Sheet 04 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00 Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-04



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSI Geod Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Fitzwilliam Road
Dublin 4, D04 TX00, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com

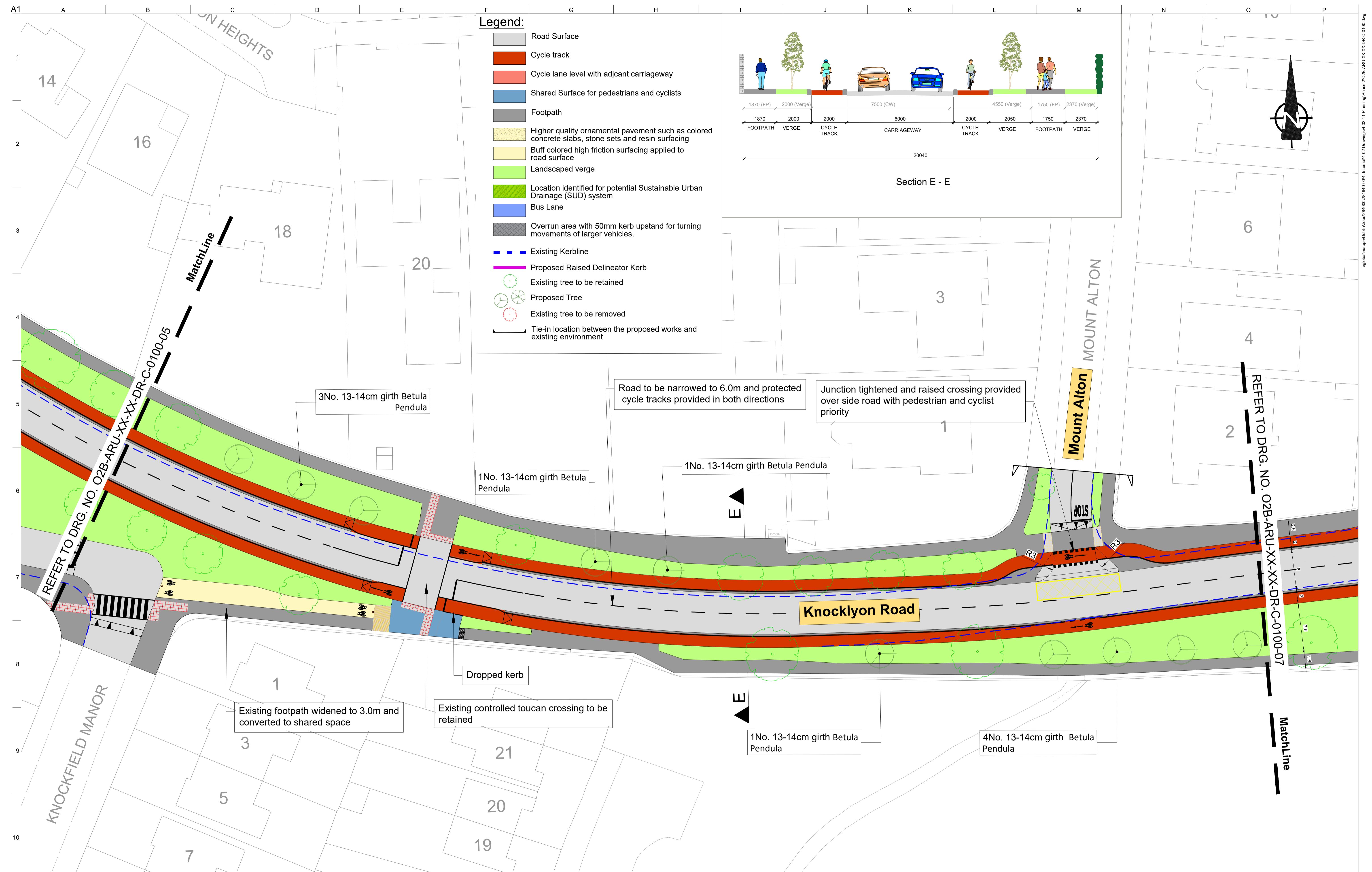
Comhairle Contae Átha Cliath Theas
South Dublin County Council

Client

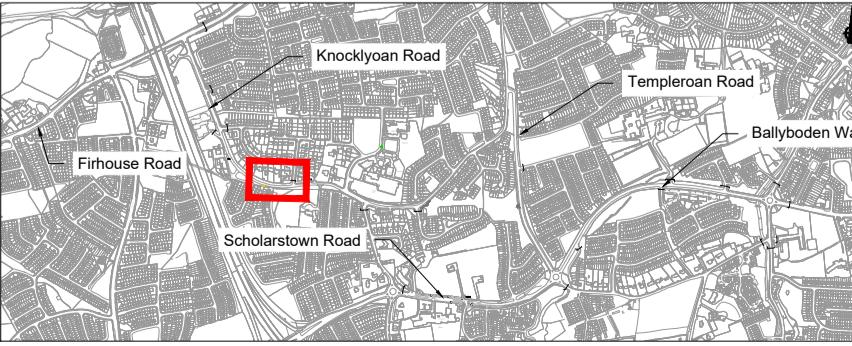
Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title
General Arrangement Sheet 05 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00
Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-05



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P05	19/09/25	JR	DC	DC
P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Appd

ARU

Arup, 50 Ringsend Road
Dublin 4, D04 T6X0, Ireland
Tel +353(0)1 233 4455 Fax +353(0)1 6
www.arup.com

The logo for South Dublin County Council. It features a stylized orange and teal wavy line graphic above the text "Comhairle Contae Átha Cliath Theas" in orange, and "South Dublin County Council" in blue.

Project Title

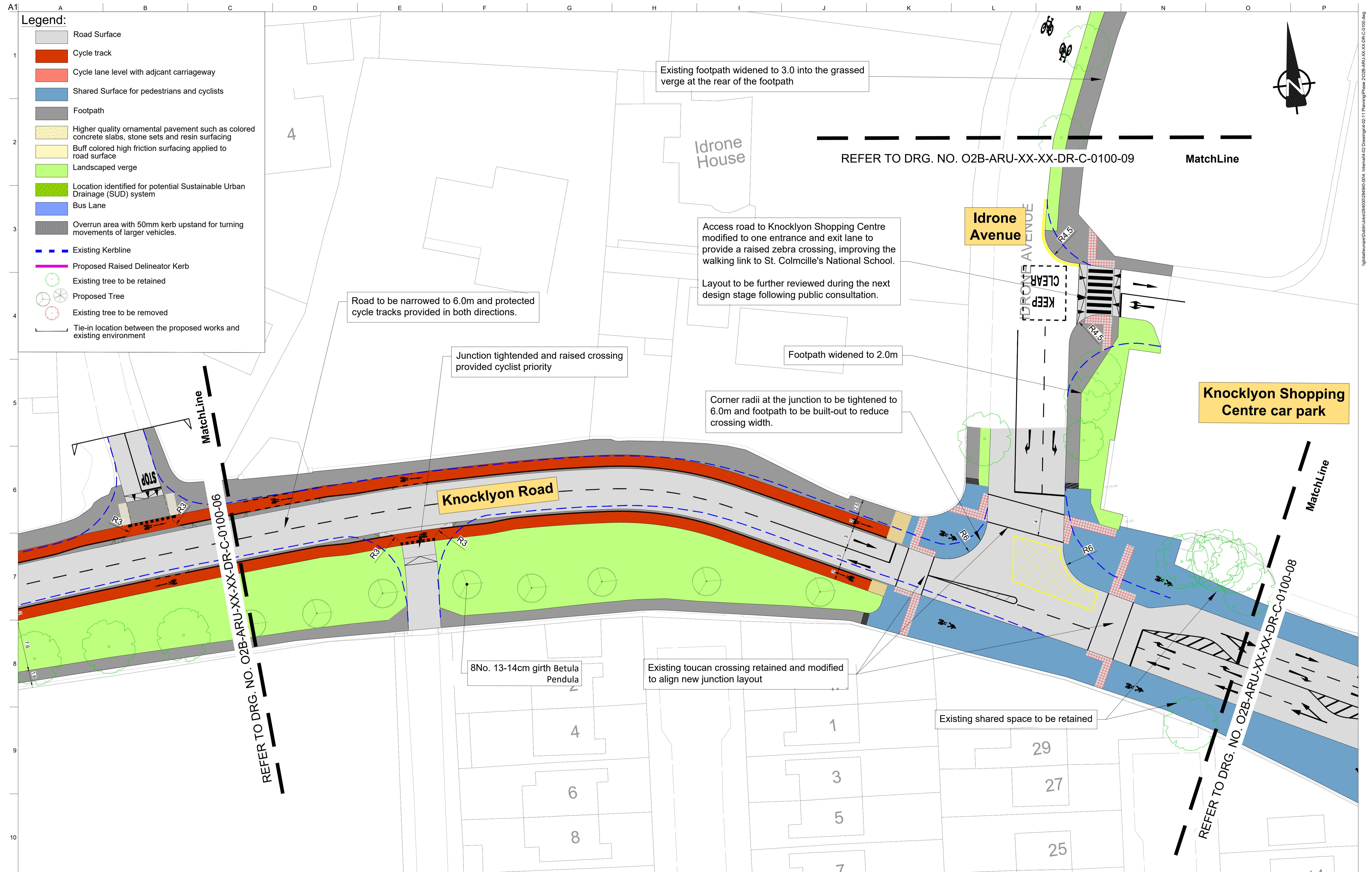
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title

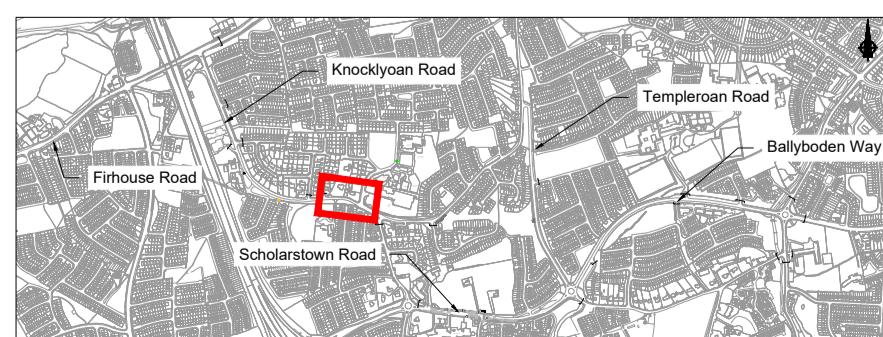
General Arrangement

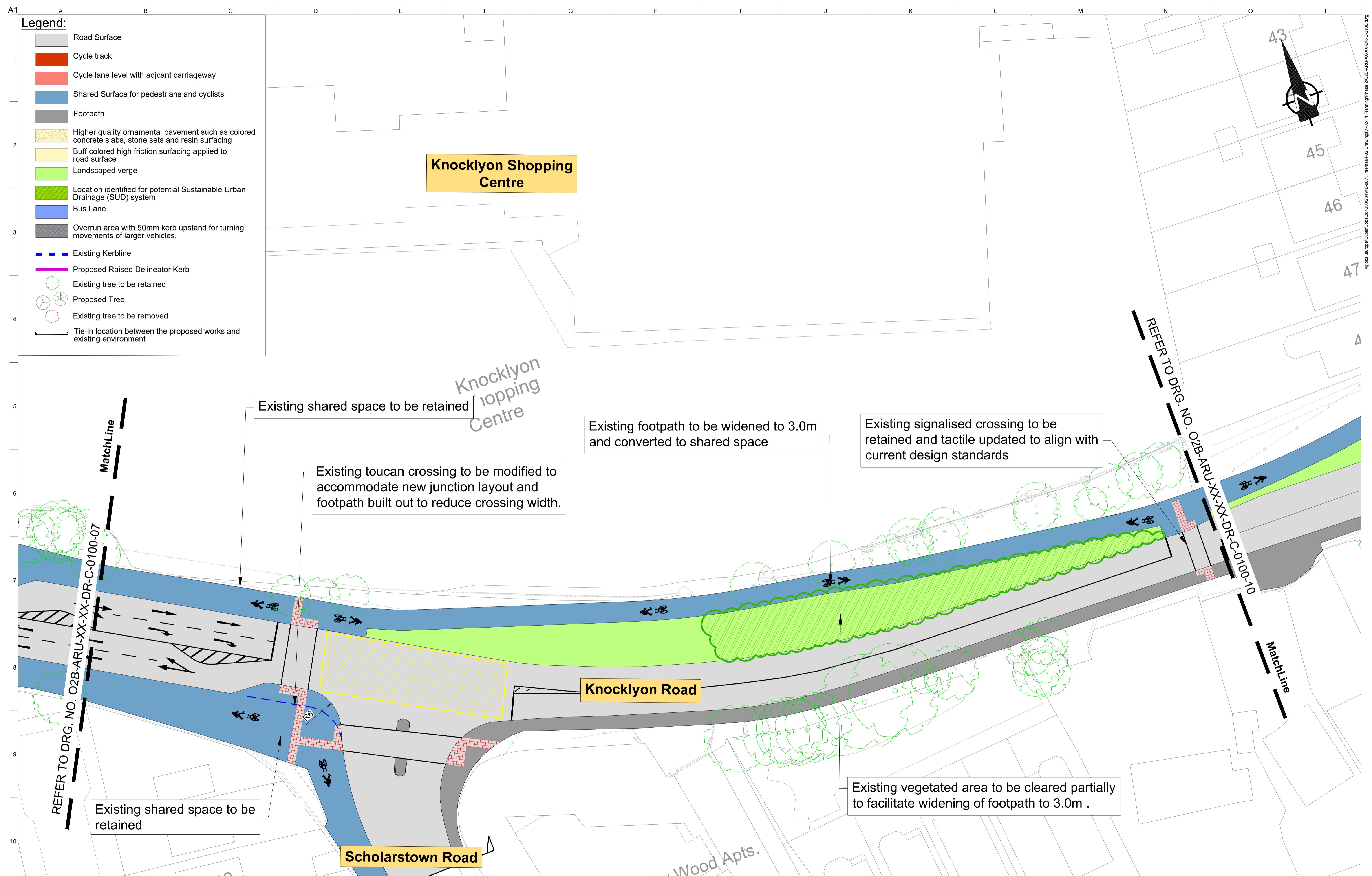
Sheet 06 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P05
Name	
O2B-ARU-XX-XX-DR-C-0100-06	

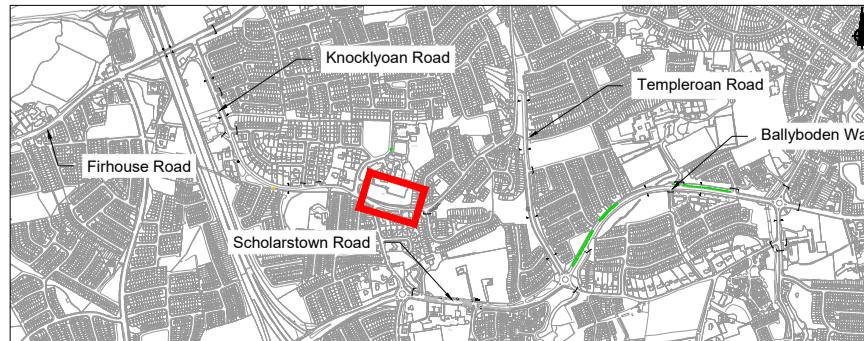


- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Main Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.





