CS CONSULTING

GROUP

DUBLIN | LONDON | LIMERICK

Traffic and Transport Assessment

Proposed Residential Development

An Triantán, Station Road, Kildare Town

Client: Kildare County Council

Job No. K114

January 2025

CS CONSULTING
GROUP

CS CONSULTING
GROUP

TRAFFIC AND TRANSPORT ASSESSMENT

PROPOSED RESIDENTIAL DEVELOPMENT, AN TRIANTÁN, STATION ROAD, KILDARE TOWN

CONTENTS

File Location: Job-K114\B_DOCUMENTS\1.0 Planning

BS 1192 FIELD	**K114-CSC-ZZ-XX-RP-C-0001**

Job Ref.	Author	Reviewed By	Authorised By	Issue Date	Rev. No.
K114	GF	NB	NB	23.01.2025	P0

CS CONSULTING
GROUP

1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by Kildare County Council to prepare a Traffic and Transport Assessment (TTA) for the proposed 'An Triantán' residential development at Station Road, Kildare Town.

The TTA is to be read in conjunction with the engineering drawings and documents submitted by CS Consulting and with all other relevant documentation submitted by other members of the project design team.

1.1 Applicable Reference Documents

In preparing this report, CS Consulting has made reference to the following:

- Kildare County Development Plan 2023-2029
- Kildare Town Local Area Plan 2023-2029
- Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) (2022)
- Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities) (2024)
- TII Project Appraisal Guidelines (2011)
- TII Traffic and Transport Assessment Guidelines (2014)
- DoT Traffic Signs Manual (2019-2024)
- Trip Rate Information Computer System (TRICS) database
- CSO 2022 Census data
- Design Manual for Urban Roads and Streets (DMURS) 2019
- NDA Building for Everyone: A Universal Design Approach – External environment and approach (2012)
- Building Regulations 2010 Technical Guidance Document M
- NTA Cycle Design Manual (2023)

- 2022 Greater Dublin Area Cycle Network

1.2 Objective

The principal objective of this report is to examine the traffic implications associated with the proposed development, in terms of its projected contribution to existing traffic in the area. The report also examines the proposed development's vehicular access and servicing arrangements, car and bicycle parking provision, site layout, public transport availability, and facilities for pedestrians and cyclists.

1.3 Study Methodology

The methodology adopted in preparing this report corresponds to industry best practice and follows the guidance set out by Transport Infrastructure Ireland (TII) in its *Project Appraisal Guidelines* and its *Traffic and Transport Assessment Guidelines*. This methodology is summarised as follows:

- Receiving environment – A desktop study of the area surrounding the development site has been conducted, examining the nature of the surrounding existing transport infrastructure, the existing public transport services nearby, and proposed future improvements to transport infrastructure and services.
- Traffic flow data – A full turning movement classified traffic count was carried out by CS Consulting over three separate 2-hour periods on Tuesday the 21st of May 2024 at the junction of Lourdesville with the R415.
- Trip generation – A multi-modal development trip generation assessment has been carried out using data extracted from the Trip Rate Information Computer System (TRICS) database of traffic surveys, in conjunction with CSO national census data. This quantifies trips to

and from the proposed development site, across several modes of transport.

- Parking – Car and bicycle parking provisions within the proposed development have been assessed with reference to the parking standards set out in the Local Authority Development Plan and other applicable guidance documents.

1.4 Structure of Report

The structure of this report corresponds to the various stages outlined above, and the key tasks summarised below:

- Section 2 describes the proposed development location, the existing land use, and the development proposals.
- Section 3 provides an overview of the existing local transportation infrastructure, existing traffic flows, and public transport services, as well as identifying relevant proposed improvements to local infrastructure and services.
- Section 4 comprises the multi-modal development trip generation assessment described above, and includes a comparison of the development's projected vehicular trip generation with existing local traffic flows.
- Section 5 assesses the proposed car and bicycle parking provisions for the development, with reference to Local Authority standards and national policy guidance.
- Section 6 examines the development's vehicular access arrangements, internal layout, pedestrian and cyclist facilities, and servicing arrangements.

- Section 7 presents the findings of the independent Quality Audit of the proposed development layout, and the design measures taken in response.
- Section 8 summarises the conclusions of the report.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The site of the proposed development is located in the centre of Kildare Town, approximately 450m to the south of Kildare Railway Station and approximately 500m to the northeast of the Kildare Village retail complex. The site has a total area of 0.51ha and is in the administrative jurisdiction of Kildare County Council. The site is bounded to the west by Station Road (R415), along a street frontage of 35m. It is bounded on all other sides by existing residential properties, with the exception of a filling station that abuts the site to the southwest.

Figure 1 – Location of proposed development site
(map data and imagery: EPA, OSM Contributors, Google)

The location of the proposed development site is shown in **Figure 1**; the extents and context of the development site are shown in more detail in **Figure 2**.

Figure 2 – Site extents and environs
(map data and imagery: NTA, OSM Contributors, Google)

2.2 Existing Site Condition

The subject development site is primarily greenfield but includes 2no. single-storey terraced cottages (understood to be vacant) and a contiguous shed/garage structure, all located on Station Road. The site currently generates no vehicular or pedestrian traffic.

2.3 Description of Proposed Development

The proposed development consists of:

- The construction of 30 social housing units to include:
  - 5no. 3 bedroom two storey duplex apartments;
  - 1no. 3 bedroom three storey house;
  - 2no. 2 bedroom two storey houses;
  - 2no. 2 bedroom single storey apartments;
  - 4no. 2 bedroom 3 person single storey apartments;
  - 6no. 2 bedroom two storey duplex apartments;
  - 10no. 1 bedroom single storey apartments;
- The construction of ancillary structures to include:
  - ESB substation;
  - Switchroom;
  - Secure cycle storage rooms;
- Associated site works to include:
  - Demolition of 2no. existing cottages and associated ancillary structures on Station Road;
  - Erection of new boundary treatment to south, east and north boundaries;
  - New vehicular and pedestrian entrance from Station Road;
- Provision of:
  - 26no. vehicle parking spaces
    - Of which 6no. provided with EV charging points
  - 54 no. residents bicycle parking spaces
    - Of which 4no. suitable for adapted cycles / cargo bikes
  - 16no. visitor bicycle parking spaces
    - Of which 4no. suitable for adapted cycles / cargo bikes
- New landscaping, internal vehicular and pedestrian shared surface route, public lighting, site drainage works, ancillary site services and development works above and below ground.

3.0 RECEIVING ENVIRONMENT

3.1 Existing Road Network Characteristics

The development site is located on the eastern side of Station Road in Kildare Town (R415). The R415 is a single-carriageway regional road that traverses Kildare Town along a north/south axis. It extends northward as far as Allenwood, approximately 13km to the north of Kildare Town, where it meets the R403 some 6km west of Prosperous. To the south of Kildare Town, the R415 crosses the M7 motorway at Junction 13 and continues southward but does not give direct access to any other town or village of significant size.

Approximately 250m to the south of the development site, the R415 intersects with the R445, which passes through Kildare Town on the east/west axis. This is a regional road of greater significance, linking Kildare Town to Newbridge (approx. 7km to the east) and Monasterevin (approx. 9km to the west).

In the immediate vicinity of the development site, the R415 has a typical carriageway width of approx. 8m, with wide raised footpaths to either side. Public lighting is in place along the western side of the street. On-street parking is prohibited on the R415 to the south of the development site. This prohibition is suspended for approx. 100m between the development site and the R415's next junction to the north; there is however very little opportunity to park on street without obstructing accesses along this stretch.

No bus lanes, cycle tracks, or on-street cycle lanes are in place on the R415 in Kildare Town, nor are they present on any connecting roads.

3.2 Existing Local Vehicular Traffic Flows

A full turning movement classified traffic count was carried out by CS Consulting on Tuesday the 21st of May 2024 at the junction of Lourdesville with the R415, this being the existing road junction closest to the proposed development's access location (see **Figure 3**). This traffic survey was conducted over three separate 2-hour periods: 07:30–09:30, 13:00–15:00, and 16:30–18:30.

Figure 3 – Traffic survey site
(*map data & imagery: OSM Contributors, Google*)

Within these three survey periods, three distinct peak hours were identified in which the highest total number of traffic movements were recorded:

- An AM (morning) peak of 08:15–09:15
- A mid-day peak of 13:45–14:45
- A PM (evening) peak of 16:45–17:45

Table 1 summarises the surveyed traffic movements at this junction in the three peak hour periods. Junction arms are identified as follows (see **Figure 3**):

- Arm A – R415 Station Road (south)
- Arm B – Lourdesville (west)
- Arm C – R415 Station Road (north)

Table 1 – Surveyed Peak Hour Junction Traffic Movements

Junction Movement		Vehicle Type			Total Vehicles
From Arm	To Arm	Light Motor Vehicle	Heavy Motor Vehicle	Bicycle	
AM Peak Hour (08:15–09:15)					
A	B	48	0	1	49
A	C	274	21	9	304
B	A	49	0	0	49
B	C	5	0	0	5
C	A	398	13	17	428
C	B	3	0	0	3
TOTALS		777	34	27	838
Mid-Day Peak Hour (13:45–14:45)					
A	B	24	0	1	25
A	C	302	14	4	320
B	A	17	0	0	17
B	C	3	0	0	3
C	A	325	16	1	342
C	B	2	0	0	2
TOTALS		673	30	6	709
PM Peak Hour (16:45–17:45)					
A	B	56	0	0	56
A	C	400	13	17	430
B	A	20	0	0	20
B	C	5	0	0	5
C	A	404	8	10	422
C	B	6	0	0	6
TOTALS		891	21	27	939

3.3 Pedestrian Accessibility and Service Locations

Figure 4 shows walking times to and from the development site, based on an average walking speed of 4.5km/h. This illustrates that the site is well positioned within the centre of Kildare Town to provide convenient access on foot to a range of key amenities and transport service points.

Pedestrian infrastructure in the town centre is generally of a reasonable standard, with raised footpaths and public lighting. Footpath widths are however restricted in some locations, and there is a general lack of controlled pedestrian crossing points and pedestrian priority measures.

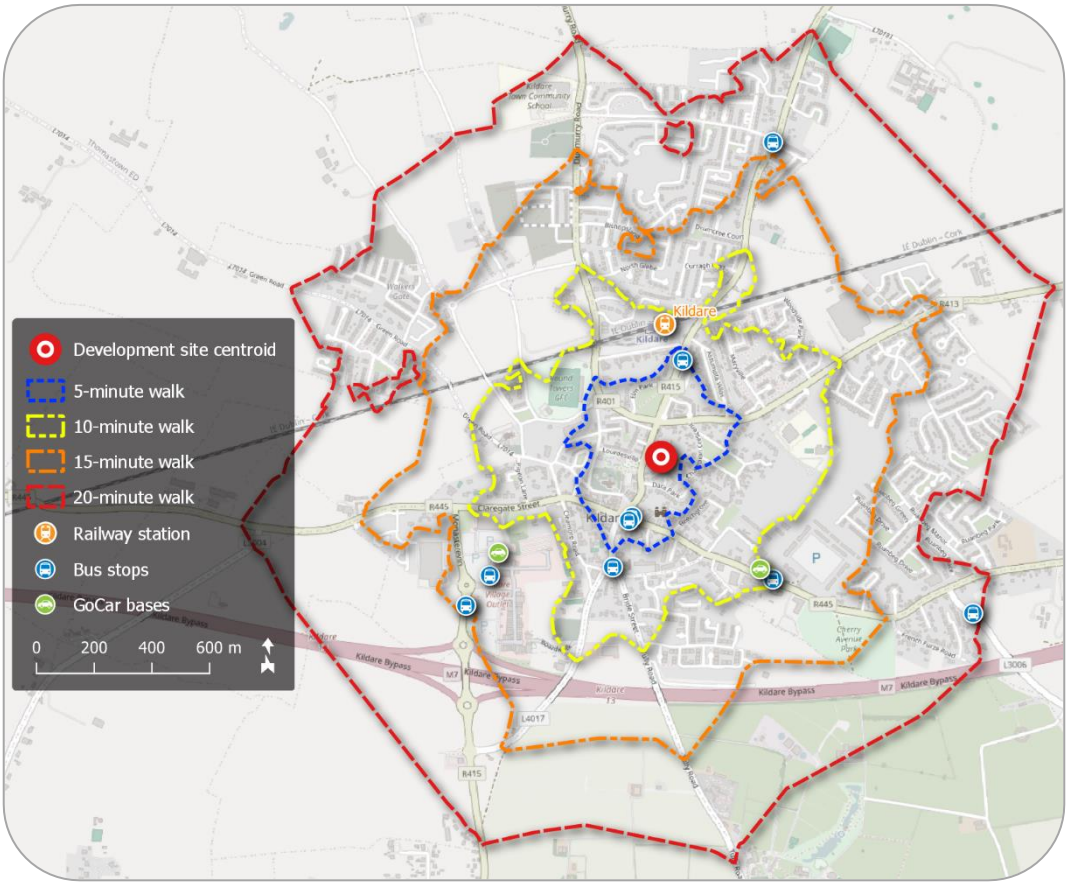


Figure 4 – Walking times to/from development site
(map data & imagery: NTA, OSi, GoCar, OSM Contributors)

3.3.1 Public and shared transport service points

Two pairs of bus stops on the R415 and R445 are within a 5-minute walk of the development site; these are served by 5no. bus routes (see sub-section **3.5**). Other bus stops are within a 10-minute walk but are not served by any additional bus routes. Kildare Railway Station is within a 10-minute walk of the development site.

A base for the GoCar car-sharing service is located southeast of the development site at the Lidl supermarket, within a 10-minute walk. A second GoCar base is located in the Tesco supermarket car park, 12 minutes' walk southwest of the development site.

3.3.2 Amenities and retail

Key amenities within a 5-minute walk of the development site include:

- The Kildare Town playground and other green spaces
- A filling station with convenience store
- Other grocery and convenience retail outlets
- A laundry and dry cleaner
- Several pharmacies
- The town library
- The Hive youth centre
- A bank with ATM
- A barber shop and hair/beauty salons
- A range of pubs and restaurants
- A cathedral

Further amenities within a 10-minute walk include:

- Four primary schools
- Three large supermarkets (Tesco, Lidl, and Aldi)
- A dental clinic
- A GAA club
- The Teach Dara community centre

- The Kildare Education Support Centre and the Kildare Town Further Education and Training Centre

3.4 Bicycle Journey Times

Figure 4 shows bicycle journey times to and from the development site, based on an average cycling speed of 18km/h. This shows almost all of Kildare Town to be within a 5-minute bicycle journey, while a 20-minute bicycle journey will almost reach the outskirts of Newbridge.

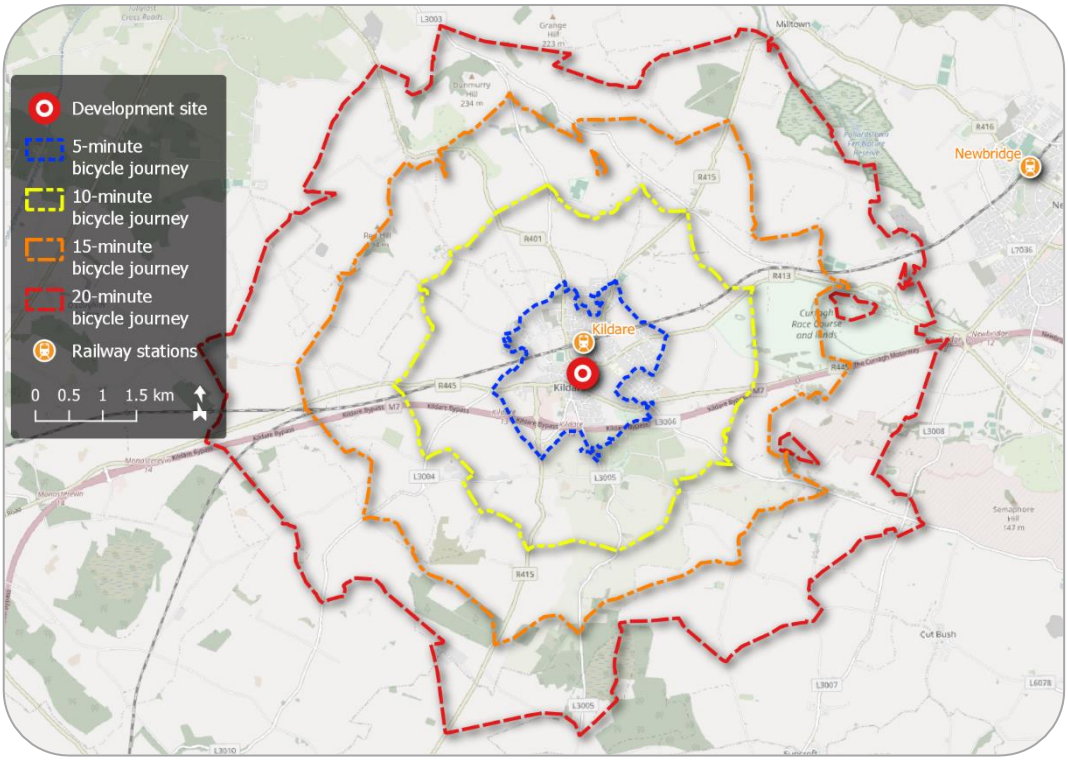


Figure 5 – Bicycle journey times to/from development site
(*map data & imagery: OSi, OSM Contributors*)

3.5 Existing Public Transport Services

Bus stops on the R415 and R445, within a 5-minute walk of the development site, are served by 5no. bus routes operated by Go-Ahead Ireland, Dublin Coach, Local Link, and JJ Kavanagh. Details of these bus services are given in **Table 2**.

