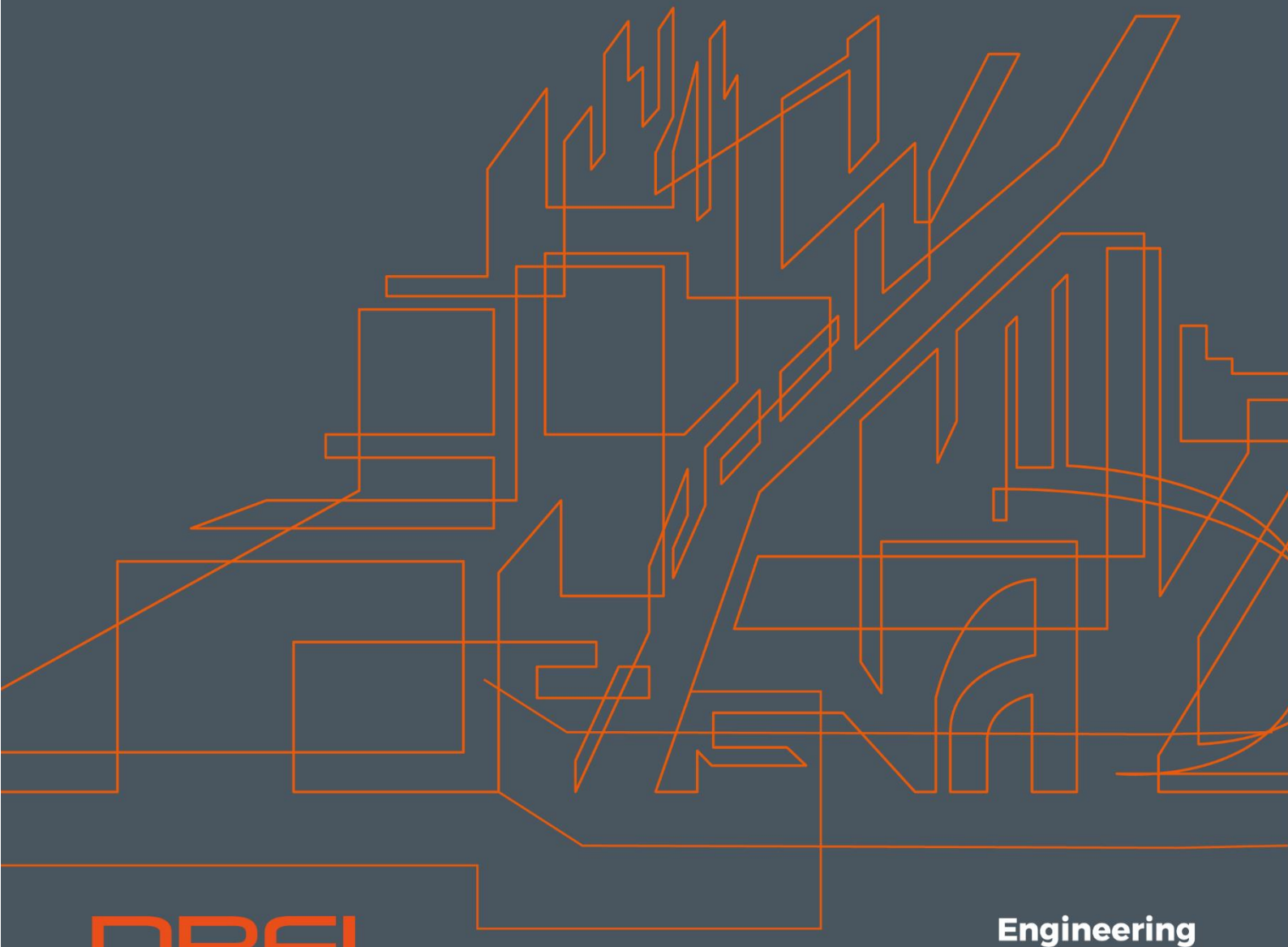
Whitestown Way Tallaght LRD

Traffic and Transport Assessment Report

240192-X-X-X-XXX-RP-DBFL-CE-0004

May 2026



DBFL CONSULTING ENGINEERS

Engineering Sustainable Futures

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P1	3	15/05/26	Final Issue	Sam Keating	Mark Kelly	Mark Kelly

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1 Introduction

1.1 Background

DBFL Consulting Engineers (DBFL) has been commissioned to prepare a Traffic and Transport Assessment (TTA) for a Large-Scale Residential Development' (LRD) at Whitestown Way, Dublin 24.

ARP 4.2 Sustainable Communities (Ireland) Fund intends to apply for permission for the development of a 'Large-Scale Residential Development' (LRD) at a site of approximately 1.32 Ha principally located at Whitestown Way, Dublin 24. The site is generally bound: to the east by Whitestown Way; to the south by Riverside Business Park; to the west by Whitestown Road / Whitestown Industrial Estate, undeveloped lands and the Vita Actives premises; and to the north by, the Vita Actives premises and The Arena mixed-used development. It also extends to include part of Whitestown Way for junction, road infrastructure and landscape works.

The proposed development principally comprises the construction of a mixed-use development in 2 No. blocks (Block A to the east and Block B to the west) with a gross floor area of 14,976.5 sq m (excluding undercroft car parking area of 1,975.8 sq m) and ranging in height from 1 No. storey to 6 No. storeys. The blocks are connected via a single-storey undercroft/podium level. The development includes: 169 No. residential units (80 No. 1-bed, 85 No. 2-bed and 4 No. 3-bed); 2 No. class 1 / class 2 commercial units (totalling 356.5 sq m); and a crèche (162.8 sq m) with external play area.

The development also comprises: new street and turning head at the site's southern side and junction with Whitestown Way to the east; 77 No. car parking spaces, with 69 No. Residential Spaces (66 No. within the undercroft car parking area) and 8 No. on-street car parking spaces serving the creche and retail units; 2 No. set-down bays; cycle parking; hard and soft landscaping, including public open space, communal amenity space and incidental spaces; private amenity spaces (as balconies and terraces facing all directions); boundary treatments; sub-station; plant/operational rooms; bin stores; public lighting; green roofs; rooftop plant, PV arrays, lift overruns, telecommunications infrastructure and automatic opening vents; and all associated works above and below ground.

1.2 Scope

The purpose of this TTA is to quantify the existing transport environment and to detail the results of the assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed residential development.

The scope of the assessment covers transport and sustainability issues including access, pedestrian, cyclist and public transport connections. Recommendations contained within this report are based on existing and proposed road layout plans, site visits, site traffic observations and junction survey data.

This TTA has been prepared in reference to the requirements of the Transport Infrastructure Ireland "Traffic and Transportation Assessment Guidelines". Reference has also been made to the South Dublin County Development Plan 2022-2028.

1.3 Methodology

Our approach to the study accords with policy and guidance both at a national and local level. Accordingly, the adopted methodology responds to best practices, current and emerging guidance, exemplified by a series of publications, all of which advocate this method of analysis. Key publications consulted include;

- 'Traffic and Transport Assessment Guidelines' (May 2014) National Road Authority (TII);
- 'Traffic Management Guidelines' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- 'Guidelines for Traffic Impact Assessments' The Institution of Highways and Transportation; and
- South Dublin County Development Plan 2022-2028.

Our methodology incorporated a number of key inter-related stages, including;

- **Background Review:** This important exercise incorporated three parallel tasks which included (a) an examination of the local regulatory and development management documentation; (b) an analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals across the Whitestown area, and (c) a review of planning applications to establish the legal status of various third party development schemes that were either considered within the strategic 'transport' studies or which have emerged and received full planning permission since.
- **Site Audit:** A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed during this stage of the assessment.

- **Traffic Counts:** Junction traffic counts in addition to vehicle queue length surveys were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed residential development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed mixed-use development.
- **Trip Distribution:** Based upon both the existing and future network characteristics, a distribution exercise has been undertaken to assign site generated vehicle trips across the local road network.
- **Network Analysis:** Further to quantifying the predicted impact of vehicle movements across the local road network for the adopted site access strategy more detailed computer simulations have been undertaken to assess the operational performance of key junctions in the post development 2028, 2033 and 2043 development scenarios.

1.4 Report Structure

Section 2 of this report describes the existing conditions at the proposed development location and immediate surrounding area including public transport capacity, whilst the relevant transport policies that influence the design and appraisal of the subject residential development proposals are highlighted within **Section 3**.

A summary of the principal characteristics of the proposed mixed-use development is provided in **Section 4.**

In order to ensure the effective operation of on-site car parking, **Section 5** provides a account of the parking management strategy for the proposed development.

A delivery and servicing plan is outlined in **Section 6**.

Section 7 outlines the trip generation exercise carried out and the adopted methodology for applying growth factors to establish design year network traffic flows.

The potential traffic impact of the proposals as assessed for the adopted 2028 Opening Year and the Horizon Year of 2033 and 2043 are summarised within **Section 8.**

The junction analysis of the proposed site access is found in **Section 9**

The Construction Phase is described in **Section 10** of this report. The main conclusions and recommendations derived from the analysis are summarised in **Section 11.**

1.5 Response to South Dublin County Council LRD Opinion

A Section 32C LRD Stage 2 Meeting took place between the design team and South Dublin County Council on the 18th of March 2026. An LRD Opinion document was prepared by SDCC, and the design responses to the traffic and transportation items are included in this chapter. These are prepared in response to the SDCC Roads department report, detailed in full in **Appendix 5** of the LRD Opinion report, within the following items are suggested:

1) Access

a) *The applicant shall provide cross sections of all roads, cycleways and pedestrian ways and comply with DMURS*

DBFL Response to Sustainable Movement: Item No. 1 (a):

Cross-sections have been prepared, please refer to Drawings No. 240192-X-04-Z00-DR-XXX-DBFL-CE-5201, 240192-X-04-Z00-DR-XXX-DBFL-CE-5202, 240192-X-04-Z00-DR-XXX-DBFL-CE-5203 submitted as part of this planning application.

b) Demonstrate how vehicles attending the creche circulate

DBFL Response to Sustainable Movement: Item No. 1 (b):

On-street parking and designated set-down areas have been provided, together with a new turning area that enables vehicles to manoeuvre safely and conveniently and exit via the Whitestown Way junction. Refer to Drawing No. 240192-X-04-Z00-DTM-DR-DBFL-CE-1001 submitted as part of this planning application.

2) Bin Storage

Clear details of bin storage and bin staging areas would be required demonstrating how bin collections can be carried out safely & efficiently. Clear layout needed to determine swept paths made by refuse trucks during collections

DBFL Response to Sustainable Movement: Item No. 2:

Refer to Section 6 - Delivery and Servicing Plan included in this TTA and Drawing No. 240192-X-04-Z00-DTM-DR-DBFL-CE-1001, and the Operational Waste Management Plan (Document Ref: 257501.0849WMR02) submitted as part of this planning application.

3) Road Safety Audit:

The applicant shall submit a Stage 1 & 2 Road Safety Audit

DBFL Response to Sustainable Movement: Item No. 3:

A Stage 1 Road Safety Audit has been completed and is included as part of the planning application documentation. A Stage 2 Road Safety Audit will be undertaken at detailed design stage in accordance with the requirements of the Transport Infrastructure Ireland publication *GE-STY-01024 Road Safety Audit*.

4) Public Lighting

A Public Lighting design to be submitted that has the written agreement of the SDCC PL Section

DBFL Response to Sustainable Movement: Item No. 4: A Lighting Design has been prepared by Fallon Design M & E Engineering, please refer to Drawing WTW-XX-60-SW-XXX-DR-FDE-EE-1001.pdf.

5) Construction Traffic Management Plan

The applicant to provide a Construction Traffic Management Plan

DBFL Response to Sustainable Movement: Item No. 5:

Refer to AWN's Construction Environmental Management Plan, submitted as part of this planning application.

6) Car Parking:

a) *The applicant proposes to provide a total of 63 No. residential car parking spaces for 169 No. residential units. This gives a car parking ratio of 0.37 No. The Roads Department recommend a parking ratio of 0.5 be applied.*

b) *The applicant to present a detailed parking plan on how the proposed parking in the development is going to be managed. To include (not an exhaustive list:*

c) *How are the spaces going to be allocated*

d) *What parking controls are going to be put in place for illegal parking?*

e) *What communication is going to be given to residents prior to and at the start of occupation?*

f) *What enforcement of parking is going to be done? By whom?*

DBFL Response to Sustainable Movement: Item No. 6 (a):

The proposed development provides 69 no. residential car parking spaces for 169 no. units, equating to a parking ratio of 0.41. While this represents a modest deviation from the Roads Department's recommended ratio of 0.5, the provision is considered appropriate and justified in the context of the site's accessibility.

The subject site benefits from proximity to high-frequency public transport services, including the BusConnects 24-hour F-Spine and the Tallaght Luas, which significantly reduces reliance on private car ownership. The scheme has been designed to prioritise sustainable travel modes, supported by the implementation of a Mobility Management Plan (MMP), which will further encourage modal shift towards walking, cycling, and public transport.

The proposed parking ratio reflects a balanced and forward-looking approach that supports reduced car dependency and aligns with national and regional policy objectives, including the National Sustainable Mobility Policy (2022) and the Transport Strategy for the Greater Dublin Area 2022–2042. Furthermore, the quantum of parking is considered sufficient to cater for the anticipated level of demand arising from the development, especially noting the primary inclusion of 1-bed and 2-bed units which generate lower car parking demands than the established 3-bed and larger units in the wider Tallaght area.

Overall, the car parking strategy is deemed appropriate for the location and nature of the scheme. Refer to Chapter 5 of the Transport Assessment (TTA) for further details on the parking strategy.

7. Mobility Management Plan

A *Mobility Management Plan is to be completed within six months of opening of the proposed development. The Mobility Management Plan shall be submitted for the written agreement of the Planning Authority. REASON: In the interest of sustainable transport.*

DBFL Response to Sustainable Movement: Item No. 7:

Yes, a Mobility Management Plan (MMP) will be completed within six months of opening of the proposed development. However, as part of this planning application a Mobility Management Plan has been prepared.

The Mobility Management Plan (MMP) sets out the initial framework, objectives, and targets for promoting sustainable travel within a development. It identifies measures to reduce reliance on private car use, particularly single-occupancy trips, while encouraging walking, cycling, and public transport, with the aim of improving accessibility, safety, and overall travel efficiency.

For further information, please refer to the Mobility Management Plan, 240192-X-00-Z00-XXX-RP-DBFL-CE-0002, submitted as part of this planning application.

2 Receiving Environment

2.1 Land Use

The subject site, outlined in red, is located within a zoned regeneration area, adjoining a mix of enterprise, institutional and open space land uses. Its proximity to strategic transport infrastructure, including Tallaght Luas and the Tallaght / Clondalkin to City Centre Core Bus Corridors, and existing employment and residential areas reinforces its suitability for residential-led, mixed-use regeneration.

According to the South Dublin County Development Plan 2022-2028, the subject site is zoned Objective Regen: *"To facilitate enterprise and/or residential-led regeneration subject to a development framework or plan for the area incorporating phasing and infrastructure delivery."* **Figure 2-1** below presents the land-Use Zoning for Subject Site as per the South Dublin County Development Plan 2022-2028.

The zoning objective reflects the intention of the Development Plan to promote the efficient use and reuse of underutilised lands, support compact growth, and facilitate the delivery of a coordinated mix of uses. The subject site represents an appropriate opportunity to contribute to the wider regeneration strategy for the area in accordance with the objectives of the South Dublin County Development Plan 2022–2028.

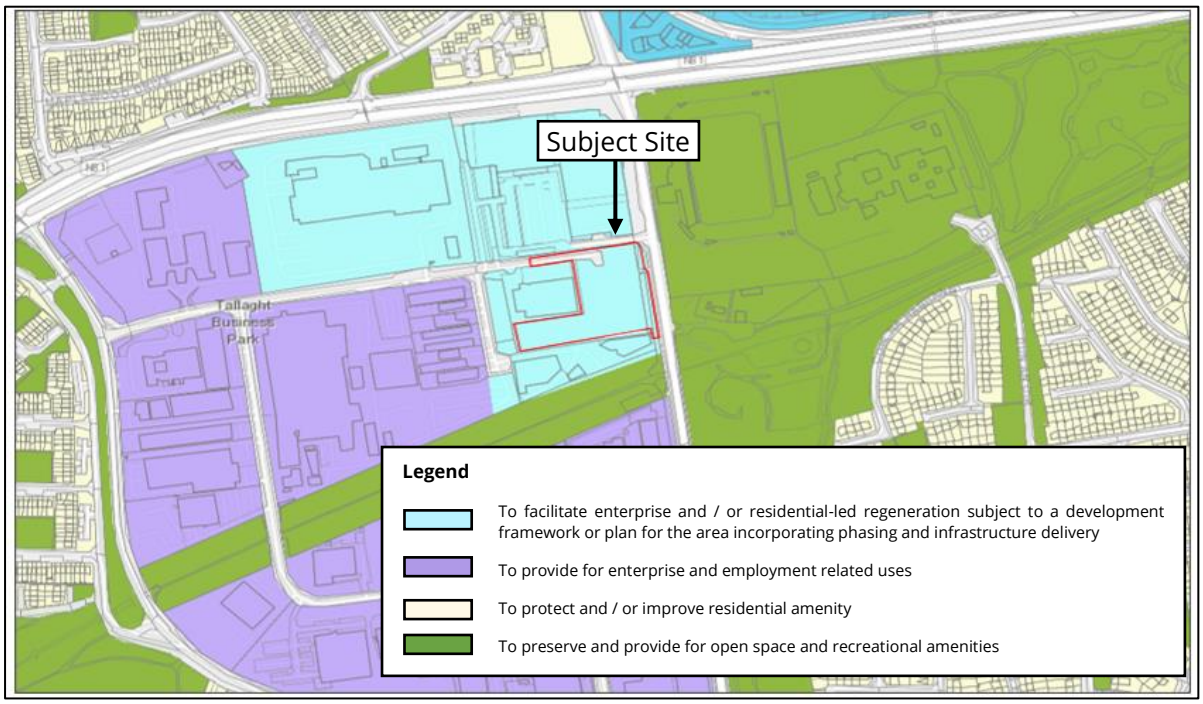


Figure 2-1 Land Use Zoning in vicinity of subject site. Source: SDCC Land Use Zoning Maps: Map 9

2.2 Location

The subject site is located on an existing greenfield site on Whitestown Way, Tallaght, Dublin.

The site is generally bound: to the east by Whitestown Way; to the south by Riverside Business Park; to the west by Whitestown Road / Whitestown Industrial Estate, undeveloped lands and the Vita Actives premises; and to the north by, the Vita Actives premises and The Arena mixed-used development. It also extends to include part of Whitestown Way for junction, road infrastructure and landscape works.

The general location of the subject site in relation to the surrounding road network is illustrated in **Figure 2-2** whilst **Figure 2-3** indicatively shows the extent of the subject site boundary and neighbouring lands.

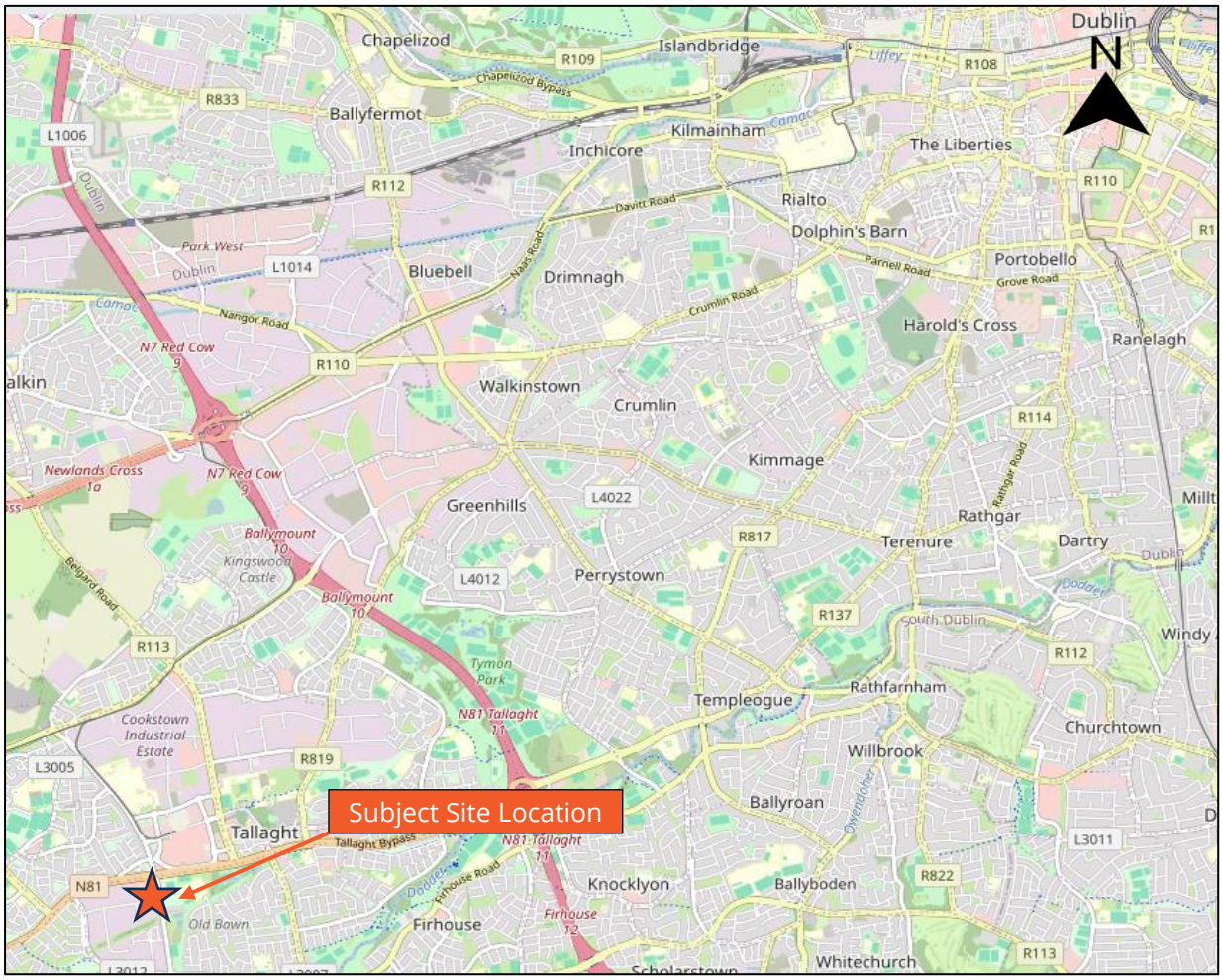


Figure 2-2 Site Location (Source: OpenStreetMap)

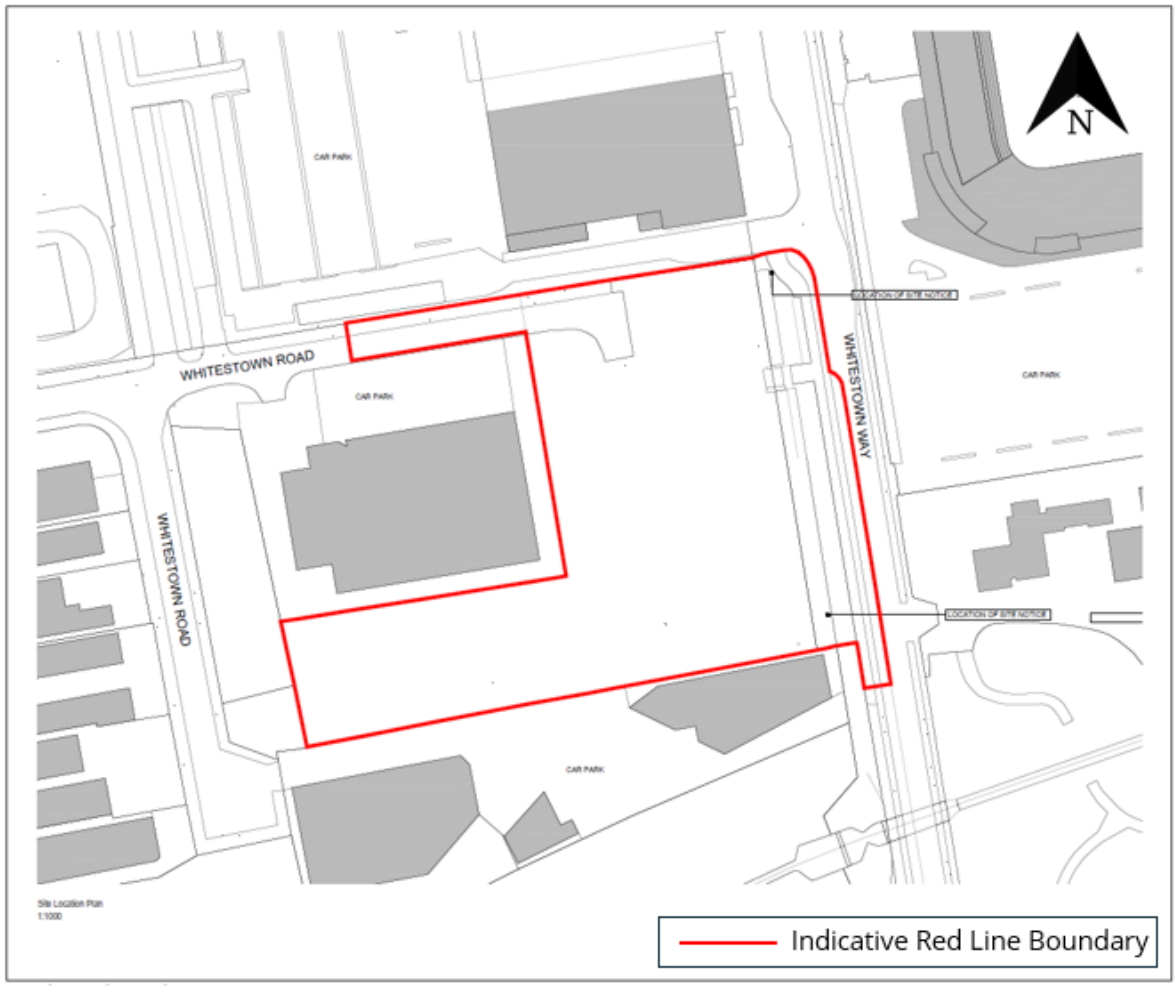


Figure 2-3 Subject site indicative Redline Boundary (Source: Google Earth Pro)

2.3 Existing Transport Infrastructure

2.3.1 Road Network

The subject development site is located immediately west of Whitestown Way. Whitestown Way is a wide single carriageway road with one general traffic lane in each direction.

Travelling northbound on Whitestown Way leads to the Tallaght Bypass / N81 whereas travelling southbound leads to the Kiltipper Way / Firhouse Rd. Roundabout.

Overleaf **Figure 2-4** illustrates the location of the subject site within the context of the existing road network.

- **Whitestown Way** is located to the east of the subject site. Travelling northbound on Whitestown Way leads to the Tallaght Bypass / N81 whereas travelling southbound leads to the Kiltipper Way / Firhouse Rd. Roundabout.

- **The Tallaght Bypass / N81** is a national road located to the north of the subject site. Travelling eastbound on the N81 connects to the M50, one of the central routes to Dublin City Centre.
- **Whitestown Road** is situated to the west of the subject site. Travelling eastbound on Whitestown Road connects to an internal access road leading to the subject site, and a variety of commercial and industrial uses located within the Tallaght Business. Travelling westbound on Whitestown Road connects to the Killinarden Way junction, which is situated immediately south of the N81.
- **Cookstown Way** is located north of the N81. Travelling northbound along Cookstown Way provides eastern access to **Belgard Square** and **Belgard Road**, both of which form part of the Tallaght–Clondalkin Core Bus Corridor. This corridor connects to key destinations including the Tallaght Luas, The Square Shopping Centre and TU Dublin.

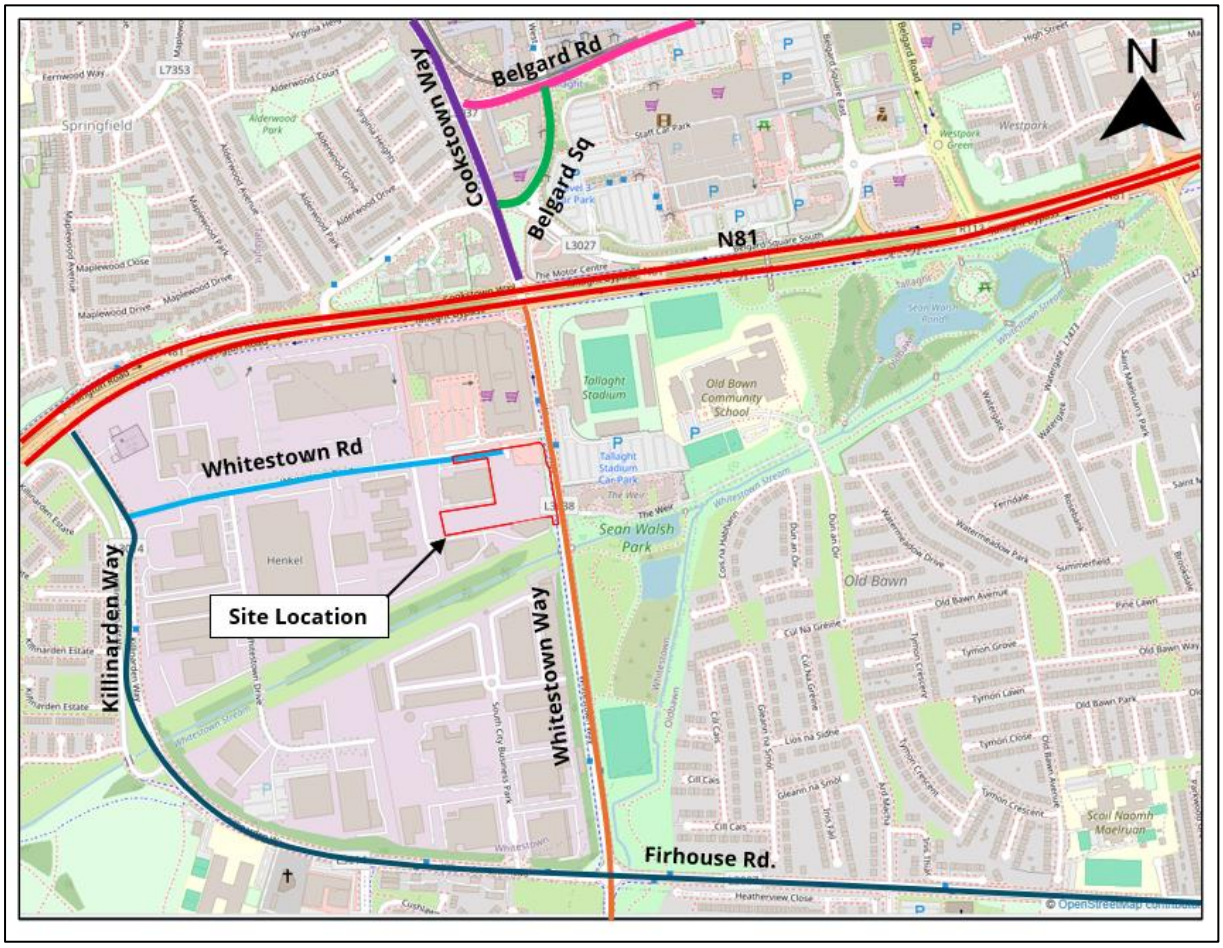


Figure 2-4 Existing Road Network (Source: Google Maps)

2.3.2 Existing Pedestrian Facilities

Pedestrian connectivity to and from the subject site is supported by a well-established network of footpaths along Whitestown Way, with high-quality footpath provision available on both sides of the carriageway. There is a shared path on the western side of the carriageway which provides access to the subject site. There is a continuous footpath (approx. 1.5m-2) on the eastern side of the carriageway, which provides access to Tallaght Stadium and the carpark for Sean Walsh Memorial Park, as well as a network of pathways providing access to the park. Public safety is further enhanced by the presence of public lighting along both sides of the road.

Whitestown Way has signalised pedestrian crossings north and south of the subject site. To the north, there are 2 No. sets of signalised crossings, one of which is situated adjacent to the Tallaght Stadium Pedestrian Entrance and the second of which is located further north at the Whitestown Way / N81 Junction. To the south, there is one signalised pedestrian crossing located approximately 40m south of the proposed site entrance (adjacent to Sean Walsh Park). Further south, there is an uncontrolled crossing with pedestrian priority / zebra crossing situated at the Whitestown Way / Kiltipper Way / Firhouse Rd. roundabout**. Figure 2-5** below and **Figure 2-6** overleaf illustrates the pedestrian facilities situated within the receiving environment of the subject site.

Figure 2-5 Pedestrian Crossing Facilities in Vicinity of the Subject Site

Figure 2-6 Pedestrian Facilities at Whitestown Way

Walking Catchment

Existing walking time isochrones from the development site are shown in **Figure 2-7** overleaf. Based on the walking time isochrone, several key locations can be accessed within a 5, 10 or 15 minute walking time, including:

- The Arena Centre (less than 5 minutes)
- Tallaght Stadium (5 minutes)
- Sean Walsh Memorial Park & Sensory Garden (10 minutes)
- ALDI (10 minutes)
- Tallaght Luas (10 minutes)
- The Square Shopping Centre (10-15 minutes)
- Tallaght University Hospital (15 minutes)
- TU Dublin (15 minutes)

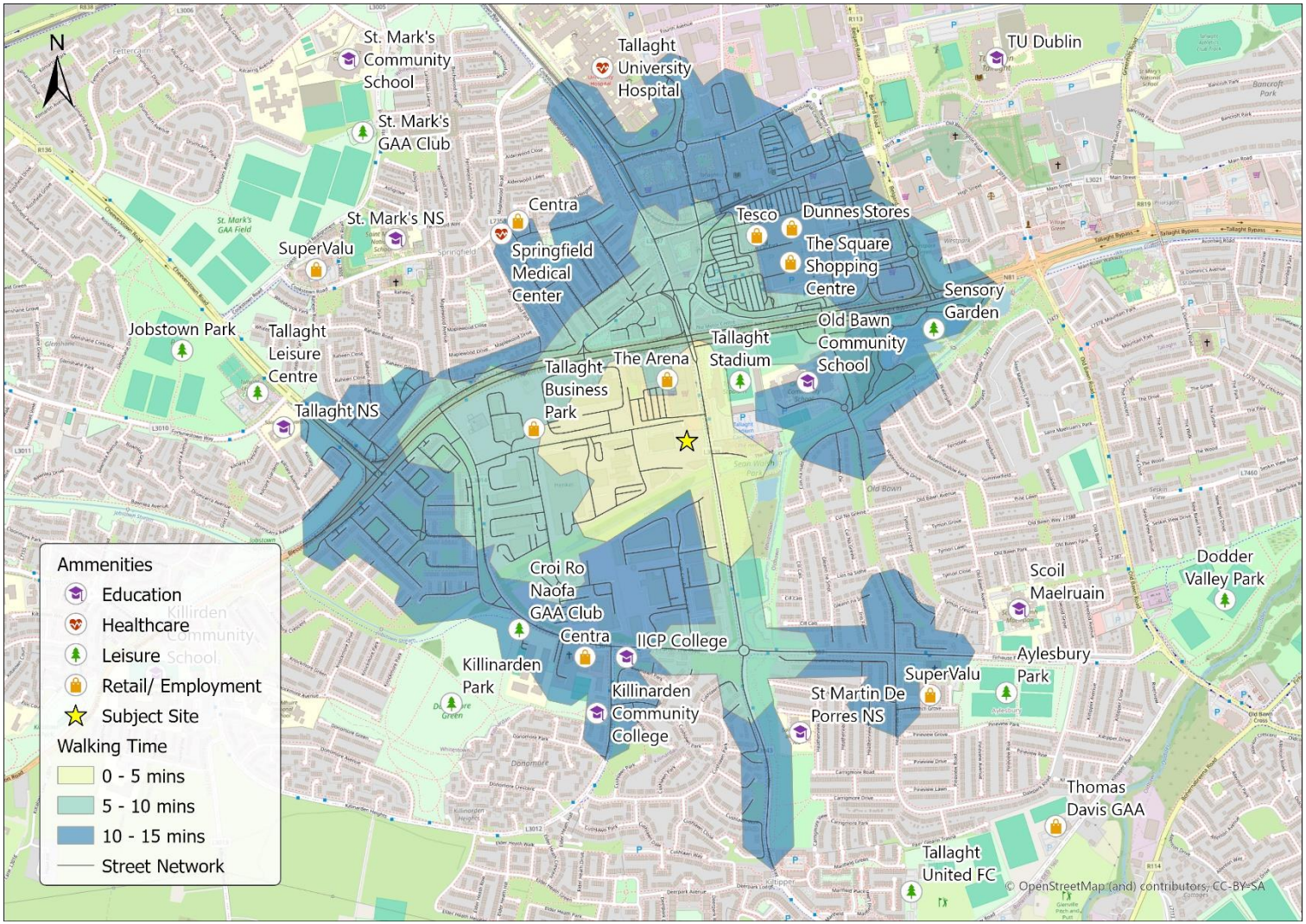


Figure 2-7 Walking Catchment from the Subject Development Site

2.3.3 Existing Cycling Facilities

The subject lands are well served by cycling facilities. There is a two-way cycle track to the immediate east of the subject lands at Whitestown Way, providing a cycle connection to the Arena Retail Centre (Lidl, Club Vitae Leisure Centre), Tallaght Stadium and supporting the wider cycling network. **Figure 2-8** and **Figure 2-9** below present the cycling facilities serving the subject site.