1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



Rev	Date	By	Chkd	Appd
P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

ARUP

3(0)1 668 3169



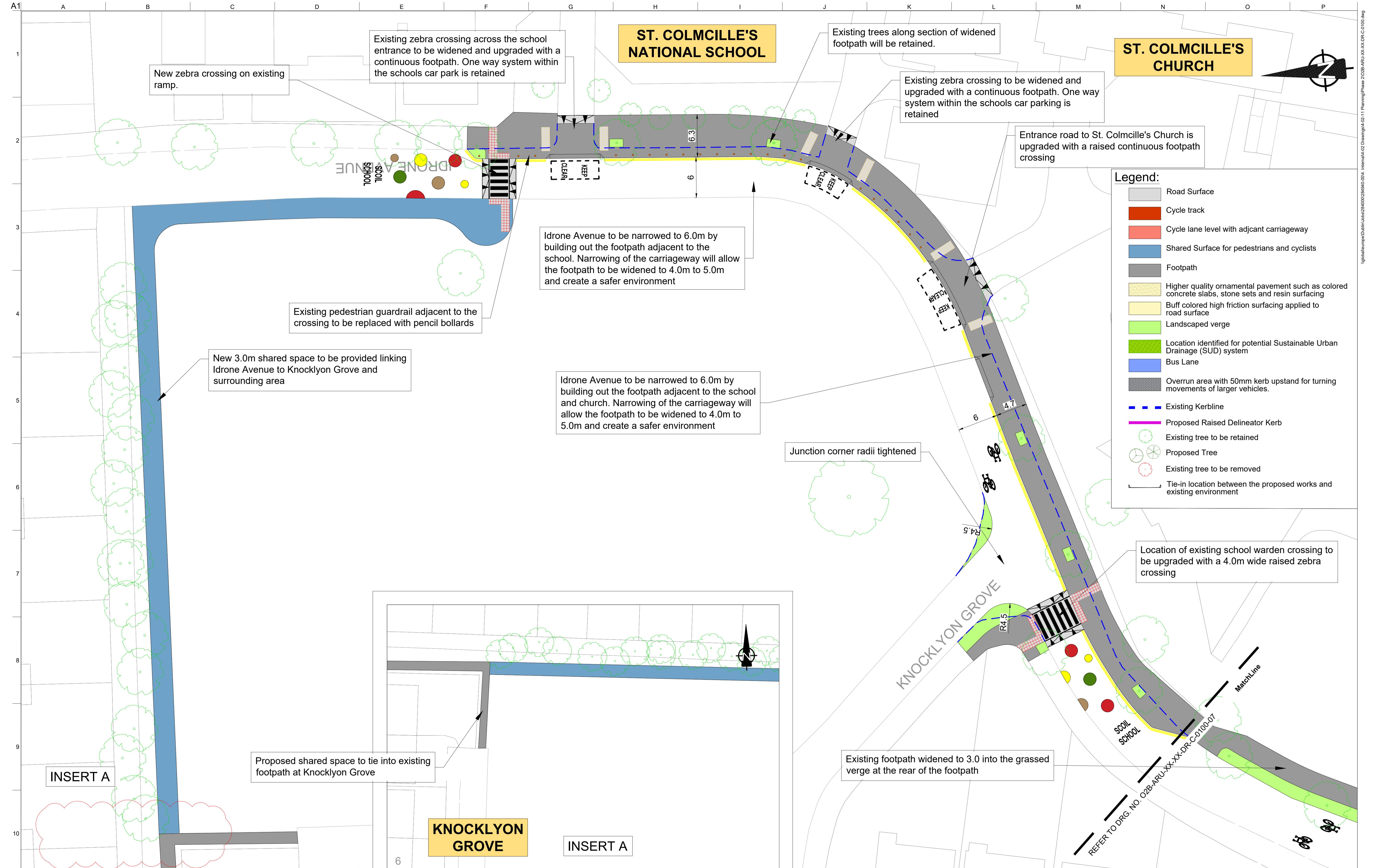
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Project Title

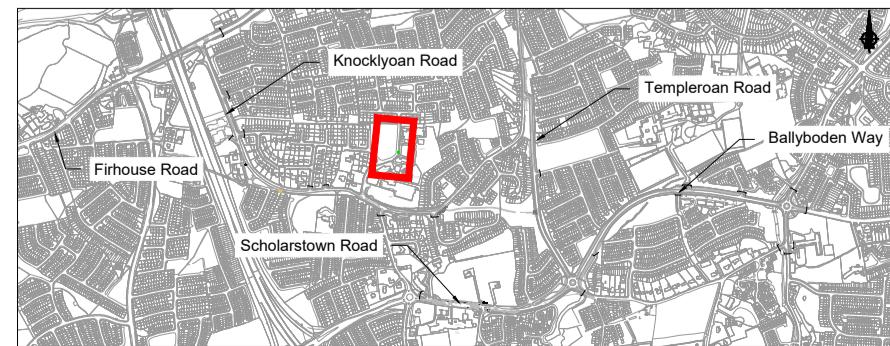
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title
General Arrangement
Sheet 08 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-08	



- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

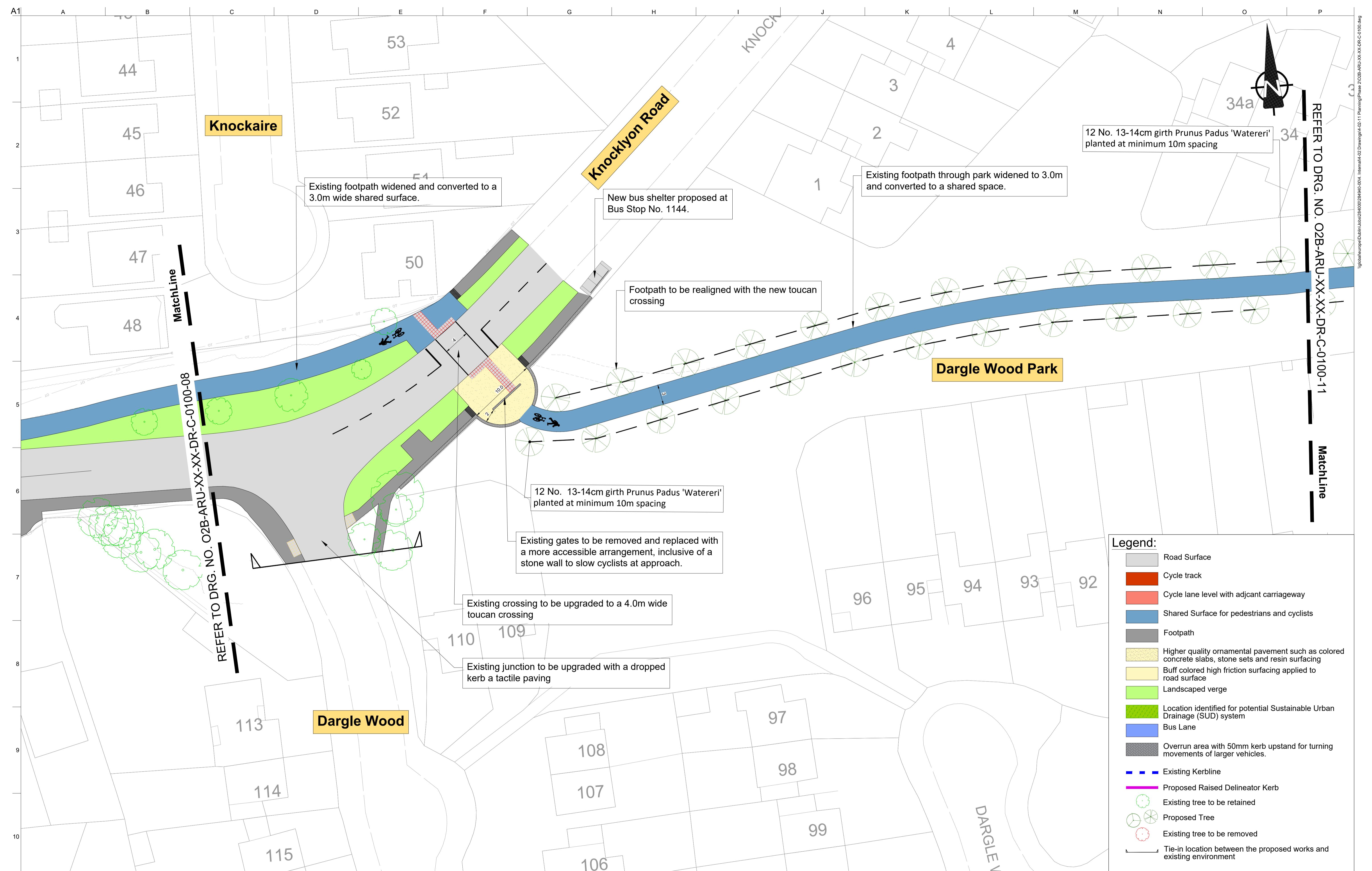
Arup, 29 Fitzwilliam Road
Dublin 2, D02 TX00, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Project Title:
Knocklyon to Ballyboden Active
and Sustainable Travel Scheme

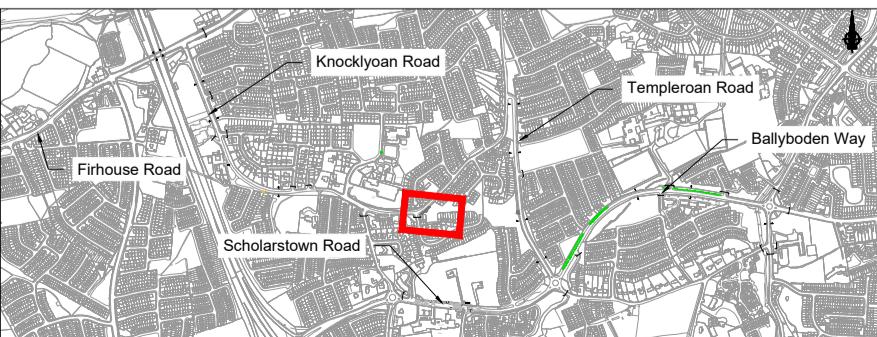
Drawing Title:
General Arrangement
Sheet 09 of 30

Scale at A1: 1:250 (1:500 @ A3)
Role: Infrastructure
Suitability: For Planning
Arup Job No: 284940-00
Rev: P04
Name: O2B-ARU-XX-XX-DR-C-0100-09



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This document is

2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DO
P03	17/04/25	JR	DC	DO
P02	16/01/25	JR	AM	DO
P01	18/10/24	JR	AM	DO
Rev	Date	By	Chkd	App

ARUP

Arup, 50 Ringsend Road
Dublin 4, D04 T6X0, Ireland
Tel +353(0)1 233 4455 Fax +353(0)1 668 3168
www.arup.com

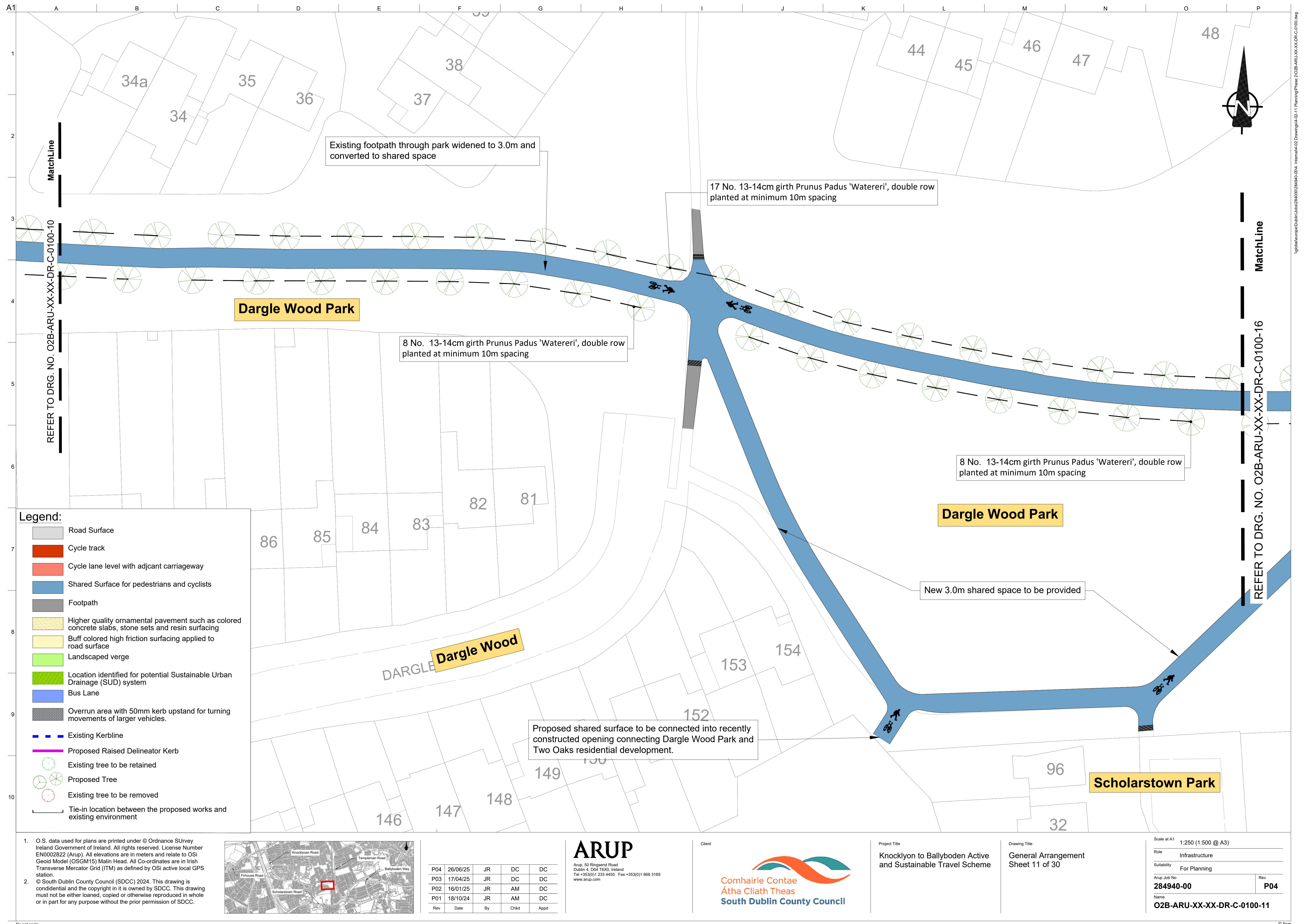
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