Table 2 – Existing Adjacent Bus Services

Route No.	Operator	Destination	Weekday Services	Typical Peak Hour Interval
126 *	Go-Ahead	Dublin	12	25 min
		Rathangan	11	70 min
726	Dublin Coach	Dublin Airport via Red Cow	34	30 min
		Portlaoise	34	30 min
883	Local Link	Newbridge	5	n/a
		Athy	6	n/a
IW02 †	JJ Kavanagh	Carlow	1	n/a
		Newbridge	1	n/a
UM14 †	JJ Kavanagh	Maynooth	1	n/a
		Portlaoise	1	n/a

Kildare Railway Station is 400m to the north of the development site, within a 6-minute walk or a 2-minute bicycle journey. This station is served by Commuter Rail trains operating between Portlaoise and Dublin Heuston, as well as by InterCity trains to and from Galway, Waterford, Limerick, and Westport and Ballina.

Table 3 – Rail Services at Kildare Station

Service Type	Origin(s)	Destination(s)	Weekday Services
Commuter Rail	Kildare and Portlaoise	Dublin	21
	Dublin	Kildare and Portlaoise	20
InterCity	Various	Dublin	19
	Dublin	Galway	3
		Waterford	13
		Limerick	2
		Westport and Ballina	2

* Including route variants 126A, 126B, 126D, 126E, and 126T
† Operates during college term times only

Figure 6 shows the reach of public transport journeys from the development site, by total journey time, based on a weekday departure time of 08:00. These journey times include service interchanges, as well as the time necessary to walk to and between public transport stops.

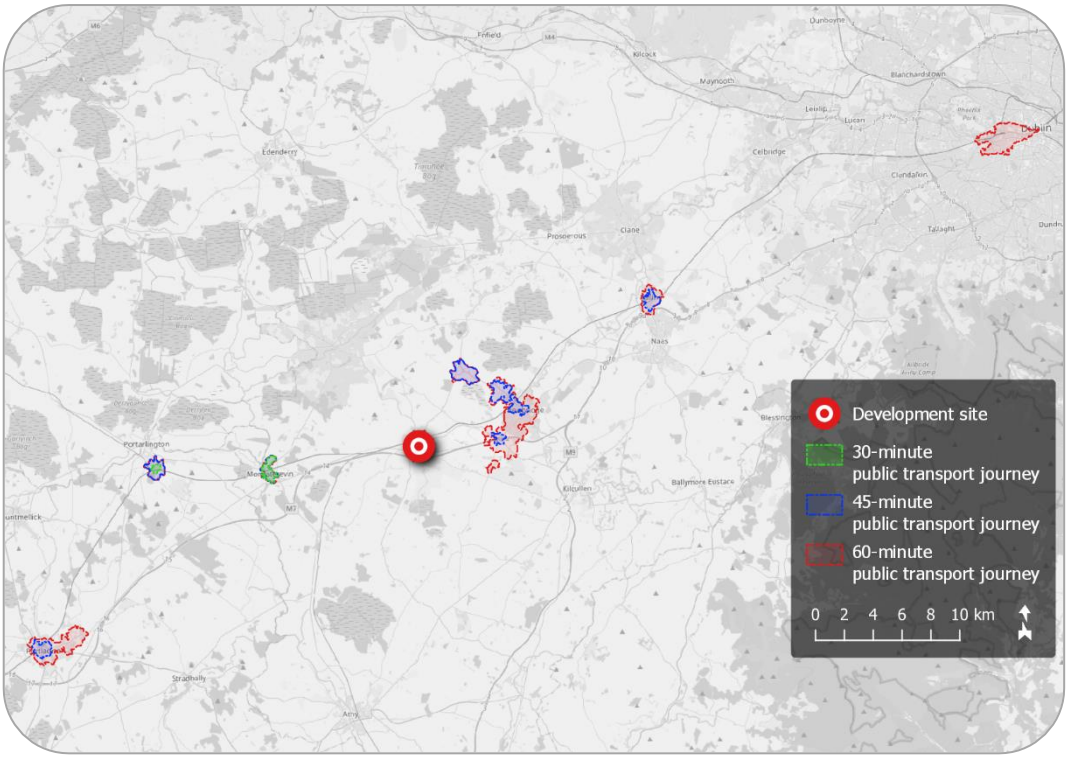


Figure 6 – Public transport journey times
(*map data & imagery: TravelTime platform, OSM Contributors*)

3.6 Proposed Transport Infrastructure and Service Improvements

3.6.1 Kildare Town LAP 2023-2029

The *Kildare Town Local Area Plan 2023-2029* includes provision for a number of measures to be implemented to improve cycling infrastructure in and around the town, as well as pedestrian/cyclist permeability, public transport services, and road infrastructure. Extracts of the relevant LAP maps are shown in **Figure 7** to **Figure 10**; the full maps are attached as **Appendix B**.

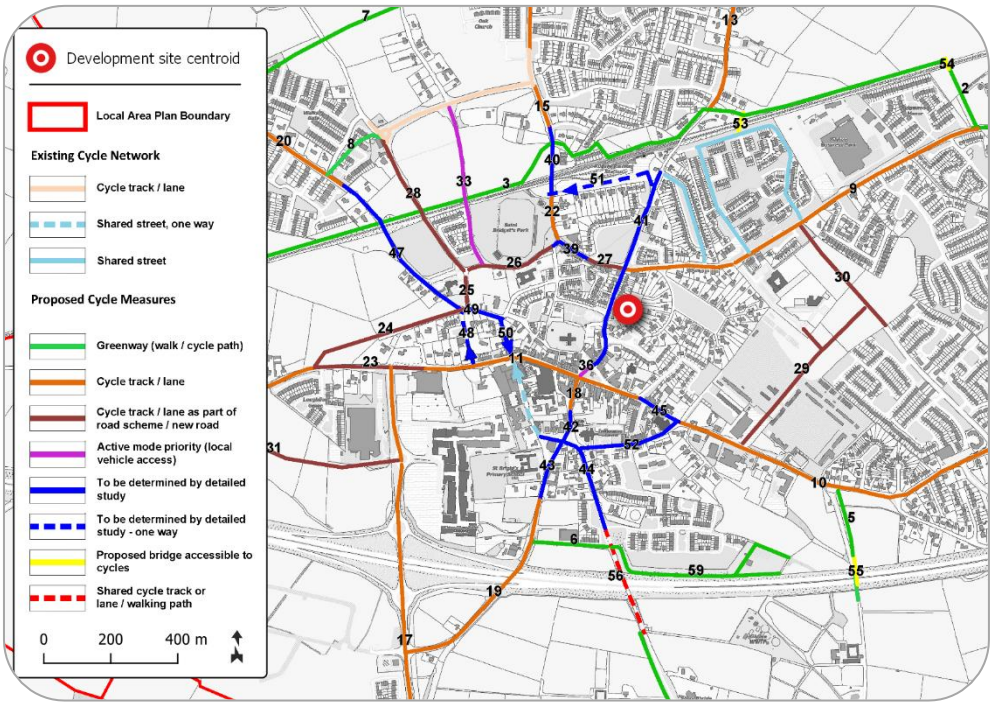


Figure 7 – Kildare Town LAP 2023-2029 cycling measures
(*source: Kildare County Council*)

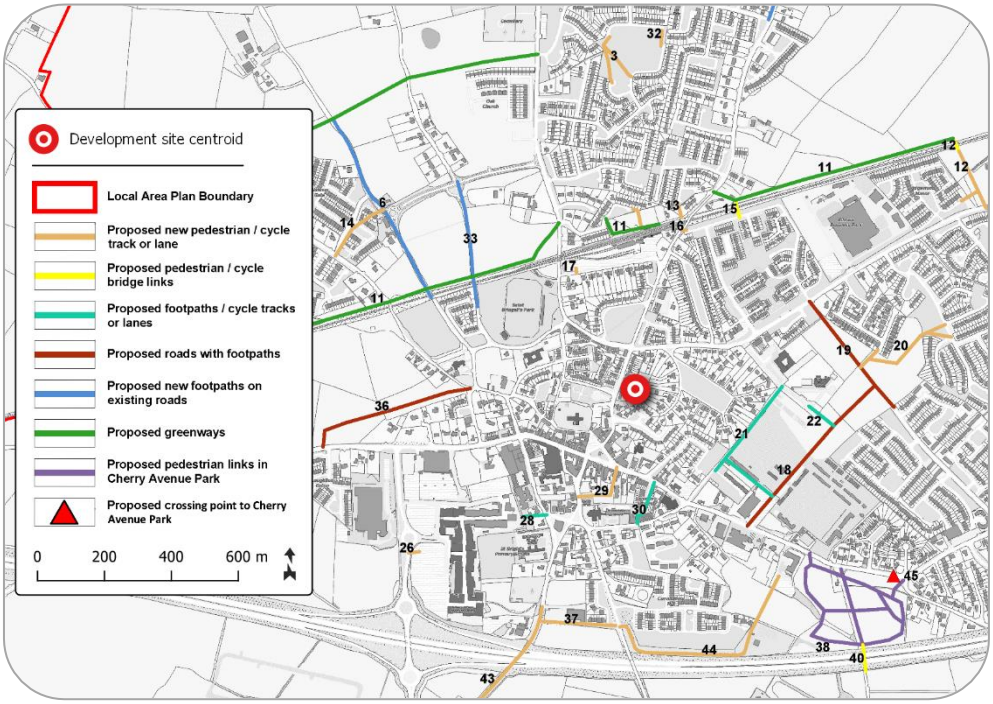


Figure 8 – Kildare Town LAP 2023-2029 permeability measures
(*source: Kildare County Council*)

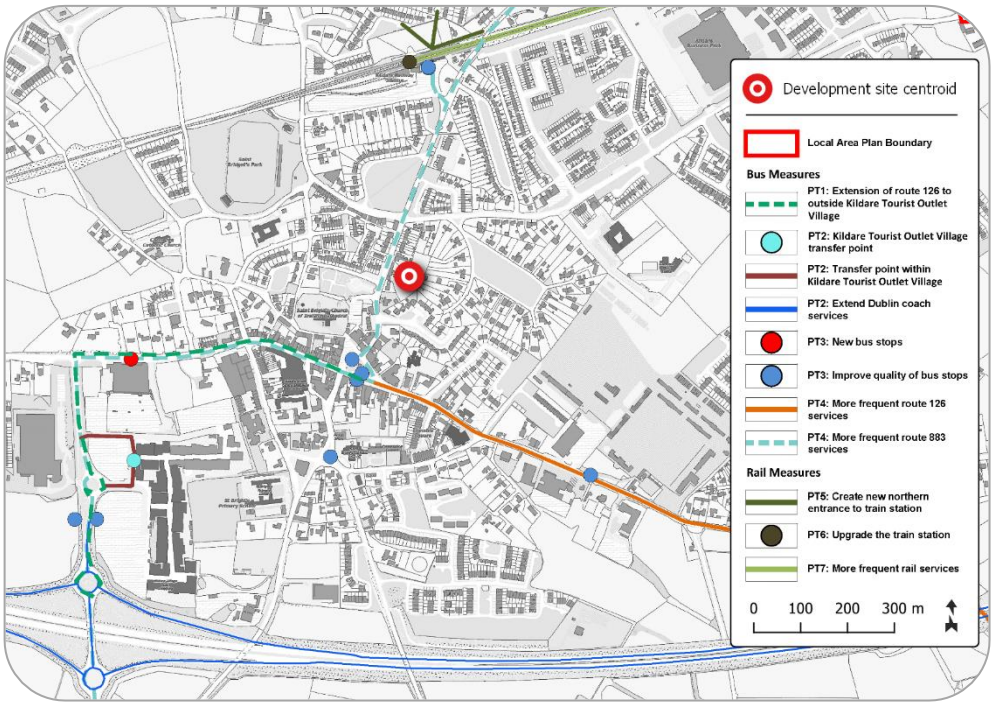


Figure 9 – Kildare Town LAP 2023-2029 public transport measures
(*source: Kildare County Council*)

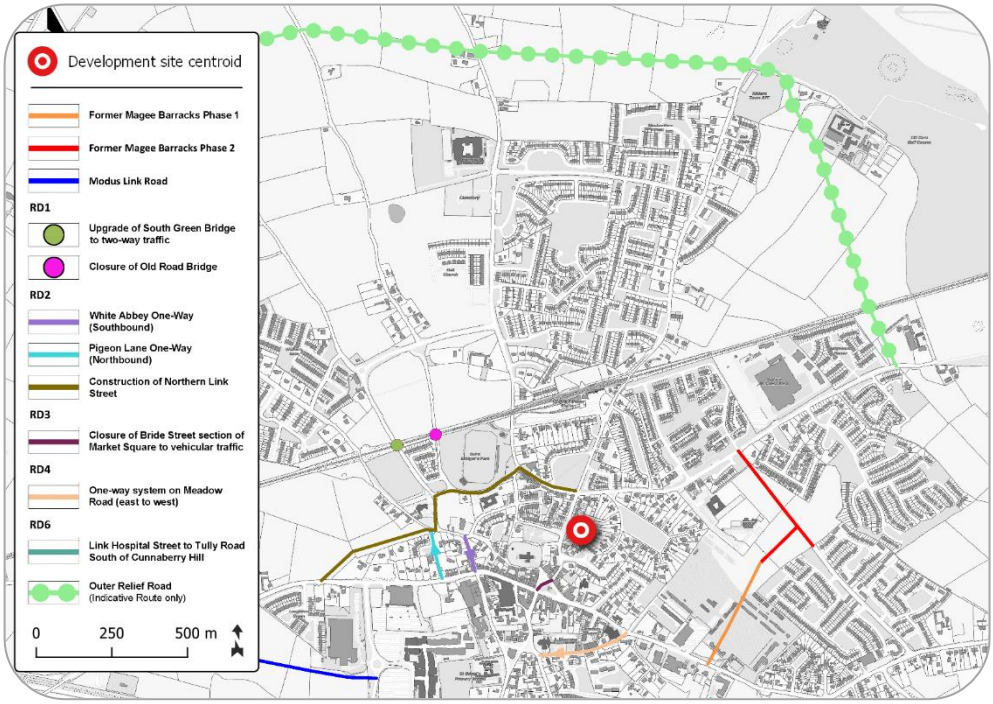


Figure 10 – Kildare Town LAP 2023-2029 road measures
(*source: Kildare County Council*)

3.6.2 Greater Dublin Area Cycle Network Plan 2022

The Cycle Network Plan for the Greater Dublin Area, administered by the National Transport Authority, was first published in 2015. Revised GDA Cycle Network proposals were published by the NTA in 2022.

Within Kildare Town, the GDA Cycle Network Plan provides for the implementation of primary radial cycle routes along both the R415 and the R445, in proximity to the development site. These are to be complemented by a network of secondary and feeder cycle routes in and around the town, as shown in **Figure 11**.

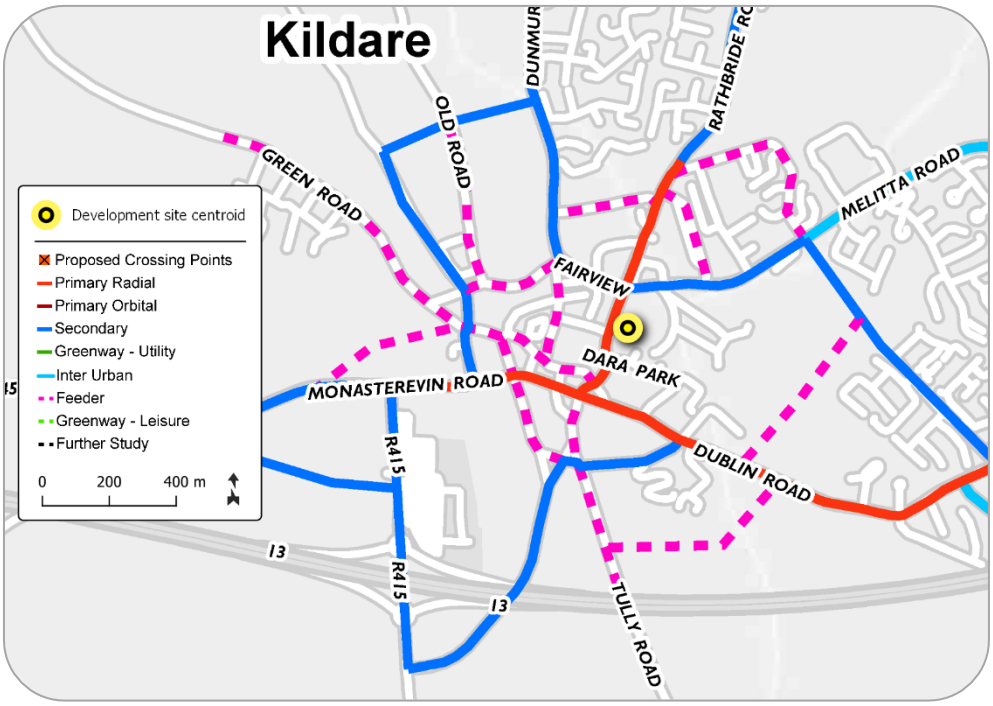


Figure 11 – 2022 GDA Cycle Network Plan proposals for Kildare Town (*source: NTA*)

The GDA Cycle Network proposals are generally consistent with the cycling measures outlined in the *Kildare Town Local Area Plan 2023-2029*, although each document includes some cycle network elements that do not feature in the other. The full relevant map from the 2022 GDA Cycle Network Plan, which covers Newbridge and Kildare Town, is attached as **Appendix C**.