Figure 2-8 Cycling Facilities on Whitestown Way (Facing North)

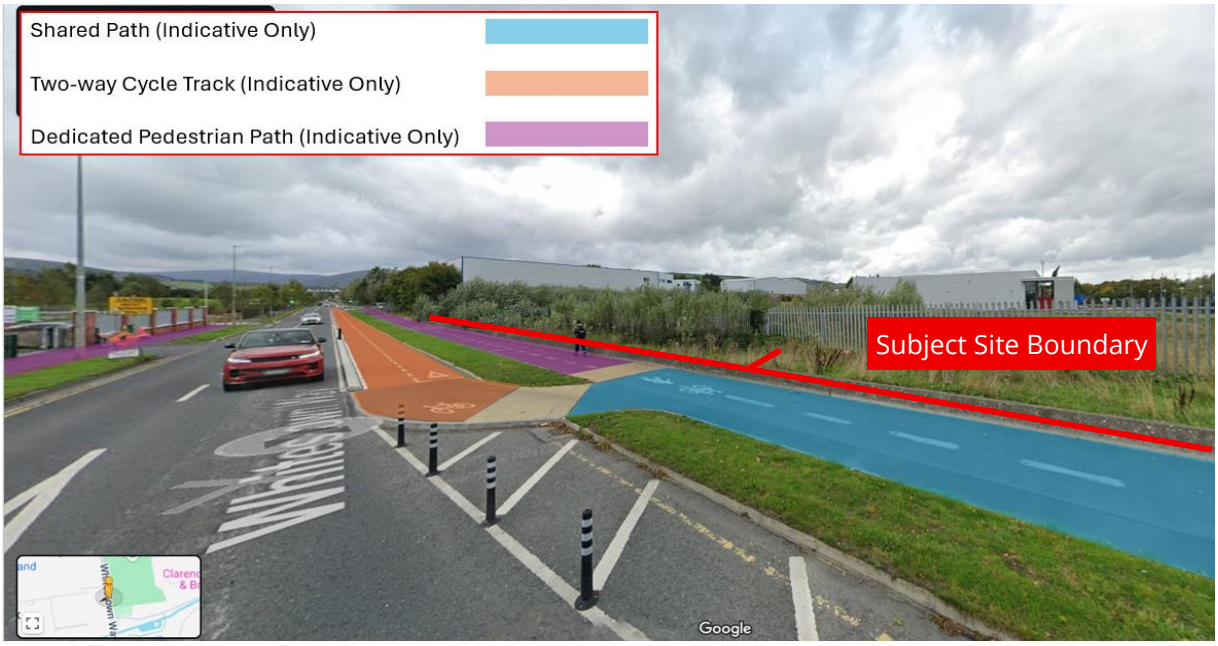


Figure 2-9 Cycling Facilities along Whitestown Way Facing South)

In addition to the cycle facilities outlined on the previous page, further cycling facilities are available in the wider environs of subject site, helping to define the surrounding cycling network. These cycling facilities are illustrated in **Figure 2-10** below.

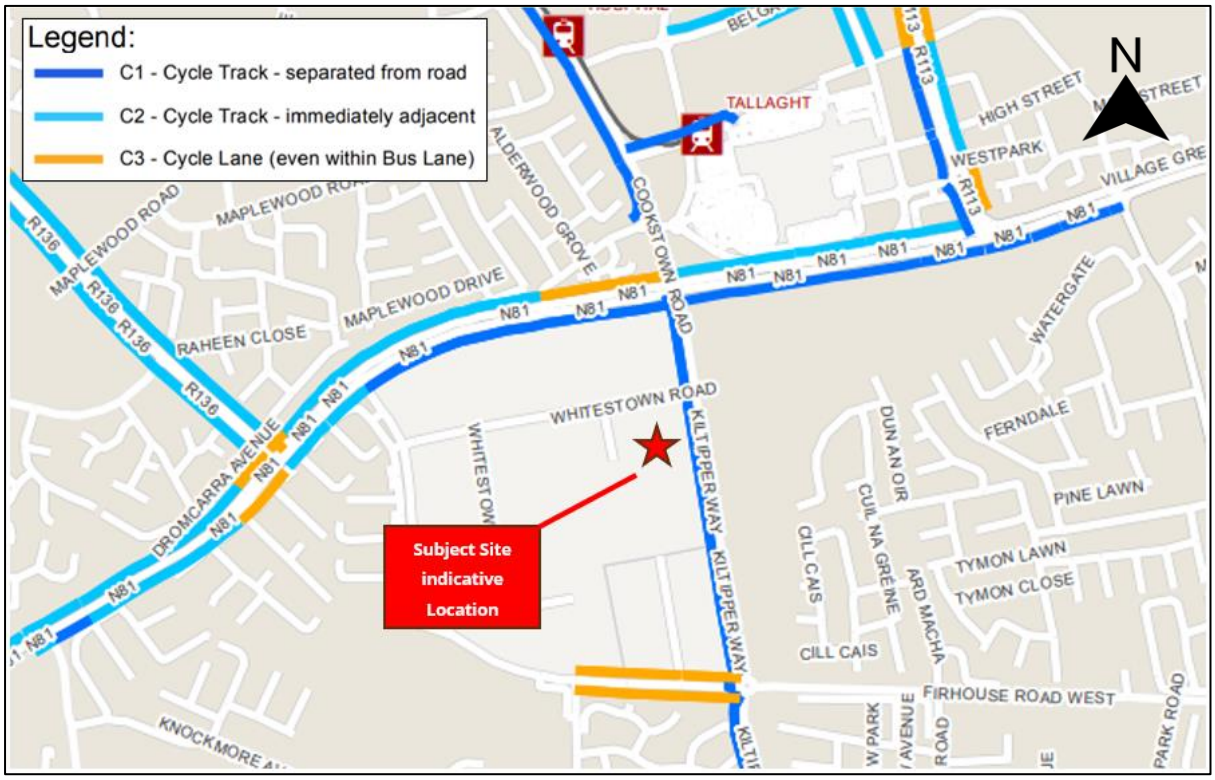


Figure 2-10 Existing Cycling Facilities

The cycle facilities outlined above include the following:

- Two-way Cycle Track along Whitestown Way
- Unprotected cycle lane (eastern side of Whitestown Way)
- Protected cycle track along the southern side of the N81 (north of Tallaght stadium)
- Unprotected Cycle Lane on the northern side of the N81
- Protected Cycle Lanes on the south-eastern extent of Killinarden Way

To the east of the subject site, there is also a pedestrian footbridge connecting Sean Walsh Memorial Park to the Square Shopping Centre via the N81 (shown in **Figure 2-11** overleaf).

Figure 2-11 Pedestrian Footbridge over the N81 Dual Carriageway

Cycling Catchment

The location of this subject development offers high levels of cycling connectivity, particularly due to the level of existing and proposed cycle network in the vicinity of the site. **Figure 2-12** overleaf presents the travel time catchment associated with 10, 20 and 30-minute cycling times from the subject development and the key destinations which can be accessed within these timeframes.

As can be seen, there is a wide cycling catchment from the subject site, with many key locations accessible within a 10, 20 or 30 minute cycle, including the following:

- The Square Shopping Centre (≤10-minute cycle)
- Tallaght LUAS (≤10-minute cycle)
- TU Dublin (≤10-minute cycle)
- Tallaght University Hospital (≤10-minute cycle)
- Kingswood Luas (≤20-minute cycle)
- Belgard Luas (≤20-minute cycle)
- Citywest Business Park (≤20-minute cycle)

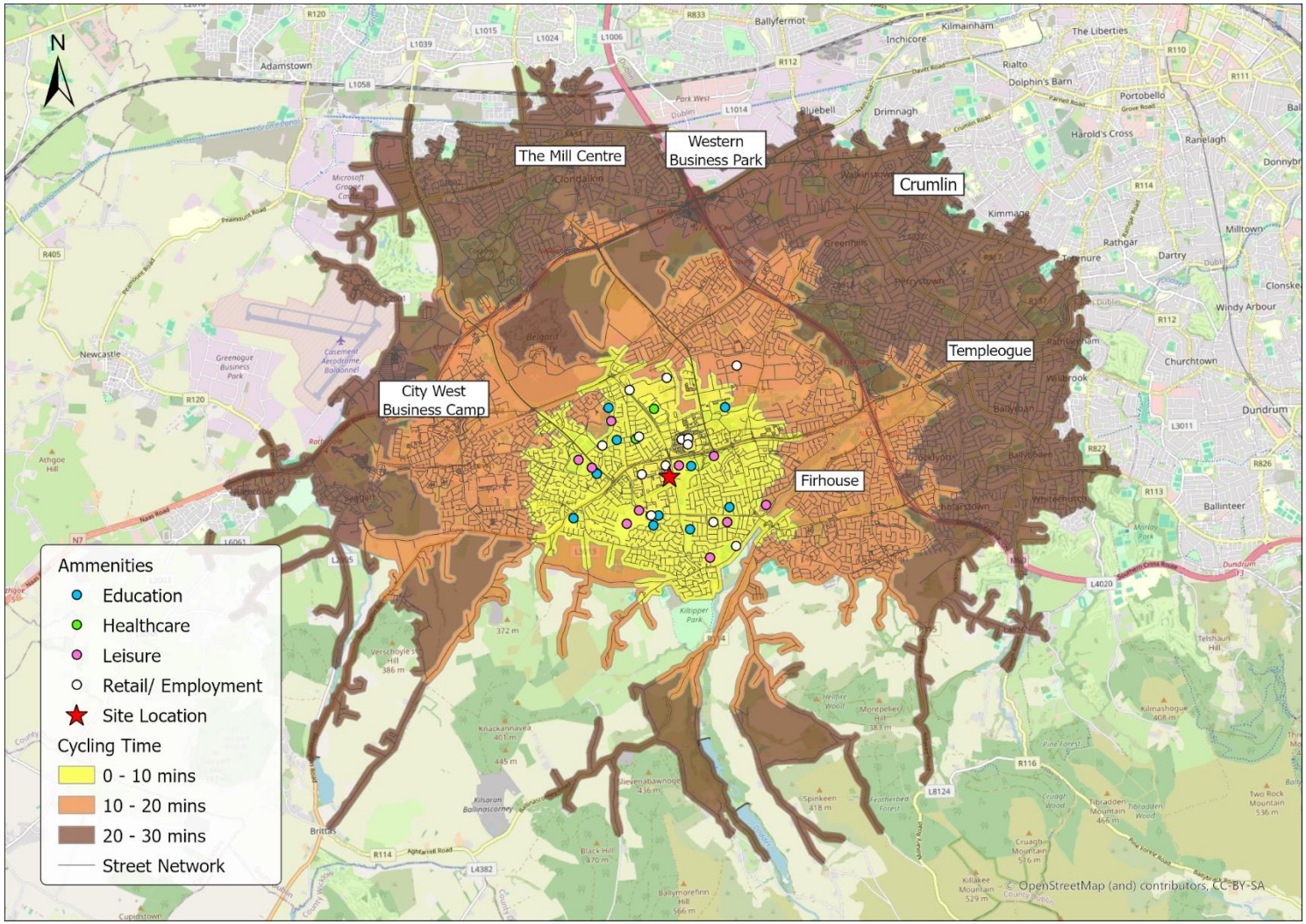


Figure 2-12 10, 20 and 30-minute Cycling Catchment

2.3.4 Public Transport – Bus

The subject site is ideally located to avail of a multitude of existing bus services. The majority of bus services are within an 8-minute walking distance of the subject development:

- 27
- 65B
- 77A
- 77X
- 82
- F1
- S6
- S8
- W2
- W4
- W6

Figure 2-13 below illustrates location/proximity of the bus stops to the subject site

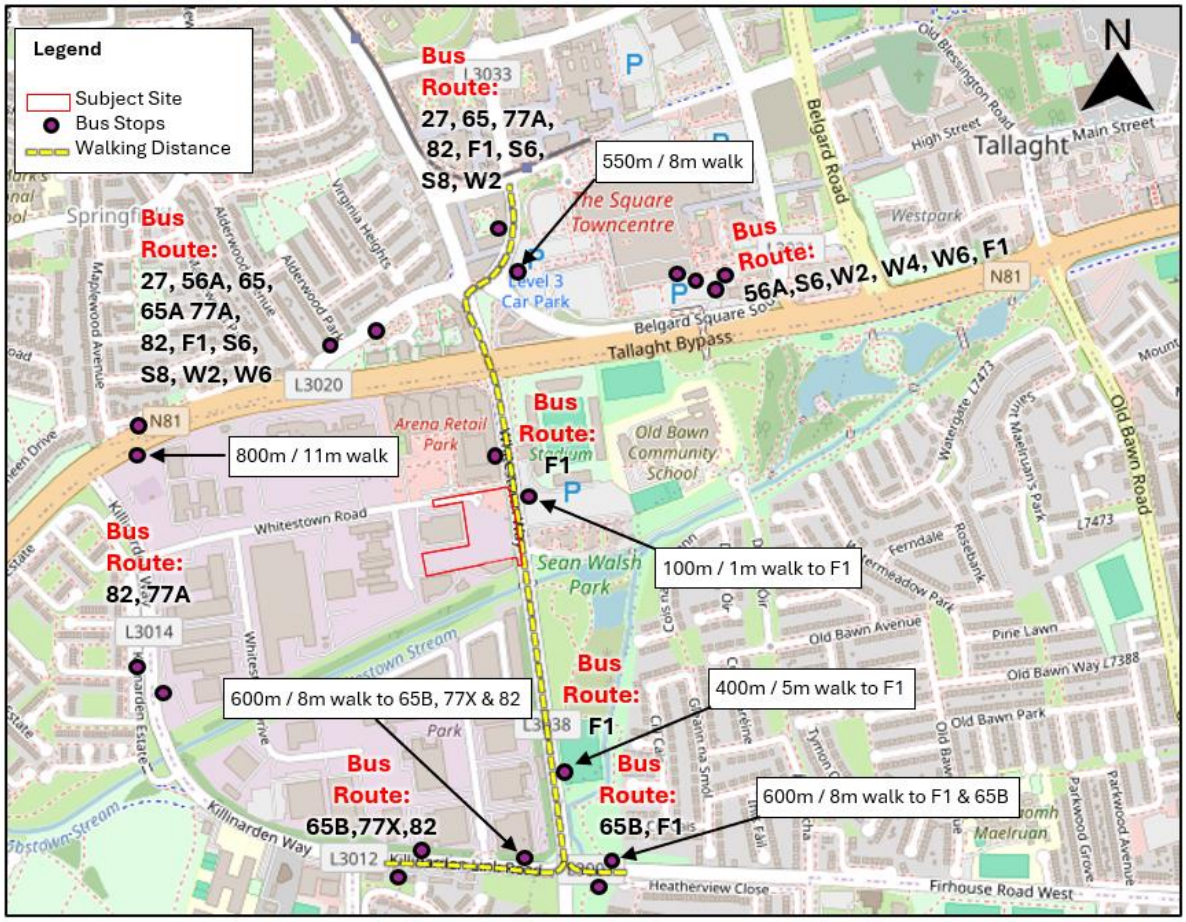


Figure 2-13 Existing Dublin and Go-Ahead Bus Stops

The closest bus stop is located approximately 100m (a 1-min walk) from the site entrance. It is currently served by the F1 bus, a high-frequency 24-hour service connecting Tallaght with the city centre and beyond, which runs every 15-20 minutes until midnight, from when it then runs every hour until 5am.

Bus services 65B, 77X and 82 are accessed from Killinarden Way, serving between Citywest, Tallaght and Dublin City Centre – these are a short 8-minute walk from the subject site.

The 65B runs at a 1-hour frequency, the 82 runs at a frequency of 15-20 minutes and the 77x provides one daily service. North of the N81, Bus Services 27, 65, 77A, 82, 51, S6, S8 and W2 can all be accessed from Belgard Sq., within an 8-minute walk from the subject site.

The 27 runs on a 10-minute frequency, the 77a runs every 10-20 minutes during peak hours and the 82 runs every 15-20 minutes on average during peak hours. On average, route 65 provides an hourly service. It can be seen in the diagram that the majority of bus routes can be accessed within a 8 minute walk. The pedestrian facilities to these bus stops, including footpaths and signalised crossings, allow fast and safe transit from the subject site to the respective bus stops. **Table 2-1** below illustrates the bus routes with direction and frequency.

Existing Bus Network (Scheduled)				
Bus Service	Route Number	Describe	Frequency (No. of Services)	
			AM Peak Period (7-10)	PM Peak Period (4-7)
Dublin Bus	F1	The Square Tallaght - Ikea	12	20
	27	Jobstown – Clare Hall	21	18
	56A	Ringsend Rd - Tallaght	3	3
	65	Blessington – Poolbeg St	2	4
	65B	Citywest – Poolbeg Street	3	3
	82	Irishtown towards Kiltipper	10	13
	77A	Citywest - Ringsend	15	12
	77X	Citywest – UCD Belfied	1	-
Go Ahead	S6	Tallaght – Blackrock Station via UCD	14	13
	S8	Kingswood Avenue – Dun Laoghaire Stn	12	12
	W2	The Square – Liffey Value SC via Clondalkin	12	12
	W4	Blanchardstown SC – The Square	10	10
	W6	Community College – The Square	6	6
Total			121	126

Table 2-1 Bus Service Frequency (No. of Services)

2.3.5 Bus Transport Capacity Assessment

In order to determine the number of additional bus users which are predicted to utilize the nearby network as a result of the subject proposal, the 2022 Census data results have been analysed. Using the number of future residents at the site and utilising the existing 2022 modal split of 11% of users commuting by bus, we can measure the impact on the local public transport network. **Figure 2-14** below shows the small areas included in the analysis. **Figure 2-15** presents a graphic representation of the 2022 modal split for the above areas.

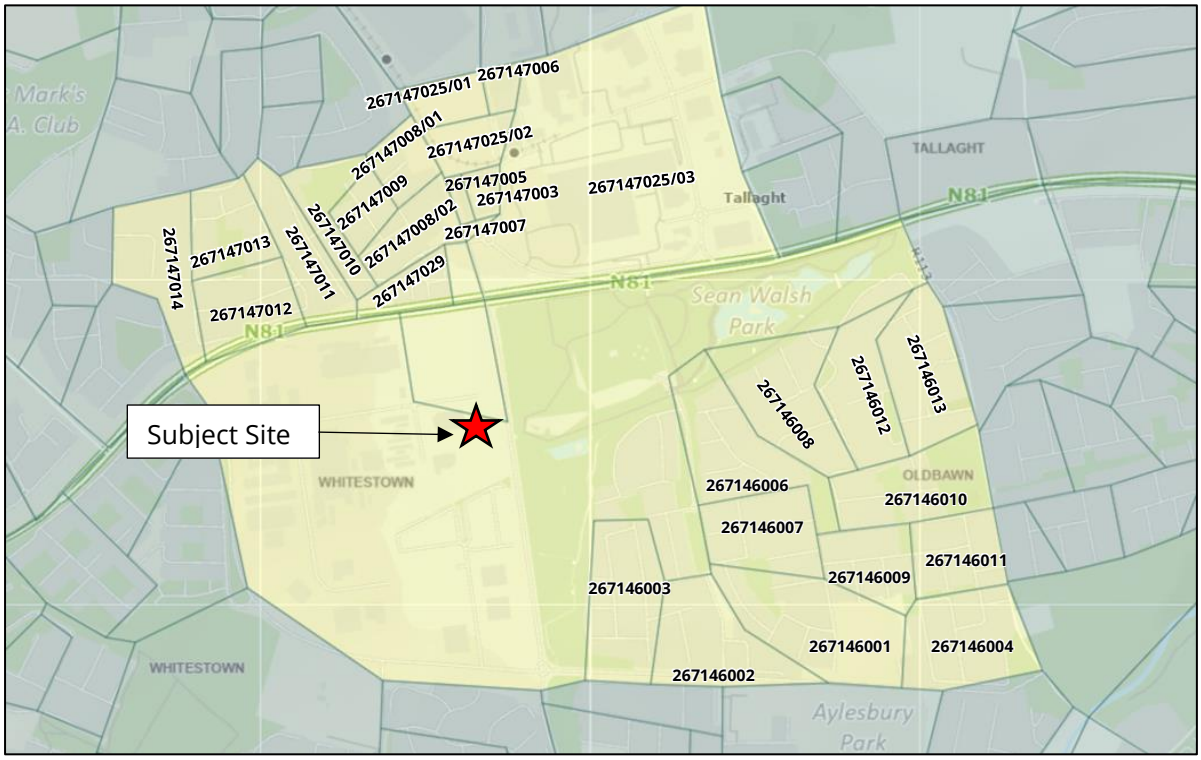


Figure 2-14 Small Areas Included in the Analysis

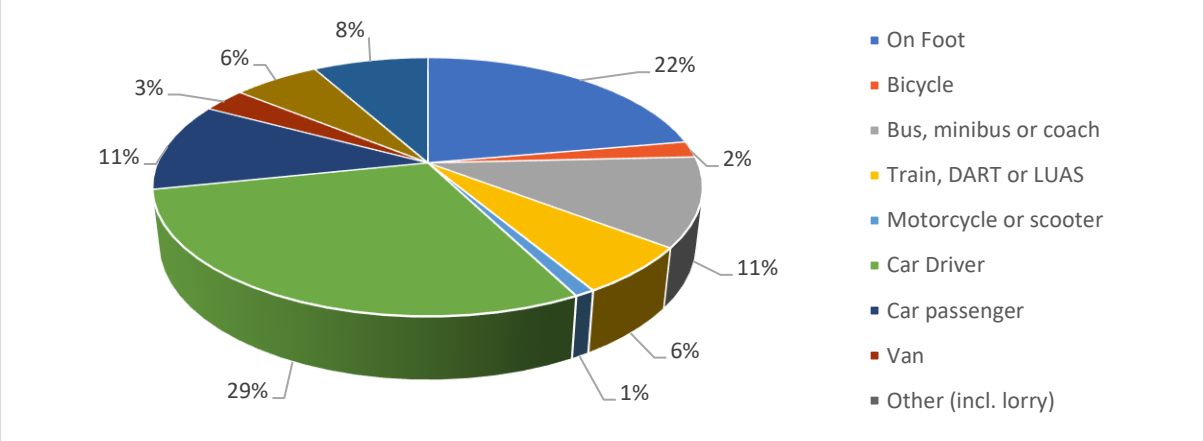


Figure 2-15 Modal Split for all Commuting Trips from Existing Residential Developments

The development comprises a total of 169 No. residential units, consisting of 80 No. 1-bed, 85 No. 2-bed and 4 No. 3-bed units in 2 No. blocks (Block A to the East and Block B to the West) In total, there will be. 267 No. bedrooms. Assuming 1.5 residents per bedroom, the total expected number of residents is estimated to be 393.

Table 2-2 below resents the modal split numbers for each mode of travel, based on the 2022 Census results, while **Table 2-3** overleaf presents the existing bus services during the AM and PM Peak Periods.

Table 2-2 shows that 11% of people living in the vicinity of the subject site commute by bus. It is therefore assumed that 11% of the subject development will also commute by bus. Based on our occupancy assumptions (1.5 residents per bedroom), the total number of proposed residents is 393, of which 11% is 43. Therefore, the public transport network is required to accommodate an extra 43 passengers due to the subject development.

2022 Census Results	Total	Percentage
On foot	1658	22%
Bicycle	174	2%
Bus, minibus or coach	846	11%
Train, DART or LUAS	451	6%
Motorcycle or scooter	38	1%
Car driver	2106	29%
Car passenger	848	11%
Van	226	3%
Other (incl. lorry	15	0%
Work mainly at or from home	425	6%
Not stated	601	8%
Total	7388	100%

Table 2-2 No. of Commuters per Mode

Table 2-3 overleaf illustrates that during the AM Peak Period of 7-10AM, there are a total of 121 bus services. And there is a total of 126 bus services during the PM Peak Period of 4-7PM. Assuming a 90-passenger capacity per bus, this gives a total of 10,890 available spaces on buses during the AM Peak Period, and 11,340 spaces during the PM Peak Period. An additional 43 passengers increase on both periods is expected to have a minimal impact on the local bus network.

Overall, the scale of the impact of the proposed development on the bus network within the proximity of the subject site is considered low, and we believe it can readily be accommodated within the current service provision over the entire peak period

Existing Bus Network (Scheduled)				
Bus Service	Route Number	Describe	Frequency (No. of Services)	
			AM Peak Period (7-10)	PM Peak Period (4-7)
Dublin Bus	F1	The Square Tallaght - Ikea	12	20
	27	Jobstown – Clare Hall	21	18
	56A	Ringsend Rd - Tallaght	3	3
	65	Blessington – Poolbeg St	2	4
	65B	Citywest – Poolbeg Street	3	3
	82	Kiltipper- St. Stephen's Green – Poolbeg	10	13
	77A	Citywest - Ringsend	15	12
	77X	Citywest – UCD Belfied	1	-
Go Ahead	S6	Tallaght – Blackrock Station via UCD	14	13
	S8	Kingswood Avenue – Dun Laoghaire Stn	12	12
	W2	The Square – Liffey Value SC via Clondalkin	12	12
	W4	Blanchardstown SC – The Square	10	10
	W6	Community College – The Square	6	6
Total			121	126

Table 2-3 Existing Bus Network in the vicinity of Subject Site During AM and PM

In conclusion the additional demand for bus trips as a result of the proposed development can be accommodated on the existing and future improved services in the area without any noticeable effect.

Whilst this Report contains an assessment of current capacity, it should be noted that service providers are commercial in nature, running their businesses based on existing demand, rather than medium to longer term future demand. Bus services are provided based on real demand rather than potential demand. If there is an increased demand for services, or indeed if there is a deficit in a service provision, Operators generally react to improve facilities if it makes commercial sense to do so. This is outlined in 'Measure BUS5' of Chapter 12 of the GDA Transport Strategy (2022-2042), which states: "It is the intention of the NTA to continually monitor the demand for bus services in the Dublin Area as part of the roll-out of the new service network and as part of the monitoring and periodic review of the Transport Strategy, and enhance or amend the service network as appropriate."

2.3.6 Public Transport – LUAS

The subject site is ideally positioned approximately 700m (10-minute walking time) south of Tallaght Red Line LUAS stop. This is the final stop on the LUAS Red Line which operates between Tallaght Belgard and The Point. At the Belgard interchange, the LUAS Red Line branches in two directions; to Saggart and to Tallaght.

This provides a highly convenient and sustainable mode of transport to and from Tallaght via Heuston Station, City Centre and Connolly Sation amongst other destinations. **Figure 2-16** illustrates the location of the nearest LUAS stop relative to the subject site.

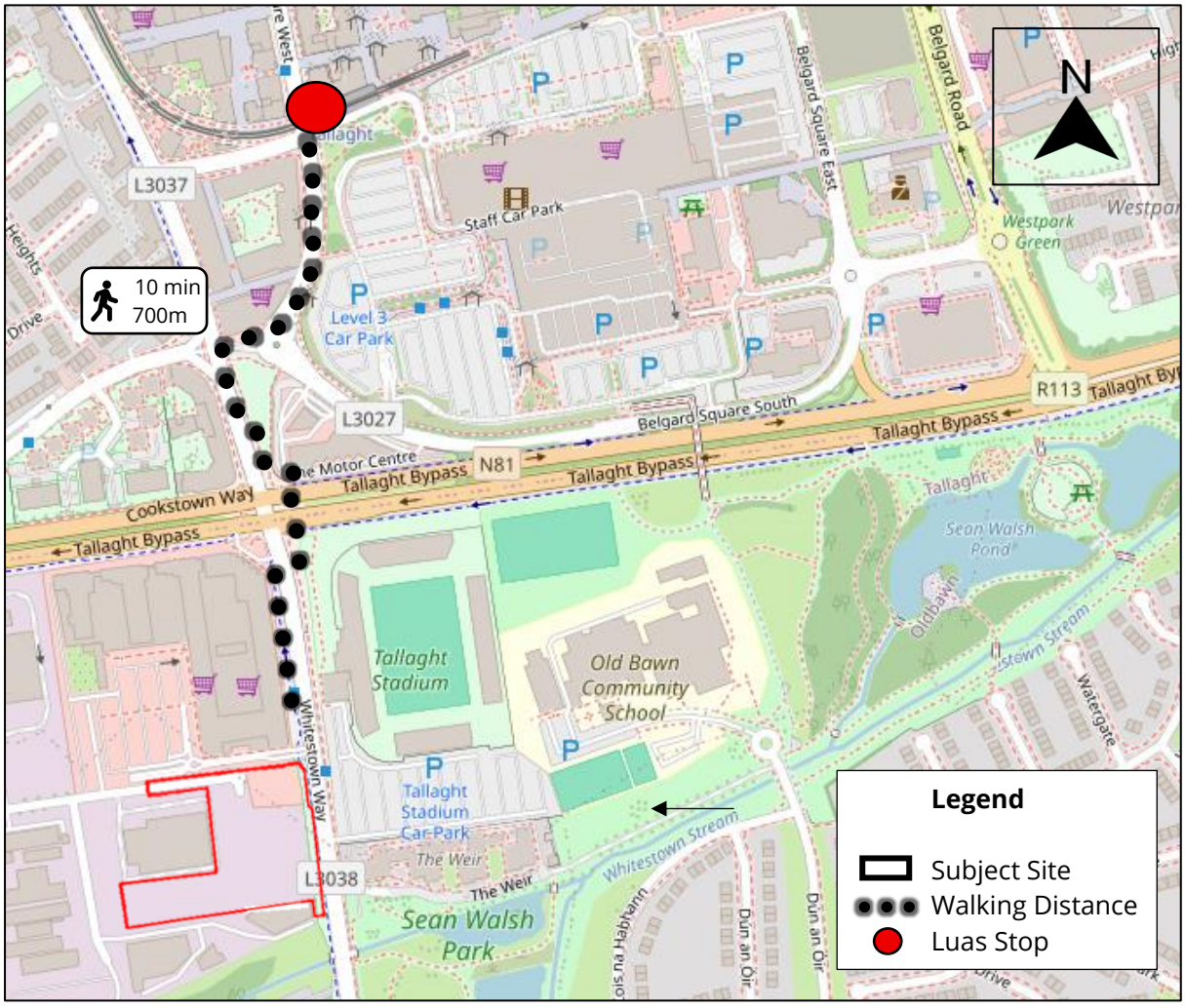


Figure 2-16 Tallaght Luas Stop

Since the completion of the LUAS Cross City, the catchment of the service has been greatly enhanced along with an improvement of accessibility to the LUAS Green Line. Furthermore, interconnectivity is now more conveniently achievable between destinations located along the both the Red and Green LUAS Lines greatly expanding the catchment area of the service**.**

Table 2-4 below lists the frequency at which the Tallaght LUAS Red Line service operates.

Link	Weekdays		Saturdays		Sundays & Bank Holidays	
	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
The Point / Connolly – Tallaght	4-10	5-15	1520-	15	12-20	12-20
Tallaght – The Point / Connolly	6 – 10	12-15	10 – 20	10-15	13-20	12-15

Table 2-4 LUAS Service Frequency (minutes)

2.4 Local Amenities

The subject development site is well placed in terms of the availability of local amenities.

There are a number of restaurants, cafes and retail outlets, including LIDL, Polonez Shopping Centre Woodies D.I.Y. and the Maldron Hotel within walking distance of the subject site (100m).

There is also numerous leisure facilities, includingSean Walsh Memorial Park, Tallaght Stadium, the Club Vitae Leisure Centre and the South Dublin Taekwando Club. The Square Shopping Centre can be accessed within a 7 minute walk or a 3 minute cycle.

There are several schools within walking distance of the subject site including the Old Bawn Community School, Scoil Maelruain Junior / Senior National School, Tallaght Community School and St. Mark's Senior National School. TU Dublin Tallaght is a 23 minute walk or six minute cycle.

Tallaght Hospital is situated approximately 1.3km (18 minute walk) north of the subject site.

Figure 2-17 overleaf illustrates the amenities within the vicinity of the subject site.