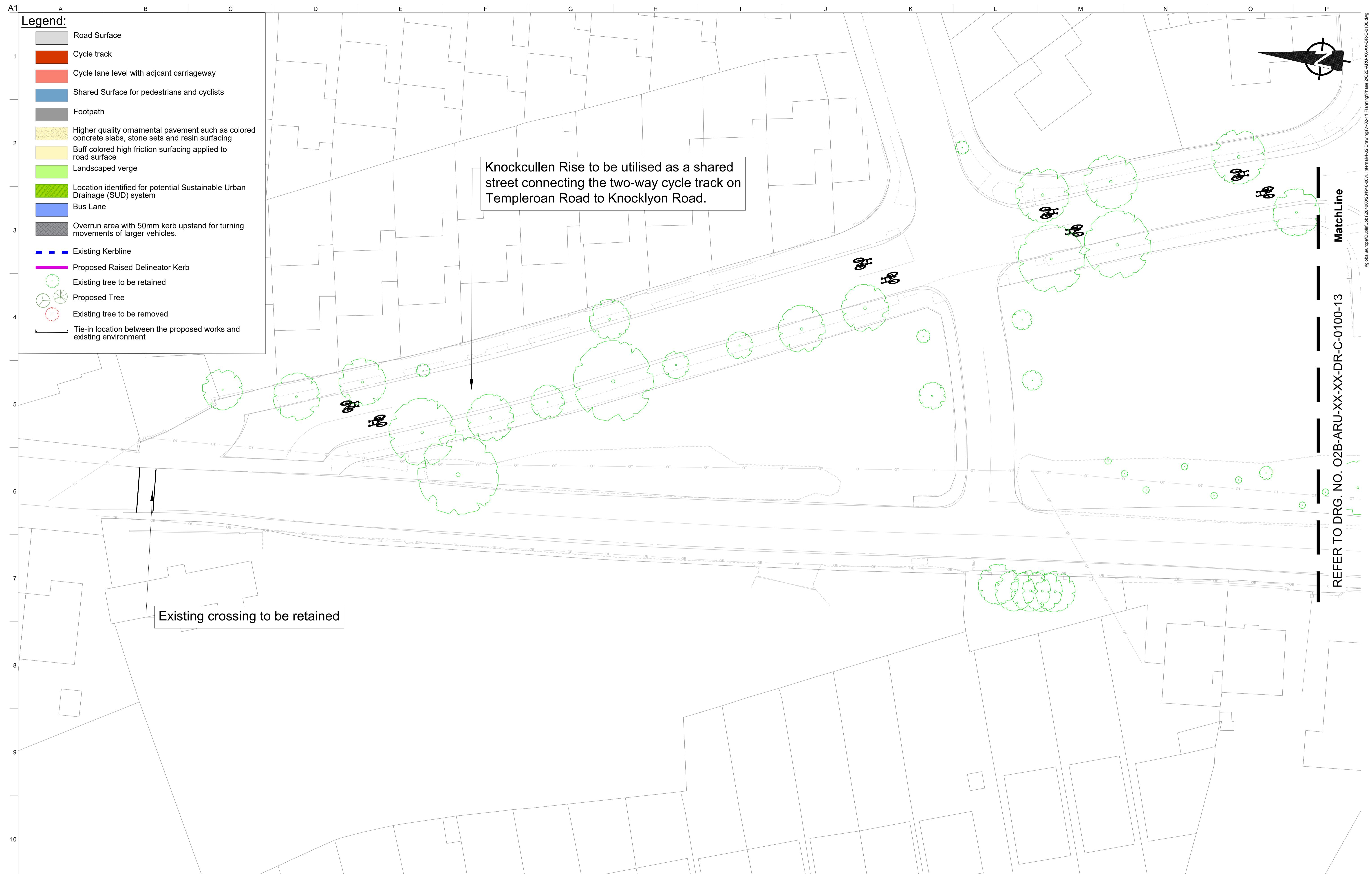
Project Title

Knocklyon to Ballyboden Active and Sustainable Travel Scheme

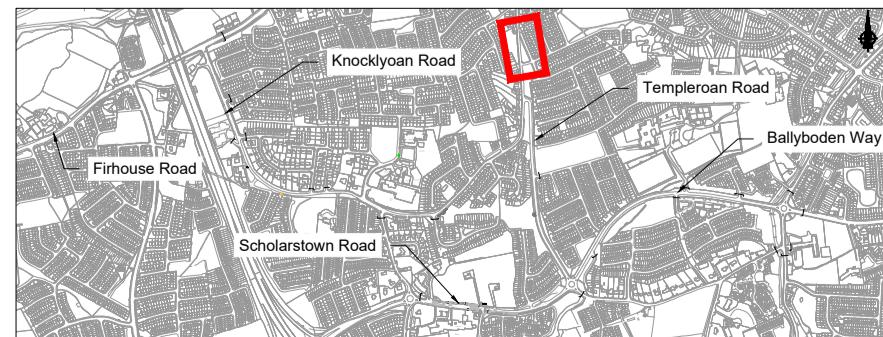
Drawing Title
General Arrangement
Sheet 10 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00 Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-10





- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geotiff Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Ranelagh Road
Dublin 4, D04 TX00, Ireland
Tel +353(0)1 233 4455 Fax +353(0)1 668 3169
www.arup.com

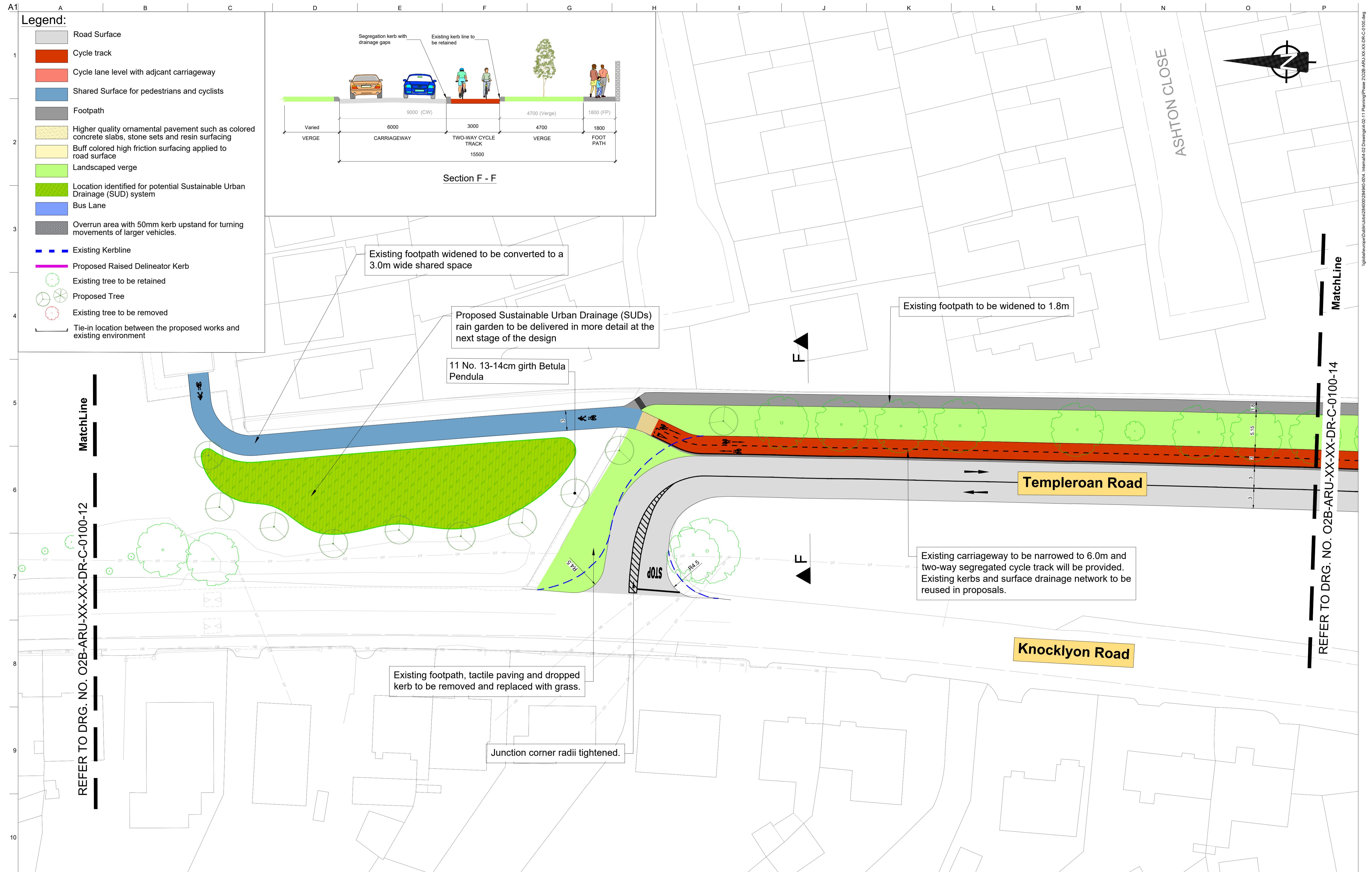
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Client

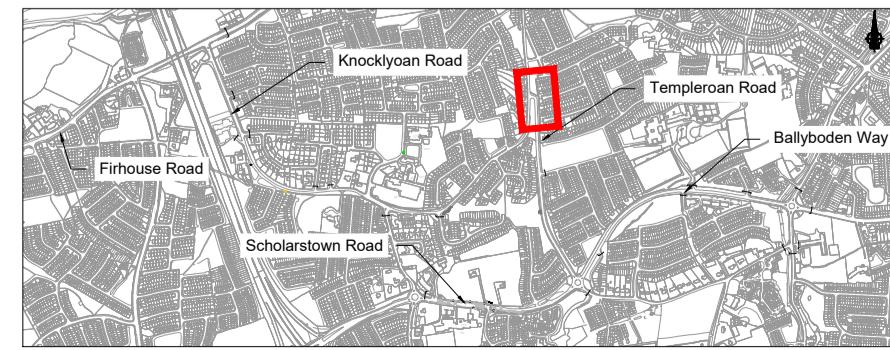
Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title
General Arrangement
Sheet 12 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00 Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-12



- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSM Geoid Model (OSGM15) Main Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSM active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Bishopsgate
London, EC2M 4BX, United Kingdom
Tel: +44 (0)123 456 7890 | Fax: +44 (0)123 456 7891
www.arup.com