4.0 TRIP GENERATION

4.1 Modal Split

To establish indicative baseline modal splits for residents of (and visitors to) the development, reference has been made to CSO data derived from the 2022 census, in the form of Small Area Population Statistics (SAPS) that give modal splits for residents' trips to places of work or study. For the purposes of the present assessment, these splits are assumed to apply also to visitors. The development site is within Census Small Area (SA) no. 087050011 (see **Figure 12**), which has a census population of 117 people. To obtain a larger sample size, this SA has been considered in conjunction with its 7no. neighbouring SAs. The aggregate census modal splits for these 8no. SAs, which have a total combined census population of 1,169 people, are given in **Table 4**.

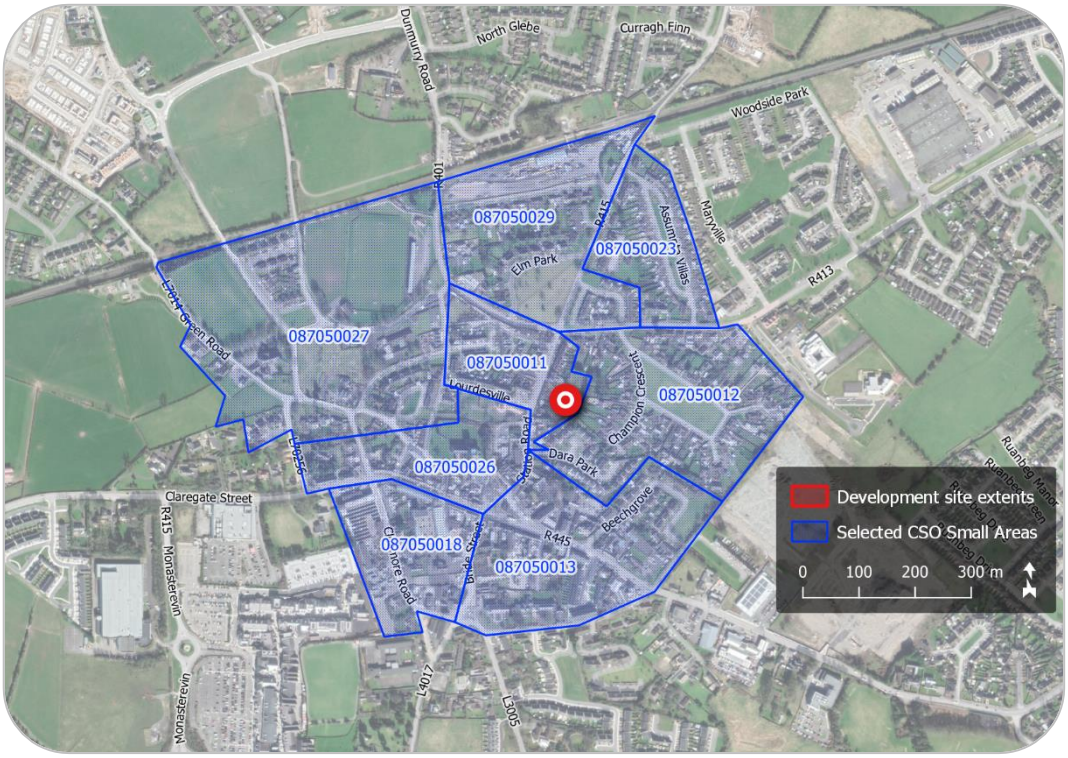


Figure 12 – Site Census Small Area (SA) and neighbouring SAs
(*map data & imagery: CSO, Google*)

Table 4 – CSO 2022 Census Data – Existing Modal Splits

Transport Mode	Local Area Census Modal Shares ‡
Driving a Car or Van	43%
Passenger in a Car	18%
Bicycle	2%
Motorcycle	0%
Bus	8%
Train or Tram	7%
Walking	22%

It should be noted that these modal shares refer to the greatest proportion (by distance) of each journey. A bus journey, for example, is likely to involve walking or cycling at one or both ends of the trip but will not be classified as a walking or cycling journey.

4.2 Development Resident and Visitor Person-Trip Generation

The proposed development comprises 30no. social housing units (27no. apartments and 3no. houses) with a total of 56no. bedrooms. Trip generation factors from the Trip Rate Information Computer System (TRICS) database have been used to predict the total trip generation to and from the proposed development (across all modes) for the weekday AM and PM peak hour periods, as well as for an average full day (AADT). The TRICS survey database is maintained by a consortium of English County Councils but covers the entirety of Great Britain and Ireland. Full details of the TRICS information used are provided in **Appendix B**.

The TRICS sub-category '03 Residential / D - Affordable/Local Authority Flats' has been employed, being the most appropriate for assessing the

‡ Excluding 'not stated' responses and those who work mainly from home.

proposed development. This is described in the TRICS land use category definitions as follows:

"Housing developments where at least 75% of households are non-privately owned. Of the total number of units, 75% must also be flats (sum of flats in blocks and "split" houses), with no more than 25% of the total units being "non-split" houses. "Non-privately owned" may be council rented or housing association rented. The TRICS definition of a privately owned dwelling is a dwelling at which residents have any degree of equity, or a dwelling that is owned by a private landlord and rented at market rates. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms."

The TRICS trip rates for the proposed development have been selected from the above category and restricted insofar as possible to similar locations. The selected TRICS person-trip rates are given in **Table 5**. These account for all trips to and from the proposed development's dwellings, the majority of which shall be made by residents and their visitors.

Table 5 – TRICS Person-Trip Generation Rates for Houses

Time Period	Arrivals per bedroom	Departures per bedroom
Weekday AM Peak (08:15-09:15)	0.060	0.200
Weekday PM Peak (16:45-17:45)	0.165	0.103
AADT§ (24-hour period)	1.758	1.758

The total person-trip generation figures obtained for the proposed development are given in **Table 6**.

§ Annual Average Daily Traffic

Table 6 – Development Residential Person-Trip Generation from TRICS

Time Period	Arrivals	Departures	Total Trips
Weekday AM Peak	3	11	14
Weekday PM Peak	9	6	15
AADT (24hr)	98	98	196

4.3 Development Resident and Visitor Trips by Mode

The local modal splits given in **Table 4** have been applied to all weekday peak hour and AADT person-trips to be generated by the proposed development, as given in **Table 6**. This produces the distribution of development trips across transport modes that is presented in **Table 7**.

Table 7 – Development Trip Generation by Mode

Transport Mode	Direction and Time Period					
	Arrivals			Departures		
	Weekday AM Peak	Weekday PM Peak	AADT	Weekday AM Peak	Weekday PM Peak	AADT
Driving a Car or Van	1	4	42	5	3	42
Passenger in a Car/Van/Taxi	1	2	18	2	1	18
Bicycle	0	0	2	0	0	2
Motorcycle	0	0	0	0	0	0
Bus	0	1	8	1	0	8
Train or Tram	0	1	6	1	0	6
Walking	1	2	22	2	1	22
TOTAL	3	10	98	11	5	98

4.4 Development Residential Servicing Vehicle Trip Generation

In addition to trips made to and from the site by residents and visitors, the proposed development shall also generate vehicular trips by servicing vehicles. These shall be required for operations such as deliveries, maintenance works, and refuse collection, and shall be made by either

Ordinary Goods Vehicles (rigid or articulated lorries over 7.5t) or Light Goods Vehicles (vans).

To separate these trips from those made by development residents and visitors, specific OGV and LGV trip generation rates have been sourced from the TRICS database (also from the sub-category '03 Residential / A - Houses Privately Owned'); these are given in **Table 8**.

Table 8 – TRICS Residential Servicing Vehicle Trip Generation Rates

Time Period	Arrivals per bedroom		Departures per bedroom	
	OGVs	LGVs	OGVs	LGVs
Weekday AM Peak (08:15-09:15)	0.001	0.004	0.000	0.006
Weekday PM Peak (16:45-17:45)	0.000	0.006	0.000	0.005
AADT (24-hour period)	0.004	0.068	0.004	0.068

The development's resultant predicted servicing vehicle trip generation is given in **Table 9**.

Table 9 – Development Residential Servicing Trips from TRICS

Time Period	Arrivals		Departures		Total Trips	
	OGVs	LGVs	OGVs	LGVs	OGVs	LGVs
Weekday AM Peak	0	0	0	0	0	0
Weekday PM Peak	0	0	0	0	0	0
AADT (24hr)	0	4	0	4	0	8

It must be noted that the total person-trip generation figures already established for the development's residential component (**Table 6**) technically already include residential servicing trips, although these have not been removed from the trip numbers calculated for residents and visitors. It is further noted that some of the LGV trips accounted for by the TRICS rates under this vehicle category may in fact be made by residents or visitors driving their own vans, rather than representing additional servicing trips. As such, the trip generation methodology employed may

very slightly overestimate the number of servicing vehicle trips to and from the proposed development. This effect – if present – would however contribute to a more robust traffic assessment of the development and has therefore not been corrected for.

4.5 Maximum Potential Development Vehicular Trips

Table 10 gives the total projected maximum vehicular trip generation of the proposed development, obtained by combining the trip generation figures derived in sub-sections **4.3** and **4.4**. Car passengers (as listed in **Table 7**) are assumed not to represent separate vehicle trips; these are already accounted for by corresponding car driver trips.

Table 10 – Maximum Potential Development Vehicular Trip Generation

Time Period	Arrivals (PCU)	Departures (PCU)	Total Trips (PCU)
Resident and Visitor Trips			
Weekday AM Peak (08:15-09:15)	1	5	6
Weekday PM Peak (16:45-17:45)	4	3	7
AADT (24-hour period)	42	42	84
Servicing Trips			
Weekday AM Peak (08:15-09:15)	0	0	0
Weekday PM Peak (16:45-17:45)	0	0	0
AADT (24-hour period)	4	4	8
Total Trips			
Weekday AM Peak (08:15-09:15)	1	5	6
Weekday PM Peak (16:45-17:45)	4	3	7
AADT (24-hour period)	46	46	92

The above vehicular trip generation figures include all motorised vehicles and are given in Passenger Car Units (PCU).

4.6 Proportional Increases in Vehicular Traffic

Table 11 shows the absolute and proportional increases in peak hour motor vehicle traffic flows that shall result from the proposed development at the location of its proposed vehicular access on Station Road (R415), as shown in **Figure 2** (page 6).

Table 11 – Station Road Traffic Flow Changes – Weekday Peak Hours

2024 Baseline 2-Way Motor Vehicle Traffic (PCU)		Development-Related Trips (PCU)		Proportional Increase	
AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
748	857	6	7	0.8%	0.8%

The TII *Traffic and Transport Assessment Guidelines* (PE-PDV-02045) advise that Transport Assessments should generally be applied where traffic to and from a development is projected to exceed 10% of the existing background traffic on the adjoining road (or 5% at sensitive locations). These have been taken as the threshold values beyond which operational analysis of surrounding road network performance would be required, in the form of junction modelling.

As shown in **Table 11**, the subject development shall result in increases of less than 1% in total peak hour vehicular traffic flows at the location of its proposed access on the R415 (Station Road). It is therefore not deemed necessary to conduct detailed operational analysis of any existing road junction.

5.0 PARKING PROVISION

The proposed development comprises the following elements:

- 10no. 1-bedroom apartment units
- 12no. 2-bedroom apartment/duplex units
- 5no. 3-bedroom apartment/duplex units
- 2no. 2-bedroom houses
- 1no. 3-bedroom house

The development shall provide:

- 26no. car parking spaces, of which 4no. spaces shall be disabled-accessible and 6no. spaces shall be equipped with EV charge points.
- 54no. long term bicycle parking spaces, of which 4no. spaces shall be suited to non-standard (oversized) cycles.
- 16no. short stay bicycle parking spaces, of which 4no. spaces shall be suited to non-standard (oversized) cycles.

Refer to architectural drawings for the locations and uses of all car and bicycle parking spaces.

5.1 Overall Car Parking Provision

The car parking provision of the proposed development has been assessed with respect to the *Kildare County Development Plan 2023-2029*, which defines the standard maximum car parking provision for new developments by land use type. **Table 12** shows the car parking standards applicable to the proposed development and illustrates that the total car parking provision does not exceed the maximum number permitted by the Local Authority development plan.

The development's proposed overall car parking provision equates to a ratio of 0.87 spaces per residential unit.

Table 12 – Overall Car Parking Provision

Land Use	Car Parking Maximum	Quantum	Max. Parking Provision	Proposed Provision
Apartments	1.5 spaces per unit + 1 visitor space per 4 apartments	27 units	47 spaces	26 spaces
Houses (up to 3 bedrooms)	1 space per unit	3 units	3 spaces	
TOTALS		30 units	50 spaces	26 spaces

The *Kildare County Development Plan 2023-2029* notes that:

"The maximum provision of parking should not be viewed as a target. Lower rates of parking and car-free developments should be considered in the first instance, particularly where such developments are close to and can avail of public transport."

The policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, published by the Department of Housing, Planning and Local Government in December 2022 ('the Apartment Guidelines'), gives the following guidance on the provision of residential car parking:

"In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such [as] rail and bus stations located in close proximity.

"These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally

located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services."

The 2024 *Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities)* also note that:

"The availability of car parking has a critical impact on travel choices for all journeys, including local trips. […] Car parking ratios should be reduced at all urban locations, and should be minimised, substantially reduced or wholly eliminated at locations that have good access to urban services and to public transport."

As detailed in sub-sections **3.3** and **3.5**, the development site is centrally located within Kildare Town and is within a 6-minute walk of Kildare Railway Station. The proposed development is therefore considered a suitable candidate for a reduced car parking provision.

5.2 Disabled-Accessible Car Parking

The proposed development includes 4no. designated disabled-accessible car parking spaces, representing 15% of the total car parking provision.

The *Kildare County Development Plan 2023-2029* does not stipulate a requirement for the provision of disabled-accessible car parking spaces within residential developments. It notes only that:

"5% of parking spaces in non-residential developments should be set aside for disabled parking."

Part M of the Building Regulations also sets a 5% target for the proportional provision of disabled-accessible car parking. However, this is explicitly restricted to non-residential buildings and apartment blocks; it does not apply to duplex units. As such, there is deemed to be no applicable

standard against which the proposed development's disabled-accessible car parking provision may be assessed.

5.3 Electric Vehicle Charging Facilities

6no. car parking spaces within the proposed development shall be equipped from the outset with charging facilities for battery-electric vehicles.

Objective TM O117 of the *Kildare County Development Plan 2023-2029* requires that:

> *"New buildings or buildings undergoing major renovations (containing one or more than one dwelling), which has more than 10 car parking spaces, shall install ducting infrastructure for each car parking space to enable the subsequent installation of recharging points for electric vehicles."*

To meet this requirement, all car parking spaces within the proposed development shall be 'future-proofed' by the provision of ducting to allow the rapid future installation of charging points for battery-electric vehicles.

5.4 Car Parking Management

All car parking spaces within the development (including the 4no. accessible spaces) shall be controlled by Kildare County Council or by the designated Management Company or Approved Housing Body responsible for the development. Residential parking spaces shall not be assigned to individual units; spaces shall instead be allocated and/or leased to residents on the basis of availability and need, in part by means of a permit/lottery system, in order to optimise the use of parking spaces. Suitable information and enforcement measures shall be implemented to

prevent unauthorised or undisciplined vehicle parking within the development.

5.5 Bicycle Parking

The proposed development's bicycle parking provision has been assessed with respect to the *Kildare County Development Plan 2023-2029*, which defines the minimum standard bicycle parking provision for new developments by land use type. **Table 13** shows the standards applicable to the proposed development. These bicycle parking standards are the same as those given in the *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*.

Table 13 – Bicycle Parking Provision

Bicycle Parking Type	Dev. Plan Minima	Quantum	Min. Parking Provision	Proposed Provision
Long Term (residents)	1 space per bedroom	56 bedrooms	56 spaces	50 standard + 4 oversized
Short Stay (visitors)	1 space per 2 units	30 units	15 spaces	12 standard + 4 oversized
TOTALS			71 spaces	70 spaces

The proposed development has a total bicycle parking provision of 70no. spaces. These include:

- 54no. standard residents' spaces in a secure dedicated internal bicycle store at ground floor level and within dwelling curtilages at surface level (of which 4no. oversized spaces).
- 16no. standard visitor spaces provided at surface level within the development's internal courtyard and landscaping (of which 4no. oversized spaces).