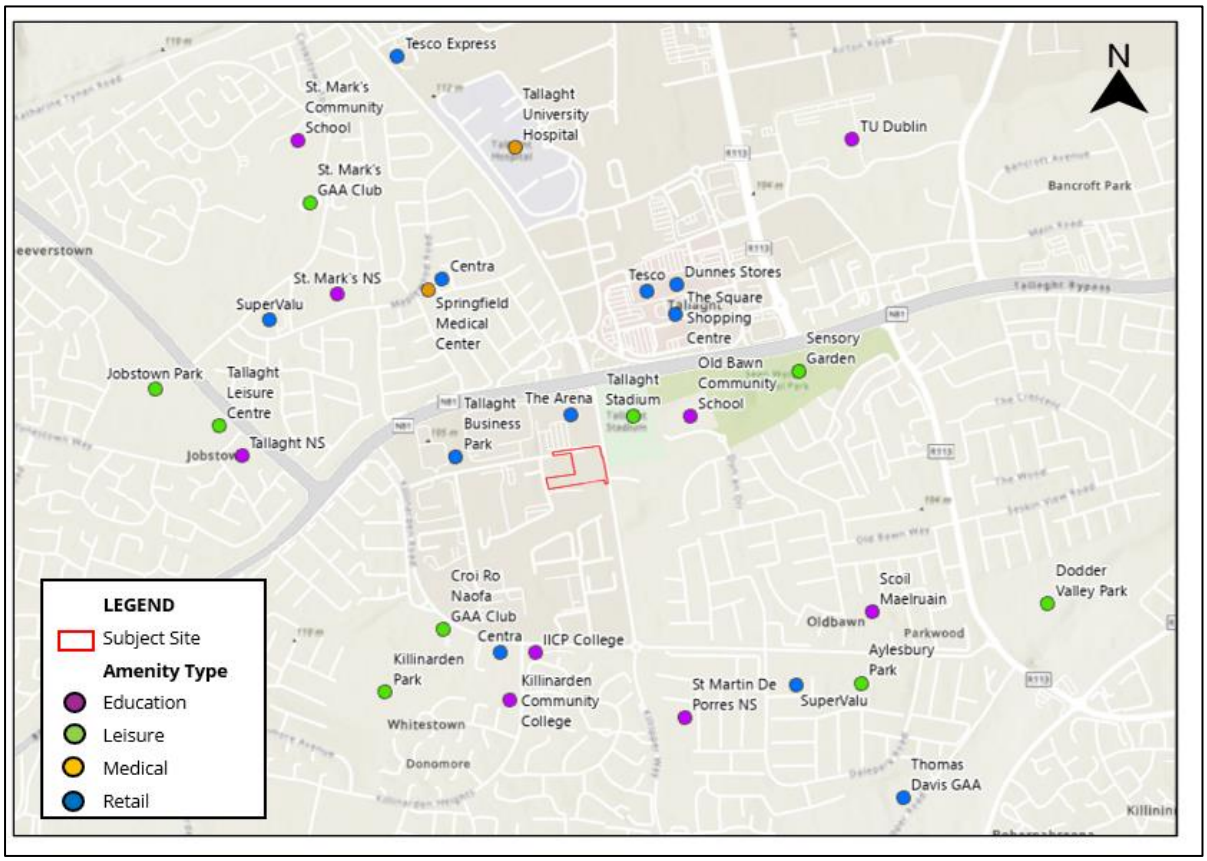


Figure 2-17 Local Amenities

2.5 Road Safety Review

The collision statistics on the Road Safety Authority (RSA) website were reviewed in order to ascertain the safety record of Whitestown over the most recent period, 2016-2020. The RSA records detail only those occasions where the incident was officially recorded such as the Garda being present to formally record details of the incident.

The RSA website currently states *"The RSA is in the process of reviewing its road traffic collision (RTC) data sharing policies and procedures. Record-level RTC data cannot be shared until this review is complete, but we expect this to be finalised in the coming months. At that point, we will have new policies and procedures in place for access to RTC information and data."*

A website (collisiontracker.ie) was launched in 2024 by the Dublin Inquirer which includes a crowdsourced collision map specifically for pedestrians and cyclists. The map includes collisions, near misses, and hazard reporting. While the data provided by the public is unverifiable, it can be assumed that if a number of reports appear at specific junctions, there may be safety issues. No

collisions were reported at the subject site access, however, one collision was reported south of the subject site on Killinarden Way, as seen in **Figure 2-18** below.

Figure 2-18 Collisions Reported in vicinity of subject site (Source: collisiontracker.ie)

2.6 Future Transport Infrastructure

2.6.1 GDA Cycle Network Proposals (2022)

The subject site is located within the "Dublin South West Sector" as outlined within the Greater Dublin Area Cycle Network Plan (published by the NTA in 2022). **Figure 2-19** presents variety of routes in the vicinity of the subject site, including:

- Primary Radial Route along Main Road / R189
- Secondary Route along Whitestown Way, Killinarden Way, Kiltipper Way, the N81, Cookstown Way, Belgard Sq. and Belgard Road.
- Utility Greenway running east-west along the Whitestown Stream and offering access to the Sean Walsh Memorial Park / Sensory Gardens.

- Leisure Greenway running south-north from the N81 to Firhouse Road West, providing connections with Tallaght Stadium, Old Bawn Community School and Sean Walsh memorial Park
- Feeder Route alongs Dún An Óir and Dale Park Road

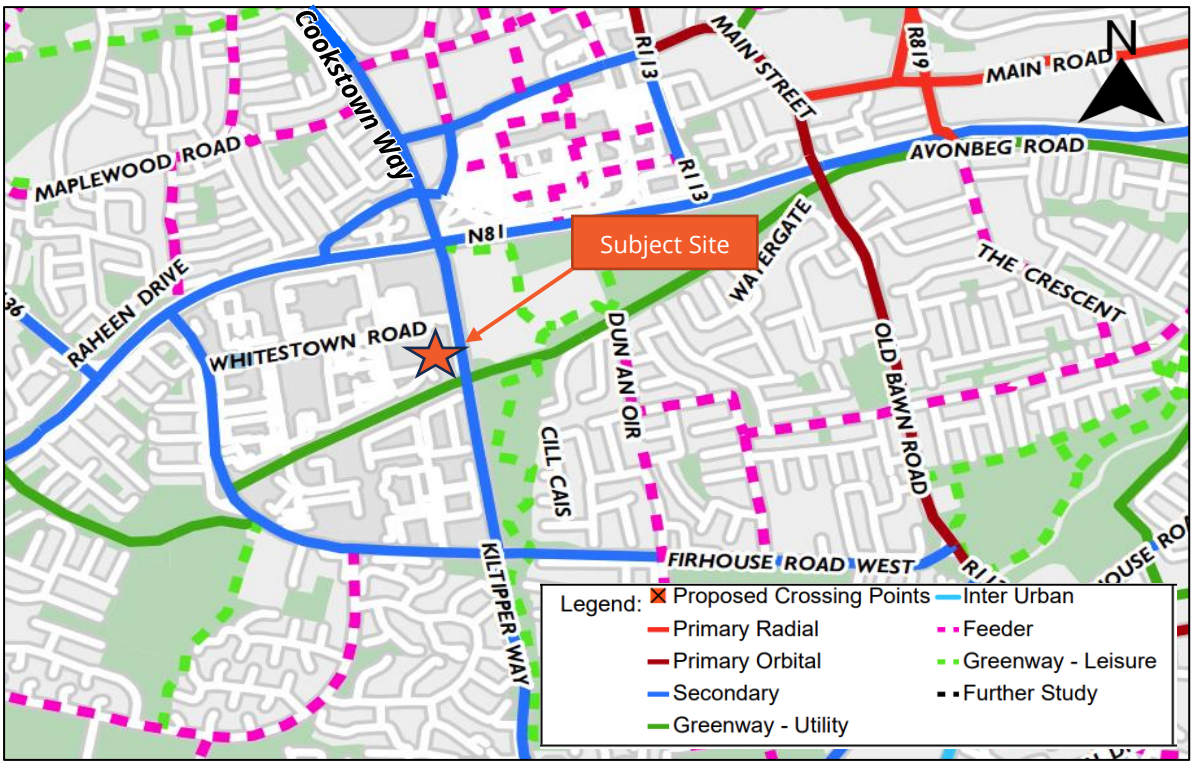


Figure 2-19 Greater Dublin Area Cycle Network Proposals

2.6.2 Bus Connects – Improved Network

BusConnects is an initiative launched by the National Transport Authority with the aim of overhauling the bus system in the Dublin Region. This initiative includes a review of the bus services, the definition of a core bus network which comprises radial, orbital, and regional core bus corridors. It also includes enhancements to ticketing and fare systems as well as transition to a new low emission vehicle fleet.

This initiative is currently being rolled out, with the latest phase (Phase 7) launched on the 19th of October 2025. The fundamental changes to the network would be as follows:

- Introduces nine new bus routes, including two 24-hour services F1 and F2, which aim to enhance connectivity across the capital and support Dublin's growing night-time economy.

- Overall bus service levels in these areas are to increase by over 14% as a result of these changes.
- Interchange opportunities have also been expanded, including a key connection point being delivered at Tallaght (adjacent to Tallaght Luas Stop)

The proposed development site is ideally located to benefit from the enhanced accessibility levels that have been delivered by BusConnects. The subject site will further be directly serviced by the following proposed BusConnects routes:

- **F1-Spine** (10-to-15 minute frequency) servicing Ballymun (IKEA) – Finglas – City Centre – Tallaght (**Operation since October 2025)**
- **82** (20 minute frequency) servicing Kiltipper- St. Stephen's Green – Poolbeg (**Operation since October 2025)**
- **S6** (10-15 minute frequency) servicing The Square - Blackrock Station **Operation since November 2023)**
- **W2** (15 minute frequency) servicing The Square - Liffey Valley SC) **Operation since November 2023)**
- **W4 (**15 minute frequency) servicing The Square – Blanchardstown **Operation since June 2023)**
- **W6 (**30 minute frequency) servicing Maynooth - The Square via Newcastle **Operation since June 2023)**

In addition to above, the subject is set to be benefit from the the following proposed BusConnects services, which are due to commence in 2026 and beyond:

- **D2** (12 minute frequency) servicing Clare Hall – City Centre – City West **(commencing in Spring 2026)**
- **D4** (12 minute frequency) servicing Swords Road - City Centre - Castletymon – Killinarden **(commencing in Spring 2026)**
- **P43** (Three journeys during morning and evening peak) servicing Ballyknockan - Blessington - City Centre **(commencing in autumn 2026)**
- **P44** (Three journeys during morning and evening peak) servicing Ballymore Eustace - Blessington - City Centre **(commencing in autumn 2026)**

- **71** (20 minute frequency) Tallaght - Ballymount - Warrenmount - East Wall **(Commencing in Spring/Autumn 2026)**
- **85** (12-minute frequency) Tallaght - Ballyboden - Harold's Cross - Parnell Square **(Commencing in Spring/Autumn 2026)**
- **L44 (60 minutes)** Ballymore Eustace - Blessington – Tallaght **(Commencing in Spring/Autumn 2026)**

In addition to the above, The A-spine routes (A1-A4) are set to launch in Autumn 2026, subject to operational readiness and funding.

The proposed routes allow greater connectivity between the subject site and locations around Dublin. It is also important to note that as part of the Transport Strategy for the Greater Dublin Area 2022-2042, the NTA have outlined **Measure BUS5**, which states the following:

> *"It is the intention of the NTA to continually monitor the demand for bus services in the Dublin Area as part of the roll-out of the new service network and as part of the monitoring and periodic review of the Transport Strategy, and enhance or amend the service network as appropriate."*

Figure 2-20 below illustrates the proposed BusConnects proposed routes that will serve the subject. Also shown in **Table 2-5** overleaf are the future proposed bus services during the AM and PM Peak Periods in the area.

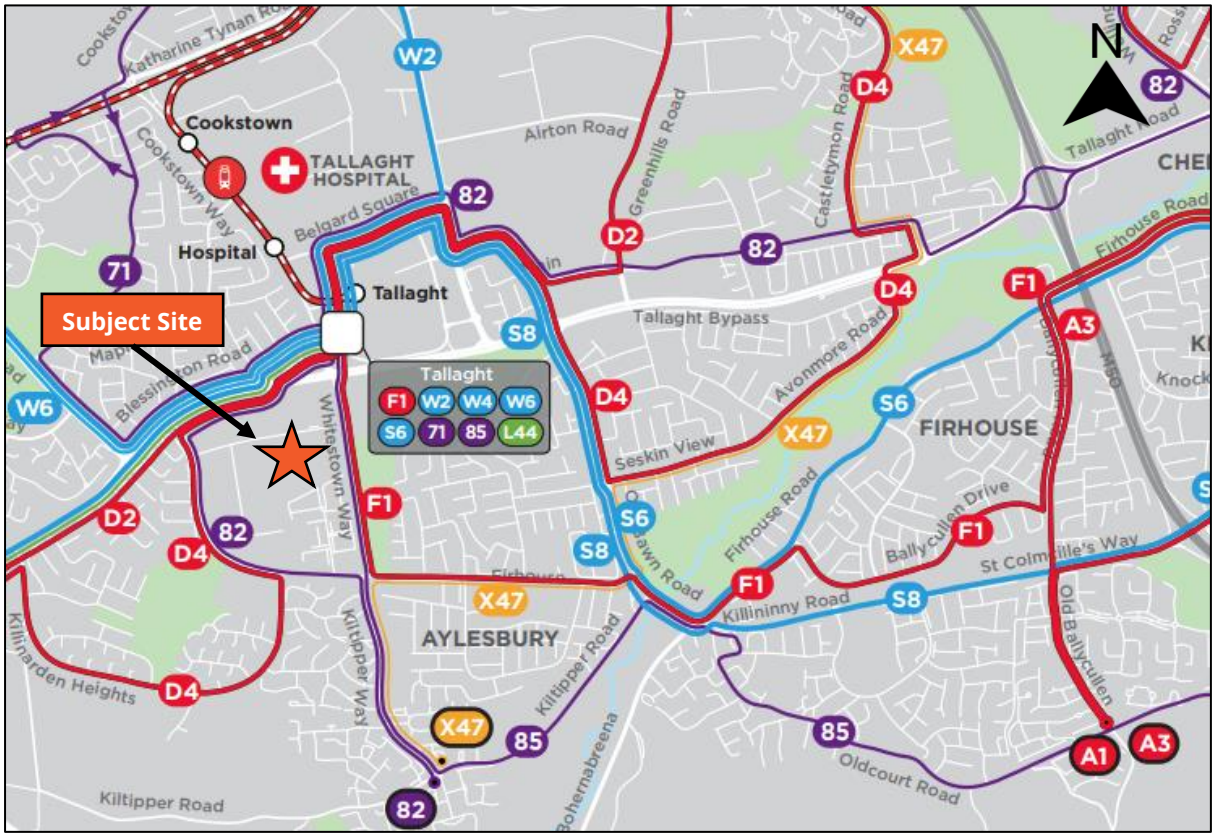


Figure 2-20 Proposed Public Transport Services

Future Proposed Bus Network				
Bus Service	Route Number	Describe	Frequency (No. of Services)	
			AM Peak Period (7-10)	PM Peak Period (4-7)
	71	Tallaght - Ballymount - Warrenmount - East Wall	9	9
	85	Tallaght - Ballyboden - Harold's Cross - Parnell Square	15	15
	D2	Clare Hall - City Centre - Citywest	15	15
	D4	Swords Road – City Centre – Castletymon - Killlinarden	15	15
	P43	Ballyknockan - Blessington - City Centre	3	3
	P44	Ballymore Eustace - Blessington - City Centre	3	3
	L44	Ballymore Eustace - Blessington - Tallaght	3	3
Total			**63**	**63**

Table 2-5: Future Proposed Bus Network in the vicinity of Subject Site

2.6.3 Bus Connects – Infrastructural Works (Core Bus Corridor)

The site is located adjacent to **The Tallaght / Clondalkin to City Centre Core Bus Corridor**. CBC's are significant infrastructure works along radial routes of Dublin City, which include the upgrade of routes to include segregated bus facilities, as well as the introduction of improved walking and cycling facilities. These proposed works are expected to improve the bus journey times significantly, particularly city-bound buses during AM and PM Peak Periods. The improved walking and cycling facilities will also encourage more users to consider active travel for part or all of their journey. The route of this CBC can be seen in Figure **2-21,** and the proposed works adjacent to the subject site are seen in **Figure 2-22** below**.**

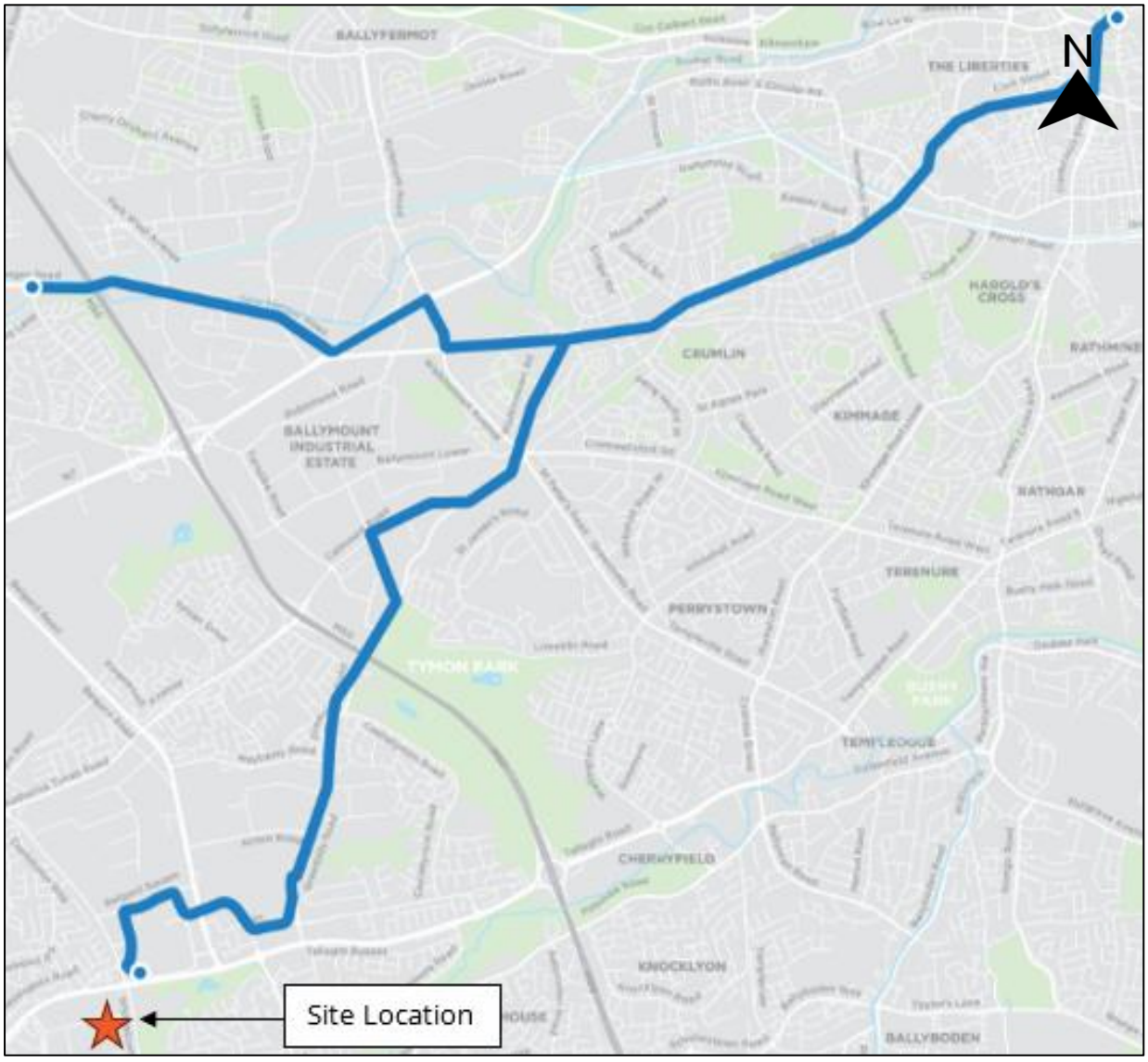


Figure 2-21: The Tallaght / Clondalkin to City Centre Core Bus Corridor Route

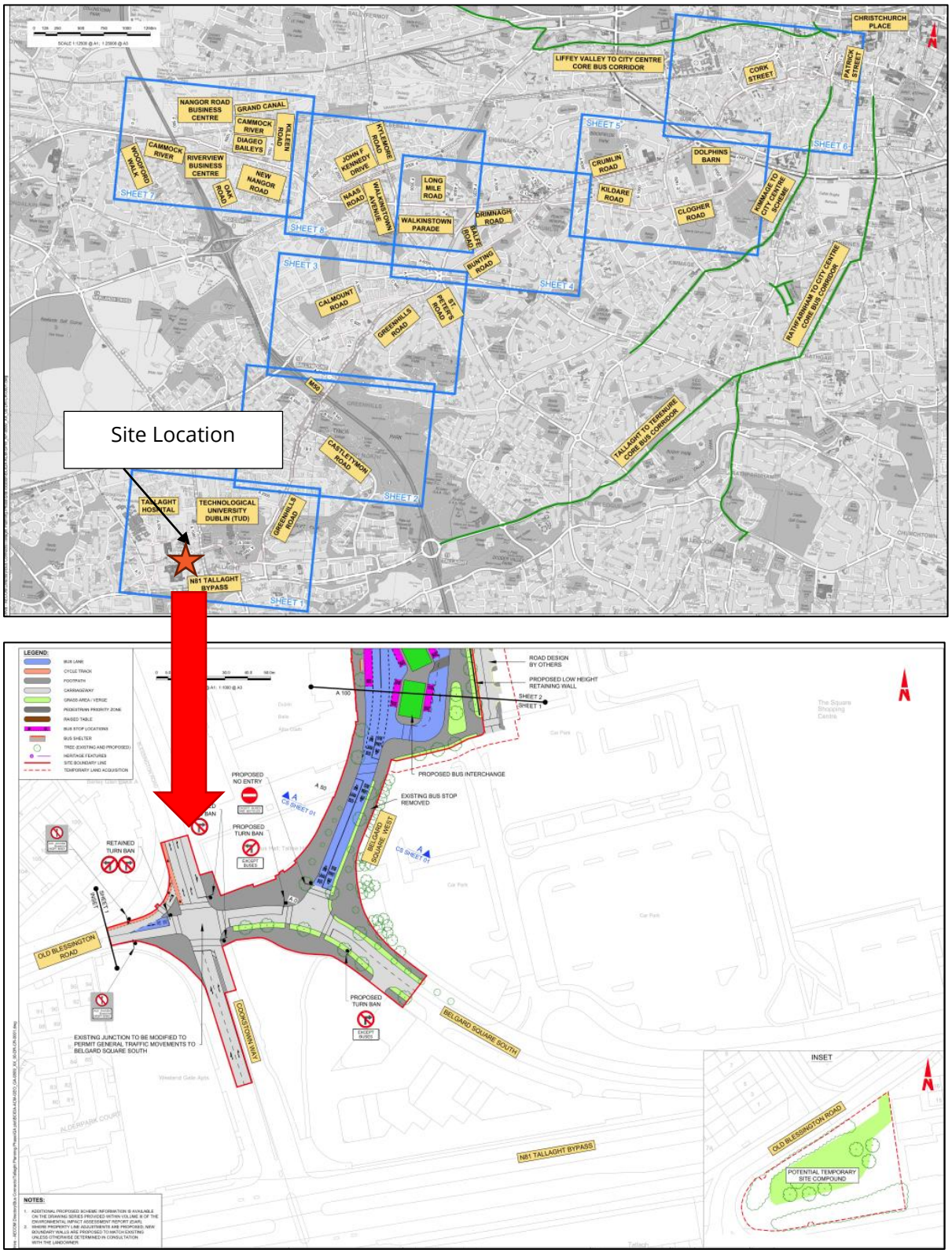


Figure 2-22 CBC Infrastructural Works adjacent to Subject Site

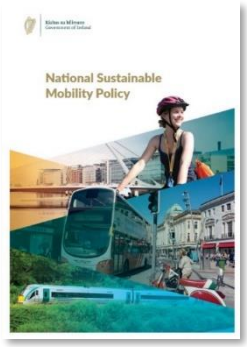
3 Policy Framework and Development Standards

3.1 Introduction

In the context of transportation, the subject site policy framework is influenced by the following key documentations. A common theme through each of these key documents is the emphasis placed upon the importance of travel demand management, with many identifying the need to implement mobility management plans with the objective of promoting sustainable travel patterns.

- National Sustainable Mobility Policy (2022)
- Sustainable Residential Development and Compact Settlements: Guidelines for Planning Authorities (January 2024)
- Planning Design Standards for Apartments, Guidelines for Planning Authorities (July 2025)
- Design Manual for Urban Roads and Streets (DMURS) (2019)
- Transport Strategy for the Greater Dublin Area 2022-2042
- South Dublin County Development Plan 2022-2028
- Tallaght Town Centre Local Area Plan 2020

3.2 National Sustainable Mobility Policy (2022)



This policy sets out a strategic framework to 2030 for active travel and public transport, to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by 2030.

The target of the policy is to *"deliver at least 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030. These are in line with metrics for transport set out in the Climate Action Plan 2021."*

The policy will promote four main areas regarding Sustainable Mobility:

- Supporting Safe and Green Mobility
- Supporting People Focused Mobility
- Supporting Better Integrated Mobility

- Improving the Delivery of Sustainable Mobility

The policy also sets out four key areas where benefits can be seen from Sustainable Mobility:

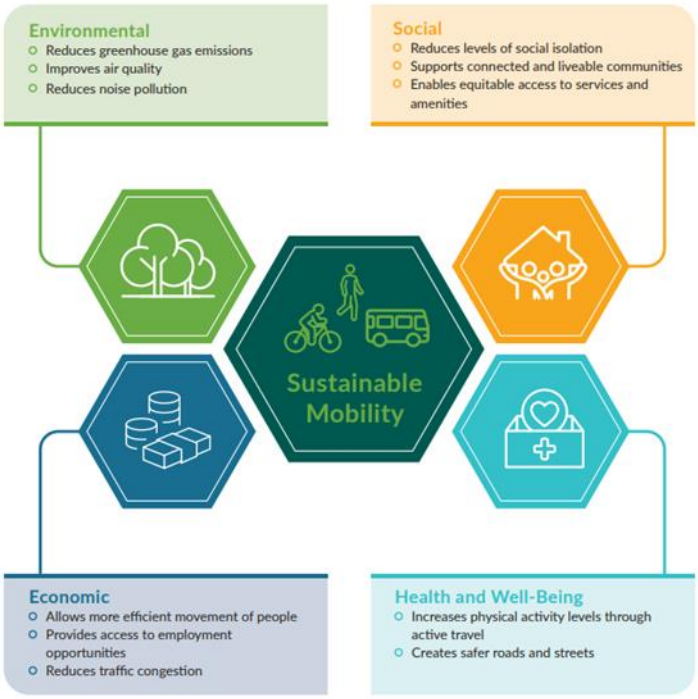
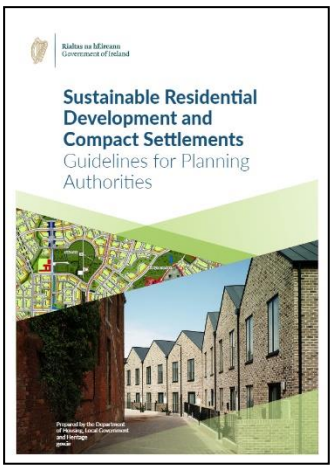


Figure 3-1: Sustainable Mobility Key Areas (Source: Department of Transport)

Goal 4 of the policy *"aims to expand the capacity and availability of sustainable mobility in a regional and rural context. This will be done through the delivery of improved active travel infrastructure, expansion of regional bus and rail services and local bus networks, and improved connectivity between different transport modes."*

Goal 4 also states: *"Pedestrian enhancement plans will also be developed for the regional growth centres and key towns identified in the NPF and the Regional Spatial and Economic Strategies. Improved walking and cycling infrastructure in towns and villages can support the Town Centre First principle through enabling access to local services by active travel."*

3.3 Sustainable Residential Development and Compact Settlements: Guidelines for Planning Authorities – January 2024



The Sustainable Residential Development and Compact Settlements: Guidelines for Planning Authorities (**SRDCSGs**) was published by Department of Housing, Local Government and Heritage in January 2024. The purpose of this document is to set out policy and guidance in relation to the planning and development of urban and rural settlements, with a focus on sustainable residential development, and the creation of compact settlements. The Guidelines expand on higher-level policies of the National Planning Framework, setting policy and guidance in relation to the growth priorities for settlements, residential density, urban design and placemaking and introduce development standards for housing.

This document improves upon previous guidance by detailing various different settlement densities and place contexts, recognising in particular the differences between cities, large and medium sized towns and smaller towns and villages.

The guidelines detail car and cycle parking requirements, based upon the development's density, location, and proximity to high-frequency public transport links.

The quantum of car parking or the requirement for any such provision proposed development will vary, having regard to the nature of the development's location, as well as proximity and accessibility criteria. When considering the Area and Density Ranges for **Dublin and Cork City and Suburbs**, the guidance document sets out two ranges of locations that will assist in determining the level of parking provided. The first range is defined as being for **City - Centre** comprising of the town centre and immediately surrounding neighbourhoods, strategic and sustainable development locations, and lands around existing or planned high-capacity public transport nodes or interchanges. The second range is **the City – Urban Neighbourhoods**, which are compact medium-density residential neighbourhoods around the city centre that have evolved over time to include a greater range of land uses.

The document offers further definitions in relation to the accessibility of the development. There are those which are near a **High Capacity Public Transport Node of Interchange**, stated as being within 1km of an existing of planned high capacity urban public transport (DART, Commuter Rail,

Luas, MetroLink) node or interchange, or within 500m of an existing or planned BusConnects 'Core Bus Corridor'.

Those which are considered to be at an **Accessible Location** are defined as those that are within 500 metres (i.e. up to 5-6 minute walk) of existing or planned high frequency (i.e. 10 minute peak hour frequency) urban bus services. Whilst **Intermediate Locations**, are lands within 500m-1km (i.e. 10-12 minute walk) of existing or planned high frequency (i.e. 10 minute peak hour frequency) urban bus services; and Lands within 500 metres (i.e. 6 minute walk) of a reasonably frequent (minimum 15 minute peak hour frequency) urban bus service. **Peripheral Locations** are those which do not fit the location characteristics of any of the aforementioned categories – including all lands in small and medium sized towns, and in rural towns and villages.

When considering the area / density ranges and location characteristics, the proposed development can be identified as being in a **High Capacity Public Transport Node of Interchange**, given proximity to the Tallaght Luas and the Tallaght / Clondalkin to City Centre Core Bus Corridors.

In relation to car parking, for a development with such characteristics, the document outlines that, *"In city centres and urban neighbourhoods of the five cities, defined in Chapter 3 (Table 3.1 and Table 3.2) car-parking provision should be minimised, substantially reduced or wholly eliminated. The maximum rate of car parking provision for residential development at these locations, where such provision is justified to the satisfaction of the planning authority, shall be 1 No. space per dwelling."*

In relation to cycle parking, for a development with such characteristics, the document states that, *"in the case of residential units that do not have ground level open space or have smaller terraces, a general minimum standard of 1 No. cycle storage space per bedroom should be applied."* In reference to visitor cycle parking, the guidelines briefly state that, *"visitor cycle parking should also be provided."*

3.4 Planning Design Standards For Apartments, Guidelines For Planning Authorities, July 2025

This guidance document was produced by the Department of Housing, Planning and Local Government (DHPLG) and was updated with the latest version in July 2025. The purpose of this document is to set out policy and guidance in relation to the planning and development of apartments in all housing or mixed-use developments that include apartments that may be made available for sale, whether for owner occupation or for individual lease, or for rental purposes.

The provision of car parking can also add significant cost to the development of apartment schemes, and in particular where the ratio of parking necessitates a podium or basement car park. Having regard to the types of location in cities and towns that may be suitable for apartment development, car parking ratios should be minimised, substantially reduced or wholly eliminated at locations that have good access to urban services and to public transport. Maximum car parking rates are set out in Section 5.25 (SPPR 3) of the SRDCSGs. These rates are graduated based on proximity to centres and accessibility to public transport services (refer also to Table 3.8: Accessibility of the SRDCSGs).

Bicycles is a key concern for apartment residents and apartment proposals must respond accordingly to the requirements below in their design and provision of cycle storage facilities. Cycle storage facilities should be directly accessible from the public road or from a shared private area that gives direct access to the public road avoiding unnecessarily long access routes with poor passive security or, slopes that can become hazardous in winter weather. Requirements for the quantity and design of bicycle parking are set out in Section 5.25 (including SPPR 4) of the SRDCSGs

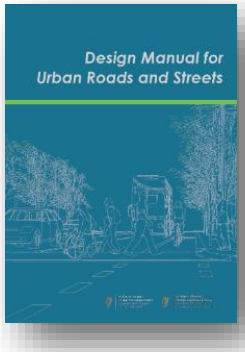
Accordingly, the maximum car parking provision for the proposed residential development shall be limited to 1 space per dwelling. A general minimum standard of 1 No. cycle storage space per bedroom is required, along with appropriate provision for visitor cycle parking.

For all types of locations, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure, where possible, the provision of an appropriate number of drop off, service, visitor parking spaces and parking for the mobility impaired. Provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles. Where any underground car parking is proposed, such facilities must be well lit and adequately ventilated. Where surface parking is provided, it should be clearly accessible to the entrance to, and where

appropriate, overlooked by, the units it serves. Car parking may be provided on-street at the edge(s) of a development site in some locations.

3.5 Design Manual For Urban Roads And Streets (DMURS) - 2019

DMURS guidance document was produced by the Department of Transport, Tourism and Sports and the Department of Environment, Community and Local Government in March 2013 and updated in May 2019. It provides guidance relating to the design of urban Roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to street networks and individual streets.



The manual places a significant emphasis on car dominance in Ireland and the implications this has had regarding the pedestrian and cycle environment. The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities. This hierarchy places pedestrians at the top, indicating that walking is the most sustainable form of transport and that by prioritizing pedestrians first, the number of short car journeys can be reduced, and public transport made more accessible.

Second in the hierarchy are cyclists, with public transport third in the hierarchy, and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on street networks and cars should no longer take priority over the needs of other users.

The manual emphasizes that narrow carriageways are one of the most effective design measures that calm traffic. Standard width of an arterial and link street is 3.25m, however, this may be reduced to 3m where lower design speeds are being applied. Desirable footpath widths are between 2m – 4m. The 2m width should be implemented to allow for low to moderate pedestrian activity. A 3m – 4m footpath should be implemented to allow for moderate to high pedestrian activity.

The focus of the manual is to create a place – based sustainable street network that balances the pedestrian and vehicle movements. The manual references the different types of street networks, including arterial streets, link streets, local streets, and highlights the importance of movement.

3.6 Transport Strategy For The Greater Dublin Area 2022-2042

Following the review of the previous GDA Transport Strategy, an updated strategy has been set out within the Greater Dublin Area Transport Strategy 2022 – 2042 which outlines the framework for transport infrastructure investment over the next two decades.

A number of schemes which have commenced development are intended to be carried forward to completion during the new Transport Strategy timeline. The schemes include; Metrolink, DART+ West, Luas Finglas and the overall expansion of public transport fleets across multiple modes.

The strategy's key objectives include creating the following:

- An Enhanced Natural and Built Environment;
- Connected Communities and Better Quality of Life;
- A Strong Sustainable Economy;
- An Inclusive Transport System

3.7 South Dublin County Development Plan 2022-2028

The "South Dublin County Development Plan 2022 – 2028" was adopted on the 22nd of June 2022 and is effective from the 3rd of August 2022. The strategic policies and objectives that will guide development in the county over the coming four years.

In the context of the subject proposal, the following are the relevant transport and development policies set out in the plan:

SM1 Objective 1: *"To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets of 15% Walk; 10% Cycle; 20% Bus; 5% Rail; and 50% Private (Car / Van / HGV / Motorcycle)".*

SM1 Objective 4: *"To ensure that future development is planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling)*

and public transport use and creating a safe and attractive street environment for pedestrians and cyclists".