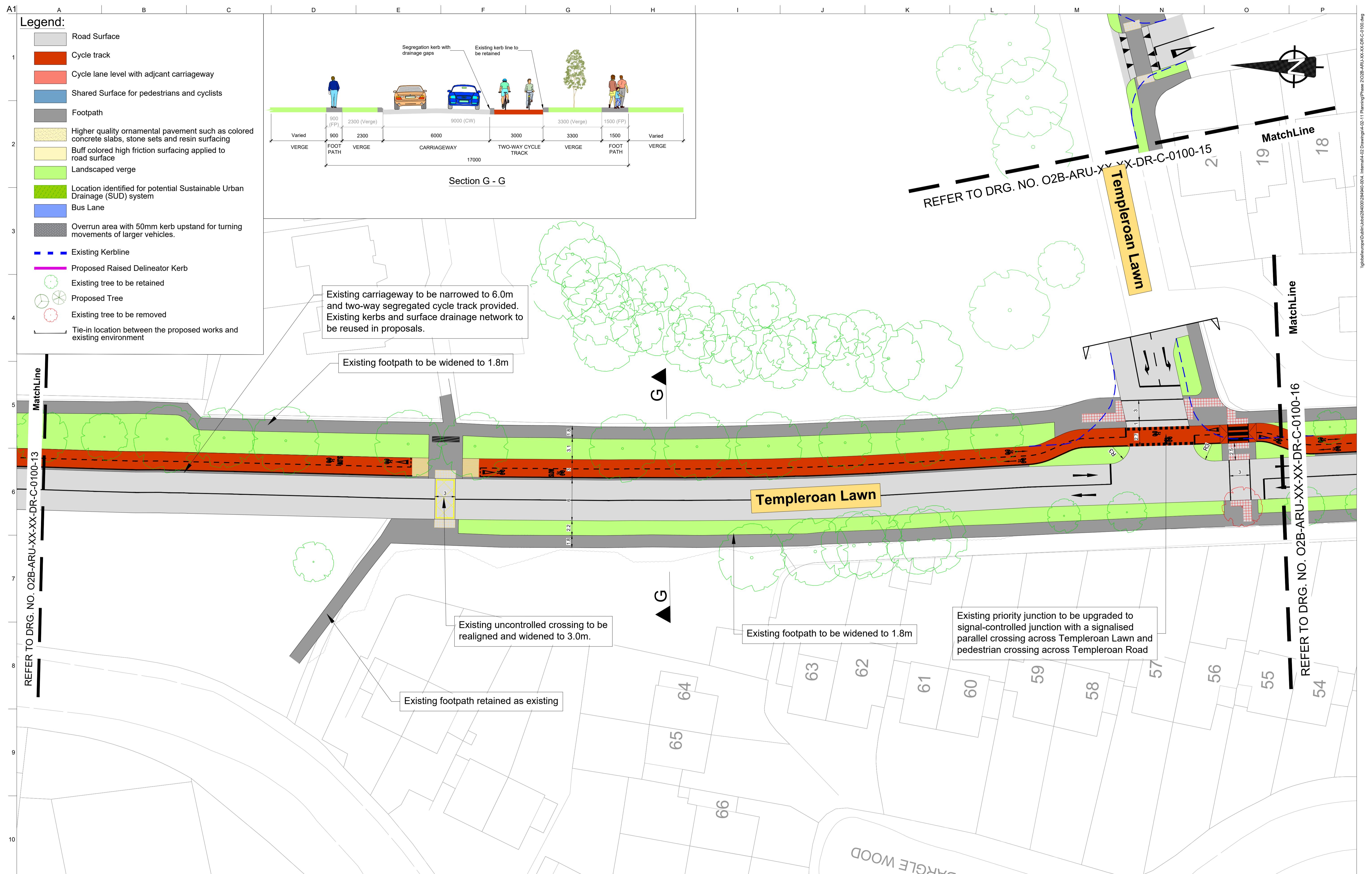


Client

Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

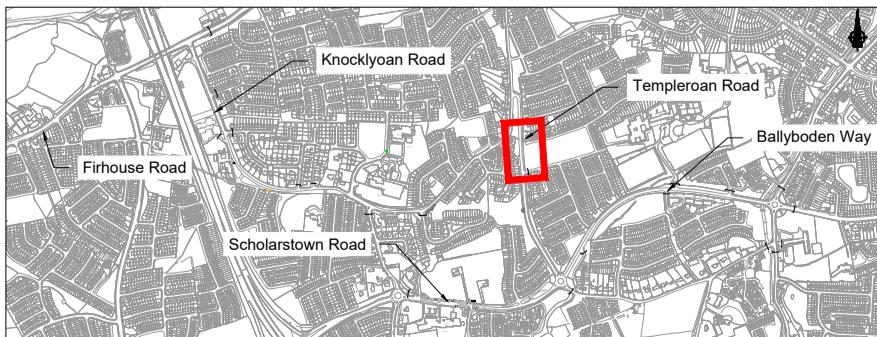
Drawing Title
General Arrangement
Sheet 13 of 30

Scale at A1: 1:250 (1:500 @ A3)
Role: Infrastructure
Suitability: For Planning
Arup Job No: 284940-00
Rev: P04
Name: O2B-ARU-XX-XX-DR-C-0100-13



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



Rev	Date	By	Chkd	Appd
P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

ARUP

Arup, 50 Ringsend Road
Dublin 4, D04 T6X0, Ireland
Tel +353(0)1 233 4455 Fax +353(0)1 668 3168
www.arup.com



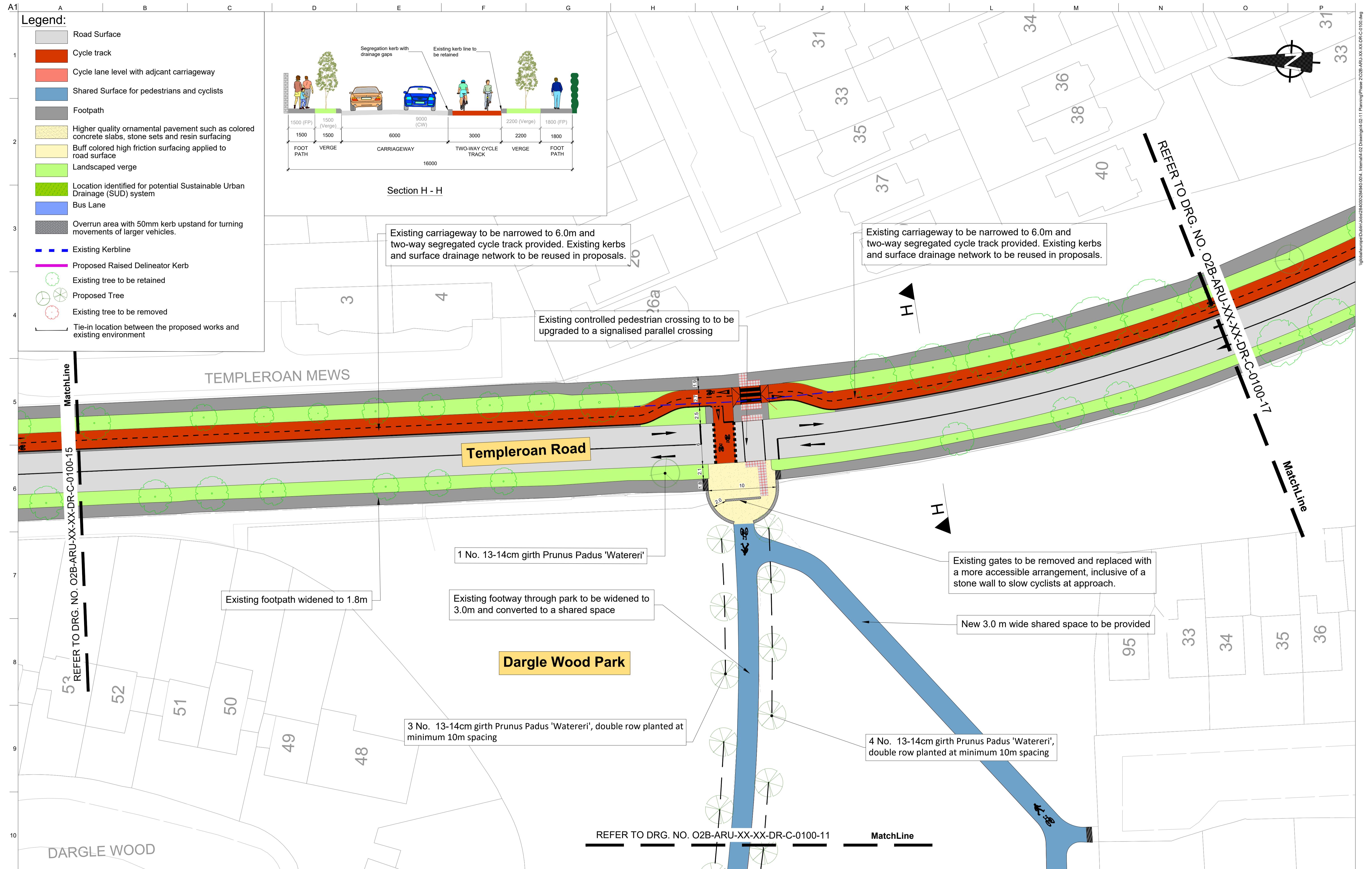
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

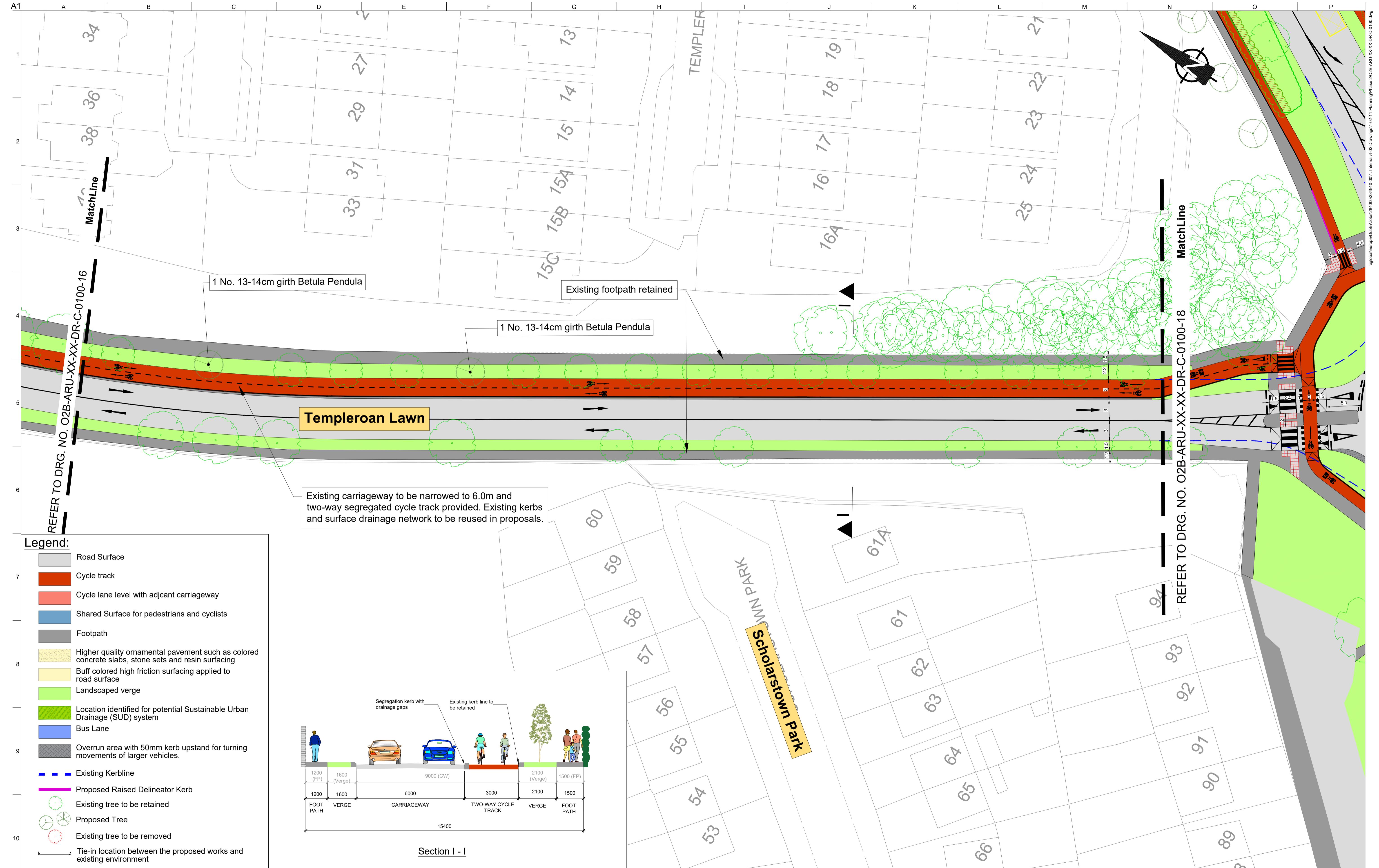
Project Title

Knocklyon to Ballyboden Active and Sustainable Travel Scheme

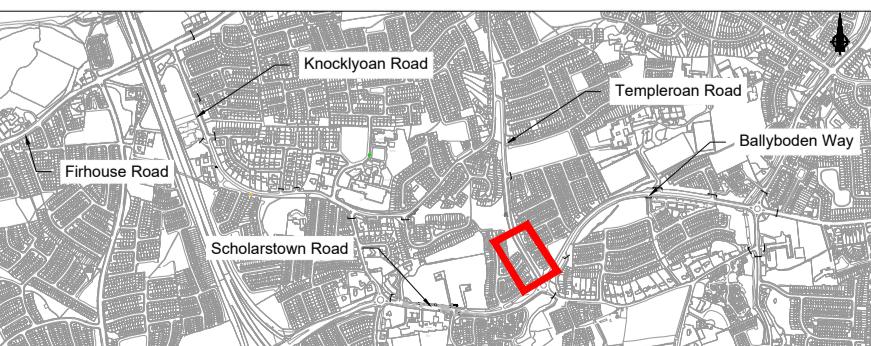
Drawing Title
General Arrangement
Sheet 14 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-14	