Oversized cycle spaces allow for a bicycle footprint of 3.5m long by 2.0m wide, to accommodate cargo bikes, tricycles, and adapted cycles. These

spaces account for approximately 11% of the development's total bicycle parking provision.

It is acknowledged that the proposed bicycle parking provision falls very slightly short of the minimum quantum derived from the *Kildare County Development Plan 2023-2029* standards. It is however submitted that this nevertheless represents an ample provision, appropriate to the nature and location of the proposed development.

6.0 ACCESS, LAYOUT, PEDESTRIAN AND CYCLIST FACILITIES, SERVICING

6.1 Vehicular Access

Vehicular access to the proposed development shall be via a single access junction on Station Road, at its western boundary. This shall have a minor arm carriageway width of 5.9m, allowing two-way traffic flows into and out of the development. To maintain pedestrian priority across the development access, the existing back of footpath levels shall be maintained and the footpath slightly dished to meet the Station Road carriageway with a 0-6mm upstand kerb.

An unobstructed sight distance in excess of 49m in either direction along Station Road is achieved for vehicles exiting the development, as measured from a set-back of 2.4m from the public road edge, in accordance with the requirements of the *Design Manual for Urban Roads and Streets*. Refer to CS Consulting drawing no. **K114-CSC-ZZ-XX-DR-C-0001** for further detail of the development's vehicular access design and sightlines.

6.2 Internal Layout

The proposed development's internal layout comprises an internal service road and courtyard, around which perpendicular and angled car parking spaces are arranged. In compliance with *Kildare County Development Plan 2023-2029* requirements and the *Design Manual for Urban Roads and Streets* (DMURS):

- Standard car parking bays have a width of 2.4m and a length of 5.0m.
- Disabled-accessible car parking bays have an effective width of 4.8m and an effective length of 6.0m (including buffers).

- A minimum clear space in excess of 6m is provided in front of each perpendicular car parking space, to accommodate parking manoeuvres.

6.3 Swept Path Analysis

Swept path analyses have been carried out for a refuse collection vehicle and a fire tender circulating within the proposed development, as well as for a car and a light goods vehicle. These analyses, shown on CS Consulting drawing **K114-CSC-ZZ-XX-DR-C-0002**, indicate that the development's access design and internal layout can accommodate these vehicle movements where required.

6.4 Pedestrian and Cyclist Facilities

Footpaths and shared surfaces are provided throughout the development, to cater for pedestrian desire lines. The development shall include a total of 70no. bicycle parking spaces.

6.5 Development Servicing and Waste Collection

Vehicular servicing of the proposed development – including deliveries and waste collection – shall be conducted within the development and shall not obstruct vehicular or pedestrian traffic on Station Road.

The development shall employ a standard 3-bin waste storage and segregation system, demised to each unit at ground level. Refuse collection vehicles shall enter the development, as shown on CS Consulting drawing no. **K114-CSC-ZZ-XX-DR-C-0002**, and bins shall be staged for collection along their circulation route.

As noted in sub-section **4.4**, it is projected that the proposed development will require a maximum of 4no. servicing vehicle visits on average in any

given weekday. This figure includes deliveries, waste collection, and all other servicing requirements.

7.0 INDEPENDENT QUALITY AUDIT

An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. This incorporates the following components:

- Stage 1/2 Road Safety Audit
- DMURS Street Design Audit
- Walking Audit
- Cycling Audit
- Accessibility Audit

The Quality Audit report document issued by Roadplan Consulting, including audit response form, are provided as **Appendix D** to this report.

The Quality Audit was completed in December 2024. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawing **K114-CSC-ZZ-XX-DR-C-0003** for details of these design changes.

The Stage 1/2 Road Safety Audit, the Walking Audit, and the Accessibility Audit each identify specific design issues and make suggestions for addressing them. The Cycling Audit did not identify any design issues.

7.1 Stage 1/2 Road Safety Audit Item 5.1

7.1.1 Issue identified

"Road markings or traffic signs to indicate junction priority are not shown to be provided at the proposed internal junctions within the development. This may lead to turning collisions if priority at the junctions is unclear to drivers."

7.1.2 Auditors' suggestion

"Provide adequate junction control (STOP road markings or similar) to clearly define vehicular priority at all junctions."

7.1.3 Design response

As shown on drawing **K114-CSC-ZZ-XX-DR-C-0003**, STOP road markings (RRM 017, RRM 001, and M 114) are now provided to regulate priority at the development's access junction.

7.2 Walking Audit Item 6.1

7.2.1 Issue identified

"It is unclear if appropriate footpaths widths will be provided for mobility impaired pedestrians resulting in pedestrians walking on carriageways where they would be at an increased risk of being struck by a passing vehicle."

7.2.2 Auditors' suggestion

"Ensure adequate footpath widths are provide throughout the development."

7.2.3 Design response

The audited site layout design included a raised footpath to either side of the development's access off Station Road, each 1.2m in width. The access design has been revised to instead provide a single 1.8m-wide raised footpath along the southern side of the development access.

7.3 Walking Audit Item 6.2

7.3.1 Issue identified

"Visually impaired pedestrian may not realise that they are entering into a shared space at the ends of the proposed footpaths. This may contribute to pedestrian collisions within the shared space."

7.3.2 Auditors' suggestion

"Ensure appropriate corduroy paving is provided at these locations to warn visually impaired pedestrians that they are entering a shared space."

7.3.3 Design response

Tactile paving is now provided at the transition between the raised footpath at the site access and the internal shared surface.

7.4 Walking Audit Item 6.3

7.4.1 Issue identified

"A shared space is proposed through the majority of the proposed development. However, where adequate guidance features are not provided, visually impaired pedestrians may become disoriented in the shared space and may stray onto the central access road, increasing the risk of collisions."

7.4.2 Auditors' suggestion

"Ensure that measures are provided to provide guidance to visually impaired pedestrians within the shared space."

7.4.3 Design response

The internal shared surface paving design has been revised to include contrasting surface finish colours and textured delineation strips, to aid orientation and guidance for visually impaired pedestrians.

7.5 Walking Audit Item 6.4

7.5.1 Issue identified

"Facilities such as dropped kerbs and tactile paving are not shown to be provided for pedestrians crossing the at the proposed development access. This may cause difficulty or delay for crossing movements by pedestrians and increase the risk of their being struck by passing motor traffic."

7.5.2 Auditors' suggestion

"Provide facilities such as dropped kerbs and tactile paving for pedestrians crossing the proposed development access."

7.5.3 Design response

The back of footpath is carried over at full height across the development access, to ensure pedestrian priority, with the existing back of footpath levels being maintained. The footpath is slightly dished to accommodate vehicle movements to and from Station Road.

7.6 Walking Audit Item 6.5

7.6.1 Issue identified

"Street lighting is not shown to be provided within the proposed development. A lack of street lighting may contribute to a pedestrian collision within the proposed development."

7.6.2 Auditors' suggestion

"Ensure that adequate street lighting is provided throughout the proposed development."

7.6.3 Design response

A full public lighting design for the proposed development has been prepared by Cundall and is shown on drawing **1040805-CDL-ZZ-XX-DR-E-39001**, which is included as part of this planning submission.

7.7 Accessibility Audit Item 8.1

7.7.1 Issue identified

"There does not appear to be any charging points proposed for electric vehicles. Current guidelines would suggest that all developments should provide facilities for charging battery operated cars at a rate of up to 10% of the total car parking spaces."

7.7.2 Auditors' suggestion

"Consideration should be given to reviewing the allocation of designated charging points for electric vehicles, to meet with current guidelines."

7.7.3 Design response

As noted in sub-section **5.3**, 6no. car parking spaces within the proposed development shall be equipped from the outset with charging facilities for battery-electric vehicles, and all other car parking spaces shall be 'future-proofed' by the provision of ducting to allow the rapid future installation of charging points for battery-electric vehicles. This exceeds the requirements of the *Kildare County Development Plan 2023-2029*.

7.8 Accessibility Audit Item 8.2

7.8.1 Issue identified

"The proposed development includes 30 residential units. However, only 26 parking spaces are shown to be provided in the drawing, including 4 accessible parking bays and without any provisions for on street parking. Residents may park on street compromising the effective width of shared space carriageway and could increase the risk of side swipe collisions or collisions involving pedestrians."

7.8.2 Auditors' suggestion

"Ensure that adequate parking provisions are available to cater the needs of the development."

7.8.3 Design response

The proposed development's car parking provision equates to 0.87 spaces per residential unit. As described in sub-section **5.1**, this is in keeping with the standards and guidance given in the *Kildare County Development Plan 2023-2029*, the *Apartment Guidelines*, and the *Compact Settlements Guidelines*. As detailed in sub-sections **3.3** and **3.5**, the development site is centrally located within Kildare Town and is within a 6-minute walk of Kildare Railway Station. The proposed development is therefore considered a suitable candidate for a reduced car parking provision.

8.0 SUMMARY OF CONCLUSIONS

This report provides an assessment of a proposed residential development at Station Road, Kildare Town, with respect to its potential effects on the surrounding road network's operation. The report also assesses the proposed development's internal layout, parking provisions, cyclist and pedestrian facilities, servicing arrangements, and access to public transport.

The main observations and conclusions of this study are as follows:

- The development site benefits from a central location in Kildare Town and is within convenient walking distance of numerous amenities, as well as being within a 6-minute walk of Kildare Railway Station.
- The proposed development shall generate minimal motor vehicle traffic. Total vehicle trips (arrivals and departures combined) of 6 PCU are predicted during the AM peak hour, and total vehicle trips of 7 PCU in the PM peak hour.
- The proposed development shall result in an increase of less than 1% in total motor vehicle traffic flows on Station Road, at the location of its proposed access, in both the AM peak hour and the PM peak hour.
- The proposed development includes car and bicycle parking provisions in compliance with Local Authority development plan standards and with the recommendations of national policy guidance documents.
- Swept path analyses have been carried out for a refuse collection vehicle and a fire tender circulating within the proposed development, as well as for a car and a light goods vehicle. These analyses indicate that the development's access design and internal layout can accommodate these vehicle movements where required.

- An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawing **K114-CSC-ZZ-XX-DR-C-0003** for details of these design changes.

In summary, this assessment indicates that the proposed development shall not have any significant detrimental effect on the surrounding road network's operation, that the development includes appropriate car and bicycle parking provisions, and that the development access design and internal layout are fit for purpose.

Appendix A

TRICS Data

CS CONSULTING
GROUP

Calculation Reference: AUDIT-656801-240726-0751

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	IS	ISLINGTON	1 days
02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	1 days
	GS	GLOUCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	SE	SHEFFIELD	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Total Bedrooms
Actual Range: 10 to 665 (units:)
Range Selected by User: 10 to 665 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 21/06/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Wednesday	2 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	5
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

C3	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	4 days
100,001 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	3 days
250,001 to 500,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	5 days
5 Very Good	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BR-03-D-04	BLOCKS OF FLATS		BRISTOL CITY
	WHITCHURCH LANE			
	BRISTOL			
	HARTCLIFFE			
	Edge of Town			
	No Sub Category			
	Total Total Bedrooms:		665	
	Survey date: WEDNESDAY		*24/11/21*	*Survey Type: MANUAL*
2	GS-03-D-01	BLOCKS OF FLATS		GLOUCESTERSHIRE
	SAINT STEPHEN'S ROAD			
	CHELTENHAM SPA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Total Bedrooms:		80	
	Survey date: THURSDAY		*04/05/23*	*Survey Type: MANUAL*
3	GS-03-D-02	BLOCKS OF FLATS		GLOUCESTERSHIRE
	PRINCESS ELIZABETH WAY			
	CHELTENHAM SPA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Total Bedrooms:		41	
	Survey date: THURSDAY		*04/05/23*	*Survey Type: MANUAL*
4	IS-03-D-04	BLOCKS OF FLATS		ISLINGTON
	LIVERPOOL ROAD			
	HIGHBURY			
	Edge of Town Centre			
	Residential Zone			
	Total Total Bedrooms:		475	
	Survey date: MONDAY		*27/06/16*	*Survey Type: MANUAL*
5	SE-03-D-01	BLOCK OF FLATS		SHEFFIELD
	SAINT LAWRENCE ROAD			
	SHEFFIELD			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Total Bedrooms:		10	
	Survey date: WEDNESDAY		*21/06/23*	*Survey Type: MANUAL*
6	WS-03-D-01	BLOCKS OF FLATS		WEST SUSSEX
	SHELLEY ROAD			
	WORTHING			
	Edge of Town Centre			
	Residential Zone			
	Total Total Bedrooms:		153	
	Survey date: MONDAY		*16/05/22*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.40

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.016	6	237	0.031	6	237	0.047
08:00 - 09:00	6	237	0.023	6	237	0.044	6	237	0.067
09:00 - 10:00	6	237	0.029	6	237	0.026	6	237	0.055
10:00 - 11:00	6	237	0.027	6	237	0.030	6	237	0.057
11:00 - 12:00	6	237	0.032	6	237	0.043	6	237	0.075
12:00 - 13:00	6	237	0.023	6	237	0.029	6	237	0.052
13:00 - 14:00	6	237	0.032	6	237	0.034	6	237	0.066
14:00 - 15:00	6	237	0.035	6	237	0.037	6	237	0.072
15:00 - 16:00	6	237	0.046	6	237	0.037	6	237	0.083
16:00 - 17:00	6	237	0.053	6	237	0.044	6	237	0.097
17:00 - 18:00	6	237	0.053	6	237	0.039	6	237	0.092
18:00 - 19:00	6	237	0.040	6	237	0.032	6	237	0.072
19:00 - 20:00	1	475	0.040	1	475	0.027	1	475	0.067
20:00 - 21:00	1	475	0.021	1	475	0.011	1	475	0.032
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.470			0.464			0.934

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	10 - 665 (units:)
Survey date date range:	01/01/16 - 21/06/23
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TAXIS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.004	6	237	0.004	6	237	0.008
08:00 - 09:00	6	237	0.003	6	237	0.004	6	237	0.007
09:00 - 10:00	6	237	0.002	6	237	0.002	6	237	0.004
10:00 - 11:00	6	237	0.004	6	237	0.002	6	237	0.006
11:00 - 12:00	6	237	0.001	6	237	0.001	6	237	0.002
12:00 - 13:00	6	237	0.003	6	237	0.003	6	237	0.006
13:00 - 14:00	6	237	0.004	6	237	0.004	6	237	0.008
14:00 - 15:00	6	237	0.001	6	237	0.004	6	237	0.005
15:00 - 16:00	6	237	0.004	6	237	0.004	6	237	0.008
16:00 - 17:00	6	237	0.006	6	237	0.005	6	237	0.011
17:00 - 18:00	6	237	0.003	6	237	0.004	6	237	0.007
18:00 - 19:00	6	237	0.001	6	237	0.000	6	237	0.001
19:00 - 20:00	1	475	0.000	1	475	0.000	1	475	0.000
20:00 - 21:00	1	475	0.002	1	475	0.002	1	475	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.038			0.039			0.077

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL OGVS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.000	6	237	0.000	6	237	0.000
08:00 - 09:00	6	237	0.001	6	237	0.000	6	237	0.001
09:00 - 10:00	6	237	0.000	6	237	0.001	6	237	0.001
10:00 - 11:00	6	237	0.001	6	237	0.000	6	237	0.001
11:00 - 12:00	6	237	0.001	6	237	0.001	6	237	0.002
12:00 - 13:00	6	237	0.001	6	237	0.001	6	237	0.002
13:00 - 14:00	6	237	0.000	6	237	0.000	6	237	0.000
14:00 - 15:00	6	237	0.000	6	237	0.000	6	237	0.000
15:00 - 16:00	6	237	0.000	6	237	0.000	6	237	0.000
16:00 - 17:00	6	237	0.000	6	237	0.000	6	237	0.000
17:00 - 18:00	6	237	0.000	6	237	0.000	6	237	0.000
18:00 - 19:00	6	237	0.000	6	237	0.000	6	237	0.000
19:00 - 20:00	1	475	0.000	1	475	0.000	1	475	0.000
20:00 - 21:00	1	475	0.000	1	475	0.000	1	475	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.003			0.007

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PSVS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.000	6	237	0.000	6	237	0.000
08:00 - 09:00	6	237	0.000	6	237	0.000	6	237	0.000
09:00 - 10:00	6	237	0.000	6	237	0.000	6	237	0.000
10:00 - 11:00	6	237	0.000	6	237	0.000	6	237	0.000
11:00 - 12:00	6	237	0.000	6	237	0.000	6	237	0.000
12:00 - 13:00	6	237	0.000	6	237	0.000	6	237	0.000
13:00 - 14:00	6	237	0.001	6	237	0.001	6	237	0.002
14:00 - 15:00	6	237	0.000	6	237	0.000	6	237	0.000
15:00 - 16:00	6	237	0.001	6	237	0.001	6	237	0.002
16:00 - 17:00	6	237	0.000	6	237	0.000	6	237	0.000
17:00 - 18:00	6	237	0.000	6	237	0.000	6	237	0.000
18:00 - 19:00	6	237	0.000	6	237	0.000	6	237	0.000
19:00 - 20:00	1	475	0.000	1	475	0.000	1	475	0.000
20:00 - 21:00	1	475	0.000	1	475	0.000	1	475	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CYCLISTS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.001	6	237	0.004	6	237	0.005
08:00 - 09:00	6	237	0.001	6	237	0.002	6	237	0.003
09:00 - 10:00	6	237	0.001	6	237	0.000	6	237	0.001
10:00 - 11:00	6	237	0.001	6	237	0.001	6	237	0.002
11:00 - 12:00	6	237	0.000	6	237	0.002	6	237	0.002
12:00 - 13:00	6	237	0.003	6	237	0.001	6	237	0.004
13:00 - 14:00	6	237	0.001	6	237	0.002	6	237	0.003
14:00 - 15:00	6	237	0.005	6	237	0.004	6	237	0.009
15:00 - 16:00	6	237	0.004	6	237	0.006	6	237	0.010
16:00 - 17:00	6	237	0.001	6	237	0.003	6	237	0.004
17:00 - 18:00	6	237	0.001	6	237	0.000	6	237	0.001
18:00 - 19:00	6	237	0.005	6	237	0.001	6	237	0.006
19:00 - 20:00	1	475	0.000	1	475	0.000	1	475	0.000
20:00 - 21:00	1	475	0.002	1	475	0.006	1	475	0.008
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.032			0.058