SM1 Objective 5: *"To ensure that future development is planned and designed in a manner that maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, both existing and planned, and to protect and maintain regional accessibility".*

SM2 Objective 3: *"To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced by promoting compact growth and permeability in the design and layout of new development areas".*

SM2 Objective 5: *"To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the Design Manual for Urban Roads and Streets (2013; updated 2019) so that the movement of pedestrians and cyclists is prioritised within a safe and comfortable environment for a wide range of ages, abilities and journey types".*

SM3 Objective 3: *"To ensure that future development is planned in such a manner as to facilitate a significant shift to public transport use through pursuing compact growth policies, consolidating development around existing and planned public transport routes and interchanges, and maximising access to existing and planned public transport services throughout the network".*

SM4 Objective 10: *"To support sustainable measures including car-pooling and car clubs which promote access to cars rather than car ownership and which facilitate higher utilisation of vehicles rather than higher numbers of vehicles".*

SM6 Objective 3: *"To minimise the impact of new development on the county's road and street network through prioritising active travel and public transport and implementing appropriate traffic and transport management measures".*

SM7 Objective 1: *"To implement maximum car parking standards for a range of land-use types, where provision is based on the level of public transport accessibility".*

SM6 Objective 8: *"To require all major traffic generating development to submit a Mobility Management Plan/Workforce Plan and/or Traffic and Transport Assessment".*

3.7.1 Road Objectives

Table 7.5 of the South Dublin County Development Plan 2022-2028 outlines a Six Year Road Programme, which is subject to available funding. The Tallaght Town Centre Street Network is

Included in the Six Year Road Programme. This objective aims to develop various Streets within the Tallaght Town Centre, in order to support the formation of a strategic street network within the Tallaght Town Centre LAP Lands. Accordingly, MAP 9 of the South Dublin County Development Plan 2022-2028 includes an objective for a "proposed / upgrade transport junction" at the Whitestown Road / Whitestown Way / Arena Centre Junction.

An extract from South Dublin County Council's Six Year Road Programme is included below in **Table 3-1** Extract from the South Dublin County Development Plan Six Year Road Program **. Figure 3-2** presents the location of the indicative transport objective, as identified in Map 9 of the Development Plan. Further information on the proposed is outlined below in Section 3.9.

Road	Description	Function
Tallaght Town Centre Street Network	Various Streets within the Tallaght Town Centre	Formation of a strategic street network within the Tallaght Town Centre LAP Lands

Table 3-1 Extract from the South Dublin County Development Plan Six Year Road Program

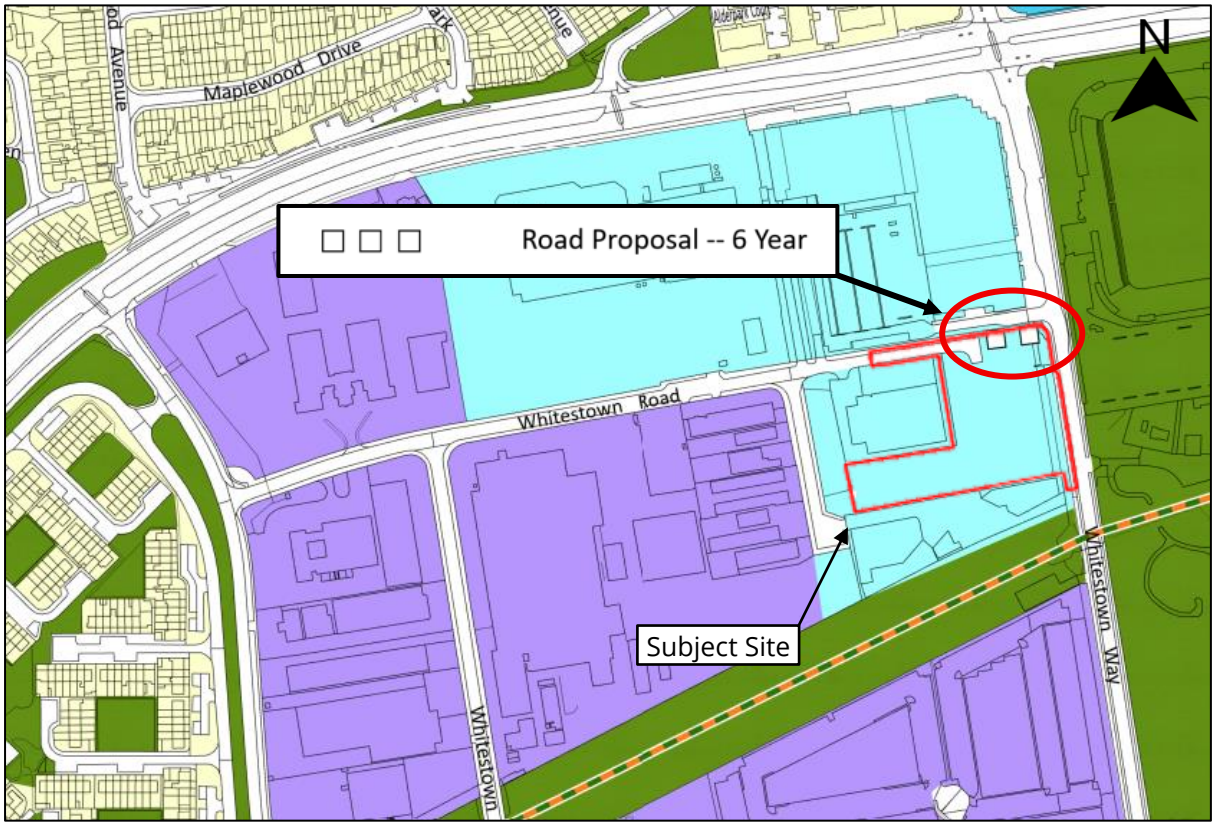


Figure 3-2 Map 9. South Dublin County Development Plan 2022-2028

3.8 Development Management Standards

3.8.1 Car Parking Standard

According to *South Dublin County Development Plan 2022 – 2028*, parking rates are divided into two main categories:

- **Zone 1:** General rate applicable throughout the Country
- **Zone 2 (Non Residential):** More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 800 metres of a train or Luas station and within 400-500 metres of a high quality bus service (including proposed services that have been proceeded to construction).
- **Zone 2 (Residential):** More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 400-500 metres of a high quality public transport service (includes a train station, Luas station or bus stop with a high service)

As referenced above, the standards of Zone 2 (Residential) shall be applied to the proposed development. SDCC's Development Plan describes car parking standards as "maximum parking provision". It also states that "*the provision of parking spaces for car sharing/pooling will be encouraged and will not impact on the maximum rates*".

Reference has been made above to the document *Design Standards for New Apartments Guidelines for Planning Authorities*, published by the DHPLG in July 2025. Section 28 provides that planning authorities and An Bord Pleanála shall have regard to Ministerial Guidelines and shall apply any specific planning policy requirements (SPPRs) of the Guidelines. Accordingly, the maximum car parking rates are set out in Section 5.25 **(SPPR 3 – Car Parking)** of the SRDCSGs. Therefore, the maximum car parking provision for the proposed residential development shall be limited to 1 space per dwelling.

Regarding the proposed development schedule, the associated car parking requirements are outlined in **Table 3-2** belo

Car Parking Standards					
Unit Type		**No. of Units**	**Metric**	**South Dublin County Development Plan 2022-2028 (Max)**	**Compact Settlement Guidelines (Max)**
Apartments	1-bed	80	Units	0.75 Space per unit	1 space per unit
	2-bed	85	Units	1 Space per unit	1 space per unit
	3-bed	4	Units	1.25 Space per unit	1 space per unit
Creche (4 rooms)			Classroom	0.5 per classroom	-
Retail (193.9 sq m)			Sqm	1 Space per 25 sq m	-
Retail (162.6 sq m)			Sqm	1 Space Per 25 sq	-

Car Parking Requirements					
Unit Type		**No. of Units**	**Metric**	**South Dublin County Development Plan 2022-2028 (Max)**	**Compact Settlement Guidelines (Max)**
Apartments	1-bed	80	Units	60	80
	2-bed	85	Units	85	89
	3-bed	4	Units	5	4
Creche (4 rooms)		4	Classroom	2	-
Retail (193.9 sq m)			Sqm	8	-
Retail (162.6 sq m)			Sqm	7	-
Total				**167**	**169**

Table 3-2 Car Parking Standards and Requirements

In addition, as per the SDCC Parking Standards, 20% of the total parking spaces shall be allocated as electric vehicle charging stations. Although Chapter 12 of the Development Plan does not explicitly raise the requirement for the provision of accessible car parking at private developments, it is suggested that in reference to national guidance, at least 5% of car parking spaces are designated for accessible parking. In this case, this rate applies for car park provision for apartments.

3.8.2 Cycle Parking Standard

Reference has been made to Section 12.7 of the South Dublin County Development Plan (2022-2028), which outlines the minimum cycle parking standards. It states that a minimum of 1 long stay bicycle parking space must be provided per bedroom and a minimum of 1 short stay (visitor) space must be provided per 2 apartment units. For creches, the standards specify a minimum of one long-stay space per five staff and one short-stay space per ten children. For retail, the standards specify a minimum of one long-stay space per five staff and one short-stay space per 50 sq m GFA. In reference to Section 5.2.5 of the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities, **SPPR 4 (Cycle Parking and Storage)** sets the following requirements for cycle parking and storage:

> *"i) Quantity – in the case of residential units that do not have ground level open space or have smaller terraces, a general minimum standard of 1 cycle storage space per bedroom should be applied. Visitor cycle parking should also be provided. Any deviation from these standards shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/ enlargement, etc. It will be important to make provision for a mix of bicycle parking types including larger/heavier cargo and electric bikes and for individual lockers.*
>
> *ii) Design – cycle storage facilities should be provided in a dedicated facility of permanent construction, within the building footprint or, where not feasible, within an adjacent or adjoining purpose-built structure of permanent construction. Cycle parking areas shall be designed so that cyclists feel safe. It is best practice that either secure cycle cage/compound or preferably locker facilities are provided."*

Regarding the proposed development schedule, the associated cycle parking requirements are outlined in **Table 3-3** below.

Cycle Parking Standards							
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Min)		Compact Settlement Guidelines (Min)	
				Long Stay	Short Stay	Long Stay	Short Stay
Apartments	1-bed	80	Bedroom / Units	1 per bedroom	1 per 2 units	Should provide	1 per Bed
	2-bed	85					
	3-bed	4					
Creche (7 staff & 33 Children)			Saff/ Children	1 per 5 staff	1 per 10 children	-	-
Retail (193.9 sq m)			Staff / sqm	1 per 5 staff	1 per 50sqm	-	-
Retail (162.6 sq m)			Staff / Sqm	1 per 5 staff	1 per 50sqm	-	-

Cycle Parking Requirements							
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Min)		Compact Settlement Guidelines (Min)	
				Long Stay	Short Stay	Long Stay	Short Stay
Apartments	1-bed	80	Bedroom / Units	262	85	258	Should provide
	2-bed	85					
	3-bed	4					
Creche (7 staff & 33 Children)			Saff/ Children	1	3	-	-
Retail (7 staff / 193.9 sq m)			Staff / sqm	1	4	-	-
Retail (6 staff / 193.9 sq m)			Staff / Sqm	1	3	-	-
Sub-Total Cycle Parking Per Requirement				**265**	**95**	**258**	
Total Cycle Parking Per Requirement				**360**		**258**	

Table 3-3 Cycle Parking Standards and Requirements

3.9 Tallaght Town Centre Local Area Plan 2020

The Tallaght Town Centre Local Area Plan came into effect on July 20th, 2020. The aim of the plan is to provide a strategic framework for the sustainable development of Tallaght Town Centre. This LAP seeks to deliver high quality housing and well connected neighbourhood areas with a strong sense of community and social cohesion.

Section 2.2 of the Tallaght Local Area Plan includes a longer term route network within and around the Tallaght Town Centre, comprising arterial routes, primary routes, secondary routes, tertiary routes and the N81.

To the north of the subject development, the LAP includes a proposal for an existing / improved secondary route, running east to west on the Whitestown Road Link Road. A proposed secondary route is also outlined for the section of Whitestown Road, which is currently inaccessible due to grassy land banks. Objective W2 of the Tallaght Local Area Plan aims to "Improve legibility throughout the area and new points of access from surrounding areas". The LAP's longstanding aim to deliver improved routes and proposals for new routes has been considered as part of the proposed development's overall characteristics which are outlined in the next chapter.

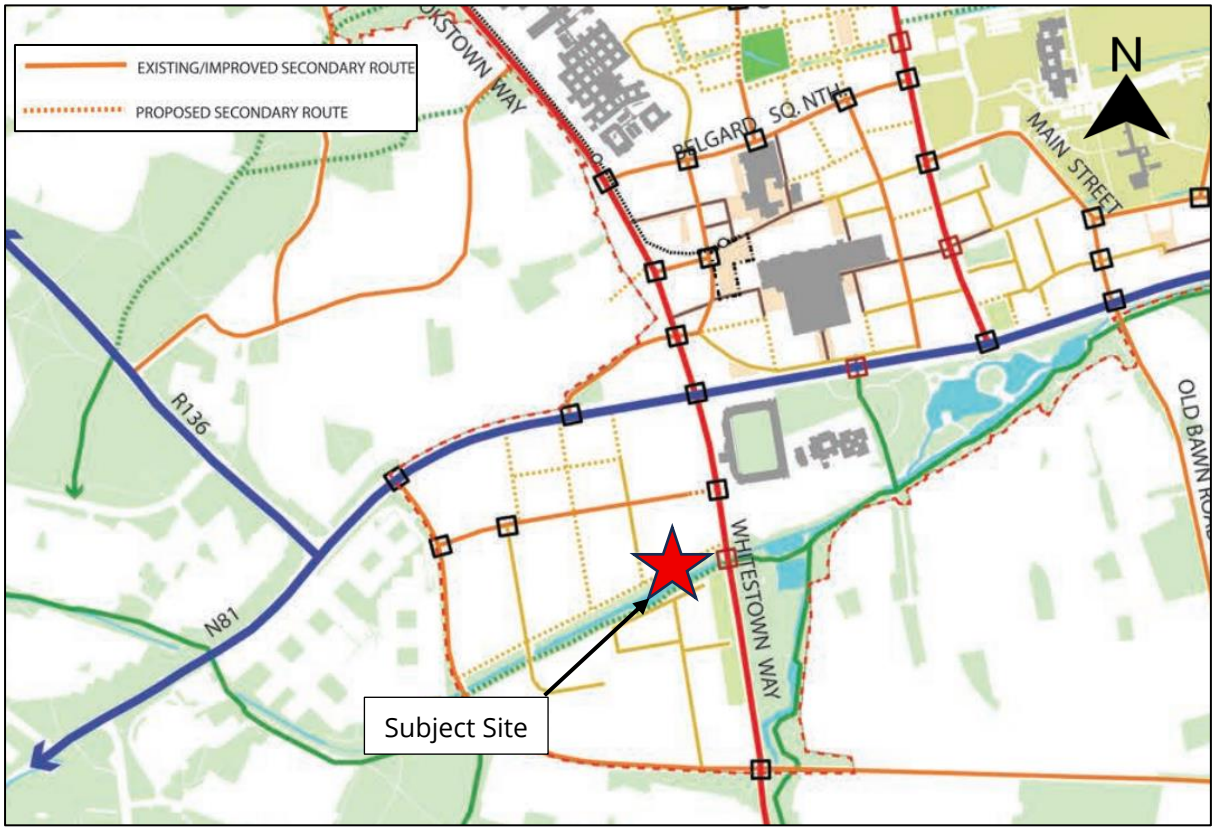


Figure 3-3 Route and Network structure. Source: Tallaght Local Area Plan 2020

4 Characteristics of Proposals

4.1 Overview

The proposed development principally comprises the construction of a mixed-use development in 2 No. blocks (Block A to the east and Block B to the west) with a gross floor area of 14,976.5 sq m (excluding undercroft car parking area of 1,975.8 sq m) and ranging in height from 1 No. storey to 6 No. storeys. The blocks are connected via a single-storey undercroft/podium level. The development includes: 169 No. residential units (80 No. 1-bed, 85 No. 2-bed and 4 No. 3-bed); 2 No. class 1 / class 2 commercial units (totalling 356.5 sq m); and a crèche (162.8 sq m) with external play area.

The development also comprises: new street and turning head at the site's southern side and junction with Whitestown Way to the east; 77 No. car parking spaces, with 69 No. Residential Spaces (66 No. within the undercroft car parking area) and 8 No. on-street car parking spaces serving the creche and retail units; 2 No. set-down bays; cycle parking; hard and soft landscaping, including public open space, communal amenity space and incidental spaces; private amenity spaces (as balconies and terraces facing all directions); boundary treatments; sub-station; plant/operational rooms; bin stores; public lighting; green roofs; rooftop plant, PV arrays, lift overruns, telecommunications infrastructure and automatic opening vents; and all associated works above and below ground.

Further details of the development proposals, including the site layout drawing, are illustrated in the architects' scheme drawings as submitted with this planning application. **Figure 4-1** overleaf illustrates the Landscape Masterplan for the proposed Residential Development, Figure 4-2 and Figure 4-3 present the Plan Site Layout and Ground Floor Site Layout, while **Figure 4-4** presents the proposed roads layout.

Figure 4-1 Landscape Masterplan. Source: Mitchell + Associates

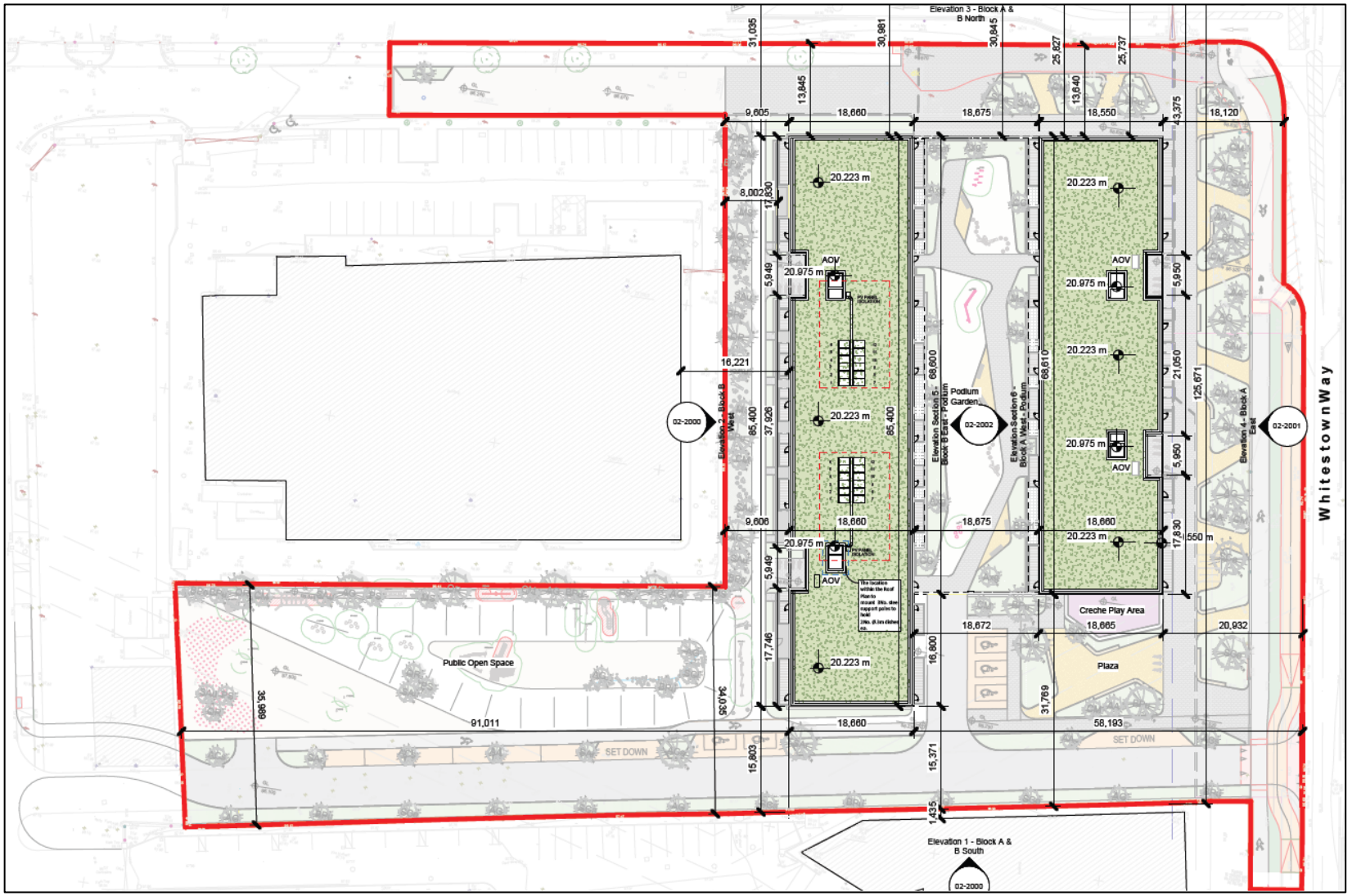


Figure 4-2 Site Layout. Source Reddy Architecture + Urbanism

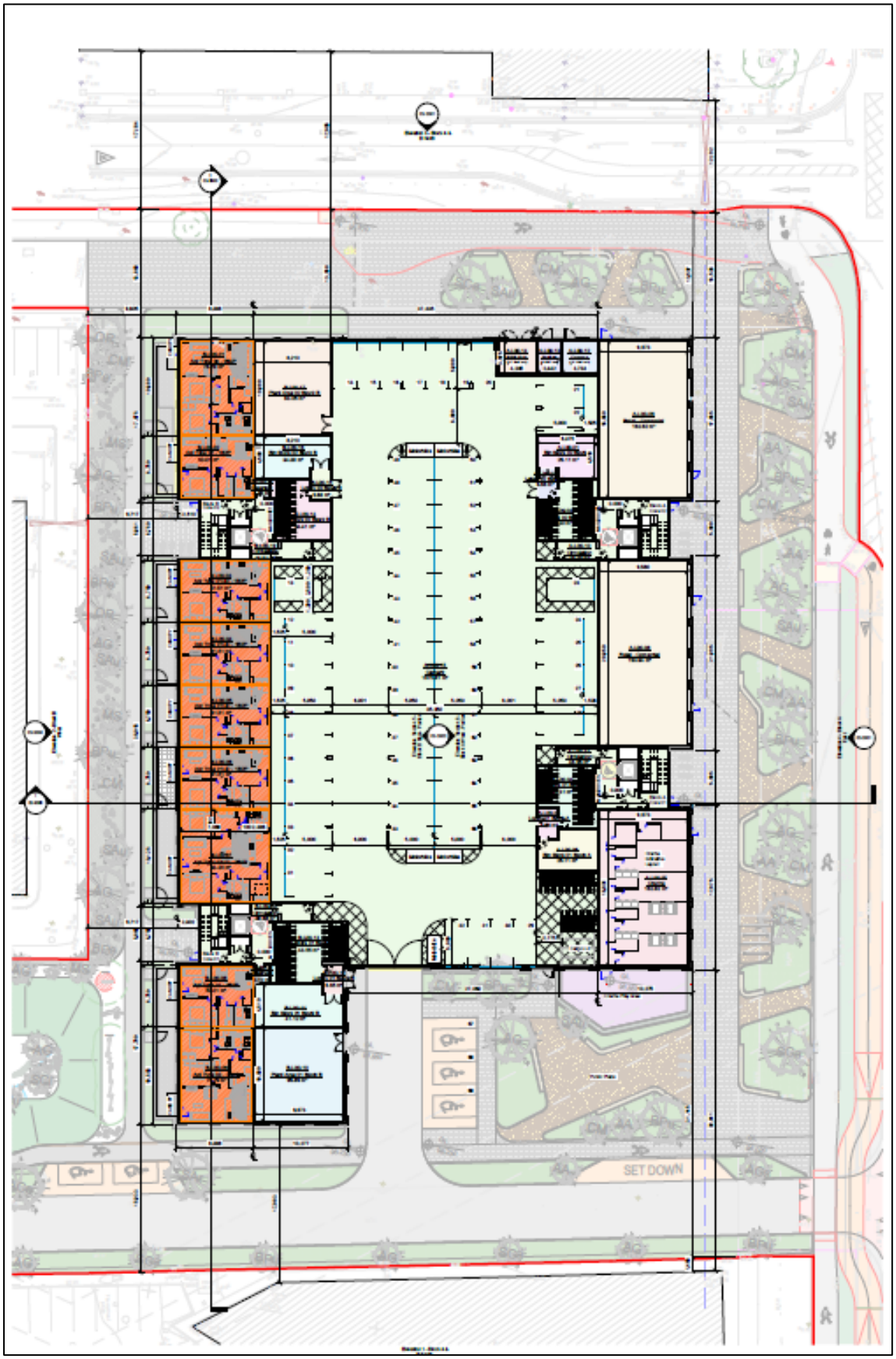


Figure 4-3 Proposed Ground floor Plan. Source: Reddy Architecture + Urbanism

4.1.1 Vehicular Access

Singular vehicular access is proposed to the site from Whitestown Way, which will take the form of a simple priority junction. Site access will be facilitated from Whitestown Way through the provision of a Link Street to the south of the site. The link street carriageway is approximately 6 metres wide. In addition, a creche set down area will be provided to the north of the main site access for vehicles. A flat-top table ramp has been provided at the junction between Whitetown Way and the proposed Link Street to provide traffic calming and a continuous footpath and cycle track. Design speed limits of 30km/hr are applied on the Link Street as per Design Manual for Urban Roads and Streets (DMURS).

The shared surface to the northern side of the proposed development will include a dropped Kerb that permits emergency vehicular access. Removable bollards will be situated to the west of the shared surface to allow for fire tender access.

Figure 4-4 overleaf presents the proposed main site access for vehicles.

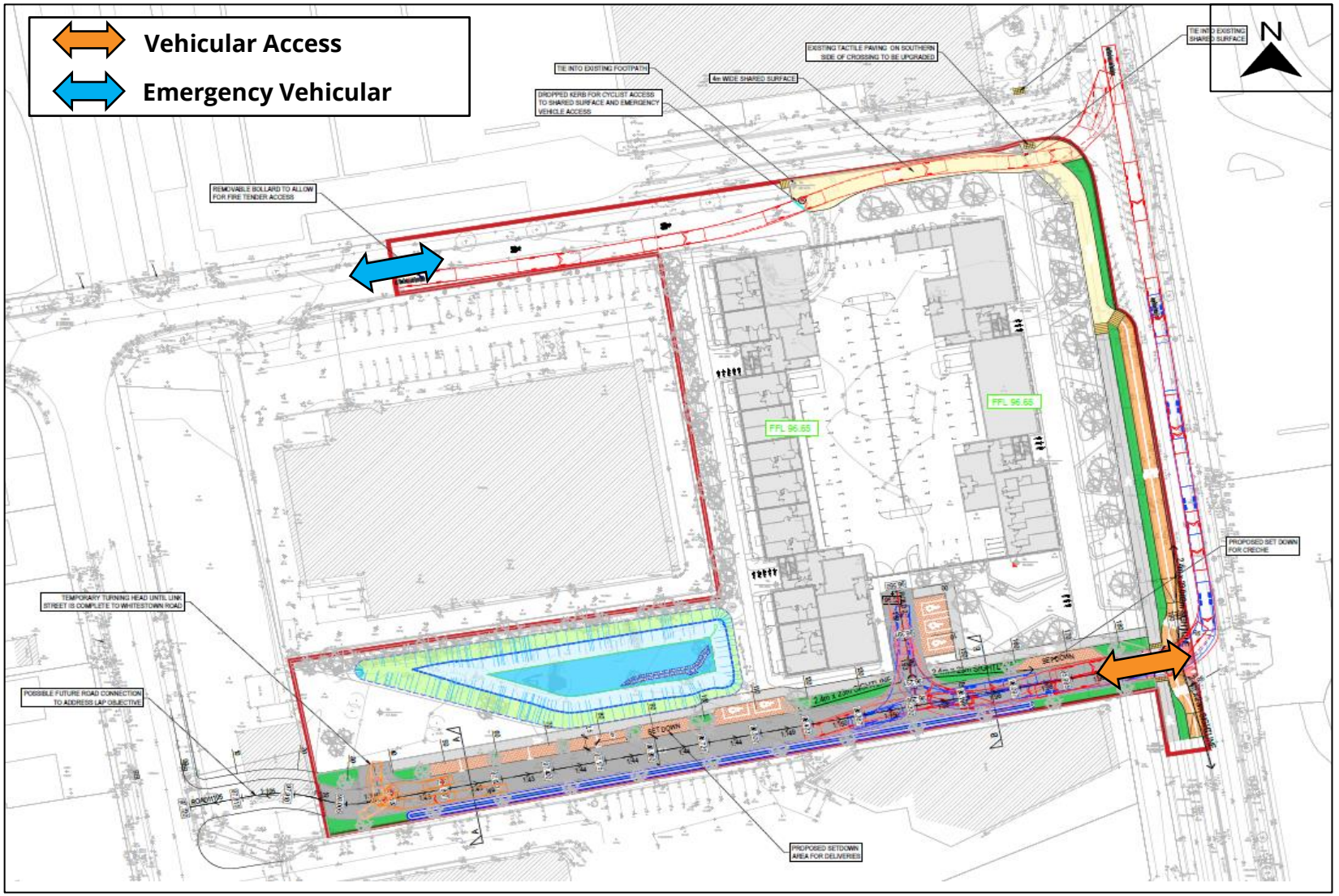


Figure 4-4 Proposed Roads Layout. Source: DBFL

4.2 Road Objective

The Tallaght Town Centre Local Area Plan 2020 includes a road objective to provide a road link between Whitestown Road and Whitestown Way, as shown in **Figure 4-5** below. It was agreed with SDCC that it is not feasible to provide the link road in this location due to its close proximity to the existing entrance to The Arena complex. A vehicular connection at this point would create a substandard junction arrangement, resulting in conflicting vehicle movements, reduced visibility, and potential traffic and road safety issues for all users. The constrained nature of the site would also limit the ability to provide an appropriate junction layout in accordance with design standards.

Alternatively, the proposed development provides a shared surface connection for pedestrians and cyclists in this location and delivers the road link in the southern part of the development as far as the site boundary. The pedestrian and cyclist link maintains permeability and connectivity through the site, while avoiding the traffic and safety issues associated with a vehicular connection at this location. Importantly, the proposed arrangement does not prejudice the future delivery of the road objective, including any future extension of the link road or potential rationalisation of access arrangements with The Arena complex.

Figure 4-5 Extract from the Tallaght Local Area Plan Highlighting the Road Objective at the Subject Site

4.3 Pedestrian / Cycle Access

The primary pedestrian and cycle access point is via the future link street to the south of the proposed development, which can be accessed from Whitestown Way.

The proposed shared pedestrian and cyclist surface along the northern boundary of the site is 4m wide. This will tie into the existing the shared surface on Whitestown Way and will provide pedestrian and cyclist connectivity through the development between Whitestown Way and Whitestown Road.

Figure 4-6 below presents the proposed Pedestrian and Cyclist Access to the subject site via the southern link street, while **Figure 4-7** overleaf presents the shared pedestrian and cycle surface along the northern boundary of the site.

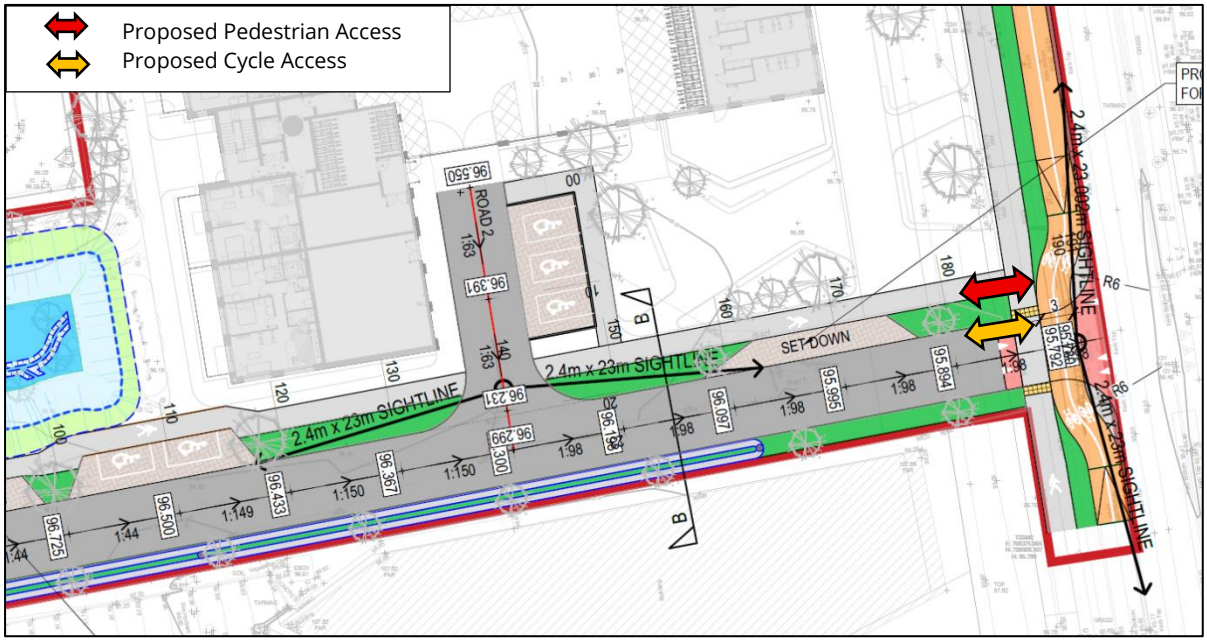


Figure 4-6 Main Pedestrian and Cyclist Site Access. Source: DBFL

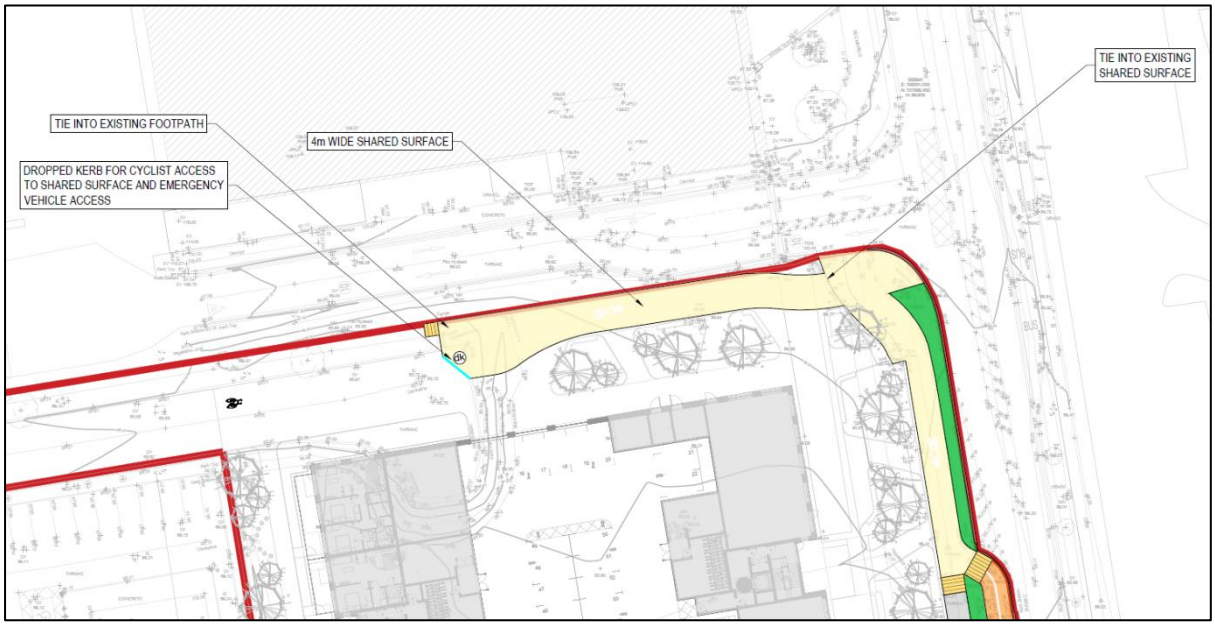


Figure 4-7 Shared Surface for Cyclists and Pedestrians. Source: DBFL

4.3.1 Service Vehicles and Bin Storage / Transfer

The proposed development will generate servicing requirements and will need to be considered as part of the servicing strategy. For further information, please see **Chapter 6** of this report.