1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Appd

ARUP

668 3169

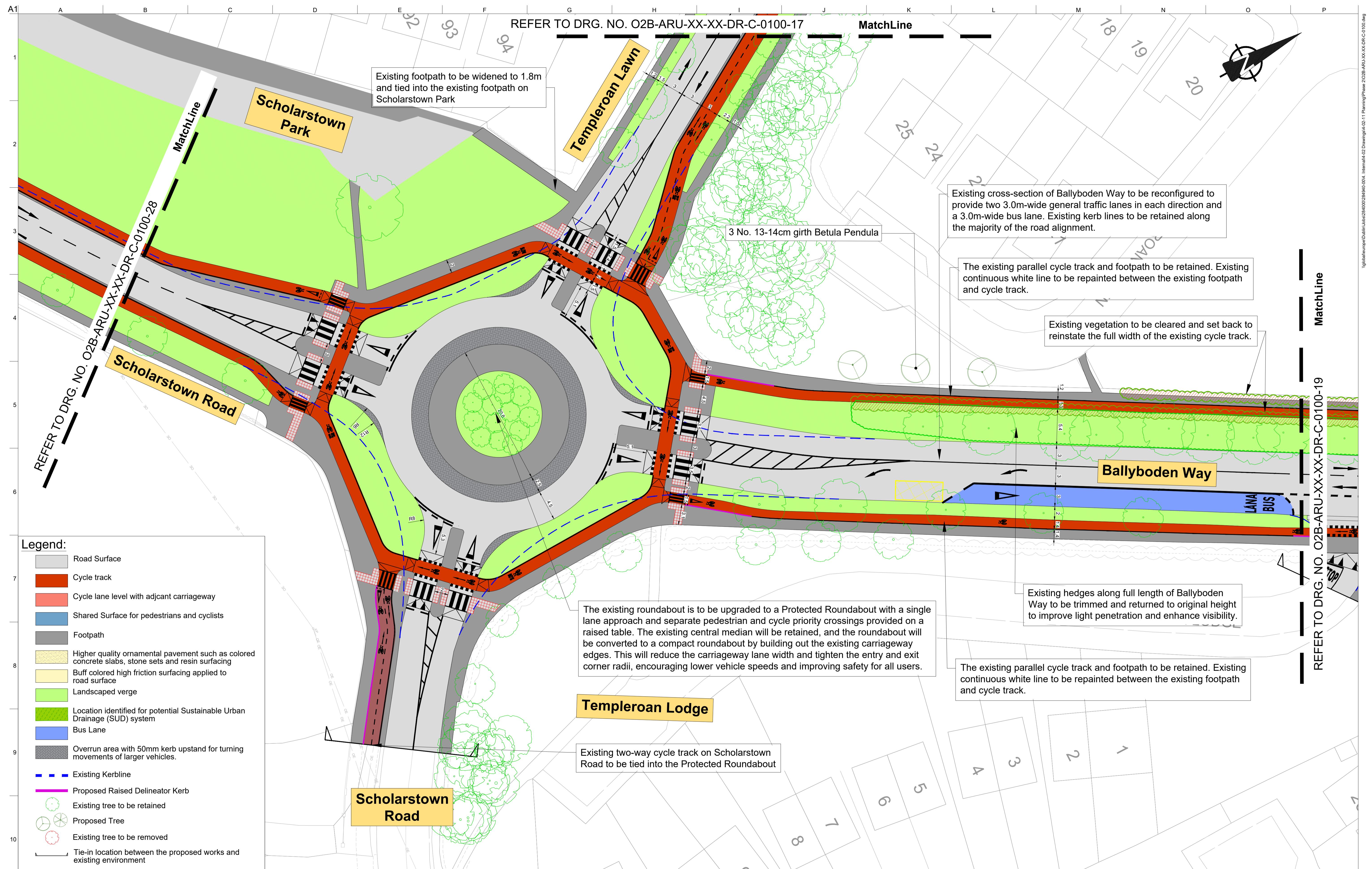
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Project Title

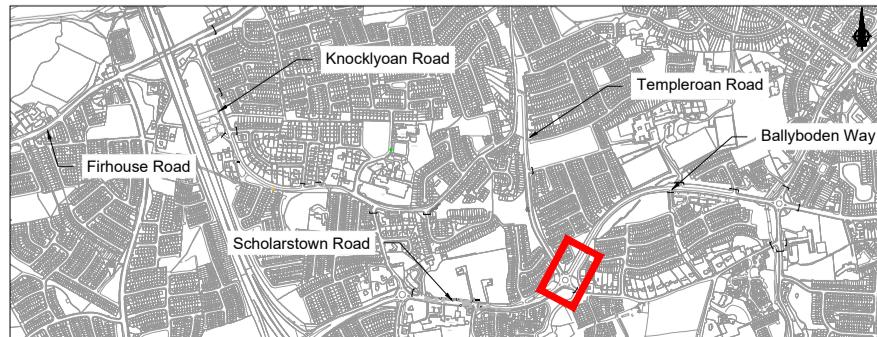
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

owing Title
General Arrangement
Sheet 17 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-17	



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC
P03	17/04/25	JR	DC
P02	16/01/25	JR	AM
P01	18/10/24	JR	AM
Rev	Date	By	Chk

ARUP

0)1 668 3169

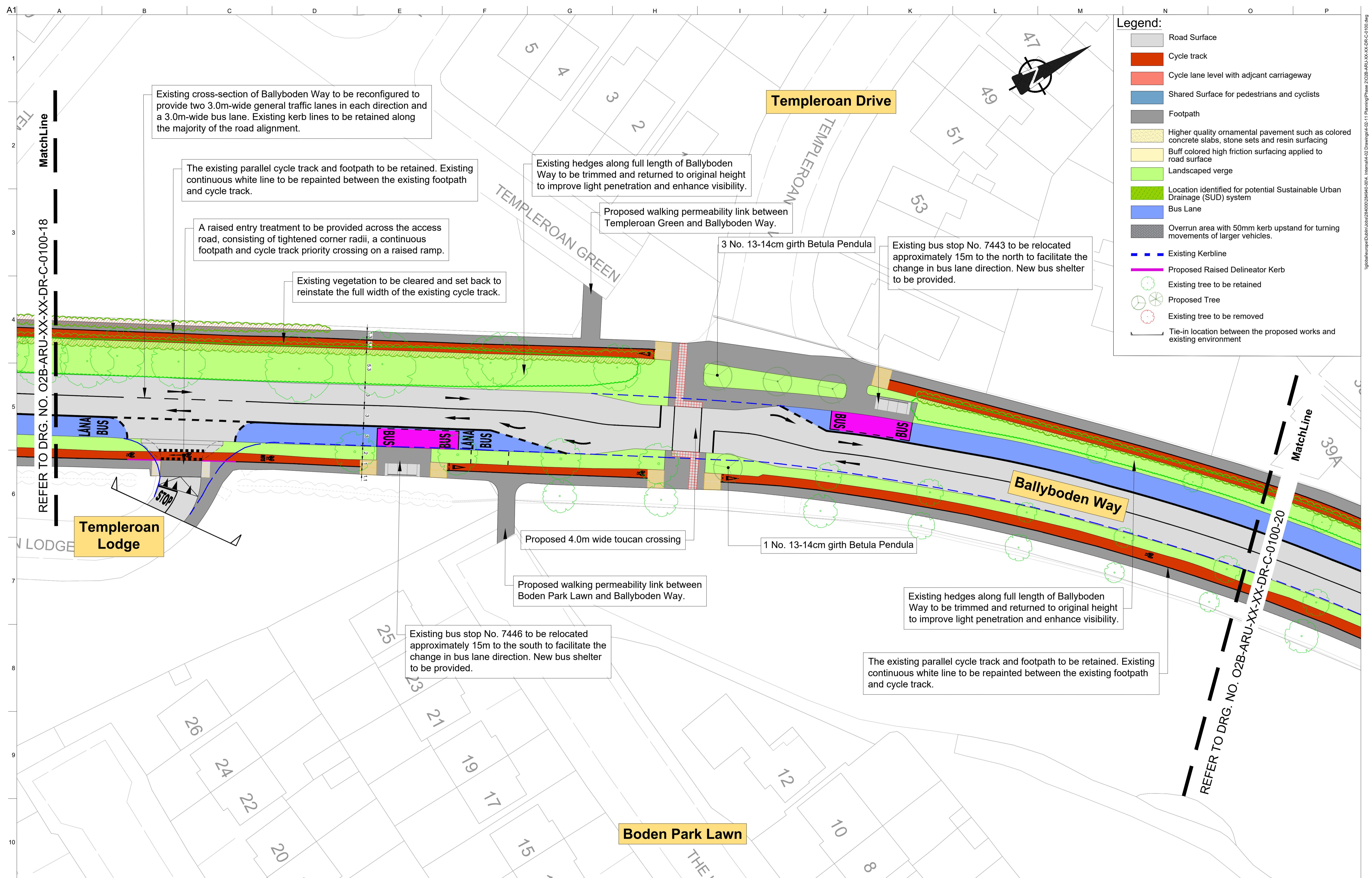
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Project Title

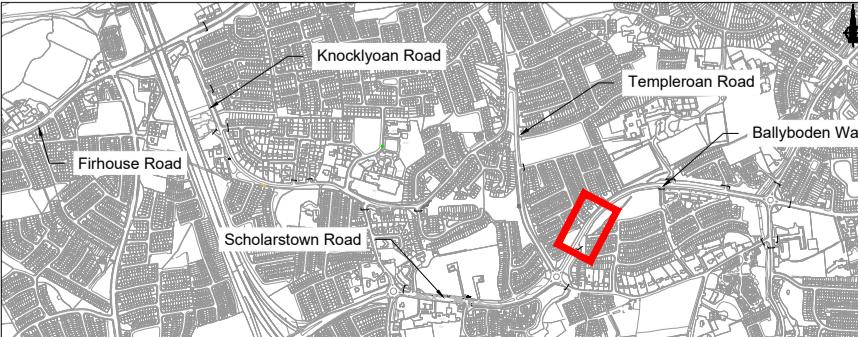
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

wing Title
General Arrangement
Sheet 18 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-18	



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Appd

ARUP

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

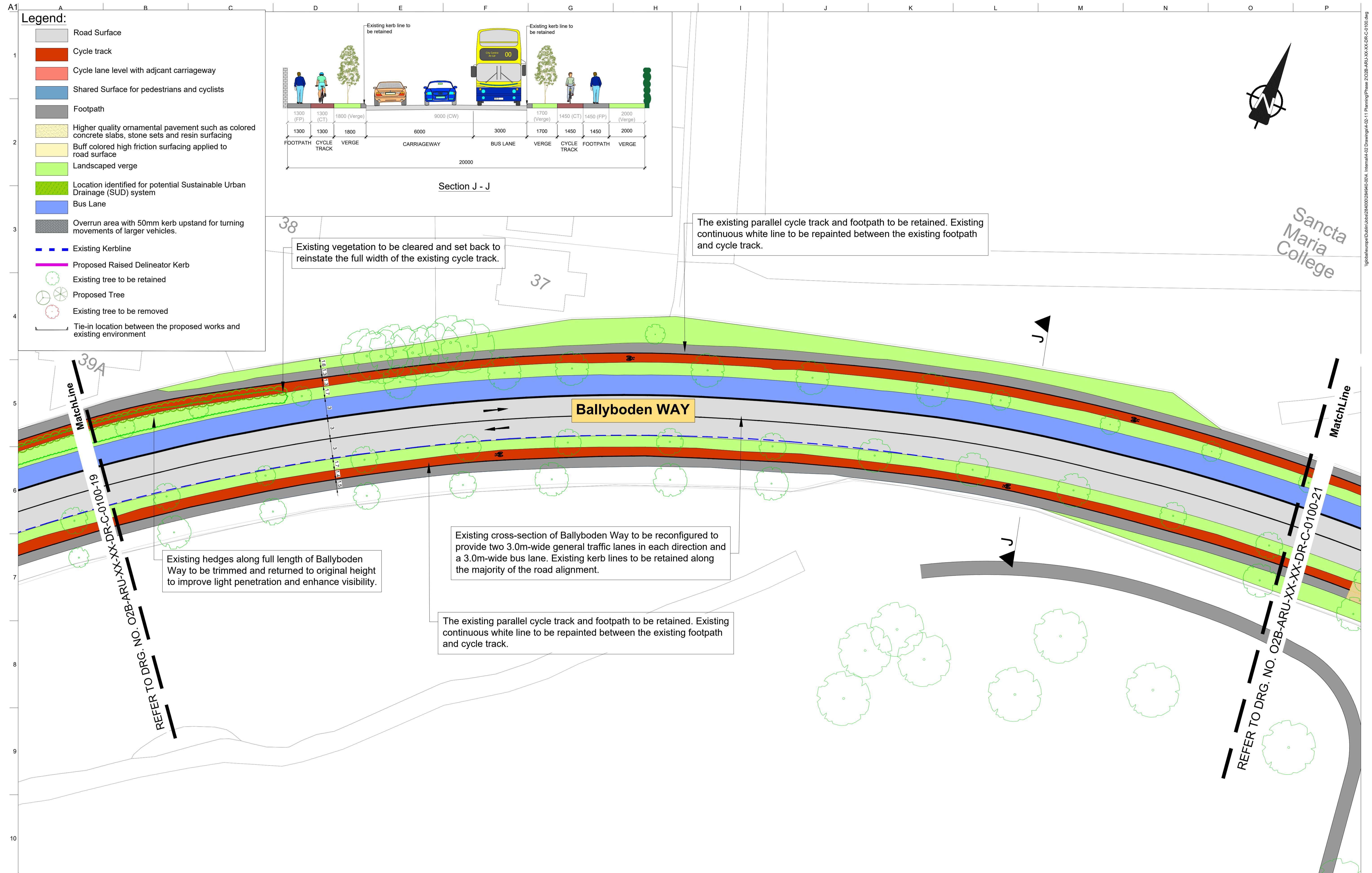
Project Title

Drawing Title

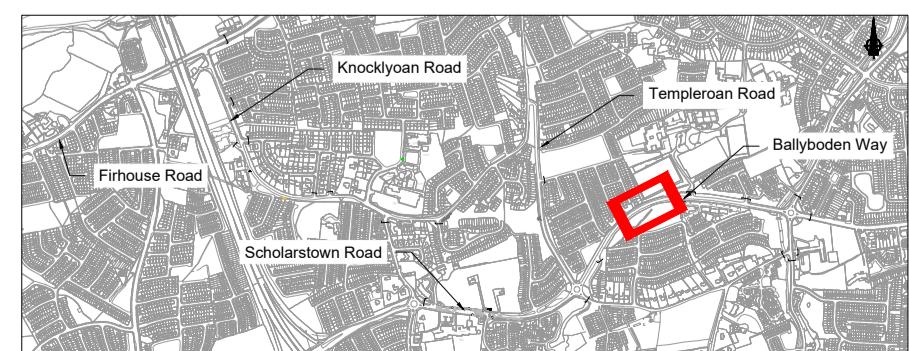
General Arrangement

Sheet 19 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	Rev
284940-00	P04
Name	
O2B-ARU-XX-XX-DR-C-0100-19	



- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

Arup, 29 Bishopsgate, London, EC2M 4AB, United Kingdom
Tel: +44 (0) 20 760 11000, Fax: +44 (0) 20 760 11111
www.arup.com