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.004	6	237	0.025	6	237	0.029
08:00 - 09:00	6	237	0.030	6	237	0.129	6	237	0.159
09:00 - 10:00	6	237	0.037	6	237	0.049	6	237	0.086
10:00 - 11:00	6	237	0.045	6	237	0.047	6	237	0.092
11:00 - 12:00	6	237	0.045	6	237	0.057	6	237	0.102
12:00 - 13:00	6	237	0.055	6	237	0.057	6	237	0.112
13:00 - 14:00	6	237	0.046	6	237	0.044	6	237	0.090
14:00 - 15:00	6	237	0.051	6	237	0.071	6	237	0.122
15:00 - 16:00	6	237	0.140	6	237	0.082	6	237	0.222
16:00 - 17:00	6	237	0.081	6	237	0.046	6	237	0.127
17:00 - 18:00	6	237	0.060	6	237	0.042	6	237	0.102
18:00 - 19:00	6	237	0.059	6	237	0.050	6	237	0.109
19:00 - 20:00	1	475	0.086	1	475	0.097	1	475	0.183
20:00 - 21:00	1	475	0.044	1	475	0.021	1	475	0.065
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.783			0.817			1.600

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.40

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.020	6	237	0.086	6	237	0.106
08:00 - 09:00	6	237	0.055	6	237	0.232	6	237	0.287
09:00 - 10:00	6	237	0.074	6	237	0.105	6	237	0.179
10:00 - 11:00	6	237	0.083	6	237	0.103	6	237	0.186
11:00 - 12:00	6	237	0.088	6	237	0.125	6	237	0.213
12:00 - 13:00	6	237	0.102	6	237	0.112	6	237	0.214
13:00 - 14:00	6	237	0.095	6	237	0.117	6	237	0.212
14:00 - 15:00	6	237	0.107	6	237	0.136	6	237	0.243
15:00 - 16:00	6	237	0.224	6	237	0.136	6	237	0.360
16:00 - 17:00	6	237	0.187	6	237	0.099	6	237	0.286
17:00 - 18:00	6	237	0.158	6	237	0.104	6	237	0.262
18:00 - 19:00	6	237	0.145	6	237	0.097	6	237	0.242
19:00 - 20:00	1	475	0.189	1	475	0.141	1	475	0.330
20:00 - 21:00	1	475	0.109	1	475	0.048	1	475	0.157
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.636			1.641			3.277

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CARS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.010	6	237	0.020	6	237	0.030
08:00 - 09:00	6	237	0.015	6	237	0.035	6	237	0.050
09:00 - 10:00	6	237	0.022	6	237	0.016	6	237	0.038
10:00 - 11:00	6	237	0.015	6	237	0.020	6	237	0.035
11:00 - 12:00	6	237	0.024	6	237	0.032	6	237	0.056
12:00 - 13:00	6	237	0.012	6	237	0.020	6	237	0.032
13:00 - 14:00	6	237	0.022	6	237	0.023	6	237	0.045
14:00 - 15:00	6	237	0.028	6	237	0.028	6	237	0.056
15:00 - 16:00	6	237	0.036	6	237	0.025	6	237	0.061
16:00 - 17:00	6	237	0.041	6	237	0.034	6	237	0.075
17:00 - 18:00	6	237	0.041	6	237	0.027	6	237	0.068
18:00 - 19:00	6	237	0.035	6	237	0.029	6	237	0.064
19:00 - 20:00	1	475	0.034	1	475	0.021	1	475	0.055
20:00 - 21:00	1	475	0.017	1	475	0.008	1	475	0.025
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.352			0.338			0.690

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL LGVS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.003	6	237	0.005	6	237	0.008
08:00 - 09:00	6	237	0.004	6	237	0.006	6	237	0.010
09:00 - 10:00	6	237	0.004	6	237	0.004	6	237	0.008
10:00 - 11:00	6	237	0.006	6	237	0.007	6	237	0.013
11:00 - 12:00	6	237	0.006	6	237	0.007	6	237	0.013
12:00 - 13:00	6	237	0.006	6	237	0.005	6	237	0.011
13:00 - 14:00	6	237	0.005	6	237	0.005	6	237	0.010
14:00 - 15:00	6	237	0.005	6	237	0.006	6	237	0.011
15:00 - 16:00	6	237	0.005	6	237	0.005	6	237	0.010
16:00 - 17:00	6	237	0.006	6	237	0.006	6	237	0.012
17:00 - 18:00	6	237	0.006	6	237	0.005	6	237	0.011
18:00 - 19:00	6	237	0.004	6	237	0.002	6	237	0.006
19:00 - 20:00	1	475	0.002	1	475	0.002	1	475	0.004
20:00 - 21:00	1	475	0.000	1	475	0.000	1	475	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.062			0.065			0.127

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	237	0.000	6	237	0.002	6	237	0.002
08:00 - 09:00	6	237	0.000	6	237	0.000	6	237	0.000
09:00 - 10:00	6	237	0.001	6	237	0.003	6	237	0.004
10:00 - 11:00	6	237	0.001	6	237	0.001	6	237	0.002
11:00 - 12:00	6	237	0.000	6	237	0.001	6	237	0.001
12:00 - 13:00	6	237	0.001	6	237	0.001	6	237	0.002
13:00 - 14:00	6	237	0.001	6	237	0.001	6	237	0.002
14:00 - 15:00	6	237	0.001	6	237	0.000	6	237	0.001
15:00 - 16:00	6	237	0.001	6	237	0.003	6	237	0.004
16:00 - 17:00	6	237	0.001	6	237	0.000	6	237	0.001
17:00 - 18:00	6	237	0.004	6	237	0.003	6	237	0.007
18:00 - 19:00	6	237	0.001	6	237	0.001	6	237	0.002
19:00 - 20:00	1	475	0.004	1	475	0.004	1	475	0.008
20:00 - 21:00	1	475	0.002	1	475	0.000	1	475	0.002
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.020			0.038

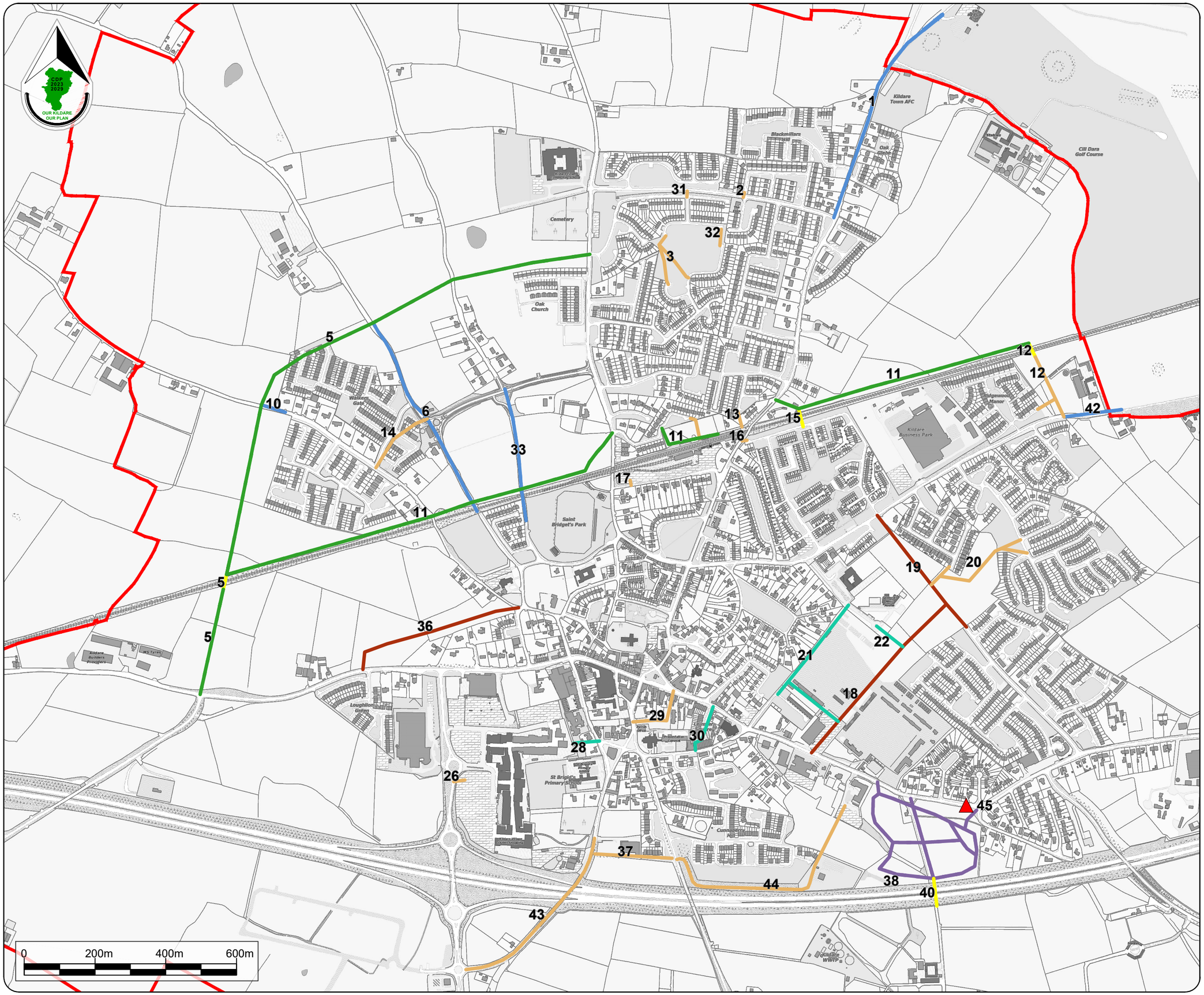
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix B

Kildare Town LAP 2023-2029 Maps

CS CONSULTING
GROUP



Kildare County Council
Planning & Strategic
Development Department
Áras Chill Dara,
Devoy Park, Naas, Co Kildare.

Kildare Town
Local Area Plan 2023 - 2029

Legend :

- Local Area Plan Boundary
- Proposed new pedestrian / cycle track or lane
- Proposed pedestrian / cycle bridge links
- Proposed footpaths / cycle tracks or lanes
- Proposed roads with footpaths
- Proposed new footpaths on existing roads
- Proposed greenways
- Proposed pedestrian links in Cherry Avenue Park
- Proposed crossing point to Cherry Avenue Park

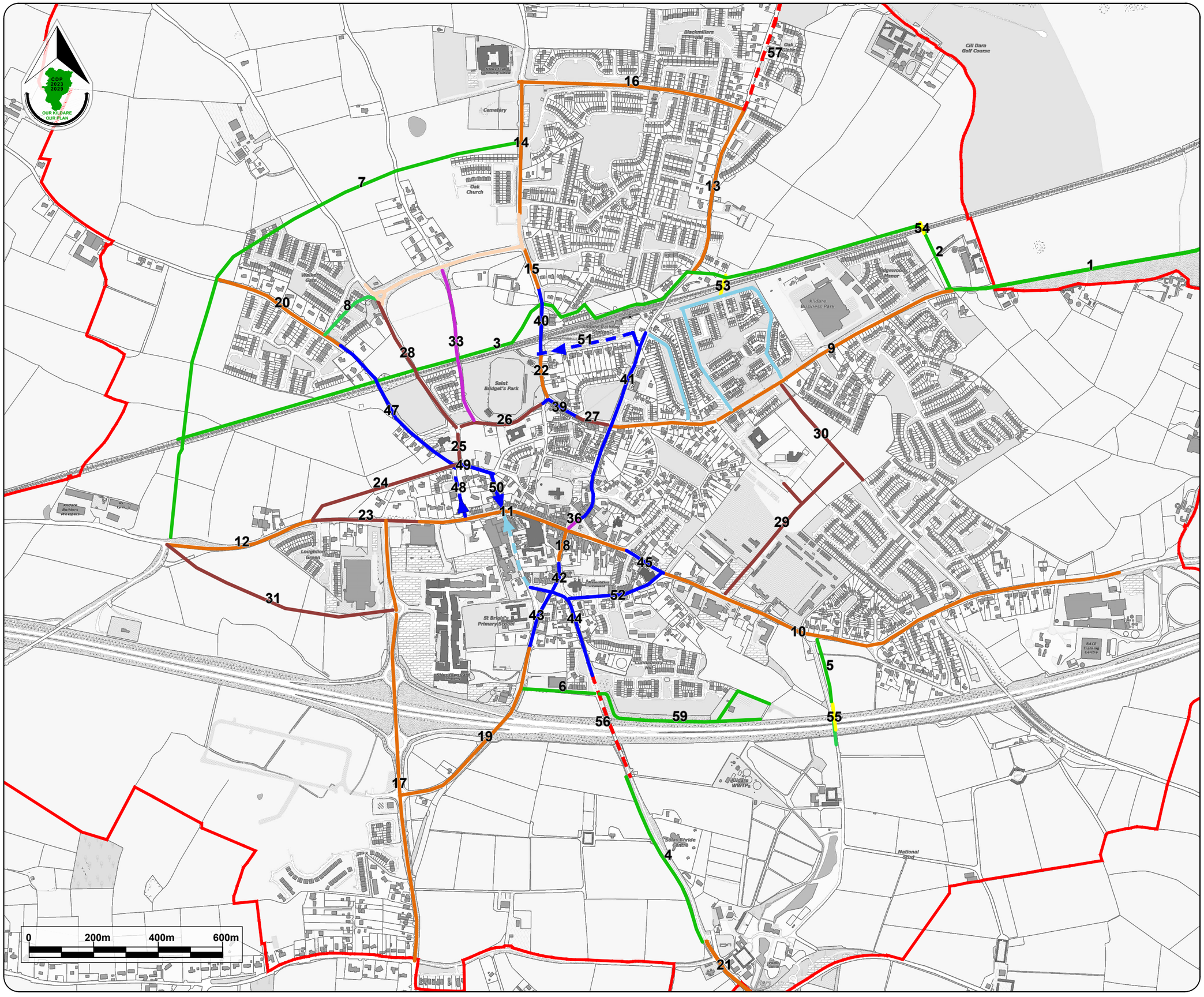
Stage	Date	Description
Kildare Town Local Area Plan	06/12/2023	Date the Plan comes into effect
Kildare Town Local Area Plan	26/10/2023	Plan adopted by Elected Members

Movement and Transportation
Permeability Measures

Scale:	N.T.S.	Map Ref.:	7.1
Date:	October 2023	Drawing No.:	200/23/1394

Drawn by:	Checked by:	Approved by:
M O'Loughlin	L Crawford	J O'Reilly
Date: 26/10/2023	Date: 26/10/2023	Date: 26/10/2023

This drawing is to be read in conjunction with the written statement



Kildare County Council
Planning & Strategic
Development Department
Áras Chill Dara,
Devoy Park, Naas, Co Kildare.