In addition to the details provided in **Chapter 6**, more extensive information is provided in the Operational Waste Management Plan completed by AWN consulting, included as part of this planning application.

4.3.2 Car Parking Provision

In order to assess the appropriate level of car parking provision for the proposed development, reference should be made to both (i) the South Dublin County Council (SDCC) requirements; and (ii) the Department of Housing and Planning and Local Government (DHPLG) Government 'Planning Design Standards for Apartments, Guidelines for Planning Authorities (July 2025).

According to *South Dublin County Development Plan 2022 – 2028*, parking rates are divided into two main categories:

- **Zone 1:** General rate applicable throughout the Country
- **Zone 2 (Non-Residential):** More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs

settlement boundary within 800 metres of a train or Luas station and within 400-500 metres of a high-quality bus service (including proposed services that have been proceeded to construction).

- **Zone 2 (Residential):** More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 400-500 metres of a high quality public transport service (includes a train station, Luas station or bus stop with a high service)

As referenced above, the standards of Zone 2 (Residential) shall be applied to the proposed development. SDCC's Development Plan describes car parking standards as "maximum parking provision". It also states that "*the provision of parking spaces for car sharing/pooling will be encouraged and will not impact on the maximum rates*".

Reference has been made above to the *Design Standards for New Apartments Guidelines for Planning Authorities,* published by the DHPLG in July 2025. Section 28 of the Planning and Development Act provides that planning authorities and An Bord Pleanála shall have regard to Ministerial Guidelines and shall apply any Specific Planning Policy Requirements (SPPRs) contained therein. While the Apartment Guidelines establish the national policy approach for apartment development, they also explicitly and implicitly direct development proposals towards the parking standards set out in the *Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities* (SRDCSGs), particularly in relation to promoting reduced car dependency and sustainable travel in accessible urban locations.

Accordingly, the maximum car parking rates are set out in Section 5.25 (SPPR 3 - Car Parking) of the SRDCSGs. Having regard to the policy context outlined above, the subject site's location within an accessible urban area, and the availability of high-quality public transport and active travel infrastructure, the maximum car parking provision for the proposed residential development is limited to 1 space per dwelling. SPPR 3 also requires that the proposed parking provision be justified having regard to the site context and accessibility characteristics, and this justification is set out within this assessment.

Table 4-1 overleaf compares the proposed maximum car parking with the SDCC standards and SRDCSG guidelines.

In considering the proposed parking provision, please refer to the following:

- Table 12.26 of the **South Dublin County Development Plan** (2022-2028) which outlines the car parking requirements and allows for the determination of which Parking Zone the subject site is located in. Based on Table 12.26, the site is located in Parking Zone 2)
- Section 12.7.4 of the **South Dublin County Development Plan** (2022-2028) which outlines characteristics of developments in different Parking Zones and assessment criteria for deviation from car parking standards); and
- Chapter 4 of ***Planning Design Standards for Apartments Guidelines for Planning Authorities***, as published by the Department of Housing, Local Government and Heritage Government (DHLGH), 2025. The 2025 DHLGH documents states that maximum car parking rates are set out in Section 5.25 (SPPR 3) of the SRDCSGs. These rates are graduated based on proximity to centres and accessibility to public transport services.

In relation to car parking, the DHLGH also states document states:

"Car parking ratios should be minimised, substantially reduced or wholly eliminated at locations that have good access to urban services and to public transport."

Car Parking Standards					
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Max)	Compact Settlement Guidelines (Max)
Apartments	1-bed	80	Units	0.75 Space per unit	1 space per unit
	2-bed	85	Units	1 Space per unit	1 space per unit
	3-bed	4	Units	1.25 Space per unit	1 space per unit
Creche (4 rooms)			Classroom	0.5 per classroom	-
Retail (193.9 sqm)			Sqm	1 Space per 25 sq m	-
Retail (162.6 sqm)			Sqm	1 Space per 25 sq m	-

Comparison of Carparking Standards and Proposals						
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Max)	Compact Settlement Guidelines (Max)	Proposed
Apartments	1-bed	80	Units	60	80	69
	2-bed	85	Units	85	85	
	3-bed	4	Units	5	5	
Creche (4 rooms)			Classroom	2	-	8
Retail (193.9 sqm)			Sqm	8	-	
Retail (162.6 sqm)			Sqm	7	-	
Total				**167**	**169**	**77**

Table 4-1 Car Parking Standards and Requirement

As highlighted at the beginning of the chapter, the proposed development principally comprises the construction of a mixed-use development in 2 No. blocks (Block A to the east and Block B to the west) with a gross floor area of 14,976.5 sq m (excluding undercroft car parking area of 1,975.8 sq m) and ranging in height from 1 No. storey to 6 No. storeys. The blocks are connected via a single-storey undercroft/podium level. The development includes: 169 No. residential units (80 No. 1-bed, 85 No. 2-bed and 4 No. 3-bed); 2 No. class 1 / class 2 commercial units (totalling 356.5 sq m); and a crèche (162.8 sq m) with external play area.

The development also comprises: new street and turning head at the site's southern side and junction with Whitestown Way to the east; 77 No. car parking spaces, with 69 No. Residential Spaces (66 No. within the undercroft car parking area) and 8 No. on-street car parking spaces serving the creche and retail units; 2 No. set-down bays; cycle parking; hard and soft landscaping, including public open space, communal amenity space and incidental spaces; private amenity spaces (as balconies and terraces facing all directions); boundary treatments; sub-station; plant/operational rooms; bin stores; public lighting; green roofs; rooftop plant, PV arrays, lift overruns, telecommunications infrastructure and automatic opening vents; and all associated works above and below ground.

The combined residential parking provision (69 No.) equates to a parking ratio of approximately 0.41 spaces per residential unit. While this represents a slight reduction from the recommended parking ratio of 0.5 spaces per unit, the proposed level of parking is considered appropriate and justified having regard to the site's exceptional accessibility characteristics. The subject site is located within walking distance of a wide range of services and amenities, including Tallaght Town Centre, retail and employment uses, educational facilities, healthcare services, recreational amenities, and public open spaces. The highly accessible nature of the site enables many day-to-day trips to be undertaken on foot or by bicycle, thereby reducing reliance on private car ownership.

In addition, the site benefits from excellent access to high-frequency public transport services, including the BusConnects 24-hour F-Spine Route and the Tallaght Luas stop, providing direct and convenient connectivity to Dublin City Centre and the wider metropolitan area. The development also incorporates significant cycle parking provision and high-quality pedestrian connections, further supporting modal shift towards more sustainable travel options.

Considering the site's overall accessibility by walking, cycling and public transport, the proposed car parking strategy and associated parking quantum are considered sufficient to accommodate

the anticipated demand generated by residents. The proposed parking ratio of 0.41 spaces per unit also reflects a forward-looking and policy-aligned approach to residential development, promoting reduced car dependency in accordance with national and regional policy objectives, including the National Sustainable Mobility Policy (2022) and the Transport Strategy for the Greater Dublin Area (2022-2042).

The car parking provision for the proposed development is shown in **Figure 4-8** overleaf. For further information on the overall car parking strategy, please refer to the **Parking Management Strategy** outlined in **Chapter 5.**

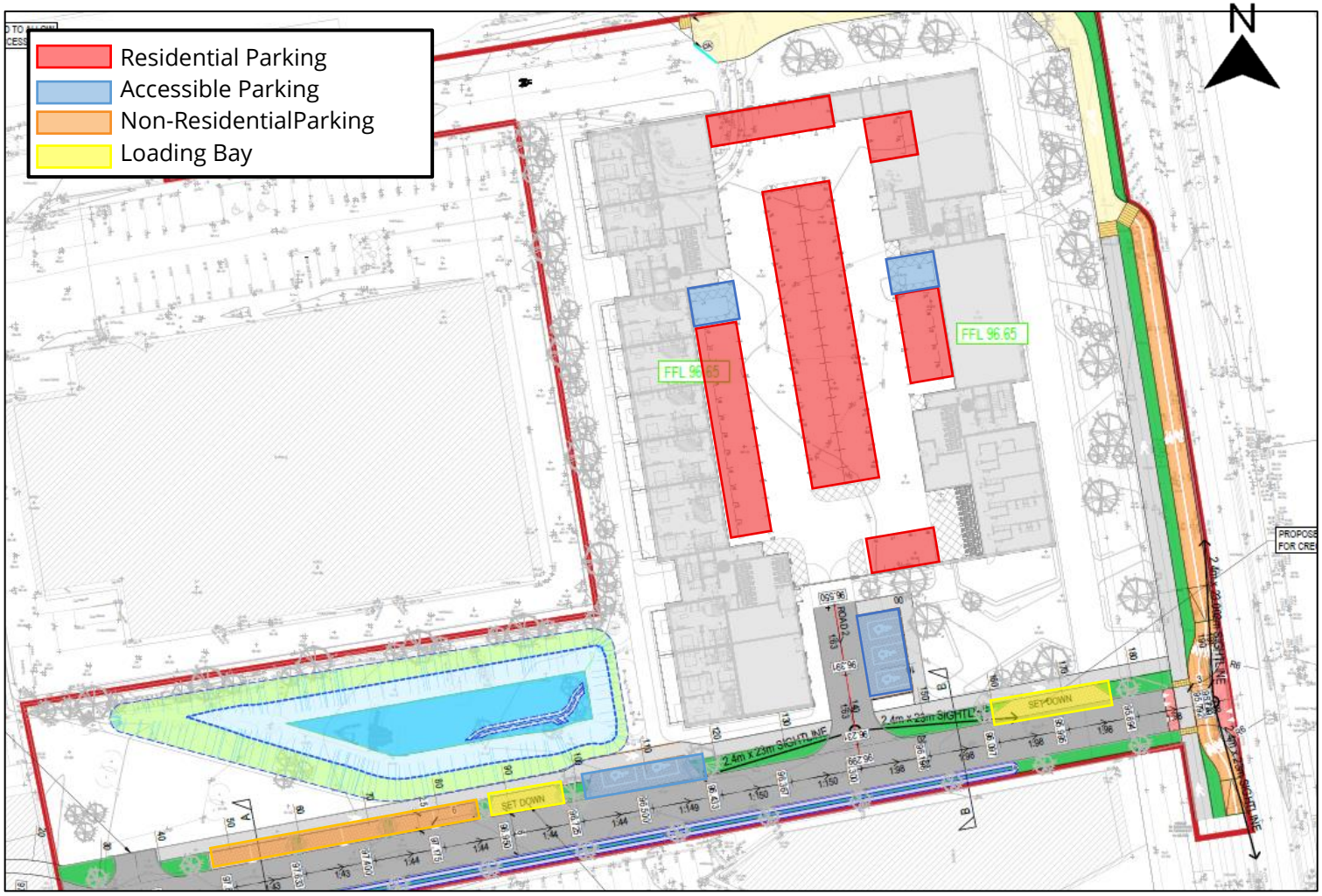


Figure 4-8 Car Parking Layout: Source: DBFL

Accessible Car Parking

The South Dublin County Development Plan 2022-2028 includes provision for disabled parking as required by Part M of the Building Regulations: *"For buildings (including apartment buildings), at least 5% of the total number of spaces should be designated car parking spaces, with a minimum provision of at least one such space"*

The proposals include the provision of 7 No. disabled car parking spaces (10% of assigned car parking), exceeding the minimum requirement for accessible parking required by SDCC.

Electric Vehicle Parking

Section 12.7.5. of the South Dublin County Development Plan stipulates that EV charging shall be provided in all residential, mixed use and commercial development and shall comprise a minimum of 20% of the total parking spaces. Therefore, 20% of the proposed car parking will provide EV charging and ducting for future proofing.

4.3.3 Cycle Parking Provision

In order to determine the appropriate level of cycle parking provision for the proposed development reference should also be made to both (i) the South Dublin County Council (SDCC) requirements; and (ii) the Department of Housing and Planning and Local Government (DHPLG) Government 'Planning Design Standards for Apartments, Guidelines for Planning Authorities (July 2025).

Section 12.7 of the South Dublin County Council Development Plan (2022-2028) outlines the minimum cycle parking standards. It states that a minimum of 1 long stay bicycle parking space must be provided per bedroom and a minimum of 1 short stay (visitor) space must be provided per 2 apartment units. For creche, the standards specify a minimum of one long-stay space per five staff and one short-stay space per ten children. For retail, the standards specify a minimum of one long-stay space per five staff and one short-stay space per 50 sq m GFA.

In reference to the Section 5.2.5 of the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities, **SPPR 4 (Cycle Parking and Storage)** sets the following requirements for cycle parking and storage:

> *"i) Quantity – in the case of residential units that do not have ground level open space or have smaller terraces, a general minimum standard of 1 cycle storage space per bedroom should be applied. Visitor cycle parking should also be provided"*

Table 4-2 overleaf compares the proposed minimum cycle parking with the SDCC standards and SRDCSG guidelines.

Cycle Parking Standards							
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Min)		Compact Settlement Guidelines (Min)	
				Long stay	Short Stay	Long Stay	Short Stay
Apartments	1-bed	80	Bedroom / Units	1 per bedroom	1 per 2 units	1 per Bed	Should provide
	2-bed	85	Bedroom / Units				
	3-bed	4	Bedroom / Units				
Creche (7 Staff & 33 Children)			Staff / Children	1 per 5 staff	1 per 10 child	-	-
Retail (193.9 sqm)			Staff/ Sqm	1 per 5 staff	1 per 50sqm	-	-
Retail (162.6 sqm)			Staff/ Sqm	1 per 5 staff	1 per 50sqm	-	-

Cycle Parking Requirements									
Unit Type		No. of Units	Metric	South Dublin County Development Plan 2022-2028 (Min)		Compact Settlement Guidelines (Min)		Proposed	
				Long Stay	Short Stay	Long Stay	Short Stay	Long Stay	Short Stay
Apartments	1-bed	80	Bedroom/ Units	262	85	262	Should provide	266	89
	2-bed	85	Bedroom/U nits						
	3-bed	4	Bedroom/U nits						
Creche (7 Staff & 33 Children)			Staff / Children	1	3	-	-	2	3
Retail (193.9 sqm)			Staff/ Sqm	1	4	-	-	1	4
Retail (162.6 sqm)			Staff/ Sqm	1	3	-	-	1	4
Sub-Total Cycle Parking Per Requirement				**265**	**95**	**262**		**270**	**100**
Total Cycle Parking Per Requirement				**360**		**262**		**370**	

Table 4-2 Cycle Parking Standards and Requirement

The development purposes to accommodate a total of 370 No. cycle parking spaces. This provision incudes 270 long stay parking spaces and 100 No. short stay visitor parking space (of which no. 11 are to be included for the non-residential elements). The total cycle parking provision also includes no. 8 cargo bike stands, the location of which can be seen in **Figure 4-11 overleaf**.

Overall, the provision of a total of 370 No. cycle parking spaces is compliant with and exceeds the minimum cycle parking requirements for both the South Dublin County Development Plan 2022-2028 (no. 360 cycle parking spaces) and the Sustainable Residential Development Compact Settlement Guidelines (no. 262 spaces).

In accordance with SDCC the long-term bicycle parking will be located in a secure area that is not visible to the general public.

Figure 4-9 overleaf shows the location of the long-stay bicycle parking spaces for the whole development, while Figure **4-10** presents the short-stay parking.

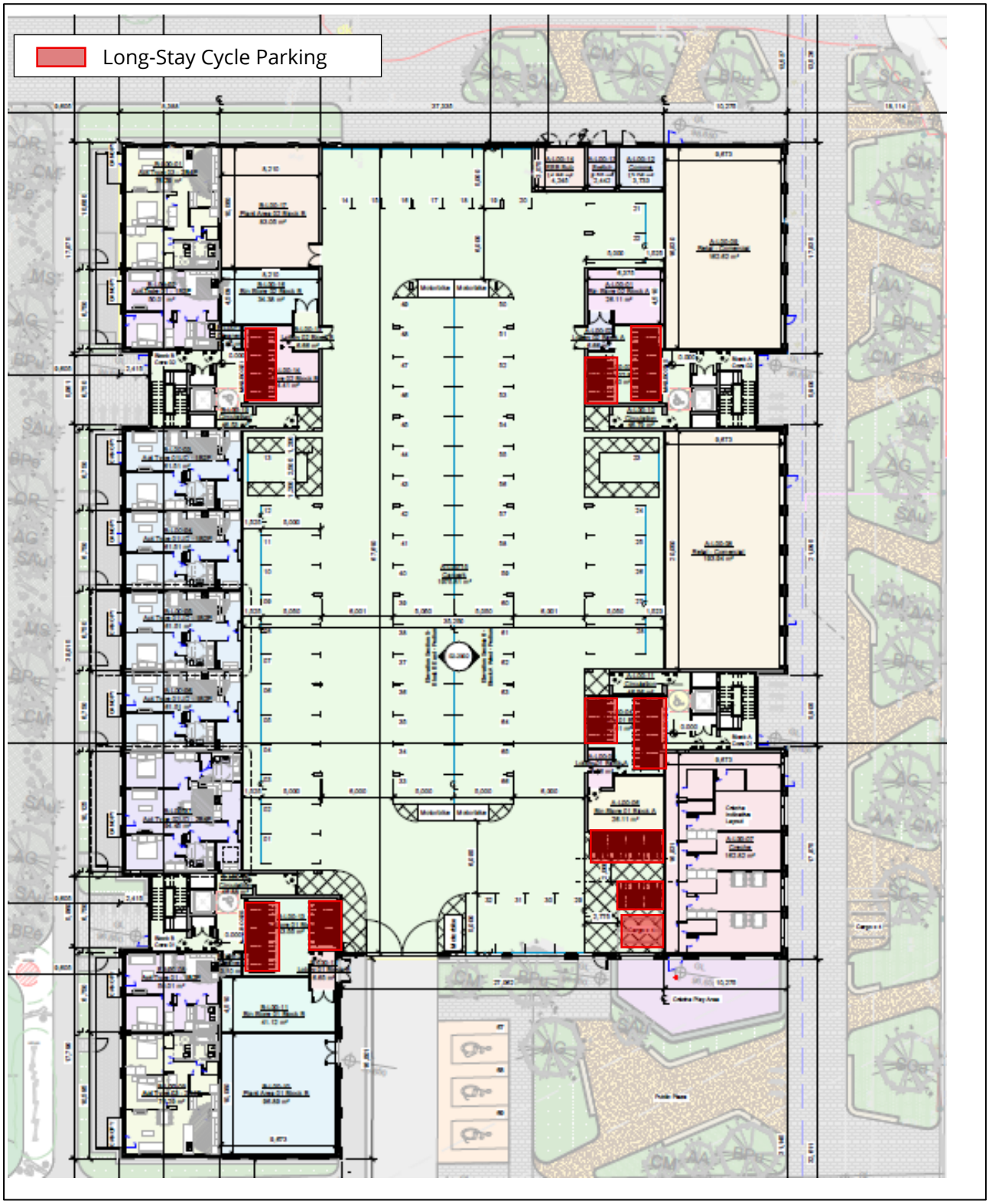


Figure 4-9 Long-Stay Cycle Parking Layout. Source: Reddy Architecture + Urbanism

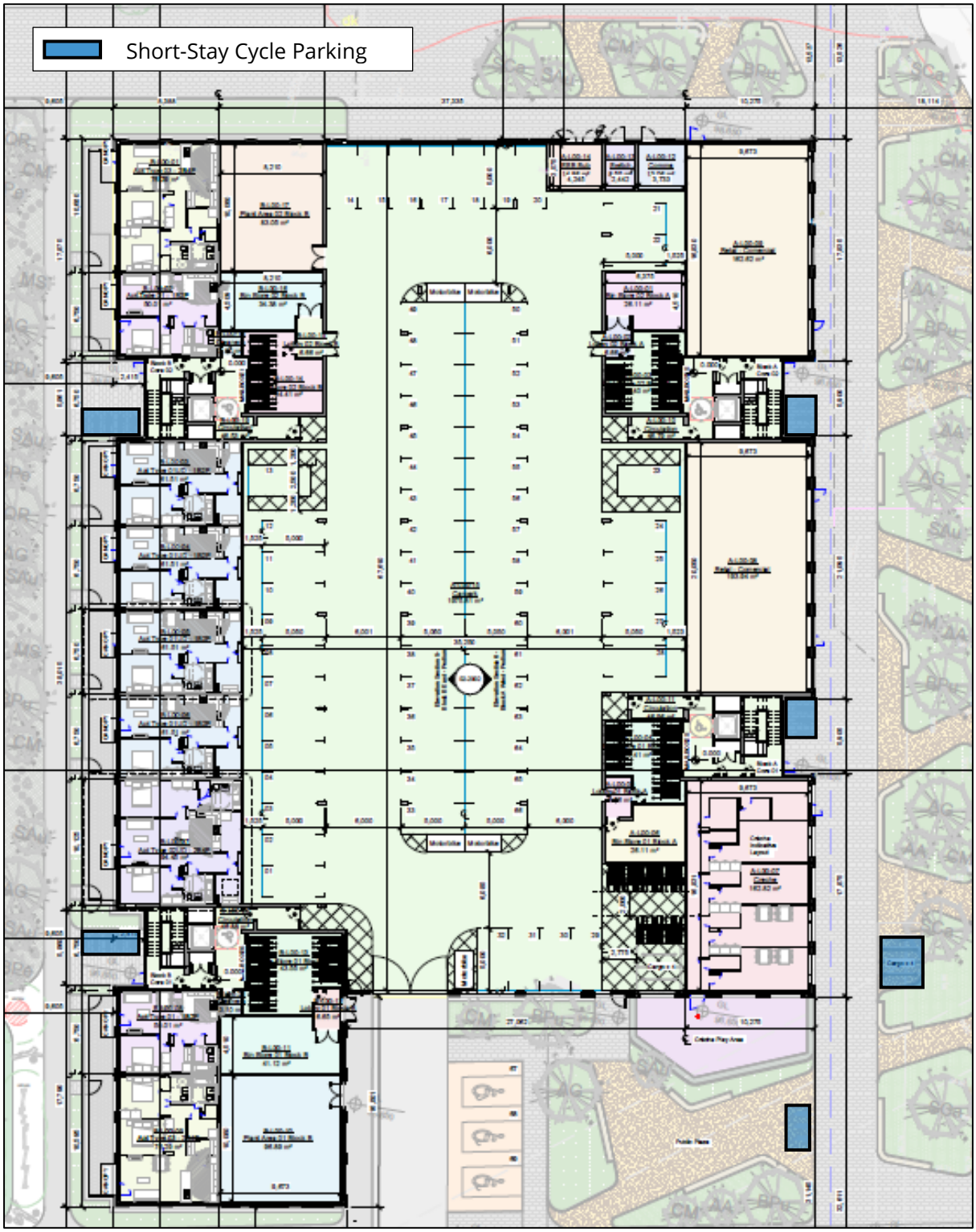


Figure 4-10 Short-stay cycle parking Source: Reddy Architecture + Urbanism

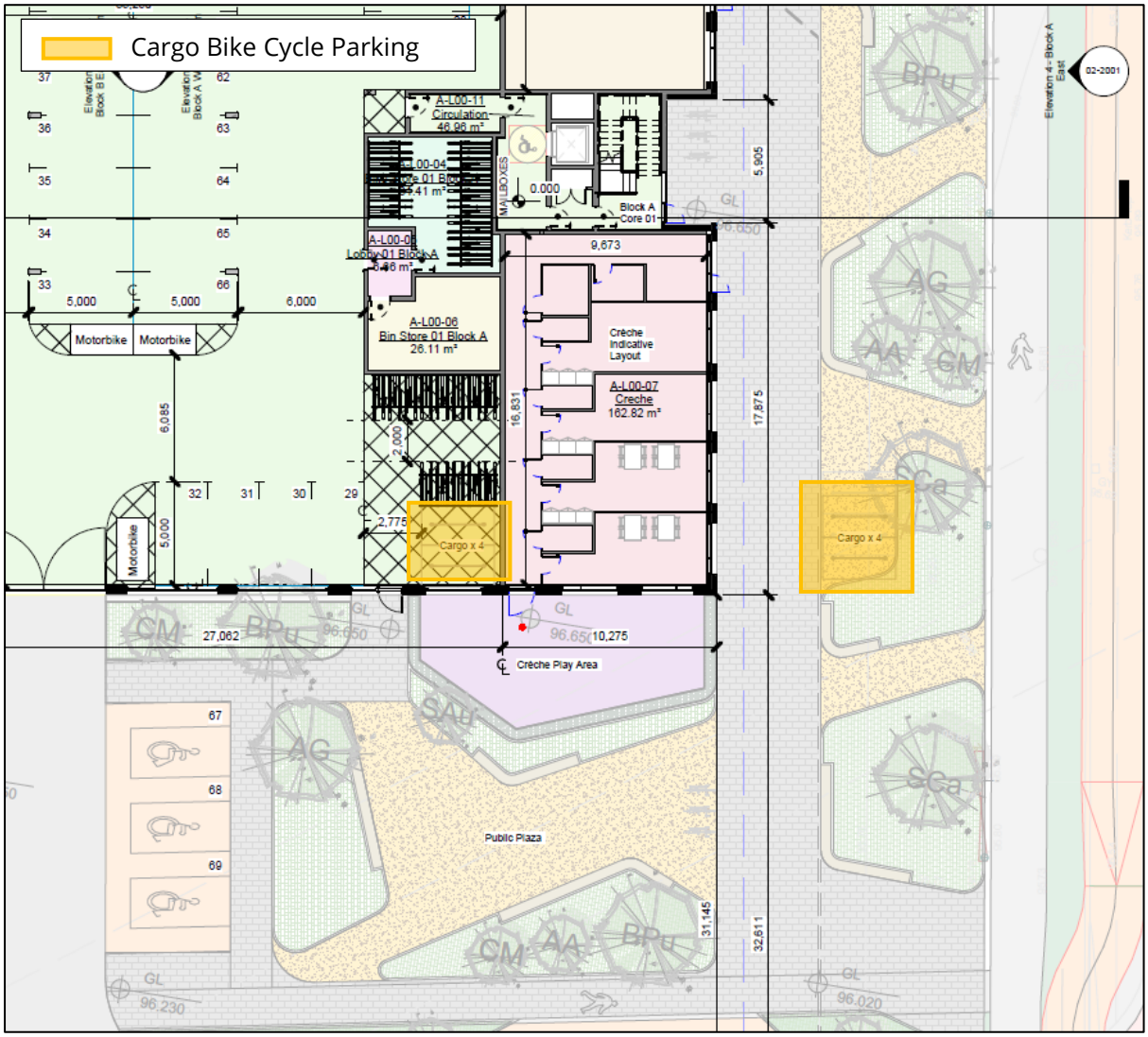


Figure 4-11 Locations for Cargo Bike Cycle Parking. Source: Reddy Architecture + Urbanism

4.4 Initiatives for Sustainable Travel

Policy documents in Ireland, as referenced in **Section 3** of this report, highlight the importance of travel by more sustainable means (Walking, Cycling, Public Transport) and that reductions in car use are key to the improvement of travel and mobility within the country. Promoting sustainable travel, therefore, is a vital element for this development.

It is acknowledged, however, that some homeowners may require a vehicle of some sort for purposes other than commuting on an everyday basis and simply reducing car parking to **0.41** spaces per unit would not be realistic without implementing alternative measures to accommodate residents and visitors alike. Accordingly, in response to the reduced level of car parking provision and anticipated lower levels of car ownership within the development, the following sustainable alternative measures are proposed:

- Mobility Management Plan;
- Ample Cycle Parking
- Parking Management.
- Sustainable Travel Initiatives.
- Encourage car share (GoCar location at The Square Shopping Centre).

4.4.1 Mobility Management Plan

A Mobility Management Plan has been prepared as part of the planning pack and should be read in conjunction with this document. The MMP will be developed further at operation stage by the management company who will have a more active role than a management company from a traditional apartment development.

4.4.2 Ample Cycle Parking Provision

Ample cycle parking provision is an alternative measure when reducing car parking spaces. A total of **370** cycle spaces is proposed for this development of 169 residential units. It is noted that the provision of cycle parking proposed is compliant with the SDCC Development Plan requirements and Design Standards for New Apartments requirements.

4.4.3 Parking Management

A parking management strategy will be implemented as part of the development to ensure the efficient and appropriate use of the reduced car parking provision. The strategy will be overseen by the management company and will assist in minimising unnecessary car ownership and parking demand within the development. Measures may include the allocation and monitoring of parking spaces and visitor parking controls, thereby supporting the overall sustainable transport objectives of the scheme.

4.4.4 Sustainable Travel Initiatives

Section 2 of this report outlines the initiatives for sustainable travel that are proposed within close proximity of the development site, including BusConnects routes, the GDA Cycle Network Plan (2022) routes as well as overall improvements to the walking and cycling network. These will provide additional enhancements for sustainable travel throughout the area.

4.4.5 Encourage Car Share

The development's accessible location and proximity to existing car share services will further reduce the need for private vehicle ownership. In particular, the nearby GoCar facilities located at The Square Shopping Centre provide residents with convenient access to vehicles on an occasional

or short-term basis, enabling access to a car when required without the need for individual ownership. This approach supports more sustainable travel behaviour and complements the reduced parking provision proposed as part of the development

4.5 Pedestrian Connectivity

The Design Manual for Urban Roads and Streets (DMURS) identifies the importance of connectivity for pedestrians within residential areas. The document states 'The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected.'

The proposed development site will have excellent connectivity for pedestrians to access the residential units, with a number of connecting paths that route through the proposed Central Open Space area.

5 Parking Management Strategy

5.1 Introduction

No. 69 car parking spaces are to be allocated for residents, with No. 66 to be provided in undercroft and an additional No. 3 spaces externally adjacent to the undercroft. No. 8 car parking spaces are to be provided for the creche and retail units on-street. Any travel demand which is generated as part of the overall development is envisaged to be predominantly local and primarily undertaken by walking, cycling or public transport, reducing pressures on the allocation of parking.

As outlined in **Section 4.3.2** above, a key component in the effective operation of on-site car parking is an active and enforced parking management strategy. This strategy will be managed by the building management company who will be responsible for managing and regulating access to the development's car parking spaces access as well as the allocation of the car parking spaces to specific users.

5.1 Parking Management Regime

It is intended that the proposed development will, in relative terms, be 'car-lite' when compared to SDCC development management standards. All marketing material will make it clear that the proposed developments on-site car parking spaces will remain within the control of the appointed management company. A management regime will be implemented by the development's management company to control access to these on-site apartment car parking bays, thereby actively managing the availability of on-site car parking for residents.

Nevertheless, all residents of the proposed residential apartment scheme will have the opportunity to apply to the on-site management company for both:

- A resident car parking permit (updated weekly, fortnightly, monthly, quarterly, or annually) and subsequently access to a dedicated (assigned) on-site car parking space; or
- A visitor's car parking permit for a short period of time (in exceptional circumstances only and subject to parking bays availability)

The building management team will be responsible for the day-to-day management of car parking operations. Residents who request a private car parking space will be allocated one (max of 1 per unit) on a 'first come, first served' basis. A charge will be applied to obtain a permit with the objective of covering the associated management costs, discouraging long term usage of the car parking space, enabling enforcement and encouraging travel by sustainable modes of travel.

Initial access to the car parking will be controlled by signage, bay surface treatments and road markings. Following a successful application to the building management team, entry to the car parking bays for residents will be facilitated by permit (displayed in vehicle window with corresponding vehicle registration plate number) to registered vehicles only. The appointed management company will administer, manage and enforce (e.g. clamping in extreme cases) the adopted strategy. All inappropriate and discriminate car parking practices within the development private car parking spaces will be discouraged through the risk (as highlighted / disseminated by signage) of exposure to the potential 'clamping' of vehicles.

This strategy will be managed by the building management company who will be responsible for managing and regulating access to the development's car parking spaces access as well as the allocation of the car parking spaces to specific users.

The developments management company will liaise regularly with Tallaght Stadium and the Vita Actives premises to ensure a holistic, integrated and consistent approach is applied to the management and coordination of car parking at Whitestown Way.

5.2 Parking Justification

No. 69 car parking spaces are to be allocated for residents, with No. 66 to be provided in undercroft and No. 3 to be provided on-street. No. 8 car parking spaces are to be provided for the creche and retail units. In terms of the overall residential parking ratio, the total parking provision is No. 69 residential car parking spaces, which results in a parking ratio of 0.41 spaces per residential unit. While this represents a modest deviation from the Roads Department's recommended ratio of 0.5, the provision is considered appropriate and justified in the context of the site's accessibility and overall policy context.

The parking ratio associated with the proposed development can be justified by the proposed development's access to high quality public transport services which reduces the need to own a private motor car through a greater emphasises upon more sustainable available travel options and the promotion of financial cost savings for residents.

The subject site benefits from proximity to high-frequency public transport services, including the BusConnects 24-hour F-Spine and the Tallaght Luas, which significantly reduces reliance on private car ownership. The scheme has been designed to prioritise sustainable travel modes, supported by the implementation of a Mobility Management Plan (MMP), which will further encourage modal shift towards walking, cycling, and public transport.

The default 'standard' requirement for the residential element is detailed in Table 12.26 of the CDP which requires 0.75 No. car parking space per 1-bed apartment, 1 No. car parking space per 2-bed apartment and No. 1.25 car parking spaces per 3-bed apartment.

However, a reduced car parking provision is considered appropriate on this site as part of the scheme proposals having regard to Section 12.7.4 of the CDP which states that;

"The maximum provision should not be viewed as a target and a lower rate of parking may be acceptable subject to: the proximity of the site to public transport and the quality of the transport service it provides.. "

Additionally, in setting out the Maximum Parking Rates for Zone 2 (Residential), Section 12.7.4. of the CDP states the following:

"More restrictive rates for application within town and village centres, lands zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 400-500 metres of a high quality public transport service (includes a train station, Luas station or bus stop with a high quality service)"

The proposed development has been assessed with regard to the relevant parking standards and policy framework set out in the South Dublin County Development Plan (SDCC CDP). The subject lands are zoned REGEN under Land Use Zoning Map No. 9 of the SDCC CDP and, in accordance with Section 12.7.4 of the Plan, this zoning supports the application of a more restrictive approach to parking provision where appropriate.