ARUP

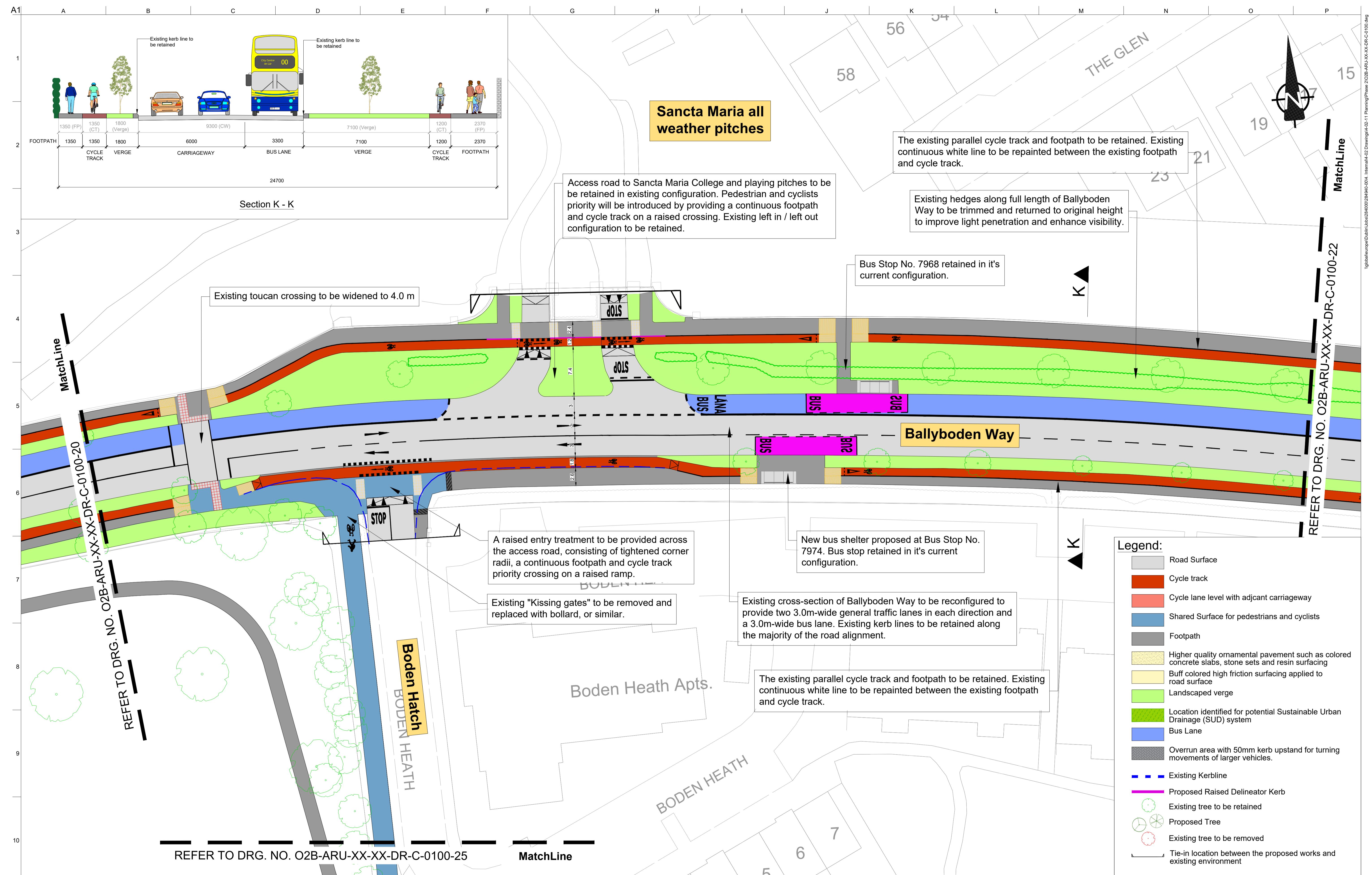
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Client

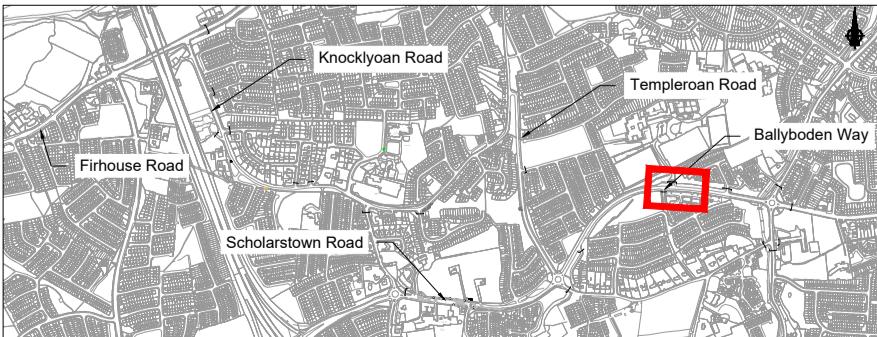
Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title
General Arrangement
Sheet 20 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00 Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-20



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC
Rev	Date	By	Chkd	Appd

ARUP

3(0)1 668 3169



Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Project Title

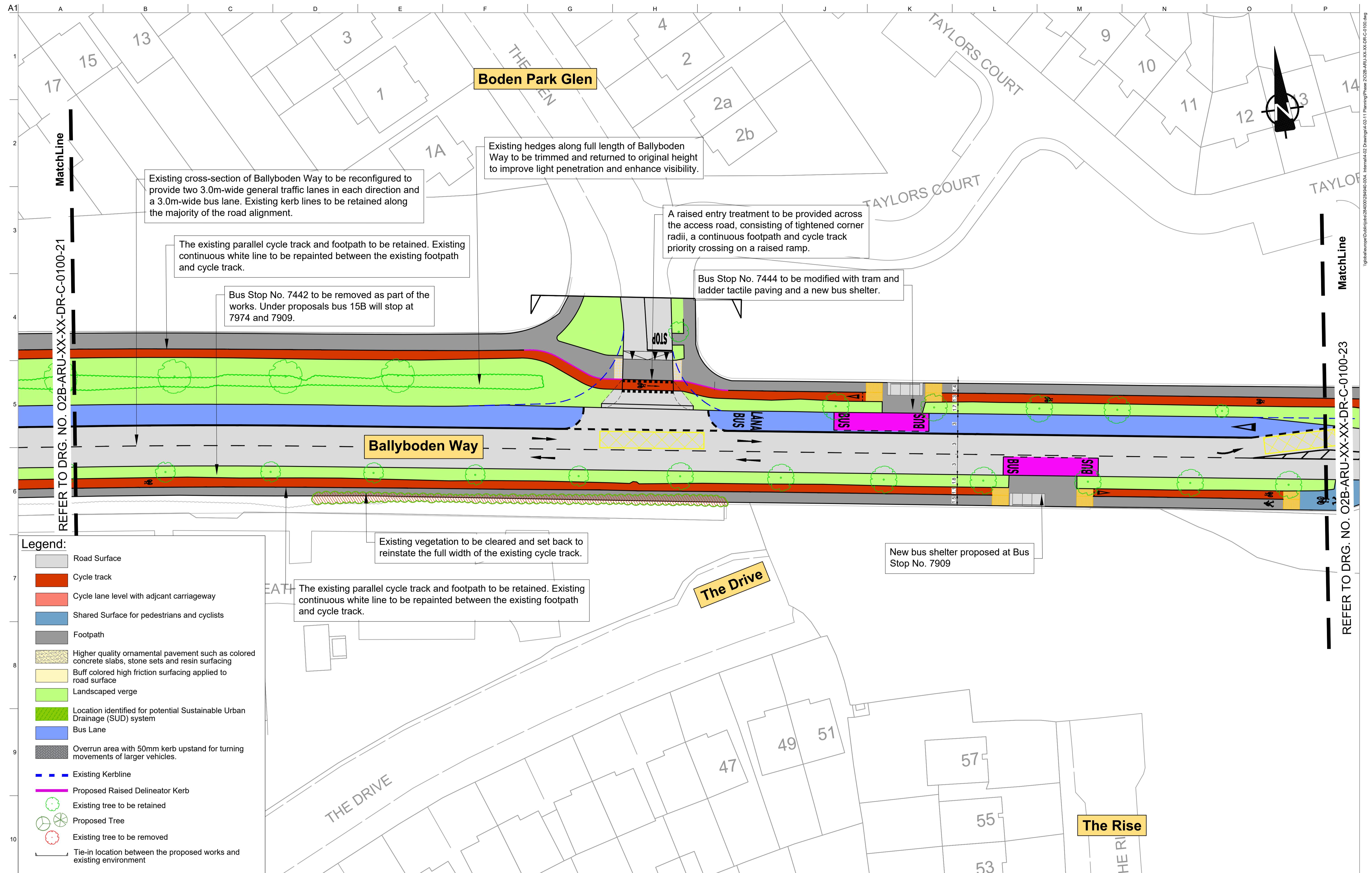
Drawing Title
General Arrangement
Sheet 21 of 30

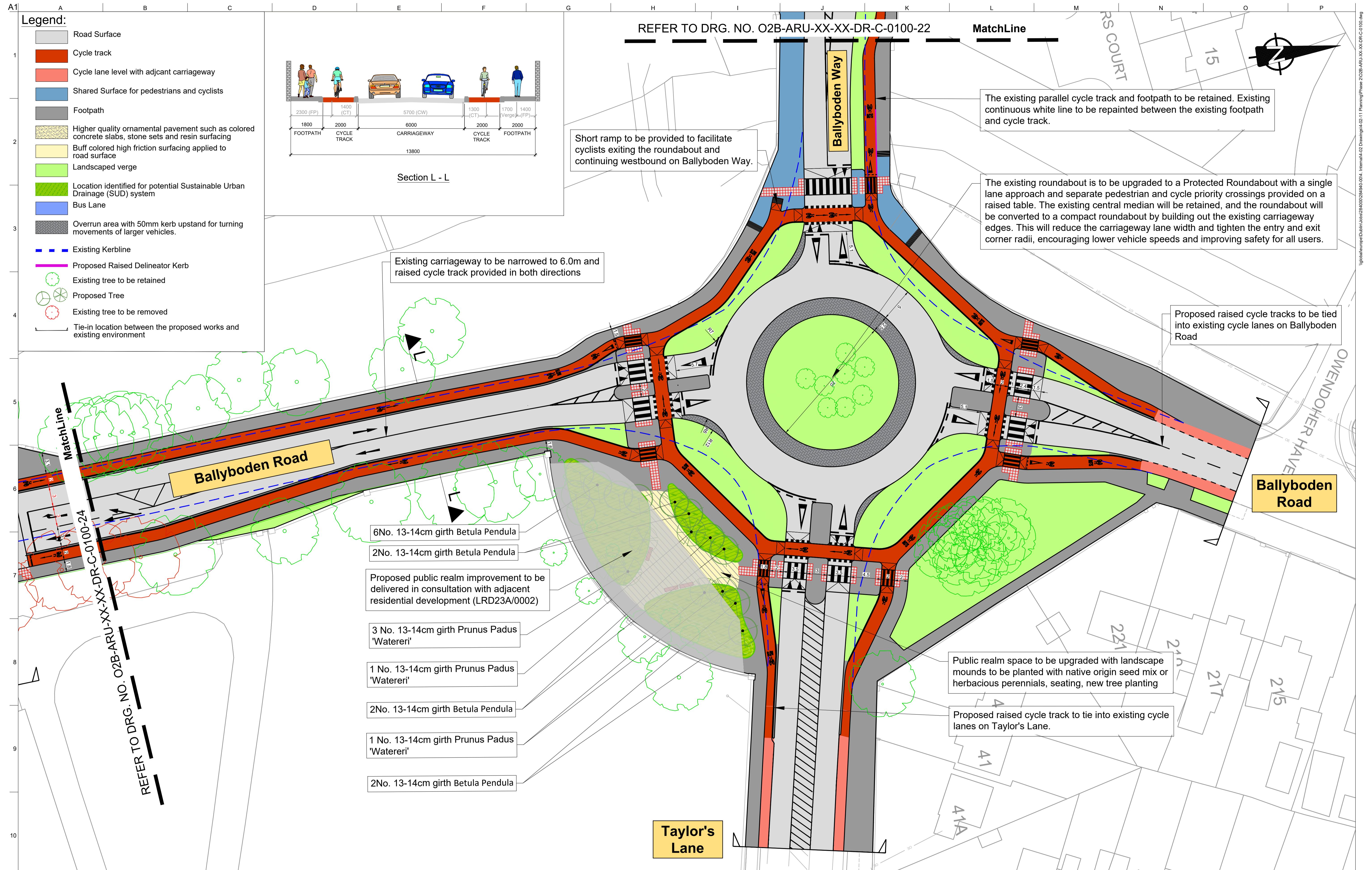
Scale at A1 1:250 (1:500 @ A3)