Kildare Town
Local Area Plan 2023 - 2029

Legend :

- Local Area Plan Boundary

Existing Cycle Network

- Cycle track / lane
- Shared street, one way
- Shared street

Proposed Cycle Measures

- Greenway (walk / cycle path)
- Cycle track / lane
- Cycle track / lane as part of road scheme / new road
- Active mode priority (local vehicle access)
- To be determined by detailed study
- To be determined by detailed study - one way
- Proposed bridge accessible to cycles
- Shared cycle track or lane / walking path

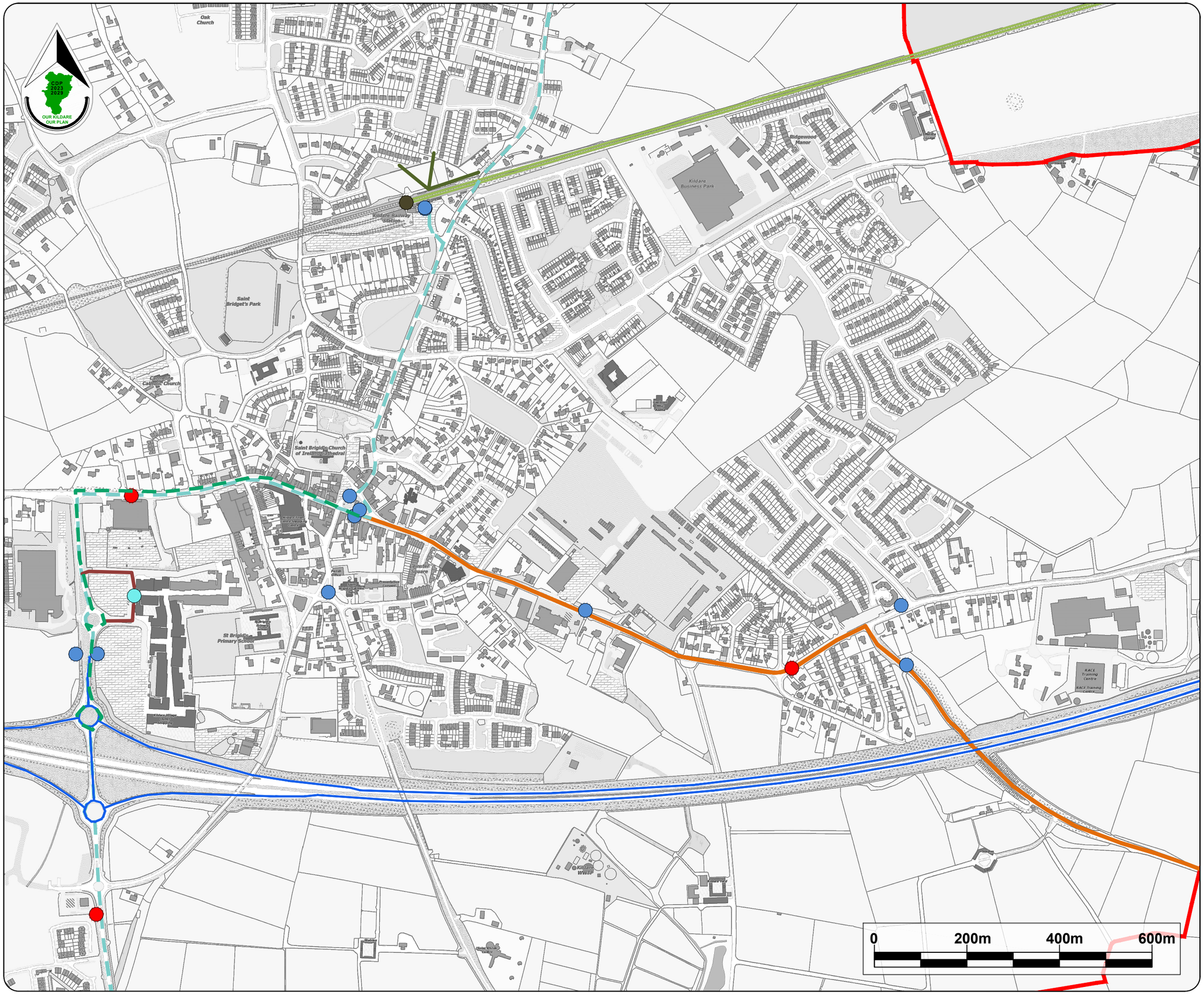
Stage	Date	Description
Kildare Town Local Area Plan	06/12/2023	Date the Plan comes into effect
Kildare Town Local Area Plan	26/10/2023	Plan adopted by Elected Members

Movement and Transportation
Cycling Measures

Scale:	N.T.S.	Map Ref.:	7.2
Date:	October 2023	Drawing No.:	200/23/1394

Drawn by:	Checked by:	Approved by:
M O'Loughlin	L Crawford	J O'Reilly
Date: 26/10/2023	Date: 26/10/2023	Date: 26/10/2023

This drawing is to be read in conjunction with the written statement



Kildare County Council
Planning & Strategic
Development Department
Áras Chill Dara,
Devoy Park, Naas, Co Kildare.

Kildare Town
Local Area Plan 2023 - 2029

Legend :

- Local Area Plan Boundary

Bus Measures

- PT1: Extension of route 126 to outside Kildare Tourist Outlet Village
- PT2: Kildare Tourist Outlet Village transfer point
- PT2: Transfer point within Kildare Tourist Outlet Village
- PT2: Extend Dublin coach services
- PT3: New bus stops
- PT3: Improve quality of bus stops
- PT4: More frequent route 126 services
- PT4: More frequent route 883 services

Rail Measures

- PT5: Create new northern entrance to train station
- PT6: Upgrade the train station
- PT7: More frequent rail services

Stage	Date	Description
Kildare Town Local Area Plan	06/12/2023	Date the Plan comes into effect
Kildare Town Local Area Plan	26/10/2023	Plan adopted by Elected Members

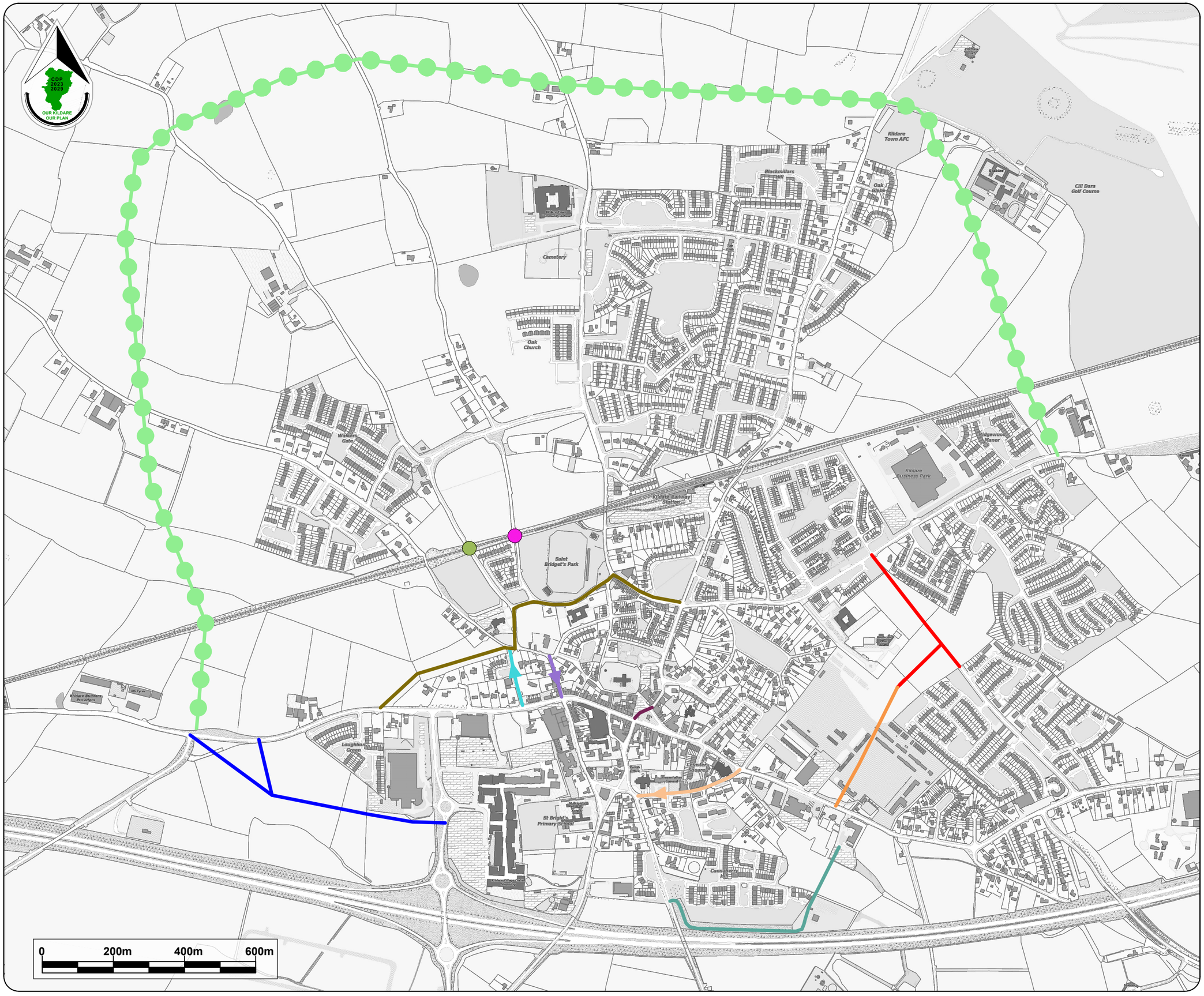
Movement and Transportation
Public Transport Measures

Scale: N.T.S. | Map Ref.: 7.3

Date: October 2023 | Drawing No.: 200/23/1394

Drawn by:	Checked by:	Approved by:
M O'Loughlin	L Crawford	J O'Reilly
Date: 26/10/2023	Date: 26/10/2023	Date: 26/10/2023

This drawing is to be read in conjunction with the written statement



Kildare County Council
Planning & Strategic
Development Department
Áras Chill Dara,
Devoy Park, Naas, Co Kildare.

Kildare Town
Local Area Plan 2023 - 2029

Legend :

- Former Magee Barracks Phase 1
- Former Magee Barracks Phase 2
- Modus Link Road

RD1

- Upgrade of South Green Bridge to two-way traffic
- Closure of Old Road Bridge

RD2

- White Abbey One-Way (Southbound)
- Pigeon Lane One-Way (Northbound)
- Construction of Northern Link Street

RD3

- Closure of Bride Street section of Market Square to vehicular traffic

RD4

- One-way system on Meadow Road (east to west)

RD6

- Link Hospital Street to Tully Road South of Cunnaberry Hill

- Outer Relief Road (Indicative Route only)

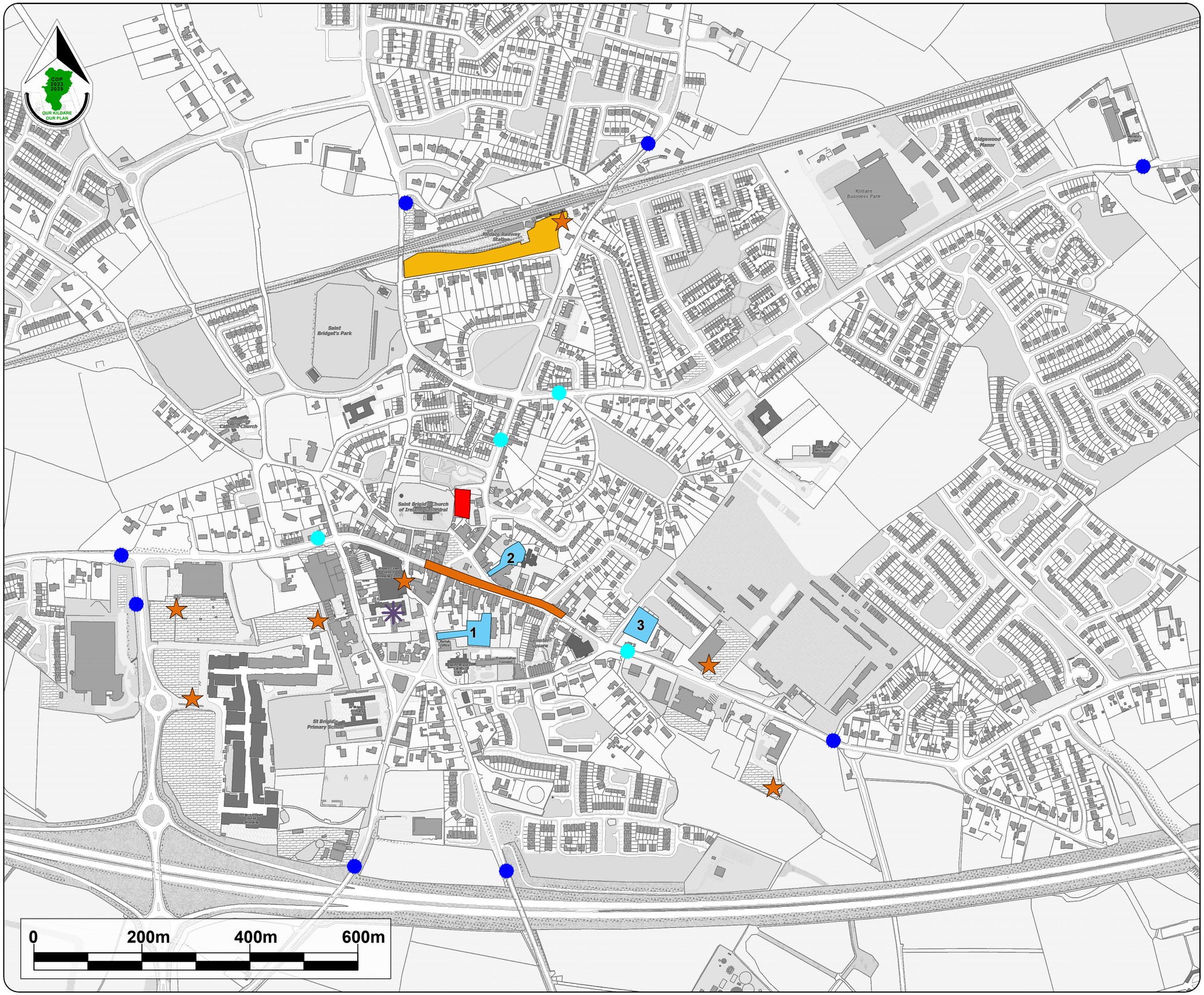
Stage	Date	Description
Kildare Town Local Area Plan	06/12/2023	Date the Plan comes into effect
Kildare Town Local Area Plan	26/10/2023	Plan adopted by Elected Members

Movement and Transportation
Road Measures

Scale:	N.T.S.	Map Ref.:	7.4
Date:	October 2023	Drawing No.:	200/23/1394

Drawn by:	Checked by:	Approved by:
M O'Loughlin	L Crawford	J O'Reilly
Date: 26/10/2023	Date: 26/10/2023	Date: 26/10/2023

This drawing is to be read in conjunction with the written statement



Kildare County Council
Planning & Strategic
Development Department
Áras Chill Dara,
Devoy Park, Naas, Co Kildare.

Kildare Town
Local Area Plan 2023 - 2029

Legend :

Existing electrical vehicle charge points

Car Parking Strategy Measures

Variable Messaging Signs (VMS)

- Outer ring
- Inner ring

Potential sites for new off street car park

- 1 — Bride Street (to include designated area for coach parking)
- 2 — Water Tower Site
- 3 — Dublin Street

Car Parking

- Relocation of Main Street parking
- Upgrade of Nugent Street Car Park
- Upgrade of Train Station Car Park
- De La Salle School (Objective MTO 4.9)

Stage	Date	Description
Kildare Town Local Area Plan	06/12/2023	Date the Plan comes into effect
Kildare Town Local Area Plan	26/10/2023	Plan adopted by Elected Members

Movement and Transportation
Car Parking Measures

Scale:	N.T.S.	Map Ref.:	7.5
Date:	October 2023	Drawing No.:	200/23/1394

Drawn by:	Checked by:	Approved by:
M O'Loughlin	L Crawford	J O'Reilly
Date: 26/10/2023	Date: 26/10/2023	Date: 26/10/2023

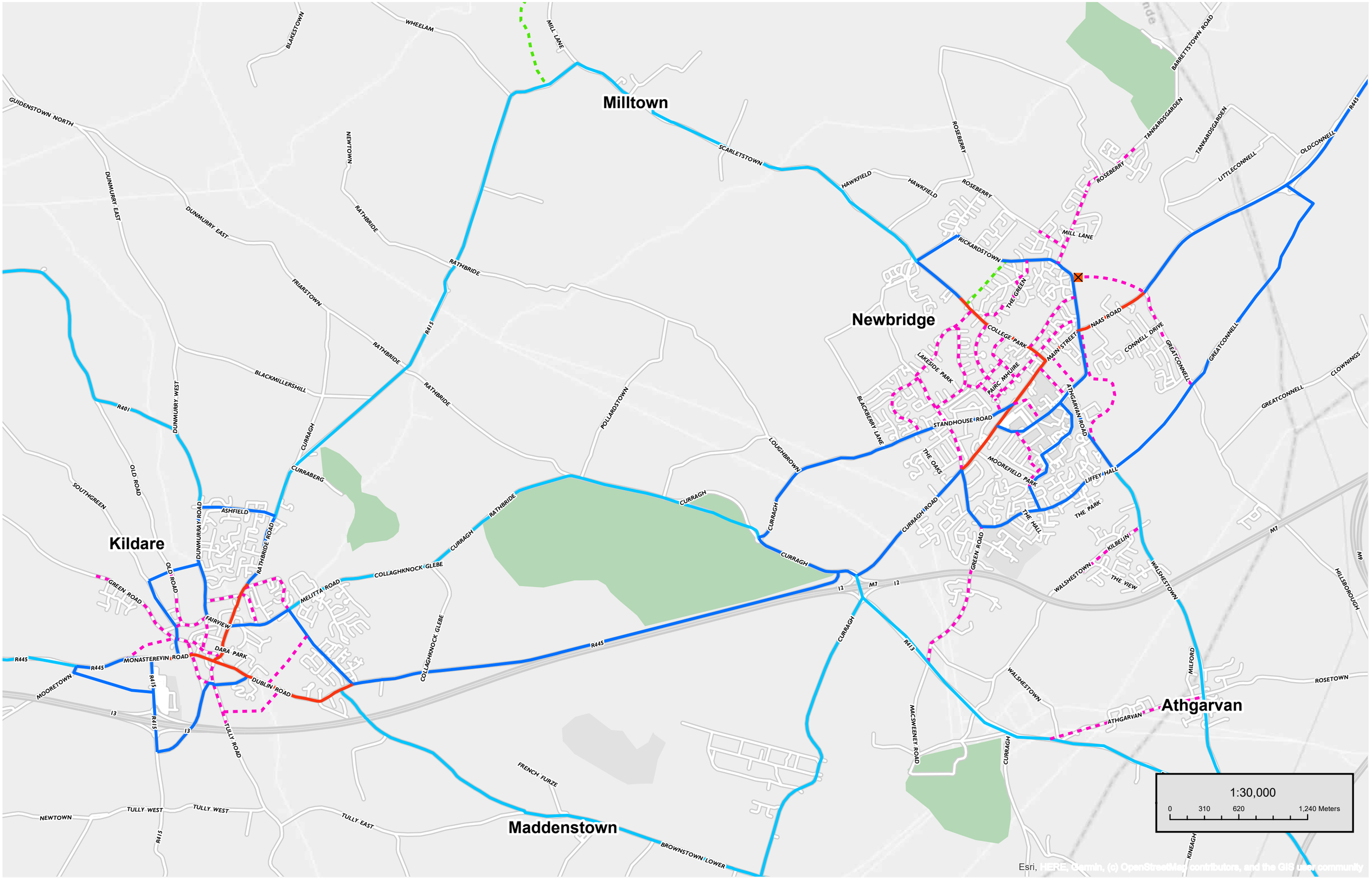
This drawing is to be read in conjunction with the written statement