The proposed development site is located within a highly accessible area, benefitting from proximity to high-quality public transport services. The site is directly served by the BusConnects 24-hour F1 Spine, which operates at a frequency of approximately 10–15 minutes and provides connectivity between Ballymun (IKEA), Finglas, Dublin City Centre and Tallaght. The nearest stops are accessible within a circa 2-minute walk of the subject site. In addition, the site is located approximately 600m (circa 10-minute walk) from the Tallaght Luas stop, which provides a high-frequency light rail connection to Dublin City Centre and other key destinations along the Red Line corridor. Accordingly, the site demonstrates a high level of accessibility by sustainable transport modes.

Section 12.7.4 of the SDCC CDP outlines that maximum parking standards should not be interpreted as target provisions and that reduced levels of parking may be appropriate where developments are located in close proximity to high-quality public transport. In this context, it is

considered appropriate to assess the proposed development with reference to the Zone 2 (Residential) maximum parking standards, while also recognising the justification for a reduced level of parking provision given the site's accessibility characteristics.

The Tallaght Town Centre Local Area Plan (2020) provides a relevant and locally specific policy framework to support this approach. The LAP promotes the delivery of a sustainable, compact and accessible urban centre, with a strong emphasis on reducing reliance on private car travel and enhancing access by walking, cycling and public transport. In particular, the LAP identifies accessibility to public transport and local services as a key principle of development and seeks to reduce the need to travel, especially by private car, through the integration of land use and transport planning.

Furthermore, the LAP supports the provision of high-density, mixed-use development in areas with strong public transport connectivity, including the Luas Red Line and enhanced bus networks, and promotes significant investment in active travel infrastructure and public transport interchange improvements. These objectives reinforce the suitability of reduced car parking provision in highly accessible locations such as the subject site.

Having regard to the REGEN zoning objective of the subject lands, the site's high level of accessibility to public transport, including the BusConnects F1 Spine and Tallaght Luas, the provisions of Section 12.7.4 of the SDCC CDP, and national guidance including the January 2024 DHPLG Guidelines (Sustainable Residential Development and Compact Settlements), which promote the minimisation or elimination of car parking in well-served urban locations, together with the policy direction set out in the Tallaght Town Centre Local Area Plan, it is concluded that the proposed parking provision is appropriate, justified and consistent with both national and local transport planning policy.

6 Delivery and Servicing Plan

The Delivery and Servicing Plan (DSP) outlines how deliveries and servicing activities at the subject development will be managed on-site to ensure efficient, safe and sustainable movement of goods to and from the site while minimizing the impact on the local environment, road safety, community and the overall operation of the business and adjoining residential areas.

This chapter is prepared to establish the management measures that will be implemented at the subject development site to ensure that the daily operations related to the delivery and servicing do not have any negative impact on the operation of the road network in terms of both safety and operational performances. The geographical scope of the DSP considers the proposed building blocks, access roads and associated parking areas in-addition to the site access arrangements with the external public road network.

6.1 DSP Objectives

The key objectives of the DSP can be summarised as follows:

- To present/illustrate how delivery and servicing activities within the proposed development are to be managed and have been accommodated within the scheme design;
- To minimise the impact of delivery and servicing movements at proposed development's site access points;
- To demonstrate that deliveries can be delivered and waste can be removed in a safe, efficient and sustainable manner without affecting the safety of residents, visitors and employees;
- To reduce the number of deliveries and servicing activities during the network peak hour periods;
- To ensure that loading and unloading requirements have been accommodated within the scheme deign and will take place in the designated areas.

6.2 Servicing and Delivery Strategy

All the delivery and servicing activities for the proposed development will be carried out within the subject site and off the public road network. The delivery and servicing activities include refuse collections, LGV deliveries, bike deliveries, motorcycle deliveries and car-based deliveries which are discussed in detail below.

6.2.1 Waste Storage and Fire Tender Access

Waste Storage

There are 2 no. Waste Storage Areas (WSA) designated to residential use. Both of the blocks have a designated WSA located internally at the ground floor level. There is 1 no. WSA designated between the two retail units. This WSA for the retail units is located internally at ground floor level, and the crèche unit has a designated WSA located internally at ground floor level. Facilities management will supply all residents and commercial tenants of the Proposed Development with a document that shall clearly state the methods of source waste segregation, storage, reuse and recycling initiatives that shall apply within the development.

The waste receptacles will be taken from the residential and commercial WSAs directly to the waste vehicle for collection. It will be the responsibility of the facilities management or the waste contractor, depending on the agreement to take the waste receptacles from the WSAs to the waste vehicle collection for emptying and then bring the empty waste receptacles back to the WSAs immediately following collection.

The collection of the waste receptacles will be such that they will not obstruct traffic or pedestrians (allowing a footway path of at least 1.8m, the space needed for two wheelchairs to pass each other) as is recommended in the Design Manual for Urban Roads and Streets (2019).

The proposed Waste Storage Areas are shown overleaf in **Figure 6-1**. For further information, please see the Operational Waste Management Plan submitted by AWN Consulting included as part of this application.

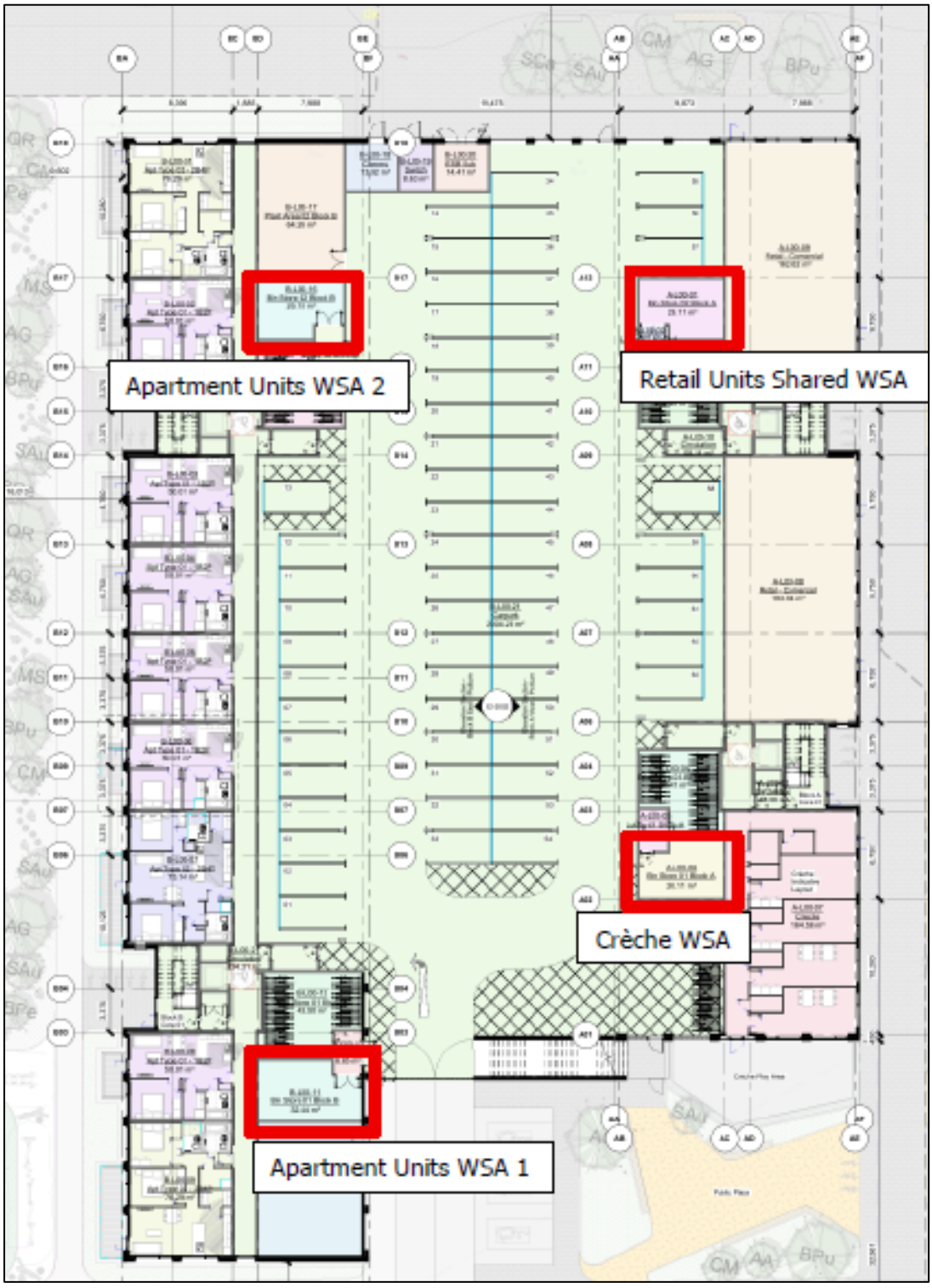


Figure 6-1Waste Storage Area

Fire Tender / Ambulance Access

A removable bollard to allow for fire tender access is provided to the north west of the site. The dedicated fire tender access is shown below in **Figure 6-2**.

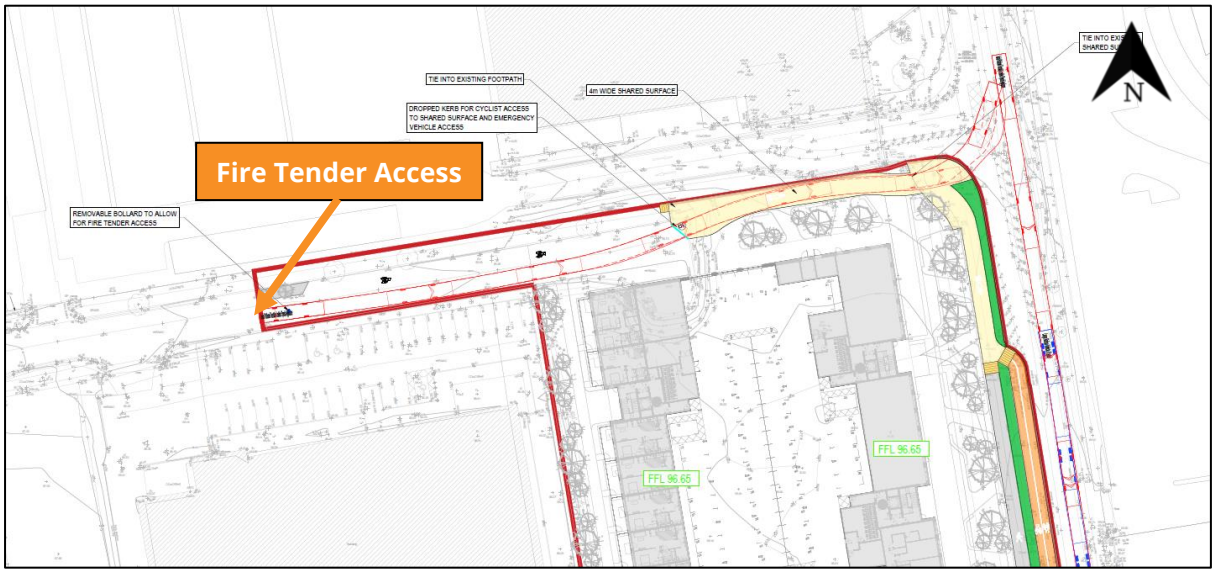


Figure 6-2 Fire Tender / Ambulance Access

6.3 Deliveries and Collections

As part of the proposed development, no. 2 Set Down Areas are to be provided, which are dedicated to the set-down and loading bays for the retail and creche elements, including deliveries. Due to the different operating hours of each of the non-residential units, it is expected that the loading bays can operate as multi use. The proposed management company will continually monitor the demand for set-down and loading bays and can adjust the provision as necessary.

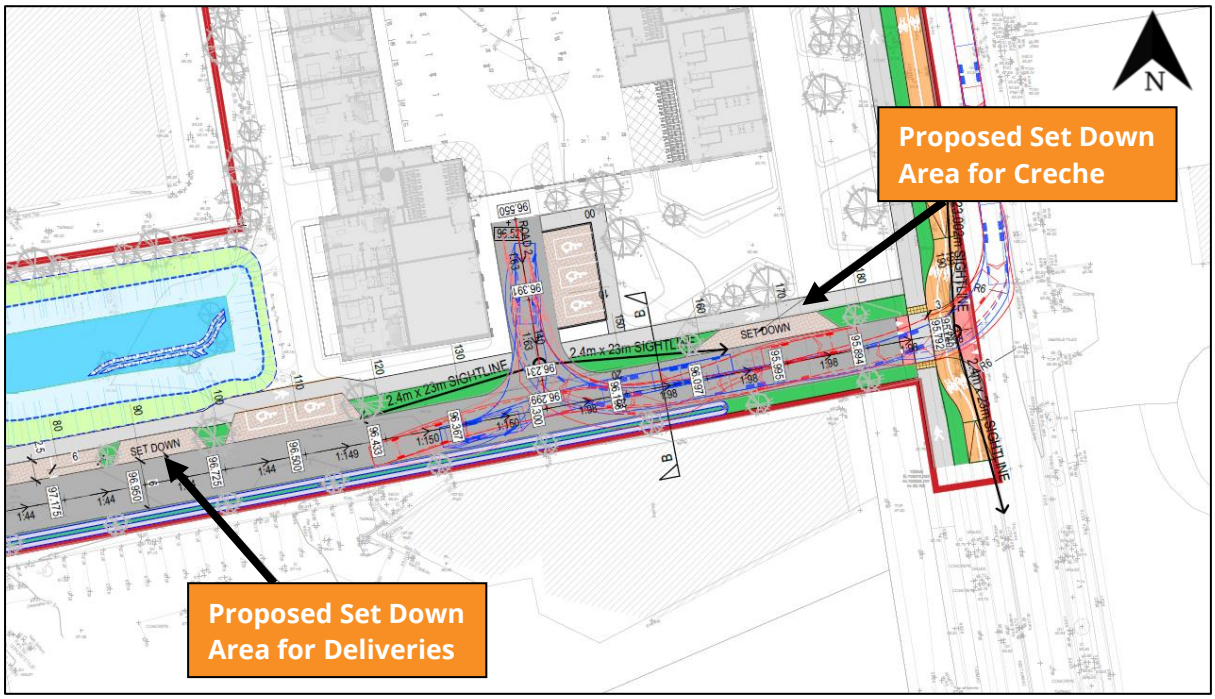


Figure 6-3 Proposed Set Down Areas for Deliveries and Creche

7 Trip Generation and Distribution

7.1 Traffic Surveys

In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed residential development, traffic surveys were conducted on Tuesday the 21st of October 2025. Further traffic surveys were conducted on Tuesday the 24th of February 2026.

The aforementioned traffic surveys (weekday classified junction turning counts) were conducted by IDASO Ltd over a 6 hour period from 07:00 to 10:00 and 16:00 to 19:00. The surveys undertaken included Junction Turning Counts (JTC) and Queue Length Surveys (QLS). JTCs were carried out at six junctions within close proximity to the proposed development site, as shown **Figure 7-1** below.

- Junction 1 – Whitestown Way / Tallaght Stadium Car Park Entrance / The Weir Apartments Entrance
- Junction 2 – Whitestown Way / The Arena Centre Car Park Entrance
- Junction 3 – Whitestown Way / N81 / Cookstown Way / N81
- Junction 4 - Whitestown Way / Firhouse Road West / Kiltipper Way / Whitestown Way
- Junction 5 - Killinarden Way / Blessington Road (N81)
- Junction 6 - Killinarden Way / Whitestown Road

Figure 7-1 Traffic Survey Locations

In order to analyse and assess the predicted traffic generation from the proposed residential development upon the local road network, an area wide traffic model incorporating these local junctions was created by DBFL. Base traffic flows and the Flow Diagrams for all scenarios are illustrated within **Appendix B.**

7.2 Traffic Growth

The TTA adopts an Opening Design year of 2028 and accordingly an Interim Year of 2033 (Opening Year +5 years) and a Future Year of 2043 (Opening Year + 15 years) as per Transport Infrastructure Ireland (TII) guidelines.

To ensure a robust analysis of the impact of traffic upon the local road network we have adopted growth rates using the TII traffic projections. **Table 6.2** (Unit 5.3 – Travel Demand Projections) within the TII Project Appraisal Guidelines provides Annual Growth Factors for the different regions within Ireland. The subject site lies within 'County – Dublin' with the growth factors as outlined within **Table 7-1** below.

County	Low Sensitivity Growth				Central Growth				High Sensitivity Growth			
	2016-2030		2030-2040		2016-2030		2030-2040		2016-2030		2030-2040	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
Dublin	1.0163	1.0303	1.0046	1.0123	1.0180	1.0317	1.0062	1.0139	1.0211	1.0348	1.0100	1.0170

Table 7-1: National Traffic Growth Forecasts: Annual Growth Factors

(Extract from Table 6.1 of Unit 5.3 PAG)

The annual factors as outlined in Table 7-1 above were applied to the 2026 normalised base flows. The annual factors were adopted for the Opening Year of 2028, the Interim Year of 2033 (Opening Year +5 years) and the Future Year 2043 (Opening Year +15 years). Accordingly, the following growth rates shown in **Table 7-2** below, have been adopted to establish corresponding 2028, 2033 and 2043 baseline network flows.

Period	2026 to 2028	2026 to 2033	2026 to 2043
Central Growth	1.0363	1.0941	1.1597
	3.63%	9.41%	15.97%

Table 7-2: Adopted Growth Rates

It is noted that the TII Project Appraisal Guidelines states that "the central growth rates are intended for use in project appraisal with the low and high growth rates to be used as sensitivity tests for economic and environmental impacts."

7.3 Trip Generation

A trip generation exercise has been undertaken to establish the potential level of vehicle trips that the development could generate. To estimate the potential level of vehicle trips that could be generated by the proposed mixed-use development, reference has been made to the TRICS database. TRICS provides trip rate information for a variety of different land uses and development types, which can be applied to the subject development.

TRICS data is primarily UK based, although a number of Irish sites have recently been included and the number of Irish sites continues to expand. Nevertheless, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.

Notwithstanding the above, internal research undertaken by TRICS has shown that there is no direct evidence of trip rate variation by country or region. The use of English, Scottish or Welsh data can be equally applicable to Ireland if users take into account important site selection filtering

factors such as levels of population, location type, local public transport provision, and development size and car ownership level, amongst others.

Data supplied for inclusion in TRICS undergoes a procedure of validation testing, and there is no evidence from this procedure suggesting that data from Ireland bears any significant fundamental differences to that from the other countries included. Consequently, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.

Table 7-3 presents the predicted trip generation and the estimated traffic flows arriving and departing the proposed development during the morning and evening peak hour periods. The TRICS output data is provided within **Appendix A**. It is noted that as the retail elements are proposed to serve the proposed development the number of vehicular trips generated is anticipated to be negligible given it will be within short walking distance of residents.

Period	AM Peak Hour			PM Peak Hour		
Land Use	In	Out	2-way	In	Out	2-way
Apartments/ Duplexes	0.044	0.152	0.196	0.126	0.077	0.204
Creche	3.049	2.396	5.445	1.821	2.442	4.263

Table 7-3: Proposed Development Trip Rates

Based on the above trip rates, the potential peak hour vehicle traffic flows have been calculated for the proposed development. **Table 7-4** summarise the predicted AM and PM peak hour traffic flows generated by the proposed development for the horizon years, that have been calculated based on the proposed development schedule.

Land Use	Units/sqm	AM (08:00 - 09:00)			PM (17:00 – 18:00)		
		Arrival	Departure	Total	Arrival	Departure	Total
Apartments/ Duplexes	169	7	26	33	21	13	34
Creche	164.56	5	4	9	3	4	7
Total		**12**	**30**	**42**	**24**	**17**	**41**

Table 7-4: Proposed Development Vehicle Trips (Fully Constructed)

It is estimated that the proposed development could potentially generate a total of 42 and 41 two-way vehicle movements during the road network's AM and PM peak respectively on a typical weekday as detailed in **Table 7-4.**

7.4 Trip Distribution and Assignment

For the adopted Opening Year of 2028 and Future Years of 2033 (+5 years) and 2043 (+15 years), the distribution of proposed development traffic as proposed by DBFL is included in **Appendix B** of this report.

7.5 Sensitivity Analysis

A Sensitivity Analysis has been carried out to assess how the subject site will impact the surrounding road network if the Tallaght Local Area Plan 2020 road objective, outlined in Section 4.2 of this report, to provide a road link between Whitestown Road and Whitestown Way was implemented.

In this analysis the 'Do-Nothing' traffic scenario takes into account the existing flows travelling across the network, redistributed to account for the new link road, subjected to growth rates.

The proposed development traffic flows are then added to the network's 'Do-Nothing (Redistributed Base with growth rates applied) traffic flows to establish the new post development 'Do-Something' traffic flows.

Although it is unlikely that this link road would be operational by the subject sites proposed Opening Year of 2028 it has been assessed for all design years.

The assumptions made for the redistributed traffic are as follows:

- Only vehicles that are travelling to/from the subject site or Tallaght Business Park will travel via the proposed link road. For exterior through traffic it would be faster to travel via the N81 or Killinarden Way/Whitestown Way.
- All vehicles travelling to/from The Whitestown Way / N81 / Cookstown Way / N81 Junction and Tallaght Business Park will travel via the Eastern Entrance of the proposed link road.
- All vehicles travelling to/from The Whitestown Way / Firhouse Road West / Kiltipper Way / Whitestown Way Junction will travel via the Eastern Entrance of the proposed link road.
- All vehicles arriving and departing the proposed development to/from the Killinarden Way / Blessington Road (N81) junction will travel via the Western Entrance of the proposed link road. All other vehicles arriving and departing the proposed development will travel via the Eastern Entrance of the proposed link road.

8 Network Impact

8.1 Assessment Scope

Assessment Scenarios

Two different traffic scenarios have been assessed, namely (a) the `Base' (Do-Nothing) traffic characteristic, and (b) the `Post Development' (Do-Something) traffic characteristics.

The 'Do-Nothing' traffic scenario takes into account the the existing flows travelling across the network subjected to growth rates.

The proposed development traffic flows are then added to the network's 'Do-Nothing (Base with growth rates applied) traffic flows to establish the new post development 'Do-Something' traffic flows.

For the purposes of this assessment, it has been assumed that the entire proposed development could be in place by the end of the adopted 2028 Opening Year. In summary the following scenarios are considered:

- **Do Nothing A1** – 2028 Base Flows
- **Do Nothing A2** – 2033 Base Flows
- **Do Nothing A3** – 2043 Base Flows
- **Do-Something B1** - 2028 Do Nothing (A1) + Proposed Development Flows
- **Do-Something B2** - 2033 Do Nothing (A2) + Proposed Development Flows
- **Do-Something B3** - 2043 Do Nothing (A3) + Proposed Development Flows

Committed Developments

The SDCC Planning Applications Online Portal was examined and there are currently no committed developments in the surrounding area that would impact / be impacted by the proposed development. Any future development will be required to consider this proposed development as part of their analysis.

Assessment Period

The AM and PM peak hour flows have been identified within the traffic survey data as occurring between 08:00-09:00 and 16:45 -17:45 respectively. These peak hour periods form the basis of the 2028, 2033 and 2043 network assessments.

The figures as included in **Appendix B** present the vehicle flows across the local road network for each of the adopted development scenarios mentioned above.

8.2 Road Network Impact

The TII document 'Traffic and Transport Assessment Guidelines (2014)' states that the impact of a proposed development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks respectively. When such levels of impact are generated a more detailed assessment should be undertaken to ascertain the specific impact upon the network's operational performance. In accordance with the TII guidelines we have undertaken an assessment to establish the potential level of impact upon the key junctions of the local road network. To enable this calculation to be undertaken we have based the analysis upon the 2028 Opening Year and 2033 and 2043 Future Design Years scenarios. **Table 8-1** below details the specific scale of network impact predicted at each of the key local off-site junctions during the 2028 Opening Year and 2033 and 2043 Design Years.

Junction	Year	AM Peak			PM Peak		
		DN	DS	% Impact	DN	DS	% Impact
1. Whitestown Way/The Weir/Tallaght Stadium/Proposed Development	2028	1214	1256	3.47%	1327	1368	3.12%
	2033	1282	1324	3.28%	1401	1442	2.96%
	2043	1358	1400	3.10%	1485	1526	2.79%
2. Whitestown Way/Woodies	2028	1413	1437	1.64%	1683	1705	1.27%
	2033	1492	1515	1.55%	1777	1798	1.20%
	2043	1582	1605	1.46%	1884	1905	1.14%
3. Whitestown Way/N81/Cookstown Way	2028	3712	3735	0.62%	3931	3952	0.54%
	2033	3919	3942	0.59%	4150	4171	0.52%
	2043	4154	4177	0.56%	4399	4420	0.49%
4. Whitestown Way/ Kiltipper Way/ Firhouse Rd West	2028	2141	2160	0.89%	2207	2227	0.91%
	2033	2260	2279	0.84%	2330	2350	0.86%
	2043	2396	2415	0.79%	2470	2490	0.81%
5. Killinarden Way / Blessington Road (N81)	2028	3593	3602	0.25%	3406	3417	0.30%
	2033	3793	3802	0.23%	3596	3606	0.29%
	2043	4021	4029	0.22%	3812	3822	0.27%
6. Killinarden Way / Whitestown Road	2028	1156	1161	0.50%	969	975	0.62%
	2033	1220	1226	0.48%	1023	1029	0.59%
	2043	1293	1299	0.45%	1084	1090	0.56%

Table 8-1: Proposed Development's Network Impact

Based on the scale of impact generated in the adopted worst-case scenario, all the junctions assessed are below the TII threshold for assessment for normal networks and as such the proposed development is not anticipated to have a material impact on these junctions.

Figure 8-1 and **Figure 8-2** below details the total number of two-way vehicle trips that will pass through the key off-site junctions in the 2043 Future Design Year and the resulting percentage increase in traffic flows as a result of the traffic generated by the proposed development.

Figure 8-1: Increase in Vehicle Trips Through Key Of-Site Junctions (2043 AM Peak)

Figure 8-2: Increase in Vehicle Trips Through Key Of-Site Junctions (2043 PM Peak)

Junction 1, Whitestown Way/The Weir/Tallaght Stadium/Proposed Development Priority Junction, has been assessed further to ensure a robust assessment.

8.3 Road Network Impact – Sensitivity Analysis

A Sensitivity Analysis has been carried out to assess how the subject site will impact the surrounding road network if the Tallaght Local Area Plan 2020 road objective, outlined in Section 4.2 of this report, to provide a road link between Whitestown Road and Whitestown Way was implemented.

Table 8-2 below details the specific scale of network impact predicted at each of the key local off-site junctions during the 2028 Opening Year and 2033 and 2043 Design Years for the Sensitivity Analysis.

Junction	Year	AM Peak			PM Peak		
		DN	DS	% Impact	DN	DS	% Impact
1. Whitestown Way/The Weir/Tallaght Stadium/Proposed Development	2028	1329	1362	2.51%	1431	1462	2.20%
	2033	1403	1436	2.38%	1511	1542	2.08%
	2043	1487	1520	2.24%	1601	1633	1.97%
2. Whitestown Way/Woodies	2028	1496	1516	1.33%	1731	1748	1.00%
	2033	1579	1599	1.26%	1827	1844	0.94%
	2043	1674	1694	1.19%	1937	1954	0.89%
3. Whitestown Way/N81/Cookstown Way	2028	3691	3711	0.54%	3921	3939	0.44%
	2033	3897	3917	0.51%	4140	4157	0.42%
	2043	4131	4151	0.48%	4388	4405	0.39%
4. Whitestown Way/ Kiltipper Way/ Firhouse Rd West	2028	2125	2139	0.63%	2192	2206	0.65%
	2033	2244	2257	0.60%	2314	2328	0.62%
	2043	2378	2392	0.56%	2453	2467	0.58%
5. Killinarden Way / Blessington Road (N81)	2028	3405	3414	0.26%	3251	3261	0.30%
	2033	3595	3604	0.24%	3432	3442	0.29%
	2043	3811	3820	0.23%	3638	3647	0.27%
6. Killinarden Way / Whitestown Road	2028	995	1004	0.88%	829	838	1.20%
	2033	1051	1060	0.83%	875	885	1.13%
	2043	1114	1123	0.79%	927	937	1.07%

Table 8-2: Proposed Development's Network Impact

Based on the scale of impact generated in the adopted worst-case scenario, all the junctions assessed are below the TII threshold for assessment for normal networks and as such the proposed development is not anticipated to have a material impact on these junctions.

9 Network Analysis

9.1 Introduction

The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer package PICADY for priority-controlled junctions. When considering priority junctions, a Ratio of Flow to Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly. For the PICADY analyses, a 90-minute AM and PM period has been simulated, from 07:45 to 09:15 and 16:30 to 18:00, respectively. For these junction analysis sets traffic flows were entered using an Origin-Destination table for the peak hours.

In order to analyse and assess the impact of the potential development on the surrounding road network, a traffic model replicating the local road network including the key off-site junctions was developed to quantify conditions in each of the following three future design years:

- 2028 Opening Year
- 2033 Interim Year Opening Year (Opening Year + 5 years)
- 2043 Future Horizon Year (Opening Year + 15 years)

9.1.1 Junction 1: Whitestown Way / The Weir / Tallaght Stadium / Proposed Development Priority Junction

The Whitestown Way/The Weir/Tallaght Stadium/Proposed Development Priority Junction has been analysed for all of the modelling scenarios using the Junctions 11 PICADY software package. The four arms were labelled as follows within the PICADY model:

- **Arm A**: Whitestown Way (N)
- **Arm B**: The Weir
- **Arm C**: Whitestown Way (S)
- **Arm D:** Proposed Development

Do Something Scenario

The PICADY results (**Table 9-1**) indicate that the Whitestown Way/The Weir/Tallaght Stadium/Proposed Development Priority Junction will operate within capacity for the 2028 "Do Something" AM peak hour with a maximum RFC value of 0.12 (12%) and a corresponding queue of 0.1 pcus being recorded on stream B-The Weir. For the corresponding PM peak hour, a maximum RFC value of 0.06 (6%) occurs on stream D-Proposed Development with a queue of 0.1.

For the 2033 Future Horizon Year "Do Something" scenario, the PICADY results indicate that the priority junction will also operate within capacity during the AM peak hour with a maximum RFC value of 0.13 (13%) and a corresponding queue of 0.2 pcus being recorded again on-stream B-The Weir. For the corresponding PM peak hour, a maximum RFC value of 0.06 (6%) occurs on stream D-Proposed Development with a queue of 0.1.

Scenario	Period	Arm	RFC	Mean Max Queue (pcu)	Delay (s)
2028 DS	AM Peak	B- The Weir	0.12	0.1	12.40
		A- Whitestown Way (N)	0.02	0.0	4.57
		D- Proposed Development	0.09	0.1	11.41
		C- Whitestown Way (S)	0.04	0.1	3.99
	PM Peak	B- The Weir	0.02	0.0	16.54
		A- Whitestown Way (N)	0.05	0.1	3.76
		D- Proposed Development	0.06	0.1	11.92
		C- Whitestown Way (S)	0.01	0.0	4.64
2033 DS	AM Peak	B- The Weir	0.13	0.2	13.03
		A- Whitestown Way (N)	0.02	0.0	4.54
		D- Proposed Development	0.10	0.1	11.99
		C- Whitestown Way (S)	0.04	0.1	3.92
	PM Peak	B- The Weir	0.03	0.0	18.22
		A- Whitestown Way (N)	0.06	0.1	3.70
		D- Proposed Development	0.06	0.1	12.57
		C- Whitestown Way (S)	0.01	0.0	4.58
2043 DS	AM Peak	B- The Weir	0.15	0.2	13.78
		A- Whitestown Way (N)	0.02	0.0	4.49
		D- Proposed Development	0.10	0.1	12.76
		C- Whitestown Way (S)	0.05	0.1	3.86
	PM Peak	B- The Weir	0.04	0.0	19.90
		A- Whitestown Way (N)	0.06	0.1	3.64
		D- Proposed Development	0.07	0.1	13.41
		C- Whitestown Way (S)	0.01	0.0	4.52

Table 9-1: Do Something Analysis – Junction 1

In the 2043 Future Horizon Year "Do Something" scenario, the PICADY results once again indicate that the priority junction will operate within capacity during the AM peak hour with a maximum RFC value of 0.15 (15%) and a corresponding queue of 0.2 pcus being recorded on stream B-The Weir. For the corresponding PM peak hour, a maximum RFC value of 0.07 (7%) occurs on stream D-Proposed Development with a queue of 0.1.

Do Something Scenario – Sensitivity Analysis

The PICADY results (**Table 9-2**) indicate that the Whitestown Way/The Weir/Tallaght Stadium/Proposed Development Priority Junction will operate within capacity for the 2028 "Do Something" AM peak hour with a maximum RFC value of 0.23 (23%) and a corresponding queue of 0.6 pcus being recorded on stream A- Whitestown Way (N). For the corresponding PM peak hour, a maximum RFC value of 0.33 (33%) occurs on stream D-Proposed Development with a queue of 0.5.

For the 2033 Future Horizon Year "Do Something" scenario, the PICADY results indicate that the priority junction will also operate within capacity during the AM peak hour with a maximum RFC value of 0.26 (26%) and a corresponding queue of 0.7 pcus being recorded again on stream A-Whitestown Way (N). For the corresponding PM peak hour, a maximum RFC value of 0.36 (36%) occurs on stream D-Proposed Development with a queue of 0.6.

Scenario	Period	Arm	RFC	Mean Max Queue (pcu)	Delay (s)
2028 DS	AM Peak	B- The Weir	0.12	0.1	13.11
		A- Whitestown Way (N)	0.23	0.6	5.54
		D- Proposed Development	0.17	0.2	12.58
		C- Whitestown Way (S)	0.04	0.1	4.01
	PM Peak	B- The Weir	0.03	0.0	17.90
		A- Whitestown Way (N)	0.09	0.2	3.83
		D- Proposed Development	0.33	0.5	15.41
		C- Whitestown Way (S)	0.01	0.0	4.65
2033 DS	AM Peak	B- The Weir	0.13	0.2	13.68
		A- Whitestown Way (N)	0.26	0.7	5.66
		D- Proposed Development	0.18	0.2	13.36
		C- Whitestown Way (S)	0.05	0.1	3.95
	PM Peak	B- The Weir	0.03	0.0	19.46
		A- Whitestown Way (N)	0.10	0.2	3.78
		D- Proposed Development	0.36	0.6	16.88
		C- Whitestown Way (S)	0.01	0.0	4.60
2043 DS	AM Peak	B- The Weir	0.15	0.2	14.72
		A- Whitestown Way (N)	0.28	0.8	5.80
		D- Proposed Development	0.21	0.3	14.64
		C- Whitestown Way (S)	0.06	0.1	3.88
	PM Peak	B- The Weir	0.04	0.0	22.27
		A- Whitestown Way (N)	0.11	0.2	3.72
		D- Proposed Development	0.40	0.7	19.13
		C- Whitestown Way (S)	0.01	0.0	4.54

Table 9-2: Do Something Analysis – Junction 1 – Sensitivity Analysis

In the 2043 Future Horizon Year "Do Something" scenario, the PICADY results once again indicate that the priority junction will operate within capacity during the AM peak hour with a maximum RFC value of 0.28 (28%) and a corresponding queue of 0.8 pcus being recorded on stream A-Whitestown Way (N). For the corresponding PM peak hour, a maximum RFC value of 0.40 (40%) occurs on stream D-Proposed Development with a queue of 0.7.