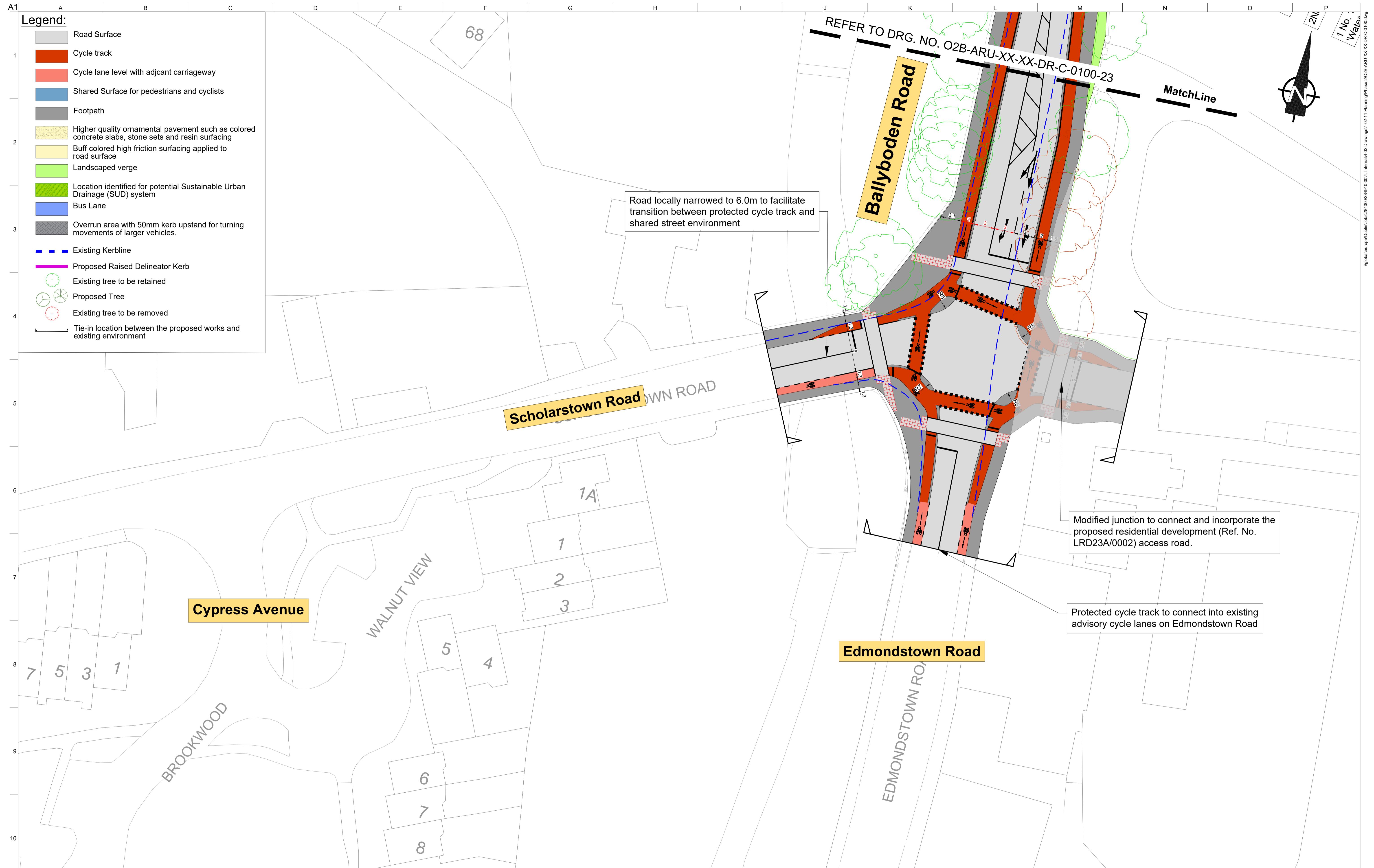
Role Infrastructure

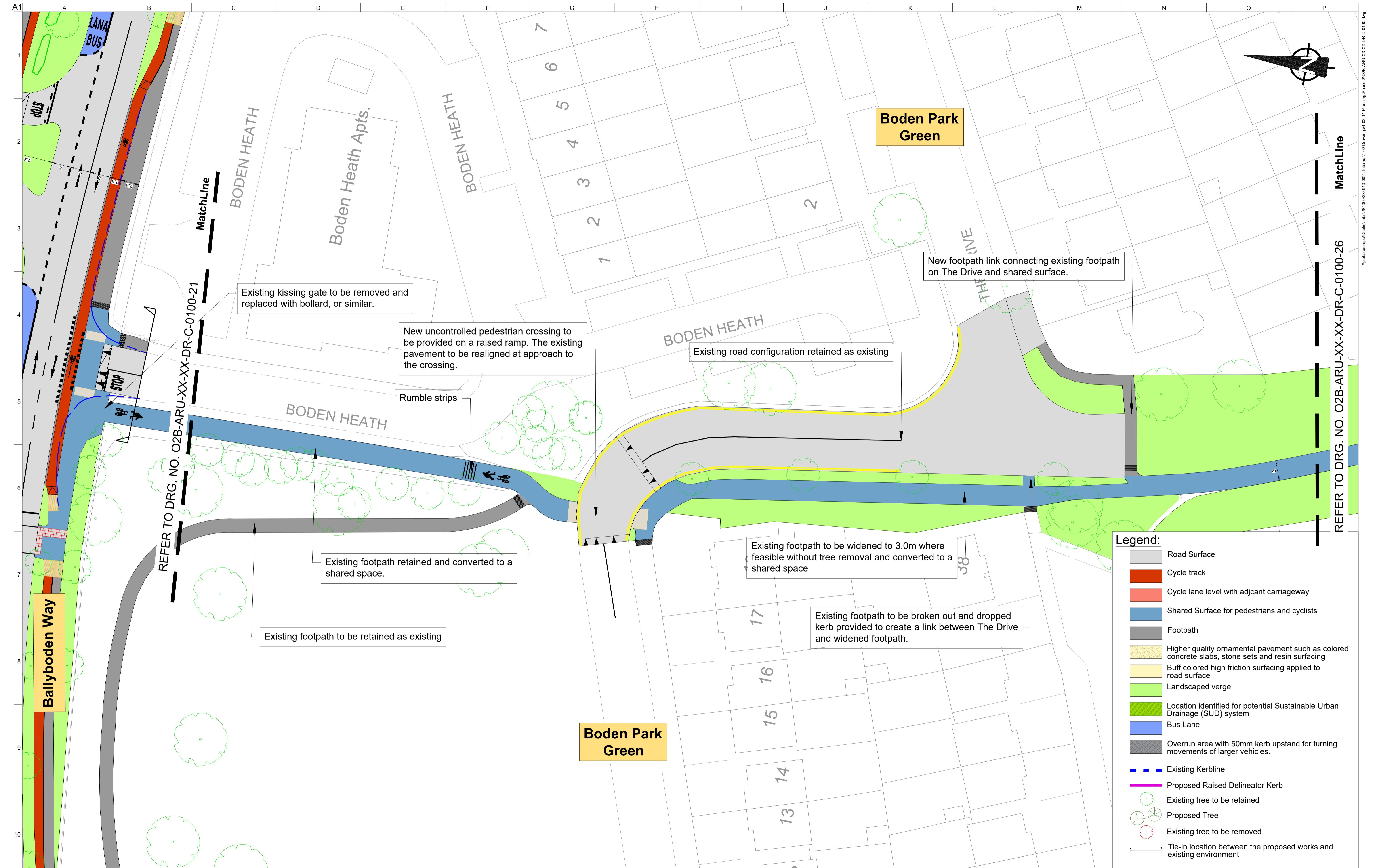
Suitability For Planning

Arup Job No 284940-00	Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-21	

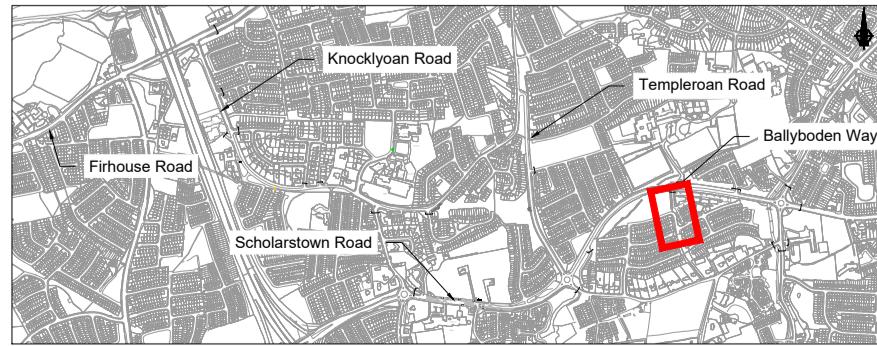








1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OSi Geoid Model (OSGM15) Main Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
 2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Ranelagh Road
Dublin 4, D04 TX00, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com

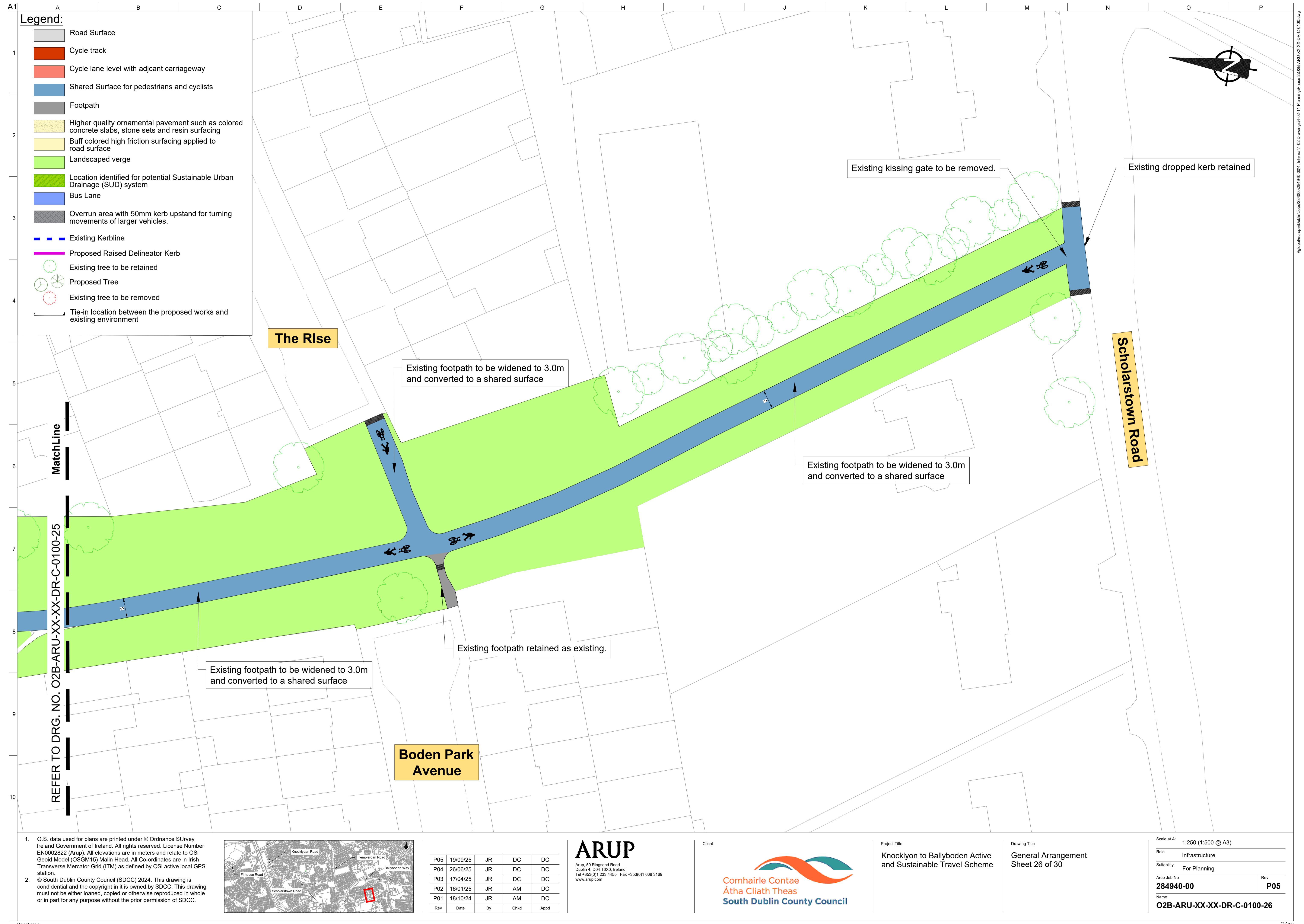
Comhairle Contae
Átha Cliath Theas
South Dublin County Council

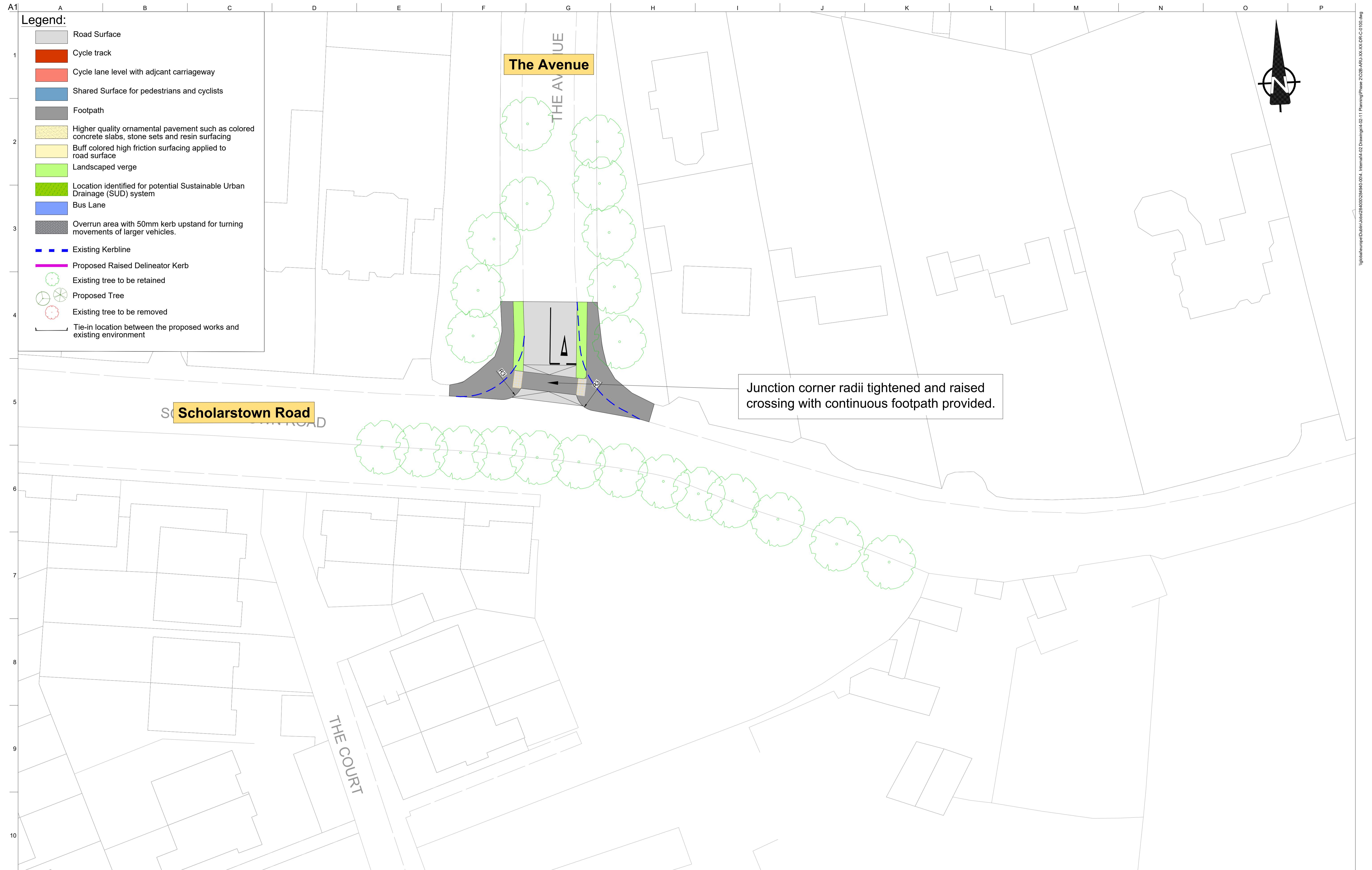
Client

Project Title
Knocklyon to Ballyboden Active
and Sustainable Travel Scheme

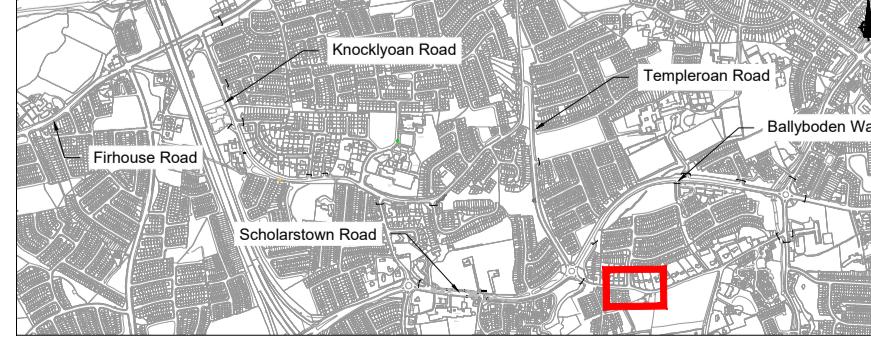
Drawing Title
General Arrangement
Sheet 25 of 30