This page intentionally blank

Appendix C

2022 GDA Cycle Network Plan Map – Newbridge & Kildare

CS CONSULTING
GROUP



Project:	Title:	Legend:	
2022 GREATER DUBLIN AREA CYCLE NETWORK PLAN	2022 GREATER DUBLIN AREA CYCLE NETWORK PLAN - NEWBRIDGE & KILDARE	Proposed Crossing Points	Inter Urban
		Primary Radial	Feeder
		Primary Orbital	Greenway - Leisure
		Secondary	Further Study
		Greenway - Utility	

NTA Údarás Náisiúnta Iompair National Transport Authority

AECOM

This page intentionally blank

Appendix D

Independent Quality Audit Report

CS CONSULTING
GROUP

24206-01-001

PROPOSED HOUSING DEVELOPMENT
AT STATION ROAD, KILDARE TOWN,
CO. KILDARE

Stage 1 Quality Audit

(Incorporating a DMURS Street Design Audit, and Audits of Accessibility, Cycling, Walking and Road Safety)

for

CS CONSULTING

JANUARY 2025

ROADPLAN CONSULTING

7, Ormonde Road
Kilkenny.
R95 N4FE

Tel: 056 7795800
info@roadplan.ie
www.roadplan.ie

DOCUMENT CONTROL SHEET

Project Title	Proposed Housing Development at Station Road, Kildare Town, Co. Kildare
Project No.	24206-01
Client	CS Consulting
Document Title	Stage 1 Quality Audit
Document No.	24206-01-001

Status	Author(s)	Reviewed By	Approved By	Issue Date
Draft 1	JPZ	GF	GF	16/12/2024
Final	JPZ	GF	GF	10/1/2025

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Roadplan Consulting has been commissioned by CS Consulting to carry out a Stage 1 Quality Audit of a proposed residential development at Station Road, Kildare Town, Co. Kildare.

1.2 The proposed development comprises the construction of 30 no. apartment and duplex units, arranged around a central courtyard.

1.3 The development is situated at the northwestern side of Kildare Village, on the Station Road. The site has a single access point from the Station Road.

1.4 The Circular Road has a speed limit of 50 km/h in the area of the proposed development.

1.5 Figure 1.1 indicates the site location and Figure 1.2 is a layout drawing of the development.

Figure 1.1– *Site Layout*

2. QUALITY AUDIT

2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.

2.2 Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.

2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.

2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.

2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.

2.6 DMURS states that Quality Audits should consist of the following parts:

- DMURS Street Design Audit
- Individual Design Audits
- Quality Audit Report

In the case of this report the individual design audits comprise a Stage 1/2 Road Safety Audit (RSA), an Accessibility audit, a Walking audit and a Cycle audit.

3. METHODOLOGY

3.1 The Audit Team was as follows:

- George Frisby Chartered Engineer MIEI
- Jince Philip Zachariah MIEI

3.2 Road safety, non-motorised users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- how the scheme is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

3.3 The site visit for this quality audit was carried out on 18th October 2024.

The documents provided for the audit were:

Drawing Number	Rev	Drawing Title
2308 - Z – Z - DR - SCA - AR - 1006	02	Planning - Proposed Ground Floor Plan
2308 - Z – L00 - DR - SCA - AR - 2000	06	Site Layout Plan – Level 00

Copies of these audited drawings are contained in Appendix A.

Details of the following have not been provided at this time:

- Road lighting drawings are not provided.
- Drainage drawings are not provided.

It is assumed that adequate layouts will be provided for road lighting and drainage.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on https://www.dmurs.ie/supplementary-material) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

4. STREET DESIGN AUDIT

CONNECTIVITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 - Wayfinding	No Comment	No comment.
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting [1]	3.3.1 – A single vehicular access point is provided to the development from Station Road.	The boundary constraints of this small infill site preclude multiple access points.
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	3.3.1 – A single vehicular access point is provided to the development from Station Road.	The boundary constraints of this small infill site preclude multiple access points.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability	No Comment	No comment.

[1] *When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).*

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function 3.2.2 – Place Context 4.1.1 – A Balanced Approach to Speed [2]	3.2.1 – There is no through road network in the development. The singular vehicular entrance is located on an existing urban street. 4.1.1 –No information has been provided on speed limits within the development.	The internal layout has been designed for a maximum vehicle speed of 20km/h but no speed limit is posted, to avoid giving the impression that the internal shared surface arrangement is a road.
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.3	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 – On-Street Parking Advice Note 1 – Transitions and Gateways	4.2.1 – No information on building heights is provided within the drawings. 4.2.2 – Street trees and soft landscaping are proposed within the integrated design strategy for the proposed development. Planting creates a sense of place and unique character to each streetscape. Care should be taken to ensure the street trees do not block visibility splays at the proposed junctions and pedestrian crossings. Their location should not create risk for mobility impaired users with regard to falling leaves. 4.2.4 – No information on Signage and Line Marking is provided within the drawings. Adequate signage and road markings should be provided according to the TSM and	Buildings within the development are either 2 storeys or 3 storeys in height, with a maximum roof parapet level of 112m AOD (max. 11m above the proposed internal shared surface level). The development does not have an internal street network as such, so it is not possible to evaluate the sense of enclosure as per DMURS §4.2.1. All planting provided as part of the internal landscaping will be selected and maintained to

[2] *Refer also to the National Speed Limit Guidelines*

[3] *In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.*

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
		DMURS at all junctions and elsewhere as required. 4.2.7 – Limited information on landscaping/greening is provided within the drawings. 4.4.9 – The proposed development includes 26 parking spaces including 4 disabled parking bays with no provisions for electric charging bays. No loading and set down areas are proposed.	ensure no obstruction of critical sightlines. Adequate signage and road markings will be provided according to the TSM and DMURS, where required. EV charging facilities will be provided in accordance with County Development Plan requirements. Vehicular servicing (loading, set-down, etc.) can be accommodated within the internal shared surface, without impeding other pedestrian or vehicle movements.
A suitable range of design standards/ measures have been applied that are consistent with the applied design speeds.	4.4.1 – Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	4.4.1 – It is unclear if widths are adequate for refuse trucks or fire tenders to pass opposing vehicles along all access road in the development. 4.4.6 – The swept paths of large vehicles travelling through the development should be assessed.	Swept path analysis has been conducted for both a fire tender and a refuse collection vehicle circulating within the development, and these vehicle movements are shown to be permitted by the internal layout and access arrangements.

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	4.2.5 – Information on streetlights throughout the scheme is not provided within the drawings. It is assumed that adequate lighting will be provided. Its effectiveness should not be impacted by trees or parked vehicles.	A suitable internal lighting scheme for the development will be prepared by the electrical engineering consultant.
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 – Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings	3.2.1 – Some proposed footpaths appear to narrow.	The development's access from the public road previously included a 1.2m-wide footpath to either side. This access has been reconfigured to include a single 1.8m-wide footpath, in keeping with DMURS guidance. No other footpaths are proposed within the development.
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.2 – Place Context 4.3.5 - Cycle facilities	3.2.1 – Cyclists will be expected to mix amongst general vehicular traffic. 4.3.5 – Cycle facilities: Cycle facilities and bicycle parking are provided.	The development's internal shared surface arrangement is intended to ensure that motor vehicles do not have priority over bicycle and pedestrian traffic.
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings 4.3.4 - Pedestrianised and Shared Surfaces	4.3.1 – Footpaths appear to be narrow at the access to the development.	The development's access from the public road previously included a 1.2m-wide footpath to either side. This access has been reconfigured to include a single 1.8m-wide footpath, in

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
			keeping with DMURS guidance.

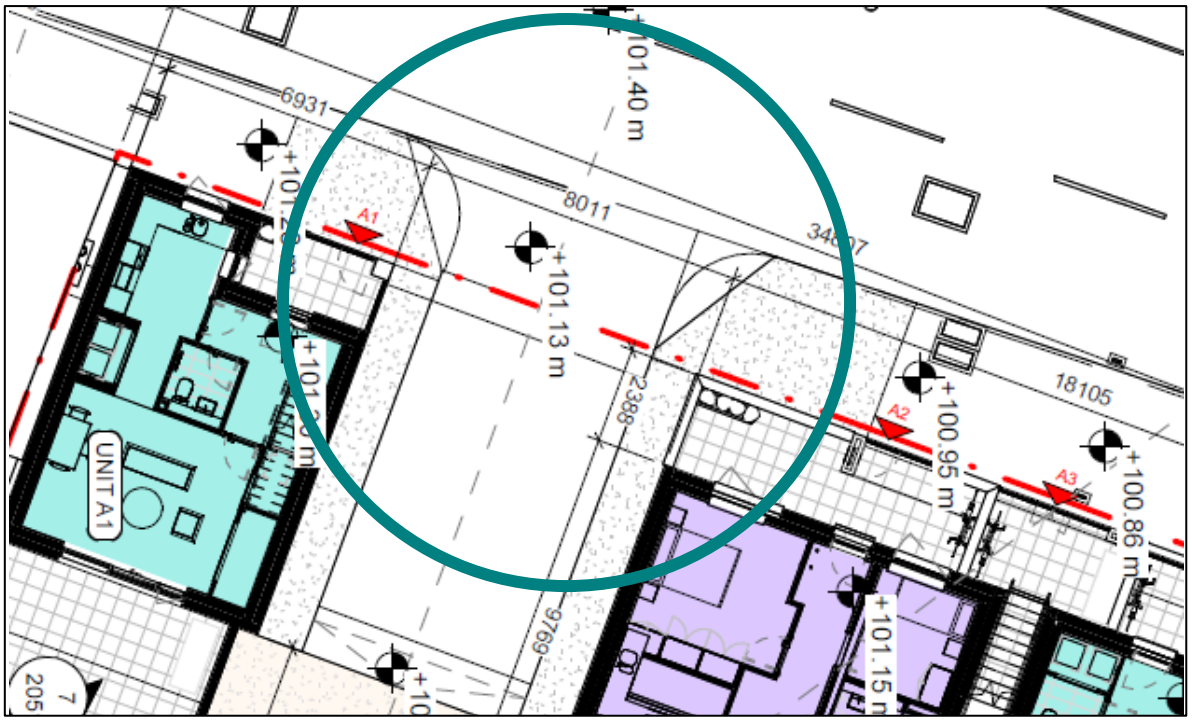
VISUAL QUALITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	3.2.2 – The internal areas will provide a sense of place. 4.2.7 – Trees are shown to be provided along the access road and internal areas.	No comment.
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips	4.2.5 There does not appear to be any charging points proposed for electric vehicles. Current guidelines would suggest that all developments should provide facilities for charging battery operated cars at a rate of up to 10% of the total car parking spaces.	EV charging facilities will be provided in accordance with County Development Plan requirements.
The use of signage and line marking has been minimised.	3.2.1 – Movement Function. 3.2.2 – Place Context. 4.2.4 - Signage and Line Marking.	No comment	No comment.
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces Advice Note 2 – Materials and Specifications	No Comment	No comment.

ADDITIONAL COMMENTS

5. ROAD SAFETY ADUIT STAGE 1/2

5.1 Issue

Road markings or traffic signs to indicate junction priority are not shown to be provided at the proposed internal junctions within the development. This may lead to turning collisions if priority at the junctions is unclear to drivers.



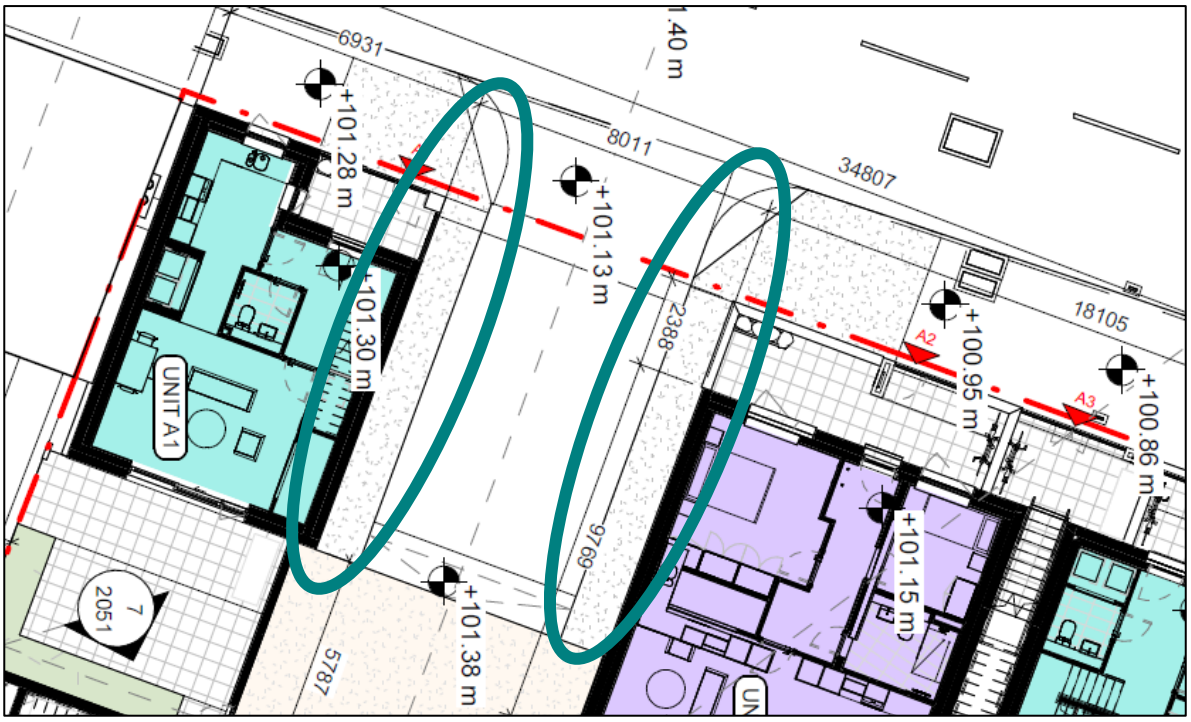
Suggestion

Provide adequate junction control (STOP road markings or similar) to clearly define vehicular priority at all junctions.

6. WALKING

6. 1 **Issue**

It is unclear if appropriate footpaths widths will be provided for mobility impaired pedestrians resulting in pedestrians walking on carriageways where they would be at an increased risk of being struck by a passing vehicle.