10 Construction Phase

10.1 Overview

In general, the impact of the construction period will be temporary in nature and less significant than the final post development operational stage.

All construction activities will be governed by a Construction Traffic Management Plan (CTMP), the details of which will be agreed with South Dublin County Council prior to the commencement of construction activities on site. The principal objective of the CTMP is to ensure that the impacts of all building activities generated during the construction phase upon the public (off-site), visitors to the subject site (on-site) and internal (on-site) workers environments, are fully considered and proactively managed/programmed thereby ensuring that safety is maintained at all times, disruption is minimised and undertaken within a controlled hazard free/minimised environment.

During the general excavation of the foundations there may be additional HGV movements from the site. All suitable material will be used for construction and fill activities where possible and appropriate. All spoil material will be removed to a registered landfill site which will be agreed in advance with South Dublin County Council.

In addition to the traffic generated by the disposal of surplus subsoil from the site, there will be traffic generated from deliveries of construction materials and equipment. It should be noted that construction traffic generated during the development works tends to be at off-peak hours. Such trips would generally be spread out over the full working day and are unlikely to be higher than the peak hour predicted for the operational stage.

Construction traffic will consist of the following categories:

- Private vehicles owned and driven by site construction staff and by full time supervisory staff.
- Excavation plant and dumper trucks involved in site development works and material delivery vehicles for the following: granular fill materials, concrete pipes, manholes, reinforcement steel, ready-mix concrete and mortar, concrete blocks, miscellaneous building materials, etc.
- On-site employees will generally arrive before 07:30, thus avoiding the morning peak hour traffic. These employees will generally depart after 18:00. It should be noted that a large

proportion of construction workers would arrive in shared transport. Deliveries would arrive at a steady rate during the course of the day.

In the absence of a final construction programme, it is difficult to assess the exact impact during the construction period. Nevertheless, the following estimates have been made in respect of the construction period impacts:

- Appropriate on-site parking and compounding will be provided to prevent overflow onto the local network.
- It is likely that some numbers of the construction team will be brought to/from the site in vans/minibuses, which will serve to reduce the trip generation potential.
- Delivery vehicles to and from the site will be spread across the course of the working day, therefore, the number of HGVs travelling during the peak hours will be relatively low.
- Site offices and compound will be located within the site boundary. The site will be able to accommodate employee and visitor parking throughout the construction period. Initially, hard-standing parking areas will be provided and as the development progresses, employees will use constructed car-parking spaces, as they become available.
- Finally, truck wheel washes will be installed at construction entrances and any specific recommendations with regard to construction traffic management made by South Dublin County Council will be adhered to.

11 Summary and Conclusion

11.1 Summary

DBFL Consulting Engineers (DBFL) have been commissioned to prepare a Traffic and Transport Assessment (TTA) for a proposed Residential Development at a site located on Whitestown Way, Tallaght, Dublin 24.

The purpose of this TTA was to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed residential/commercial development.

In terms of future transport proposals, the GDA Cycle Network Plan (2022), BusConnects as well as the SDCC Development Plan (2022-2028) proposes a number of cycle routes, bus routes and road improvement proposals within the area in proximity to the development site.

A number of policy and guidance documents reviewed as part of this assessment emphasises the requirement for increasing sustainable travel modes such as walking, cycling and public transport. The 'Design Standards for Apartments – July 2025' outlines the car parking requirements for new apartment units.

The proposed development principally comprises the construction of a mixed-use development in 2 No. blocks (Block A to the east and Block B to the west) with a gross floor area of 14,976.5 sq m (excluding undercroft car parking area of 1,975.8 sq m) and ranging in height from 1 No. storey to 6 No. storeys. The blocks are connected via a single-storey undercroft/podium level. The development includes: 169 No. residential units (80 No. 1-bed, 85 No. 2-bed and 4 No. 3-bed); 2 No. class 1 / class 2 commercial units (totalling 356.5 sq m); and a crèche (162.8 sq m) with external play area.

The development also comprises: new street and turning head at the site's southern side and junction with Whitestown Way to the east; 77 No. car parking spaces, with 69 No. Residential Spaces (66 No. within the undercroft car parking area) and 8 No. on-street car parking spaces serving the creche and retail units; 2 No. set-down bays; cycle parking; hard and soft landscaping, including public open space, communal amenity space and incidental spaces; private amenity spaces (as balconies and terraces facing all directions); boundary treatments; sub-station; plant/operational rooms; bin stores; public lighting; green roofs; rooftop plant, PV arrays, lift overruns, telecommunications infrastructure and automatic opening vents; and all associated works above and below ground.

Further details of the development proposals, including the site layout drawing, are illustrated in the architects' scheme drawings as submitted with this planning application.

Traffic Surveys were carried out in October 2025 on a number of key junctions surrounding the proposed development site.

In order to undertake an assessment of the likely traffic impacts that the proposed development would have on the surrounding road network, a traffic generation assessment was undertaken. Traffic growth rates were applied to background traffic using the TII Project Appraisal Guidelines (PAG). Development trips were generated using the TRICS database. Committed Developments close to the proposed development site were also included as part of the assessment.

A detailed traffic model was developed of the road and junction network. Trips were assigned to the network for the Opening Year (2028) as well as the Future Design Years (2033 and 2043). A traffic impact assessment was undertaken in order to determine whether the impact threshold of 5% was exceeded (as per the TII Traffic and Transport Assessment Guidance which recommended a 10% impact threshold for non-congested road networks and a 5% impact threshold for congested road networks).

Results of the assessment indicate that all junctions are below the threshold of 10% threshold (for non-congested road networks) and Junctions 1, 2, 3 and 4, are below the 5% impact threshold (for congested road networks) for further detailed junction analysis. Additional analysis was undertaken for the Whitestown Way/The Weir/Tallaght Stadium/Proposed Development Priority Junction, using the Junctions 11 PICADY software package, with results showing that the proposed development's priority junction is will within operational capacity for all modelling scenarios. A further sensitivity analysis was carried out to assess how the subject site will impact the surrounding road network if the Tallaght Local Area Plan 2020 road objective to provide a road link between Whitestown Road and Whitestown Way was implemented. The sensitivity analysis results show that the proposed development's priority junction is will within operational capacity for all modelling scenarios.

The proposed development is located at a well-served suburban location close to a variety of amenities and facilities. Whitestown Way is within walking distance of the Tallaght Red Luas Line and served by multiple high frequency bus services, with further BusConnects improvements to follow. As the public transport capacity analysis revealed, the existing public transport network has sufficient capacity available to accommodate the additional demand projected to be generated by the proposed development. Furthermore, the implementation of future

BusConnects schemes will provide additional capacity and service enhancements, further strengthening the network's ability to support anticipated growth in demand.

The facilities proposed within the subject development includes 370 No. cycle parking spaces (comprising 270 No. long-stay / 100 No. short-stay, including provision for creche and commercial units), linkages to good public transport services (current and future) and reduced parking for residents within the development. Therefore, this development proposes a sustainable approach to travel within the development. This will encourage existing and future residents to increase modal shift away from car use to more sustainable modes of transport.

In conclusion, we believe that the opportunity is available, in terms of transport and traffic, for the planning authority to consider favourably the proposed residential development on the subject site.

The findings of this report, therefore, concludes that there are no traffic or transportation related reasons that should prevent the granting of planning permission for the construction of the proposed residential development of Whitestown Way, Tallaght, Dublin 24.

Appendix A : TRICS Database Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: C - FLATS PRIVATELY OWNED

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	**GREATER LONDON**		
	BE	BEXLEY	2 days
	EG	EALING	1 day
	GR	GREENWICH	1 day
	HO	HOUNSLOW	2 days
	IS	ISLINGTON	3 days
	KI	KINGSTON	1 day
	KN	KENSINGTON AND CHELSEA	2 days
	SK	SOUTHWARK	2 days
	WF	WALTHAM FOREST	1 day
	WH	WANDSWORTH	1 day
02	**SOUTH EAST**		
	CT	CENTRAL BEDFORDSHIRE	2 days
	HF	HERTFORDSHIRE	3 days
	PO	PORTSMOUTH	1 day
	SC	SURREY	1 day
	SS	SOUTHEND ON SEA	2 days
03	**SOUTH WEST**		
	DC	DORSET	1 day
	DV	DEVON	1 day
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	2 days
	NF	NORFOLK	1 day
	SF	SUFFOLK	1 day
06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 day
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	KS	KIRKLEES	1 day
	LS	LEEDS	1 day
	RI	EAST RIDING OF YORKSHIRE	1 day
08	**NORTH WEST**		
	AC	CHESHIRE WEST & CHESTER	1 day
	MS	MERSEYSIDE	1 day
09	**NORTH**		
	TW	TYNE & WEAR	1 day
10	**WALES**		
	CO	CONWY	1 day
	FS	FLINTSHIRE	1 day
11	**SCOTLAND**		
	HI	HIGHLAND	1 day
	SA	SOUTH AYRSHIRE	1 day
	SR	STIRLING	1 day
14	**LEINSTER**		
	KD	KILDARE	1 day
	LU	LOUTH	3 days
	WX	WEXFORD	1 day
15	**GREATER DUBLIN**		
	DL	DUBLIN	1 day
17	**ULSTER (NORTHERN IRELAND)**		
	AN	ANTRIM	1 day

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:	DWELLS
Actual Range:	6 to 402 (units:DWELLS)
Range Selected by User:	6 to 832 (units:DWELLS)
Parking Spaces Range:	0 - 550

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	19/07/91 to 24/06/25

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:

Friday	9 days
Monday	9 days
Thursday	11 days
Tuesday	12 days
Wednesday	9 days

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

Selected survey types:

Manual count	50
Direction ATC Count	0

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	10 days
Edge of Town Centre	40 days

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:

Built-Up Zone	11 days
Commercial Zone	1 days
Development Zone	6 days
Industrial Zone	1 days
Residential Zone	31 days

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 Vehicle Counts:

Servicing vehicles Included	19 days
Servicing vehicles Unknown	31 days

Secondary Filtering Selection:

Use Class:

C3	50 surveys

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:

800 - 14642

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	11 surveys
100,001 or More	4 surveys
15,001 to 20,000	5 surveys
20,001 to 25,000	5 surveys
25,001 to 50,000	15 surveys
5,001 to 10,000	6 surveys
50,001 to 100,000	3 surveys

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

Population within 5 miles:

125,001 to 250,000	12 surveys
25,001 to 50,000	5 surveys
250,001 to 500,000	6 surveys
5,001 to 25,000	2 surveys
50,001 to 75,000	9 surveys
500,001 or More	15 surveys
75,001 to 100,000	1 surveys

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

Car ownership within 5 miles:

0.5 or Less	4 surveys
0.6 to 1.0	23 surveys
1.1 to 1.5	23 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	42 surveys
Yes	8 surveys

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:

2 - Poor	4 surveys
3 - Moderate	1 surveys
5 - Very good	3 surveys
6a - Excellent	3 surveys
6b - Excellent	3 surveys
No PTAL Present	36 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

1	**AC-03-C-01**	**BLOCKS OF FLATS**	**CHESHIRE WEST & CHESTER**

NEW CRANE STREET
CHESTER
Edge of Town Centre
Residential Zone
Site area: 0.30000001192092896 hect
Survey date: Friday 17/10/2008 Survey Type: Manual

2	**AN-03-C-02**	**BLOCK OF FLATS**	**ANTRIM**

SUMMERHILL AVENUE
BELFAST
KNOCK
Edge of Town
Residential Zone
Site area: 0.20000000298023224 hect
Survey date: Friday 28/11/2014 Survey Type: Manual

3	**BE-03-C-01**	**BLOCKS OF FLATS**	**BEXLEY**

CROOK LOG
BEXLEYHEATH
Edge of Town Centre
Residential Zone
Site area: 0.8410000205039978 hect
Survey date: Wednesday 19/09/2018 Survey Type: Manual

4	**BE-03-C-02**	**BLOCKS OF FLATS**	**BEXLEY**

CLYDESDALE WAY
BELVEDERE
Edge of Town
Industrial Zone
Site area: 3.0390000343322754 hect
Survey date: Wednesday 19/09/2018 Survey Type: Manual

5	**CA-03-C-01**	**BLOCKS OF FLATS**	**CAMBRIDGESHIRE**

TURING WAY
CAMBRIDGE
EDDINGTON
Edge of Town
Development Zone
Site area: 0.51 hect
Survey date: Wednesday 27/11/2024 Survey Type: Manual

6	**CA-03-C-02**	**BLOCKS OF FLATS**	**CAMBRIDGESHIRE**

TURING WAY
CAMBRIDGE
EDDINGTON
Edge of Town
Development Zone
Site area: 0.97 hect
Survey date: Thursday 21/11/2024 Survey Type: Manual

7	**CO-03-C-01**	**BLOCKS OF FLATS**	**CONWY**

MOSTYN BROADWAY
LLANDUDNO
Edge of Town Centre
Built-Up Zone
Site area: 0.44999998807907104 hect
Survey date: Survey Type: Manual

8	**CT-03-C-01**	**BLOCKS OF FLATS**	**CENTRAL BEDFORDSHIRE**

WING ROAD
LEIGHTON BUZZARD
LINSLADE

Edge of Town Centre
Residential Zone
Site area: 0.8500000238418579 hect
Survey date: Tuesday 15/05/2018
Survey Type: Manual

9 **CT-03-C-02** **BLOCKS OF FLATS** **CENTRAL BEDFORDSHIRE**
STANBRIDGE ROAD
LEIGHTON BUZZARD
Edge of Town Centre
Residential Zone
Site area: 0.6800000071525574 hect
Survey date: Tuesday 15/05/2018
Survey Type: Manual

10 **DC-03-C-01** **BLOCKS OF FLATS** **DORSET**
ABBOTSBURY ROAD
WEYMOUTH
Edge of Town Centre
Residential Zone
Site area: 0.18000000715255737 hect
Survey date: Tuesday 08/07/2008
Survey Type: Manual

11 **DL-03-C-02** **BLOCKS OF FLATS** **DUBLIN**
MAIN STREET
NEAR DUBLIN
RATHCOOLE
Edge of Town
Commercial Zone
Site area: 0.8500000238418579 hect
Survey date: Wednesday 14/02/2007
Survey Type: Manual

12 **DV-03-C-01** **BLOCK OF FLATS** **DEVON**
BONHAY ROAD
EXETER
Edge of Town Centre
Residential Zone
Site area: 0.25999999046325684 hect
Survey date:
Survey Type: Manual

13 **EG-03-C-02** **BLOCKS OF FLATS** **EALING**
A406 HANGER LANE
EALING
Edge of Town Centre
Residential Zone
Site area: 2.5 hect
Survey date: Tuesday 20/04/2004
Survey Type: Manual

14 **FS-03-C-01** **BLOCK OF FLATS** **FLINTSHIRE**
WREXHAM STREET
MOLD
Edge of Town Centre
Built-Up Zone
Site area: 0.20999999344348907 hect
Survey date:
Survey Type: Manual

15 **GR-03-C-01** **FLATS** **GREENWICH**
BENNETT PARK
BLACKHEATH
Edge of Town Centre
Built-Up Zone
Site area: 1.600000023841858 hect
Survey date:
Survey Type: Manual

16 **HF-03-C-03** **BLOCK OF FLATS** **HERTFORDSHIRE**

SHENLEY ROAD
BOREHAMWOOD
Edge of Town Centre
Built-Up Zone
Site area: 0.5 hect
Survey date: Thursday 14/11/2019 Survey Type: Manual

17 **HF-03-C-06** **BLOCKS OF FLATS** **HERTFORDSHIRE**
FERNDOWN ROAD
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Site area: 0.25999999046325684 hect
Survey date: Thursday 08/06/2023 Survey Type: Manual

18 **HF-03-C-08** **BLOCKS OF FLATS** **HERTFORDSHIRE**
HAYLING ROAD
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Site area: 0.1899999976158142 hect
Survey date: Tuesday 06/06/2023 Survey Type: Manual

19 **HI-03-C-02** **BLOCK OF FLATS** **HIGHLAND**
KING STREET
NAIRN
Edge of Town Centre
Residential Zone
Site area: 0.12999999523162842 hect
Survey date: Wednesday 19/04/2023 Survey Type: Manual

20 **HO-03-C-03** **BLOCKS OF FLATS** **HOUNSLOW**
COMMERCE ROAD
BRENTFORD
Edge of Town Centre
Development Zone
Site area: 1.190000057220459 hect
Survey date: Friday 18/11/2016 Survey Type: Manual

21 **HO-03-C-05** **BLOCK OF FLATS** **HOUNSLOW**
PARK LANE
HOUNSLOW
CRANFORD
Edge of Town
Residential Zone
Site area: 0.07999999821186066 hect
Survey date: Friday 06/03/2020 Survey Type: Manual

22 **IS-03-C-05** **BLOCK OF FLATS** **ISLINGTON**
LEVER STREET
FINSBURY
Edge of Town Centre
Built-Up Zone
Site area: 0.029999999329447746 hect
Survey date: Wednesday 29/06/2016 Survey Type: Manual

23 **IS-03-C-06** **BLOCK OF FLATS** **ISLINGTON**
CALEDONIAN ROAD
HOLLOWAY
Edge of Town Centre
Residential Zone

Site area: 0.05999999865889549 hect
Survey date: Survey Type: Manual

24 **IS-03-C-09** **BLOCK OF FLATS** **ISLINGTON**
CITY ROAD
ISLINGTON
Edge of Town Centre
Development Zone
Site area: 0.21 hect
Survey date: Tuesday 22/10/2024 Survey Type: Manual

25 **KD-03-C-01** **BLOCK OF FLATS** **KILDARE**
STATION ROAD
KILDARE
Edge of Town Centre
Residential Zone
Site area: 0.7599999904632568 hect
Survey date: Friday 22/05/2009 Survey Type: Manual

26 **KI-03-C-03** **BLOCK OF FLATS** **KINGSTON**
PORTSMOUTH ROAD
SURBITON
Edge of Town Centre
Residential Zone
Site area: 0.14000000059604645 hect
Survey date: Survey Type: Manual

27 **KN-03-C-01** **BLOCKS OF FLATS** **KENSINGTON AND CHELSEA**
UXBRIDGE STREET
NOTTING HILL
Edge of Town Centre
Residential Zone
Site area: 0.029999999329447746 hect
Survey date: Thursday 15/10/2009 Survey Type: Manual

28 **KN-03-C-03** **BLOCK OF FLATS** **KENSINGTON AND CHELSEA**
ALLEN STREET
KENSINGTON
Edge of Town Centre
Residential Zone
Site area: 0.5600000023841858 hect
Survey date: Friday 11/05/2012 Survey Type: Manual

29 **KS-03-C-01** **BLOCK OF FLATS** **KIRKLEES**
KINGS MILL LANE
HUDDERSFIELD
ASPLEY
Edge of Town Centre
Built-Up Zone
Site area: 0.20000000298023224 hect
Survey date: Wednesday 13/09/2006 Survey Type: Manual

30 **LS-03-C-01** **BLOCK OF FLATS** **LEEDS**
EAST STREET
LEEDS
CROWN POINT
Edge of Town Centre
Development Zone
Site area: 0.5 hect
Survey date: Thursday 13/11/2003 Survey Type: Manual

31 **LU-03-C-01** **BLOCKS OF FLATS** **LOUTH**
DONORE ROAD

DROGHEDA
Edge of Town Centre
Residential Zone
Site area: 0.4699999988079071 hect
Survey date: Thursday 12/09/2013 Survey Type: Manual

32	**LU-03-C-02**	**BLOCK OF FLATS**	**LOUTH**

NICHOLAS STREET
DUNDALK
Edge of Town Centre
Residential Zone
Site area: 0.2199999988079071 hect
Survey date: Survey Type: Manual

33	**LU-03-C-03**	**BLOCK OF FLATS**	**LOUTH**

NICHOLAS STREET
DUNDALK
Edge of Town Centre
Residential Zone
Site area: 0.1899999976158142 hect
Survey date: Survey Type: Manual

34	**MS-03-C-01**	**BLOCKS OF FLATS**	**MERSEYSIDE**

WAPPING ROAD
LIVERPOOL
WAPPING DOCK
Edge of Town Centre
Development Zone
Site area: 1 hect
Survey date: Thursday 16/10/2003 Survey Type: Manual

35	**NF-03-C-01**	**BLOCKS OF FLATS**	**NORFOLK**

PAGE STAIR LANE
KING'S LYNN
Edge of Town Centre
Built-Up Zone
Site area: 0.41999998688697815 hect
Survey date: Thursday 11/12/2014 Survey Type: Manual

36	**PO-03-C-01**	**BLOCKS OF FLATS**	**PORTSMOUTH**

CROSS STREET
PORTSMOUTH
Edge of Town Centre
Built-Up Zone
Site area: 0.5400000214576721 hect
Survey date: Tuesday 05/06/2018 Survey Type: Manual

37	**RI-03-C-01**	**FLATS**	**EAST RIDING OF YORKSHIRE**

465 PRIORY ROAD
HULL
Edge of Town
Residential Zone
Site area: 0.7200000286102295 hect
Survey date: Tuesday 13/05/2014 Survey Type: Manual

38	**SA-03-C-01**	**BLOCK OF FLATS**	**SOUTH AYRSHIRE**

RACECOURSE ROAD
AYR
Edge of Town Centre
Residential Zone
Site area: 1.5800000429153442 hect
Survey date: Tuesday 16/09/2014 Survey Type: Manual

39	**SC-03-C-01**	**FLATS**	**SURREY**

HEATHCOTE ROAD
CAMBERLEY
Edge of Town Centre
Residential Zone
Site area: 1.25 hect
Survey date:
Survey Type: Manual

40	**SF-03-C-01**	**BLOCKS OF FLATS**	**SUFFOLK**

STATION HILL
BURY ST EDMUNDS
Edge of Town Centre
Built-Up Zone
Site area: 0.6000000238418579 hect
Survey date: Thursday 18/12/2014
Survey Type: Manual

41	**SK-03-C-01**	**BLOCK OF FLATS**	**SOUTHWARK**

PARK STREET
SOUTHWARK
Edge of Town Centre
Built-Up Zone
Site area: 0.20000000298023224 hect
Survey date: Friday 19/09/2014
Survey Type: Manual

42	**SK-03-C-02**	**BLOCK OF FLATS**	**SOUTHWARK**

LAMB WALK
BERMONDSEY
Edge of Town Centre
Built-Up Zone
Site area: 0.10000000149011612 hect
Survey date: Thursday 23/04/2015
Survey Type: Manual

43	**SR-03-C-02**	**FLATS**	**STIRLING**

ROSEBERRY TERRACE
STIRLING
Edge of Town Centre
Residential Zone
Site area: 0.3400000035762787 hect
Survey date: Wednesday 18/06/2014
Survey Type: Manual

44	**SS-03-C-01**	**FLATS**	**SOUTHEND ON SEA**

WESTCLIFF PARADE
SOUTHEND-ON-SEA
WESTCLIFF
Edge of Town Centre
Residential Zone
Site area: 0.07000000029802322 hect
Survey date: Tuesday 22/10/2013
Survey Type: Manual

45	**SS-03-C-02**	**BLOCK OF FLATS**	**SOUTHEND ON SEA**

WESTCLIFF PARADE
SOUTHEND-ON-SEA
WESTCLIFF
Edge of Town Centre
Residential Zone
Site area: 0.3700000047683716 hect
Survey date: Tuesday 22/10/2013
Survey Type: Manual

46	**TW-03-C-01**	**BLOCKS OF FLATS**	**TYNE & WEAR**

CAULDWELL AVENUE
WHITLEY BAY
MONKESEATON
Edge of Town

Residential Zone
Site area: 0.4000000059604645 hect
Survey date: Friday 15/10/2021 Survey Type: Manual

47 **WF-03-C-01** **BLOCKS OF FLATS** **WALTHAM FOREST**
ERSKINE ROAD
WALTHAMSTOW
Edge of Town Centre
Residential Zone
Site area: 0.4000000059604645 hect
Survey date: Tuesday 05/11/2019 Survey Type: Manual

48 **WH-03-C-01** **BLOCKS OF FLATS** **WANDSWORTH**
AMIES STREET
CLAPHAM JUNCTION
Edge of Town Centre
Residential Zone
Site area: 0.49000000953674316 hect
Survey date: Wednesday 09/05/2012 Survey Type: Manual

49 **WM-03-C-04** **BLOCKS OF FLATS** **WEST MIDLANDS**
GILLQUART WAY
COVENTRY
PARKSIDE
Edge of Town Centre
Residential Zone
Site area: 0.6000000238418579 hect
Survey date: Friday 11/11/2016 Survey Type: Manual

50 **WX-03-C-01** **BLOCKS OF FLATS** **WEXFORD**
UPPER GEORGE'S STREET
WEXFORD
Edge of Town Centre
Residential Zone
Site area: 0.4099999964237213 hect
Survey date: Thursday 20/04/2023 Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
BY-03-C-01|08-09-2020	08-09-2020	COVID
MS-03-C-04|12-04-2021	12-04-2021	COVID
SF-03-C-05|23-06-2021	23-06-2021	COVID
SR-03-C-03|01-09-2020	01-09-2020	COVID
WF-03-C-02|25-05-2021	25-05-2021	COVID
WF-03-C-04|25-05-2021	25-05-2021	COVID
WF-03-C-05|25-05-2021	25-05-2021	COVID

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Total Vehicles

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**1**	**190**	**0.011**	**0.011**	**0.022**
07:00-08:00	**50**	**71**	**0.027**	**0.119**	**0.146**
08:00-09:00	**50**	**71**	**0.044**	**0.152**	**0.196**
09:00-10:00	**50**	**71**	**0.058**	**0.076**	**0.134**
10:00-11:00	**50**	**71**	**0.059**	**0.073**	**0.132**
11:00-12:00	**50**	**71**	**0.053**	**0.071**	**0.124**
12:00-13:00	**50**	**71**	**0.074**	**0.068**	**0.142**
13:00-14:00	**50**	**71**	**0.066**	**0.075**	**0.141**
14:00-15:00	**50**	**71**	**0.059**	**0.064**	**0.123**
15:00-16:00	**50**	**71**	**0.080**	**0.061**	**0.141**
16:00-17:00	**50**	**71**	**0.094**	**0.063**	**0.157**
17:00-18:00	**50**	**71**	**0.137**	**0.082**	**0.219**
18:00-19:00	**50**	**71**	**0.121**	**0.067**	**0.188**
19:00-20:00	**10**	**101**	**0.087**	**0.056**	**0.143**
20:00-21:00	**10**	**101**	**0.078**	**0.050**	**0.128**
21:00-22:00	**1**	**190**	**0.011**	**0.016**	**0.027**
22:00-23:00					
23:00-00:00					
Total Rates:			**1.059**	**1.104**	**2.163**

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:	6 - 832 (units: DWELLS)
Survey date date range:	16/10/2003 - 27/11/2024
Number of weekdays (Monday-Friday):	50
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	12
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 CALCULATION SELECTION PARAMETERS:

Land Use: 04 - EDUCATION

Category: D - NURSERY

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	**GREATER LONDON**		
	KI	KINGSTON	1 day
	RB	REDBRIDGE	1 day
02	**SOUTH EAST**		
	WS	WEST SUSSEX	1 day
03	**SOUTH WEST**		
	BR	BRISTOL CITY	1 day
	SD	SWINDON	1 day
05	**EAST MIDLANDS**		
	DY	DERBY	1 day
	LN	LINCOLNSHIRE	1 day
	NN	NORTH NORTHAMPTONSHIRE	1 day
06	**WEST MIDLANDS**		
	WK	WARWICKSHIRE	1 day
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	DR	DONCASTER	1 day
	NY	NORTH YORKSHIRE	2 days
09	**NORTH**		
	TV	TEES VALLEY	1 day
	TW	TYNE & WEAR	2 days
10	**WALES**		
	MM	MONMOUTHSHIRE	1 day
11	**SCOTLAND**		
	DU	DUNDEE CITY	1 day

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:	GFA
Actual Range:	149 to 1250 (units:sqm)
Range Selected by User:	149 to 1250 (units:sqm)
Parking Spaces Range:	4 - 45

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 06/09/23

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:

Friday	5 days
Monday	2 days
Thursday	2 days
Tuesday	6 days
Wednesday	2 days

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

Selected survey types:

Manual count	17
Direction ATC Count	0

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	6 days
Edge of Town Centre	2 days
Suburban Area	9 days

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:

Commercial Zone	1 days
Industrial Zone	1 days
Residential Zone	15 days

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 Vehicle Counts:

Servicing vehicles Included	7 days
Servicing vehicles Unknown	10 days

Secondary Filtering Selection:

Use Class:

E(f)	17 surveys

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:

20 - 8080

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	2 surveys
15,001 to 20,000	4 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	8 surveys
5,001 to 10,000	1 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	5 surveys
25,001 to 50,000	2 surveys
250,001 to 500,000	4 surveys
50,001 to 75,000	1 surveys
500,001 or More	2 surveys
75,001 to 100,000	2 surveys

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 surveys
0.6 to 1.0	7 surveys
1.1 to 1.5	8 surveys
2.1 to 2.5	1 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	17 surveys

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:

1b - Very poor	1 surveys
No PTAL Present	16 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

1	**BR-04-D-01**	**NURSERY**	**BRISTOL CITY**

BURCHELLS GREEN ROAD
BRISTOL
KINGSWOOD
Suburban Area
Residential Zone
Gross floor area: 718 sqm
Survey date: Tuesday 02/05/2023 Survey Type: Manual

2	**DR-04-D-01**	**NURSERY**	**DONCASTER**

BAWTRY ROAD
DONCASTER
Suburban Area
Residential Zone
Gross floor area: 1250 sqm
Survey date: Friday 13/05/2022 Survey Type: Manual

3	**DU-04-D-01**	**NURSERY**	**DUNDEE CITY**

LONGTOWN TERRACE
DUNDEE
Suburban Area
Residential Zone
Gross floor area: 325 sqm
Survey date: Survey Type: Manual

4	**DY-04-D-02**	**NURSERY**	**DERBY**

MAXWELL AVENUE
DERBY
DARLEY ABBEY
Edge of Town
Residential Zone
Gross floor area: 415 sqm
Survey date: Thursday 12/07/2018 Survey Type: Manual

5	**KI-04-D-01**	**NURSERY**	**KINGSTON**

WINDMILL LANE
SURBITON
LONG DITTON
Suburban Area
Residential Zone
Gross floor area: 149 sqm
Survey date: Wednesday 22/06/2016 Survey Type: Manual

6	**LN-04-D-01**	**NURSERY**	**LINCOLNSHIRE**

NEWARK ROAD
LINCOLN
SWALLOW BECK
Suburban Area
Residential Zone
Gross floor area: 600 sqm
Survey date: Tuesday 31/10/2017 Survey Type: Manual

7	**MM-04-D-01**	**NURSERY**	**MONMOUTHSHIRE**

SPOONER CLOSE
NEWPORT
COEDKERNEW
Edge of Town
Commercial Zone
Gross floor area: 860 sqm
Survey date: Friday 27/09/2019 Survey Type: Manual

8	**NN-04-D-01**	**NURSERY**	**NORTH NORTHAMPTONSHIRE**

ROCKINGHAM ROAD

KETTERING
Suburban Area
Residential Zone
Gross floor area: 850 sqm
Survey date: Tuesday 07/06/2022 Survey Type: Manual

9 **NY-04-D-02** **NURSERY** **NORTH YORKSHIRE**
OAKNEY WOOD ROAD
SELBY
Edge of Town
Industrial Zone
Gross floor area: 450 sqm
Survey date: Tuesday 10/05/2022 Survey Type: Manual

10 **NY-04-D-03** **NURSERY** **NORTH YORKSHIRE**
WETHERBY ROAD
KNARESBOROUGH
Suburban Area
Residential Zone
Gross floor area: 300 sqm
Survey date: Survey Type: Manual

11 **RB-04-D-02** **NURSERY** **REDBRIDGE**
RAY LODGE ROAD
WOODFORD GREEN
Edge of Town
Residential Zone
Gross floor area: 666 sqm
Survey date: Wednesday 22/11/2017 Survey Type: Manual

12 **SD-04-D-01** **NURSERY** **SWINDON**
SHREWSBURY ROAD
SWINDON
WALCOT
Suburban Area
Residential Zone
Gross floor area: 500 sqm
Survey date: Thursday 22/09/2016 Survey Type: Manual

13 **TV-04-D-01** **NURSERY** **TEES VALLEY**
COTSWOLD DRIVE
REDCAR
Edge of Town
Residential Zone
Gross floor area: 150 sqm
Survey date: Friday 19/05/2017 Survey Type: Manual

14 **TW-04-D-03** **NURSERY** **TYNE & WEAR**
JUBILEE ROAD
NEWCASTLE UPON TYNE
GOSFORTH
Suburban Area
Residential Zone
Gross floor area: 725 sqm
Survey date: Tuesday 21/05/2019 Survey Type: Manual

15 **TW-04-D-05** **NURSERY** **TYNE & WEAR**
COLBY COURT
NEWCASTLE UPON TYNE
ELSWICK
Edge of Town Centre
Residential Zone
Gross floor area: 750 sqm

Survey date: Tuesday 05/09/2023 Survey Type: Manual

16 **WK-04-D-01** **NURSERY** **WARWICKSHIRE**
THE RIDGEWAY
STRATFORD UPON AVON
Edge of Town
Residential Zone
Gross floor area: 340 sqm
Survey date: Friday 29/06/2018 Survey Type: Manual

17 **WS-04-D-01** **NURSERY** **WEST SUSSEX**
FARNCOMBE ROAD
WORTHING
Edge of Town Centre
Residential Zone
Gross floor area: 300 sqm
Survey date: Friday 13/05/2022 Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
MG-04-D-01|12-10-2021	12-10-2021	COVID
RO-04-D-03|14-09-2021	14-09-2021	COVID

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

Total Vehicles

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
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	**1**	**450**	**0.444**	**0.000**	**0.444**
07:00-08:00	**17**	**550**	**2.246**	**1.016**	**3.262**
08:00-09:00	**17**	**550**	**3.049**	**2.396**	**5.445**
09:00-10:00	**17**	**550**	**1.102**	**0.995**	**2.097**
10:00-11:00	**17**	**550**	**0.524**	**0.332**	**0.856**
11:00-12:00	**17**	**550**	**0.449**	**0.353**	**0.802**
12:00-13:00	**17**	**550**	**1.273**	**1.369**	**2.642**
13:00-14:00	**17**	**550**	**0.834**	**1.337**	**2.171**
14:00-15:00	**17**	**550**	**0.364**	**0.364**	**0.728**
15:00-16:00	**17**	**550**	**0.824**	**0.963**	**1.787**
16:00-17:00	**17**	**550**	**1.252**	**1.519**	**2.771**
17:00-18:00	**17**	**550**	**2.011**	**2.749**	**4.760**
18:00-19:00	**16**	**575**	**0.109**	**0.544**	**0.653**
19:00-20:00	**1**	**450**	**0.222**	**2.222**	**2.444**
20:00-21:00	**1**	**450**	**0.000**	**0.000**	**0.000**
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**14.703**	**16.159**	**30.862**

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.