Scale at A1: 1:250 (1:500 @ A3)
Role: Infrastructure
Suitability: For Planning
Arup Job No: 284940-00
Name: O2B-ARU-XX-XX-DR-C-0100-25
Rev: P04





- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to O.S. Georef Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by O.S. active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

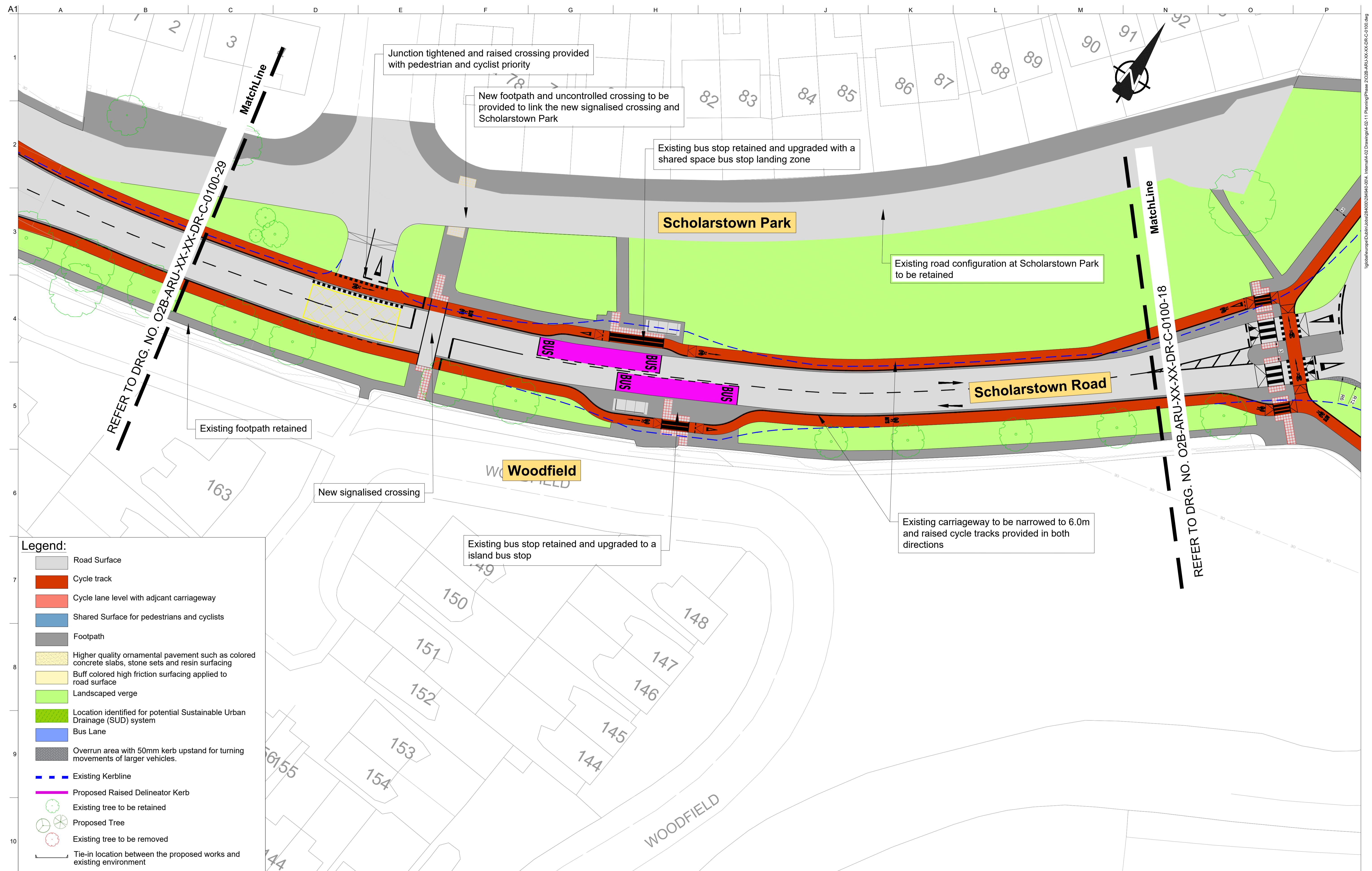
Arup, 29 Ranelagh Road
Dublin 4, D04 TX00, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com



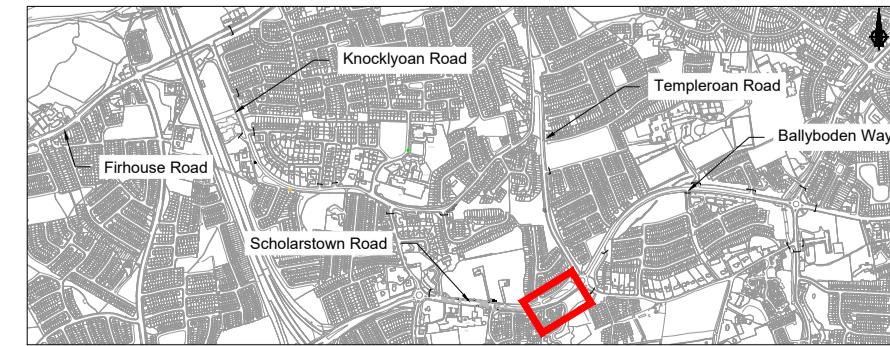
Client
Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

Drawing Title
General Arrangement
Sheet 27 of 30

Scale at A1 1:250 (1:500 @ A3)
Role Infrastructure
Suitability For Planning
Arup Job No 284940-00 Rev P04
Name O2B-ARU-XX-XX-DR-C-0100-27



- O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN0002822 (Arup). All elevations are in meters and relate to OS Geod Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.
- © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Fitzwilliam Road
Dublin 4, D04 TX30, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com

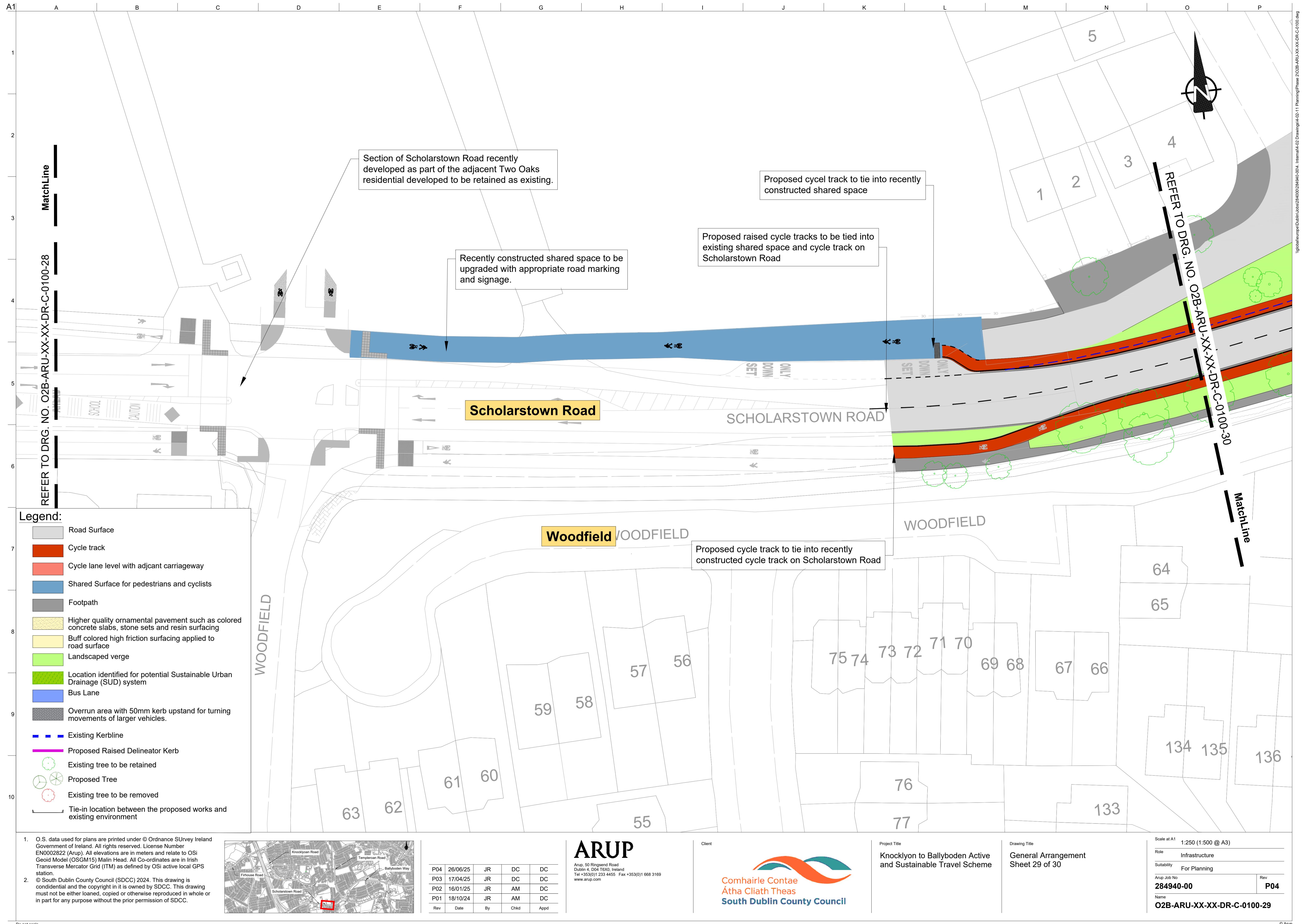


Client

Project Title
Knocklyon to Ballyboden Active and Sustainable Travel Scheme

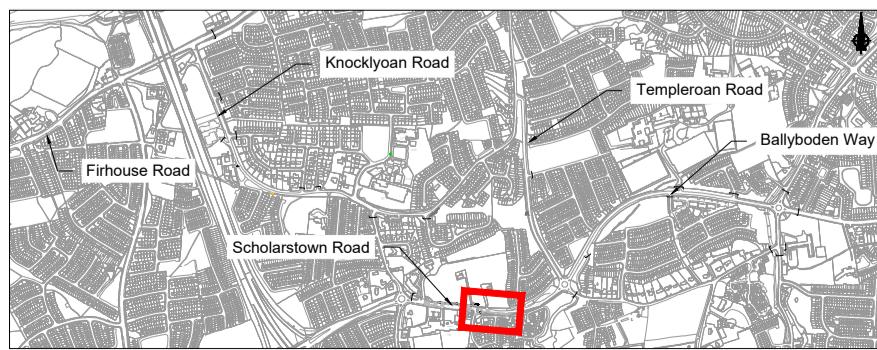
Drawing Title
General Arrangement
Sheet 28 of 30

Scale at A1	1:250 (1:500 @ A3)
Role	Infrastructure
Suitability	For Planning
Arup Job No	284940-00
Rev	P04
Name	O2B-ARU-XX-XX-DR-C-0100-28



1. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. License Number EN002822 (Arup). All elevations are in meters and relate to O.S. Geod Model (OSGM15) Malin Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by O.Si active local GPS station.

2. © South Dublin County Council (SDCC) 2024. This drawing is confidential and the copyright in it is owned by SDCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part for any purpose without the prior permission of SDCC.



P04	26/06/25	JR	DC	DC
P03	17/04/25	JR	DC	DC
P02	16/01/25	JR	AM	DC
P01	18/10/24	JR	AM	DC

Rev Date By Chkd Appd

ARUP

Arup, 29 Fitzwilliam Road
Dublin 4, D04 TX00, Ireland
Tel: +353(0)1 233 4455 Fax: +353(0)1 668 3169
www.arup.com

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

Client

Project Title
Knocklyon to Ballyboden Active
and Sustainable Travel Scheme

Drawing Title
General Arrangement
Sheet 29 of 30

Scale at A1: 1:250 (1:500 at A3)
Role: Infrastructure
Suitability: For Planning
Arup Job No: 284940-00 Rev: P04
Name: 02B-ARU-XX-XX-DR-C-0100-29