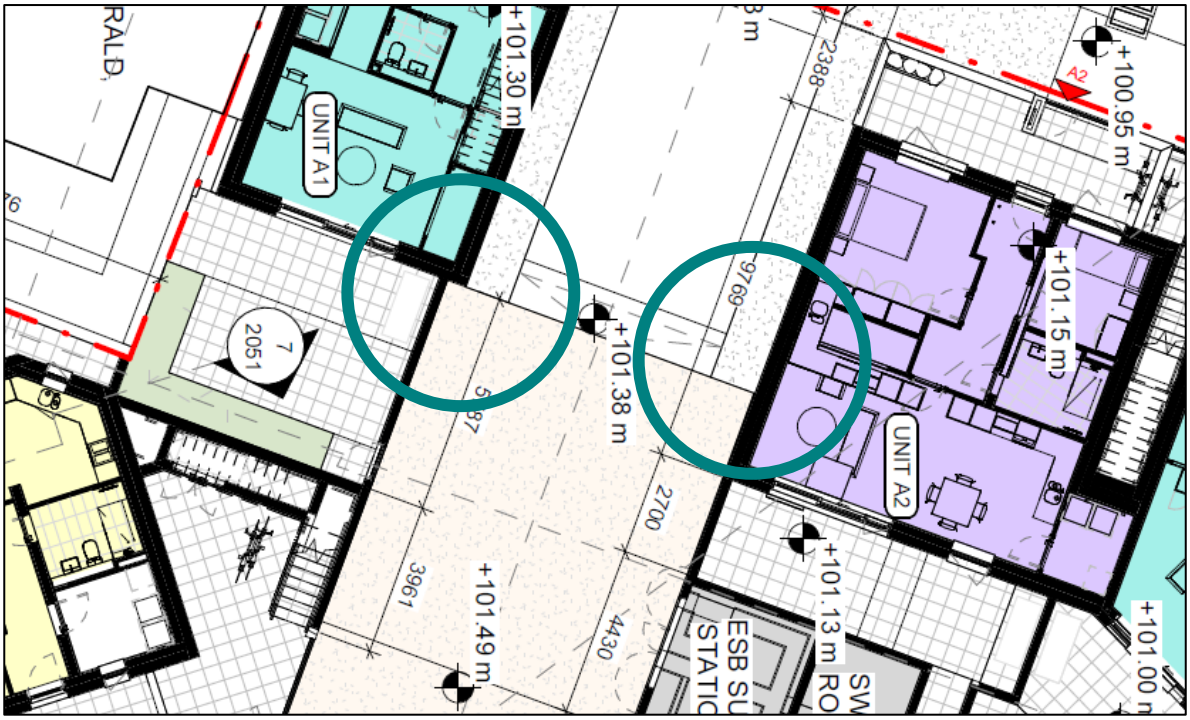


Suggestion

Ensure adequate footpath widths are provide throughout the development.

6. 2 **Issue**

Visually impaired pedestrian may not realise that they are entering into a shared space at the ends of the proposed footpaths. This may contribute to pedestrian collisions within the shared space.

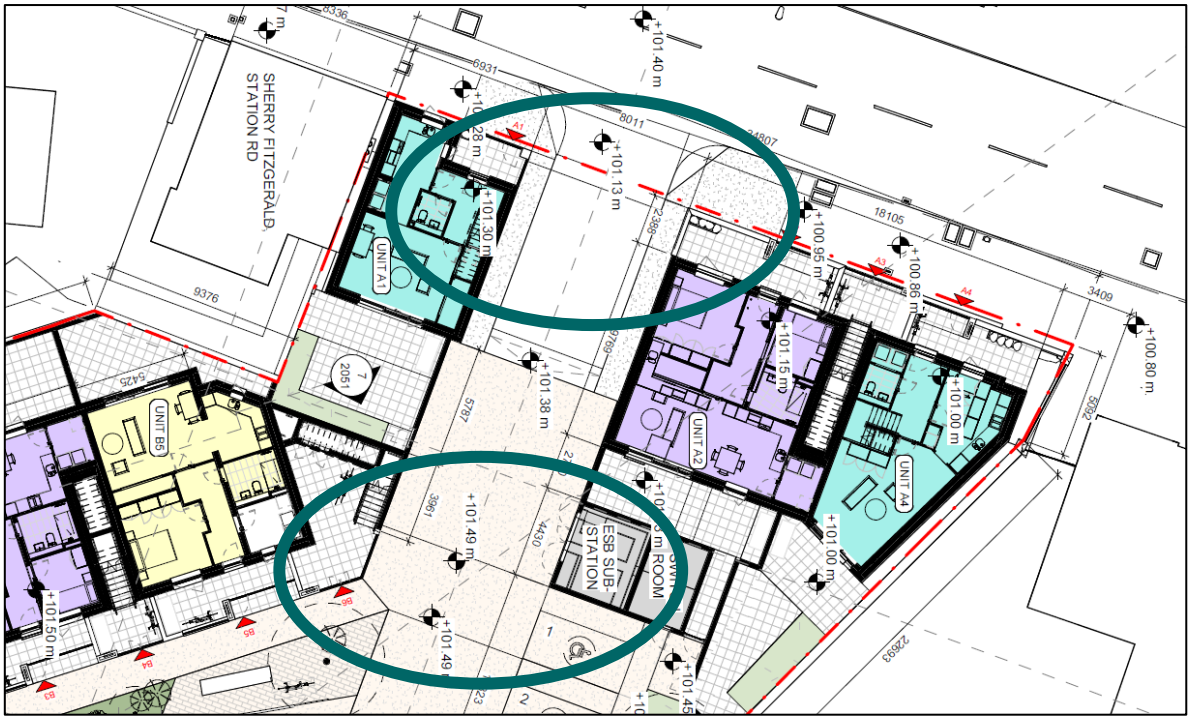


Suggestion

Ensure appropriate corduroy paving is provided at these locations to warn visually impaired pedestrians that they are entering a shared space.

6. 3 **Issue**

A shared space is proposed through the majority of the proposed development. However, where adequate guidance features are not provided, visually impaired pedestrians may become disoriented in the shared space and may stray onto the central access road, increasing the risk of collisions.

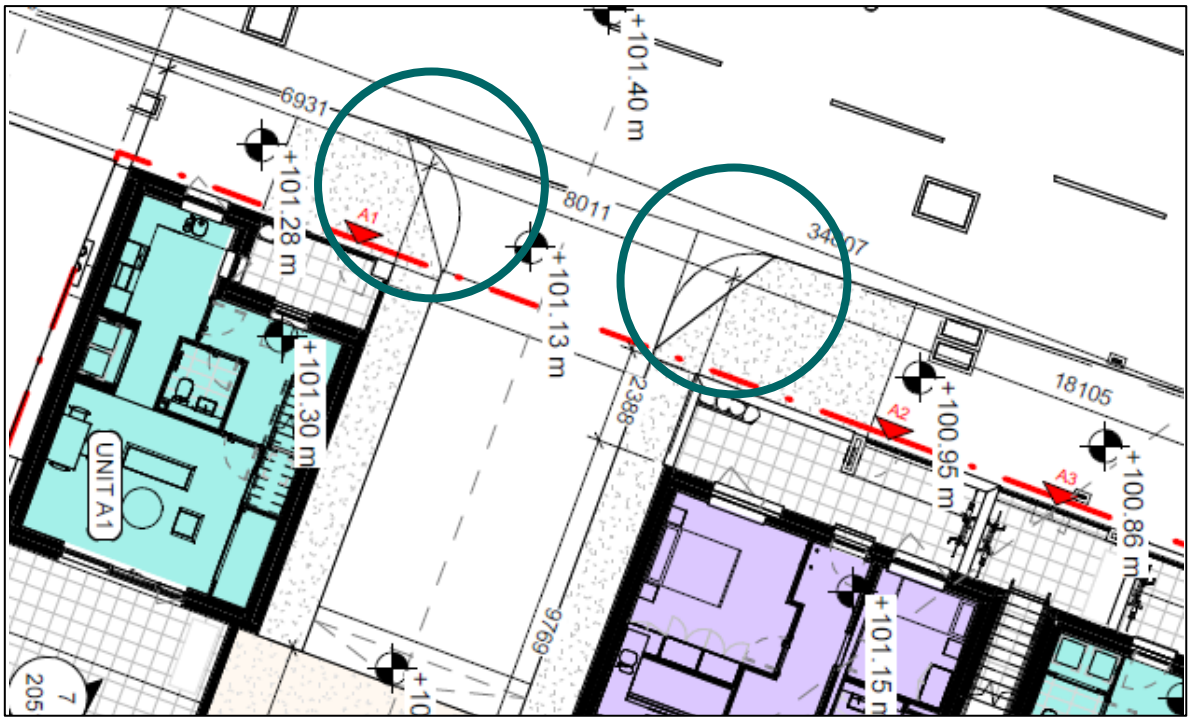


Suggestion

Ensure that measures are provided to provide guidance to visually impaired pedestrians within the shared space.

6. 4 **Issue**

Facilities such as dropped kerbs and tactile paving are not shown to be provided for pedestrians crossing the at the proposed development access. This may cause difficulty or delay for crossing movements by pedestrians and increase the risk of their being struck by passing motor traffic.



Recommendation:
Provide facilities such as dropped kerbs and tactile paving for pedestrians crossing the proposed development access.

6. 5 **Issue**
Street lighting is not shown to be provided within the proposed development. A lack of street lighting may contribute to a pedestrian collision within the proposed development.

Suggestion
Ensure that adequate street lighting is provided throughout the proposed development.

7. CYCLING

No cycle issues were noted in relation to this Quality Audit.

8. ACCESSIBILITY

8. 1 **Issue**

There does not appear to be any charging points proposed for electric vehicles. Current guidelines would suggest that all developments should provide facilities for charging battery operated cars at a rate of up to 10% of the total car parking spaces.

Suggestion:
Consideration should be given to reviewing the allocation of designated charging points for electric vehicles, to meet with current guidelines.

8. 2 **Issue**

The proposed development includes 30 residential units. However, only 26 parking spaces are shown to be provided in the drawing, including 4 accessible parking bays and without any provisions for on street parking. Residents may park on street compromising the effective width of shared space carriageway and could increase the risk of side swipe collisions or collisions involving pedestrians.

Suggestion
Ensure that adequate parking provisions are available to cater the needs of the development.

9. QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Housing Development at Station Road, Co. Kildare

Document Number: 24206-01-001

Date Audit Completed: 12th December 2024

Paragraph No. in Quality Audit Report	To Be Completed By Designer			To Be Completed by Audit Team
	Issue Accepted (yes/no)	Suggested Measure Accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting suggested measure. Only complete if suggested measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
5.1	Yes	Yes	----------	----------
6.1	Yes	Yes	----------	----------
6.2	Yes	Yes	----------	----------
6.3	Yes	Yes	----------	----------
6.4	Yes	No	The footpath will be carried over at full height across the development access, to ensure pedestrian priority.	Yes
6.5	Yes	Yes	----------	----------
8.1	Yes	Yes	----------	----------
8.2	Yes	Yes	----------	----------

Safety Audit Signed off ..... **Design Team Leader**

Print Name Gordon Finn ..... **Date** 09.01.2025

Safety Audit Signed off ..... **Audit Team Leader**

Print Name George Frisby ..... **Date** 10/1/2025

Please complete and return to:

Roadplan Consulting,
7, Ormonde Road
Kilkenny
E-mail: info@roadplan.ie

APPENDIX A – DRAWINGS

1 **Site Layout Plan - Level 00**
1 : 200

General Notes:

- 1 Bedroom Apartment
- 1 Bedroom Apartment (UD)
- 2 Bedroom House
- 2 Bedroom Apartment / Duplex
- 2 Bedroom Apartment (UD)
- 3 Bedroom Duplex
- 3 Storey House
- Ancillary / Service Building
- Reservation wayleave for existing foul line diversion to be agreed with Uisce Éireann

Area Schedule - NIA

Name	Unit Number	Unit Type	Area	Min Area
UNIT A1	01	2B	87.89 m²	85.00 m²
UNIT A2	02	2B-UD	73.95 m²	63.00 m²
UNIT A3	03	2B	89.80 m²	73.00 m²
UNIT A4	04	2B	103.04 m²	85.00 m²
UNIT B1	09	2B-UD	73.06 m²	63.00 m²
UNIT B2	10	2B	88.18 m²	73.00 m²
UNIT B3	07	2B-UD	73.95 m²	63.00 m²
UNIT B4	08	2B	89.80 m²	73.00 m²
UNIT B5	05	1B-UD	66.14 m²	45.00 m²
UNIT B6	06	2B	89.80 m²	73.00 m²
UNIT C1	11	2B-UD	72.94 m²	63.00 m²
UNIT C2	12	1B	55.10 m²	45.00 m²
UNIT C3	13	3B	110.96 m²	180.00 m²
UNIT C4	14	1B-UD	55.98 m²	45.00 m²
UNIT C5	15	1B	55.10 m²	45.00 m²
UNIT C6	16	3B	111.96 m²	90.00 m²
UNIT C7	17	1B-UD	55.98 m²	45.00 m²
UNIT C8	18	1B	55.10 m²	45.00 m²
UNIT C9	19	3B	111.96 m²	90.00 m²
UNIT C10	20	2B	86.69 m²	73.00 m²
UNIT C11	21	2B	93.08 m²	73.00 m²
UNIT C12	22	2B	82.37 m²	73.00 m²
UNIT C13	23	2B	93.08 m²	73.00 m²
UNIT D1	24	1B-UD	55.98 m²	45.00 m²
UNIT D2	25	1B	55.10 m²	45.00 m²
UNIT D3	26	3B	111.96 m²	90.00 m²
UNIT D4	27	1B-UD	55.98 m²	45.00 m²
UNIT D5	28	1B	55.10 m²	45.00 m²
UNIT D6	29	3B	111.96 m²	90.00 m²
UNIT D7	30	3B	118.73 m²	90.00 m²

No	Date	By	Description
00	2024.04.08	SF	Issued for Information
01	2024.04.26	SF	Issued at Stage 3A Completion
02	2024.05.24	MH	Issued for Stage 3B
03	2024.06.19	SF	Zone C Layout Revised, Encroachment shed added to plans
04	2024.07.24	SF	ESB Substation Location Updated
05	2024.11.22	SF	Site Layout updated - Zones C & D setout updated.
06	2024.11.28	SF	General Arrangement setout updated

N

Project: an Triantán
Address: Station Road, Kildare
Client: Kildare County Council
Title: Site Layout Plan - Level 00
Number: 2308 - Z - L00 - DR - SCA - AR - 2000
Purpose: P1 Information
Revision: 06
Scale @A1: 1 : 200
Package: 20-SITE DRAWINGS
Date: 08/04/2024
Drawn: SF

SHAY CLEARY ARCHITECTS
18 Palmerston Park, Rathmines, Dublin D06 EY64
t 01 402 5090
e info@sca.ie
w www.sca.ie

1 **Planning - Proposed Ground Floor Plan**
1 : 200

General Notes:

- Studio Apartment
- 1 Bedroom Apartment
- 1 Bedroom Apartment (UD)
- 2 Bedroom House
- 2 Bedroom Apartment / Duplex
- 2 Bedroom Apartment (UD)
- 3 Bedroom Duplex
- Ancillary / Service Building
- Resin bound gravel permeable shared surface - Addeset by Addgrip or similar Flush kerbs unless otherwise noted
- Two tone natural stone paving is bespoke paving pattern
- Grass lawn, refer to Landscape Architects drawings and specification
- Proposed planting areas, refer to Landscape Architects drawings and specification
- Raised table & entrance footpath. Refer to Civil Engineer's drawings and specification
- Permeable paving to entrances and rear gardens

Area Schedule - NIA

Name	Unit Number	Unit Type	Area	Min Area
UNIT A1	01	2B	89.31 m²	85.00 m²
UNIT A2	02	2B-UD	74.12 m²	63.00 m²
UNIT A3	03	2B	89.80 m²	73.00 m²
UNIT A4	04	2B	103.55 m²	85.00 m²
UNIT B1	09	2B-UD	73.16 m²	63.00 m²
UNIT B2	10	2B	87.85 m²	73.00 m²
UNIT B3	07	2B-UD	74.12 m²	63.00 m²
UNIT B4	08	2B	89.80 m²	73.00 m²
UNIT B5	05	1B-UD	61.30 m²	45.00 m²
UNIT B6	06	2B	89.80 m²	73.00 m²
UNIT C1	11	2B-UD	72.72 m²	63.00 m²
UNIT C2	12	1B	54.64 m²	45.00 m²
UNIT C3	13	3B	111.42 m²	180.00 m²
UNIT C4	14	1B-UD	56.20 m²	45.00 m²
UNIT C5	15	1B	54.65 m²	45.00 m²
UNIT C6	16	3B	112.40 m²	90.00 m²
UNIT C7	17	1B-UD	56.20 m²	45.00 m²
UNIT C8	18	1B	54.64 m²	45.00 m²
UNIT C9	19	3B	112.40 m²	90.00 m²
UNIT C10	20	1B-UD	56.20 m²	45.00 m²
UNIT C11	21	ST	43.90 m²	45.00 m²
UNIT C12	22	3B	112.40 m²	90.00 m²
UNIT C13	23	1B-UD	62.23 m²	45.00 m²
UNIT C14	24	2B	90.11 m²	73.00 m²
UNIT D1	25	2B	82.66 m²	73.00 m²
UNIT D2	26	2B	93.67 m²	73.00 m²
UNIT D3	27	2B	82.66 m²	73.00 m²
UNIT D4	28	2B	93.67 m²	73.00 m²
UNIT D5	29	2B	82.66 m²	73.00 m²
UNIT D6	30	2B	93.67 m²	73.00 m²

No	Date	By	Description
00	2024.02.01	SF	Issued for Stage 2 Approval
01	2024.07.22	SF	Issued for Section 179A Notification
02	2024.XX.XX	SF	Issued for Planning

Project: an Triantán
Address: Station Road, Kildare
Client: Kildare County Council
Title: Planning - Proposed Ground Floor Plan
Number: 2308 - Z - Z - DR - SCA - AR - 1006
Purpose: P3 Statutory Submission - Planning Permission
Revision: 02
Scale @A1: 1 : 200
Package: 10-PLANNING
Date: 2024.02.01
Drawn: SF/CE

SHAY CLEARY ARCHITECTS
18 Palmerston Park, Rathmines, Dublin D06 EY64
t 01 402 5090
e info@sca.ie
w www.sca.ie