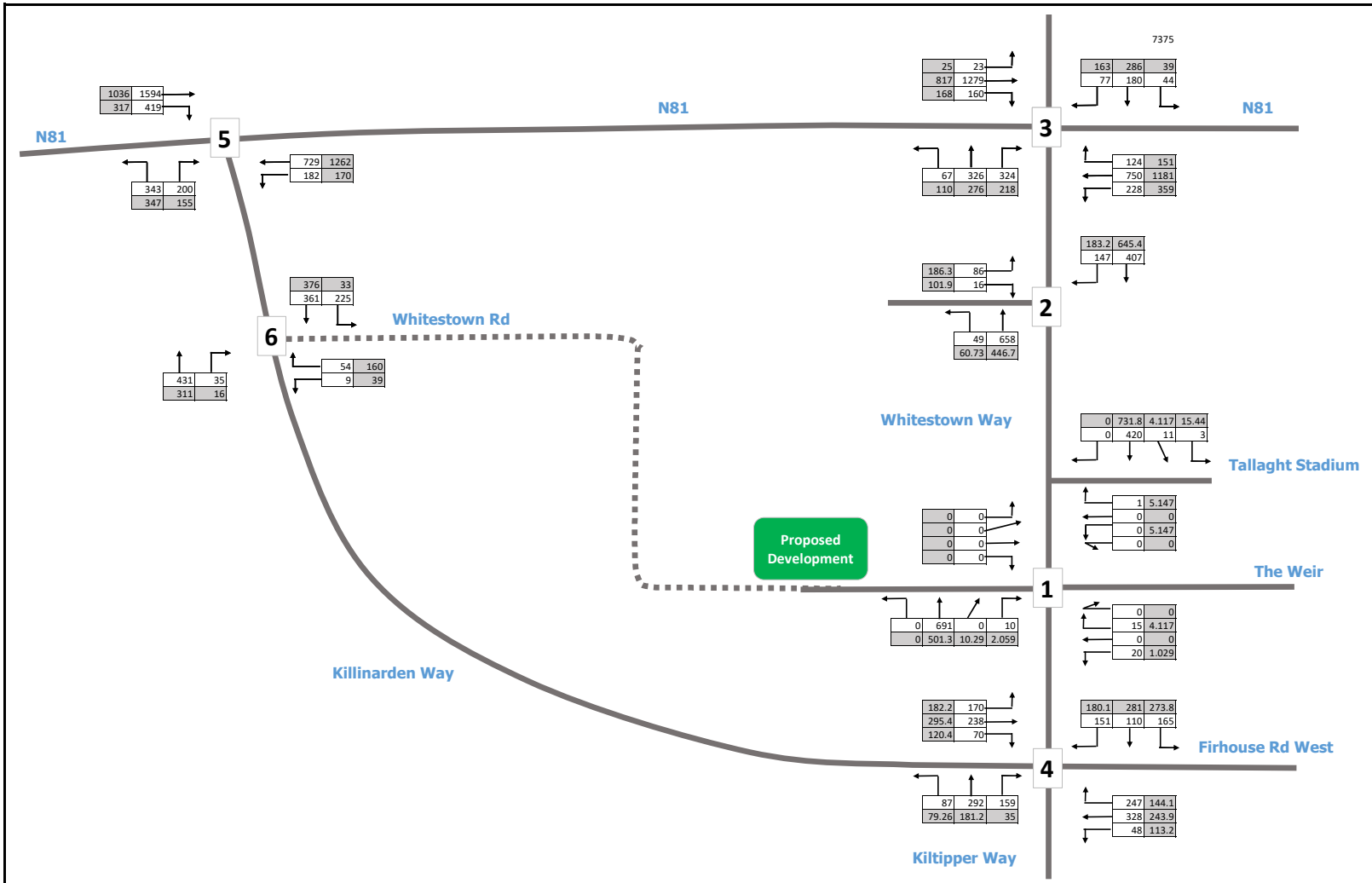
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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:	149 - 1250 (units: sqm)
Survey date date range:	22/06/2016 - 05/09/2023
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

Appendix B : Traffic Flow Diagrams



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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2026 Base Flows

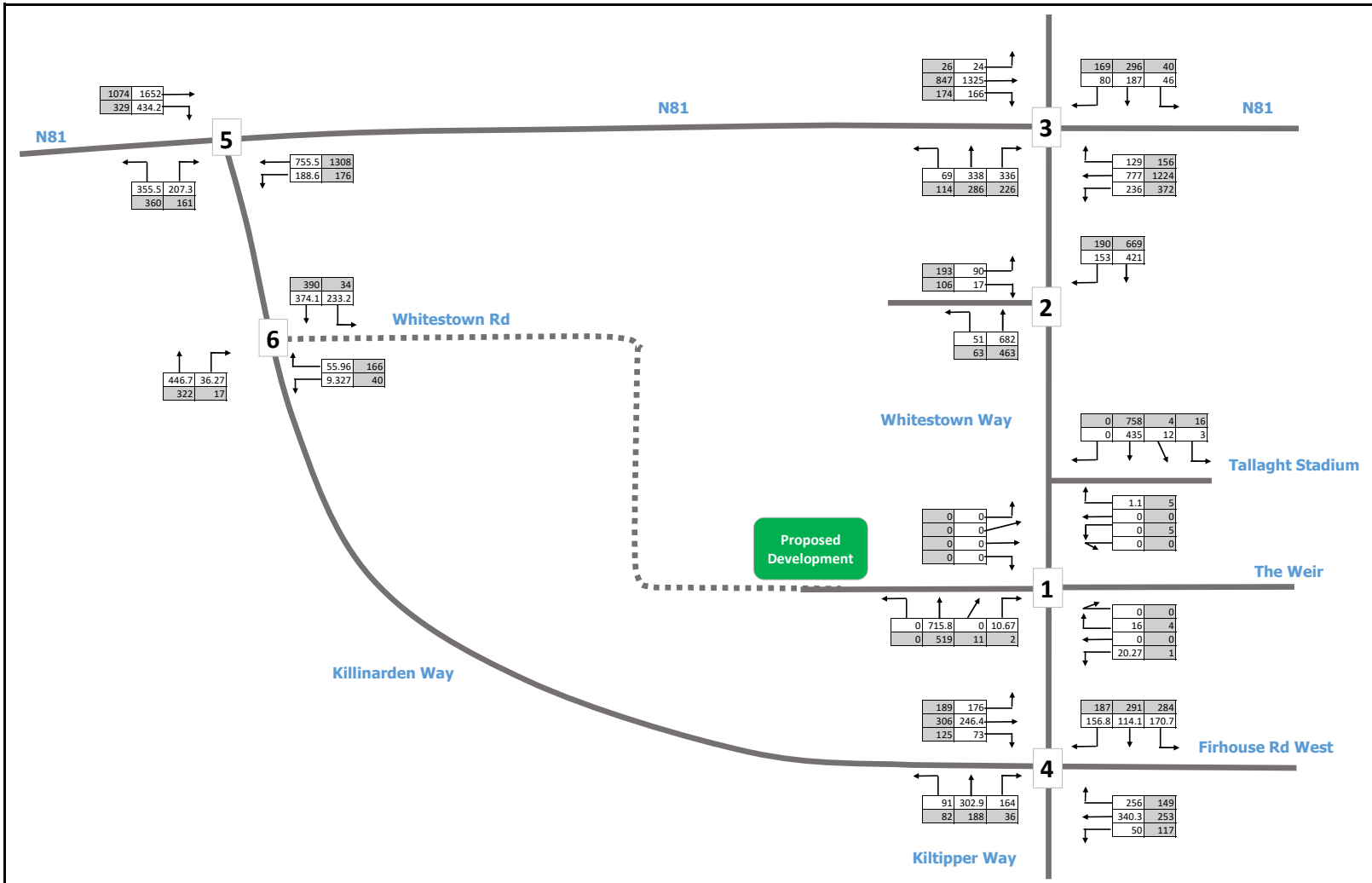
Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 1

Rev: -



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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2028 Base Flows

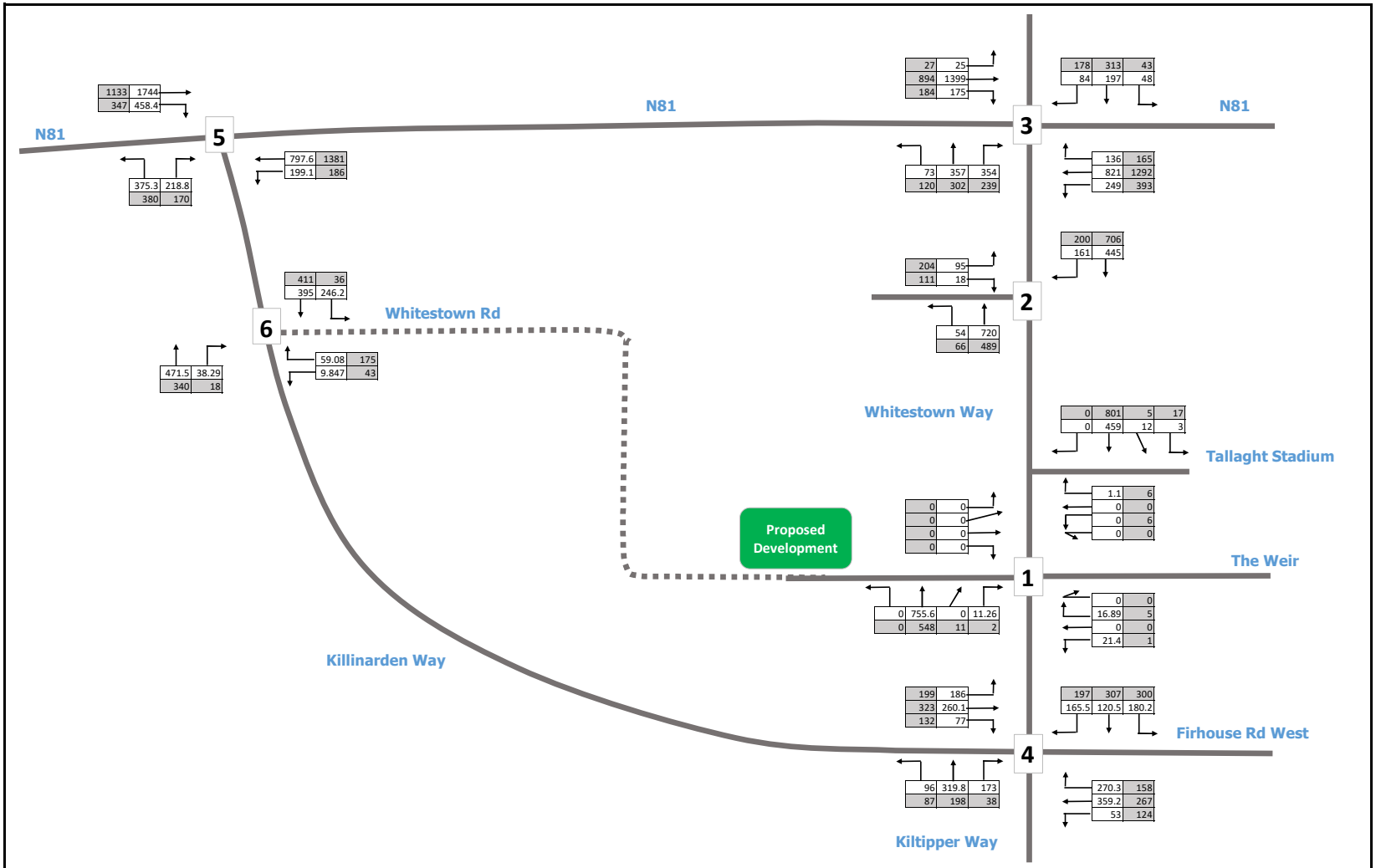
Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 2

Rev: -



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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2033 Base Flows

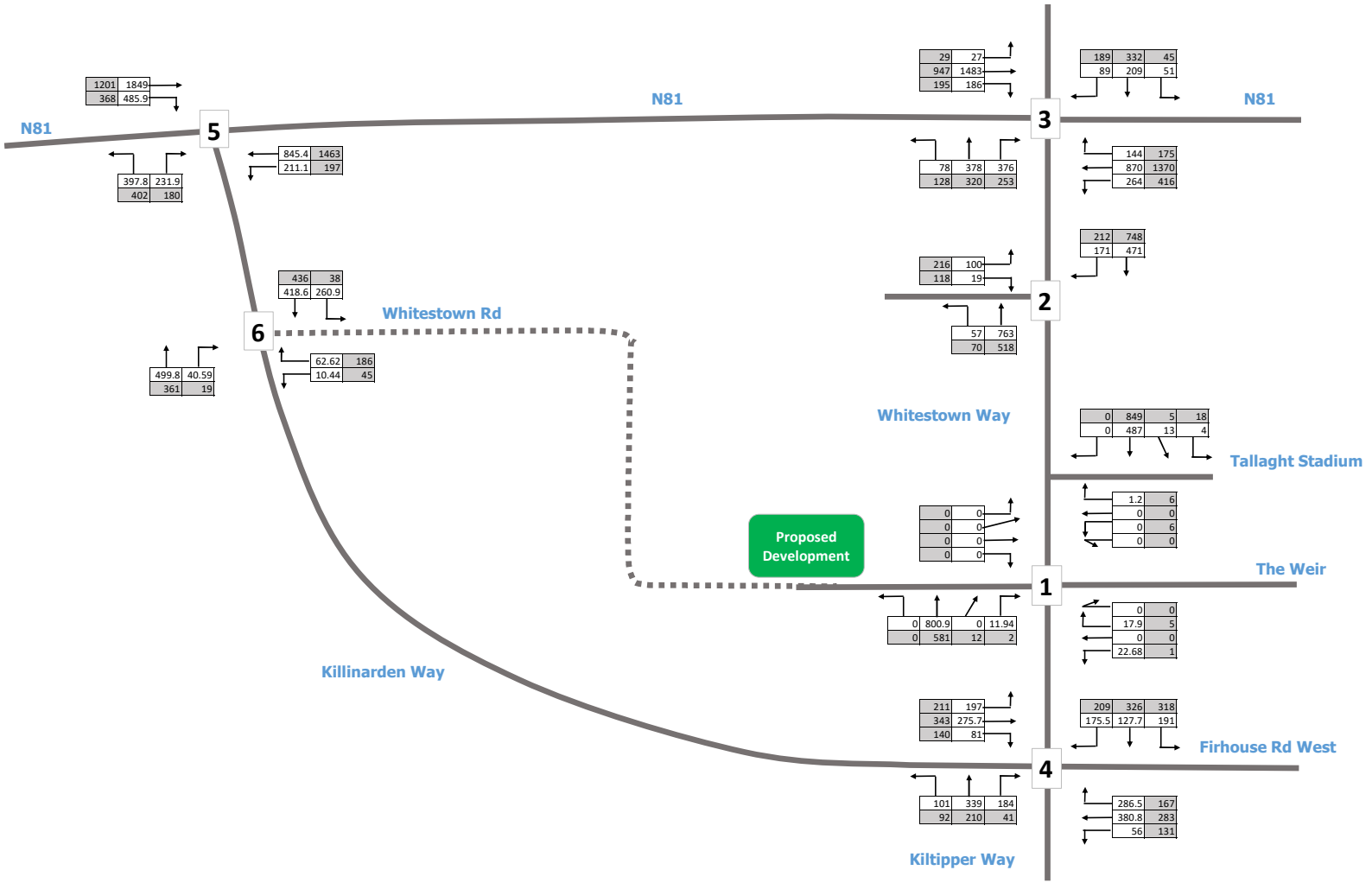
Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 3

Rev: -



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DRG. Title :
Network Traffic Flows - Vehicles
2043 Base Flows

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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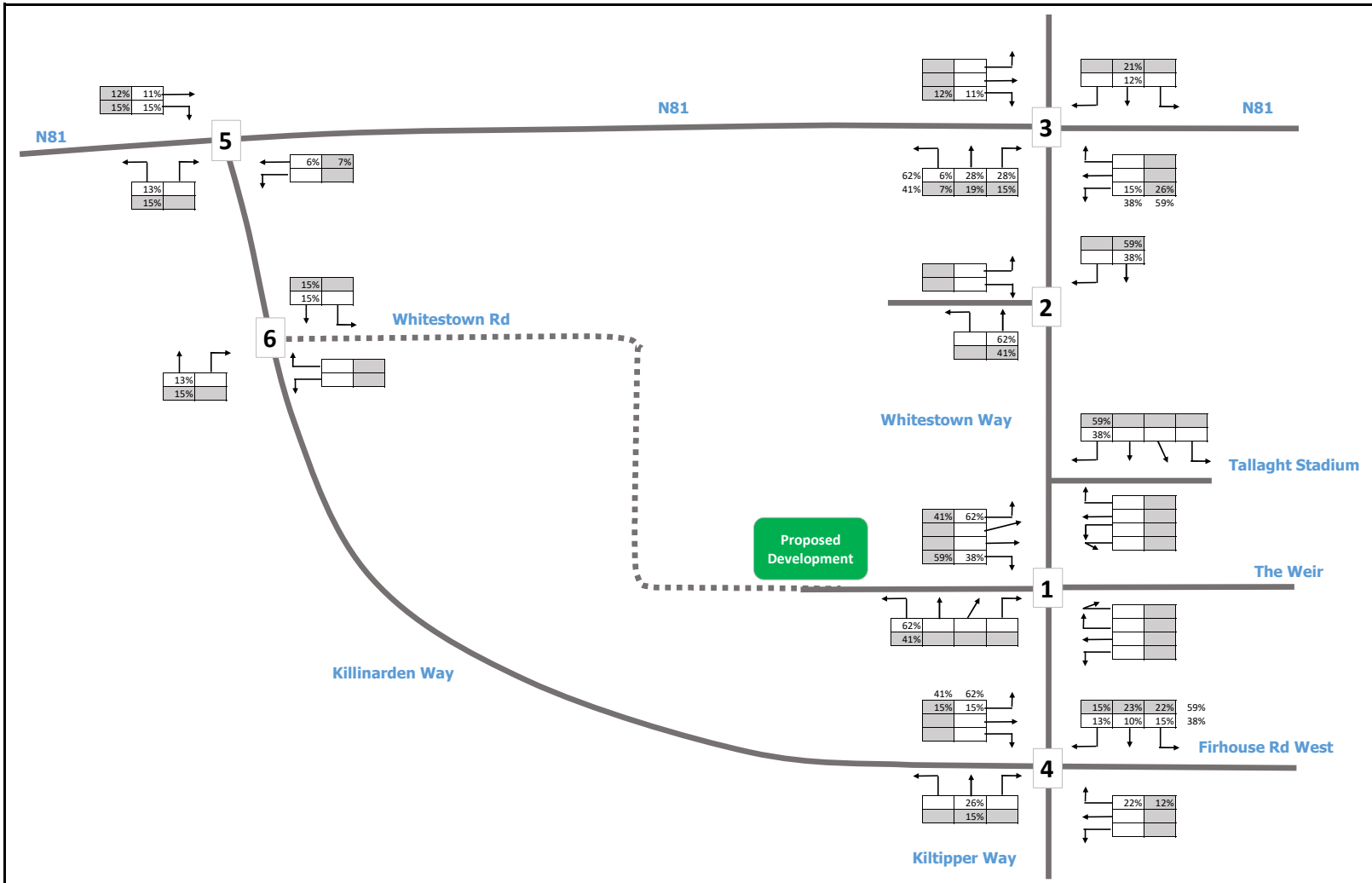
Rev: -



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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
Trip Distribution

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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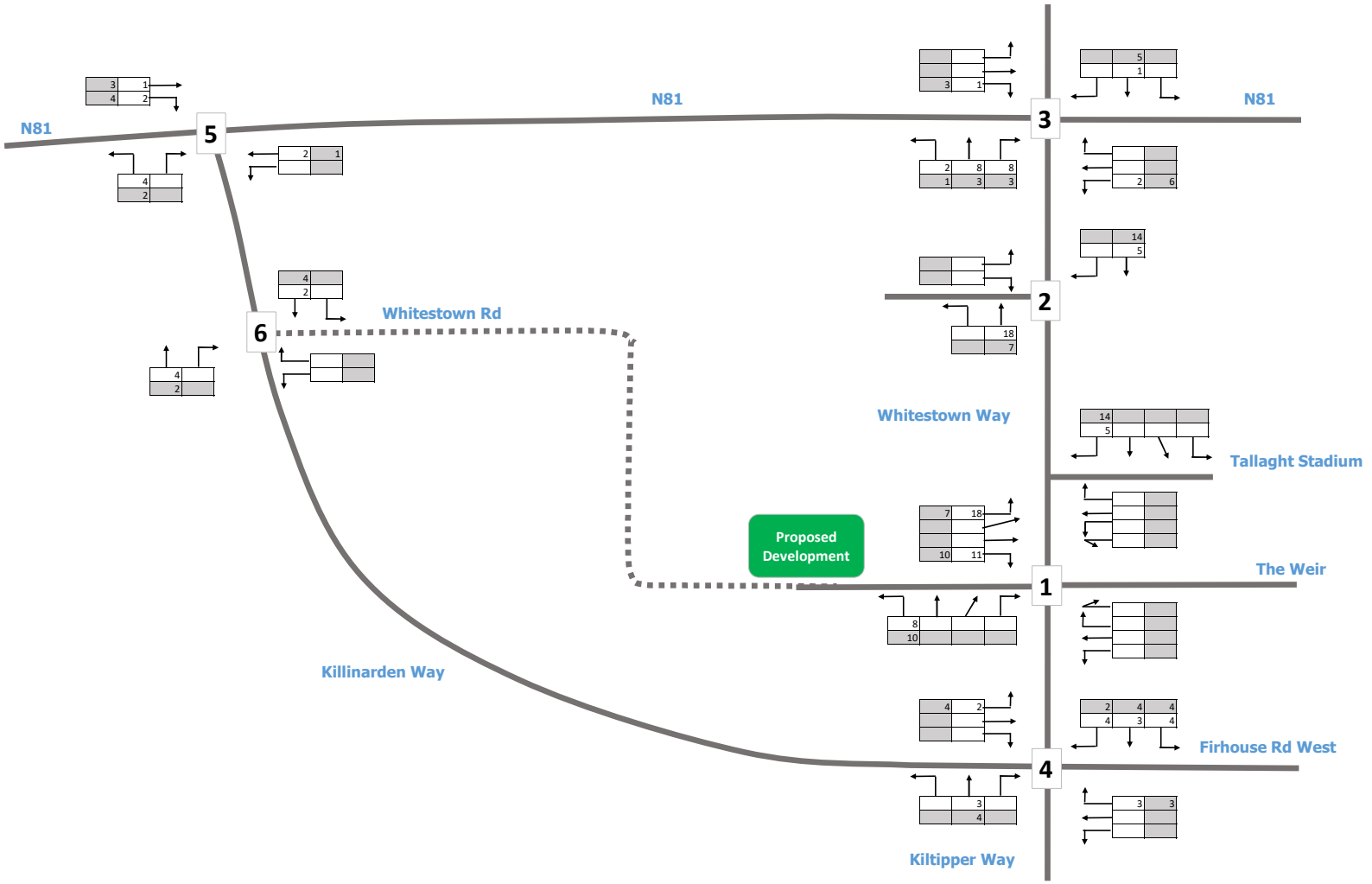

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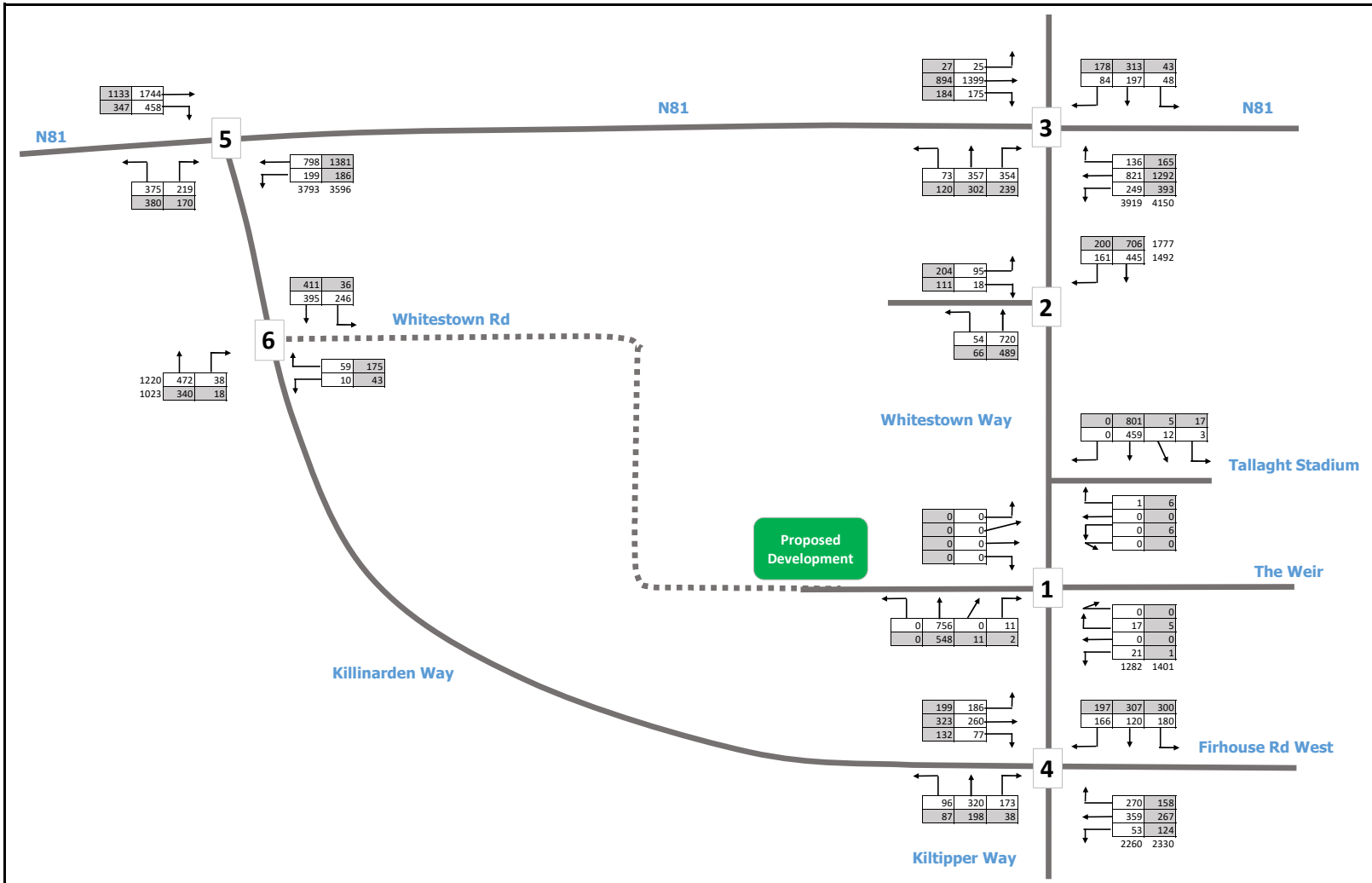

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Project : Proposed Development at Whitestown Way Tallaght

DRG. Title : Network Traffic Flows - Vehicles
Do-Nothing 2033

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

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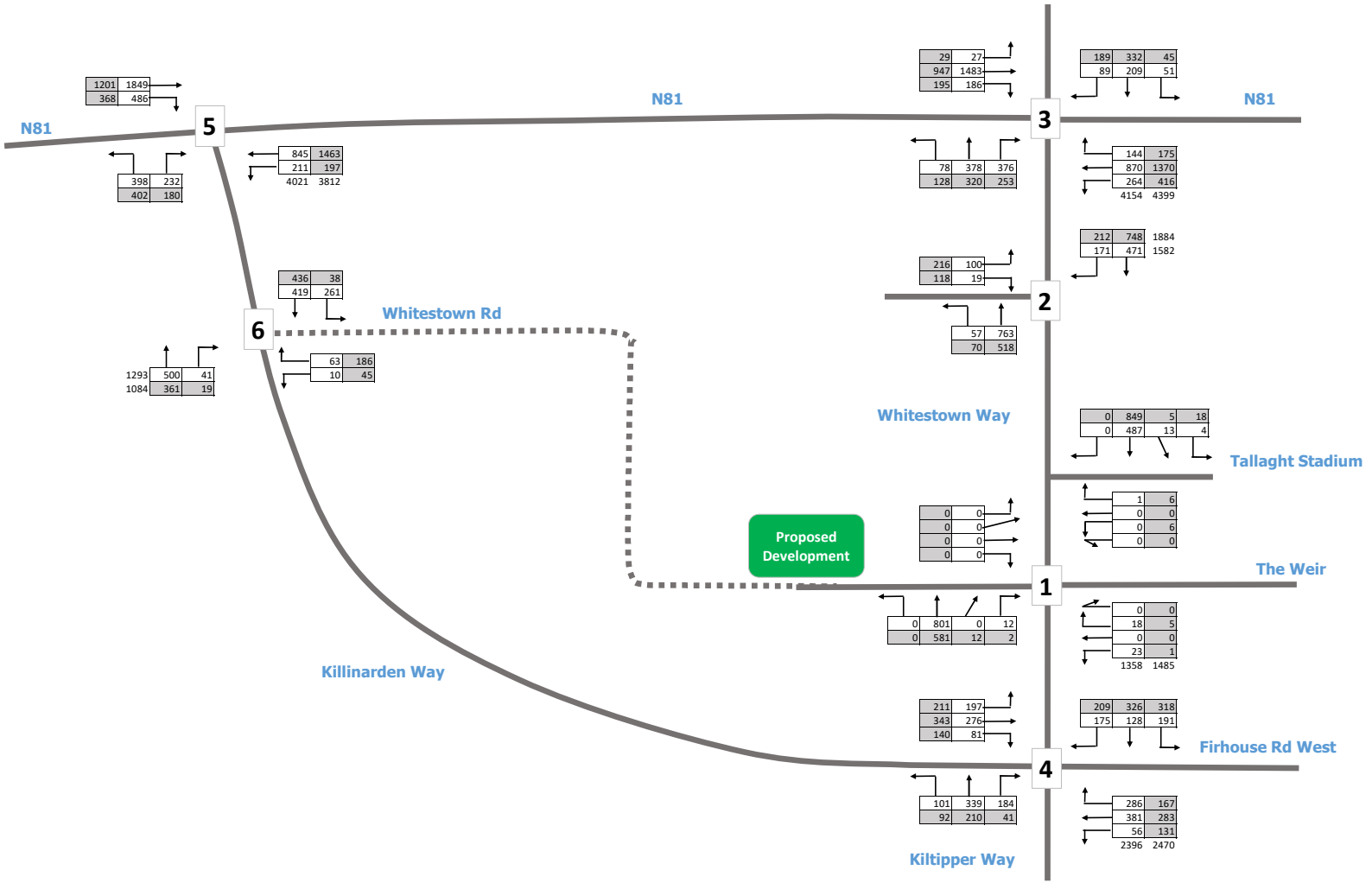

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DRG. Title :
Network Traffic Flows - Vehicles
Do-Nothing 2043

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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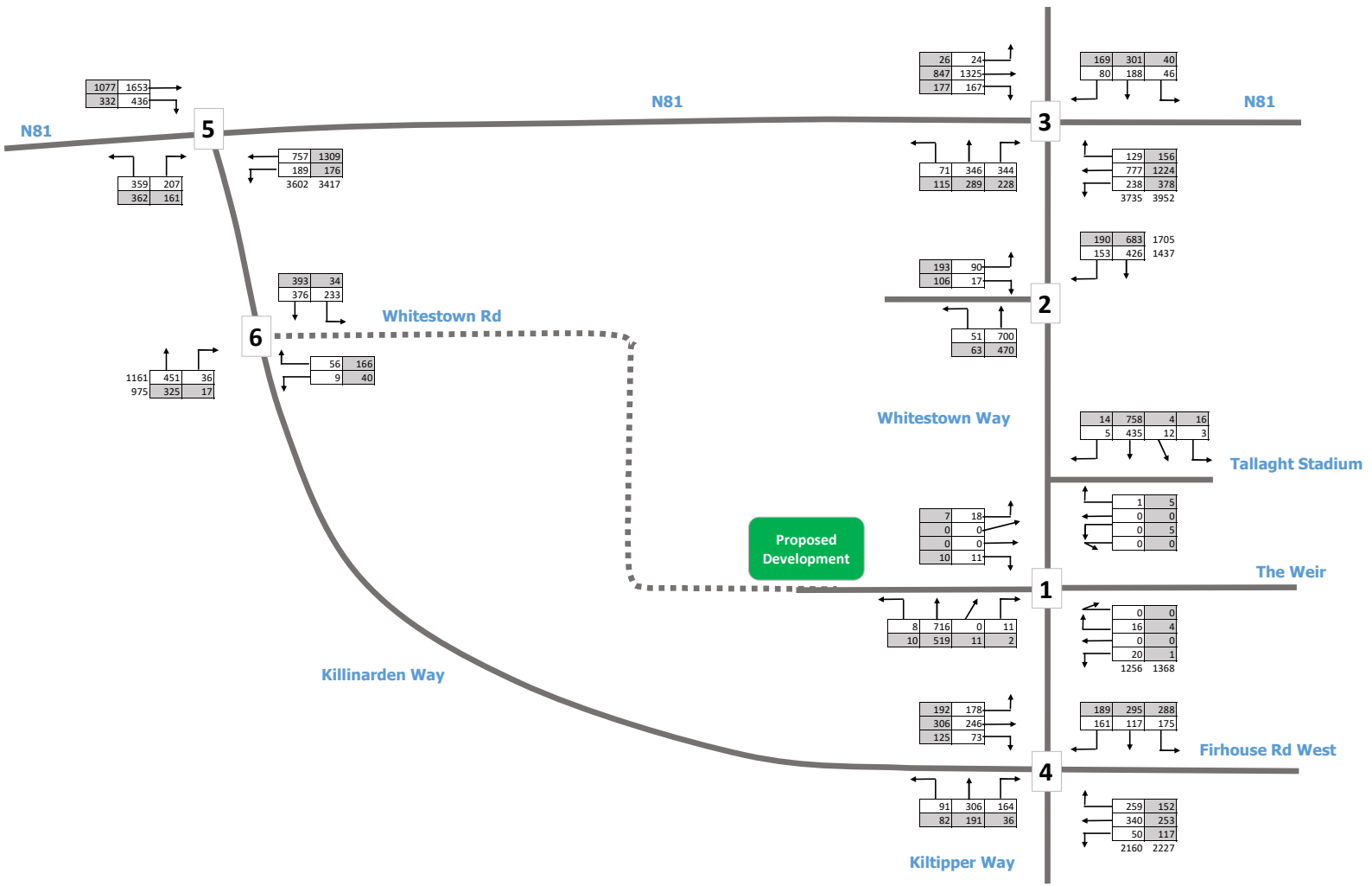
Rev: -



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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
Do-Something 2028

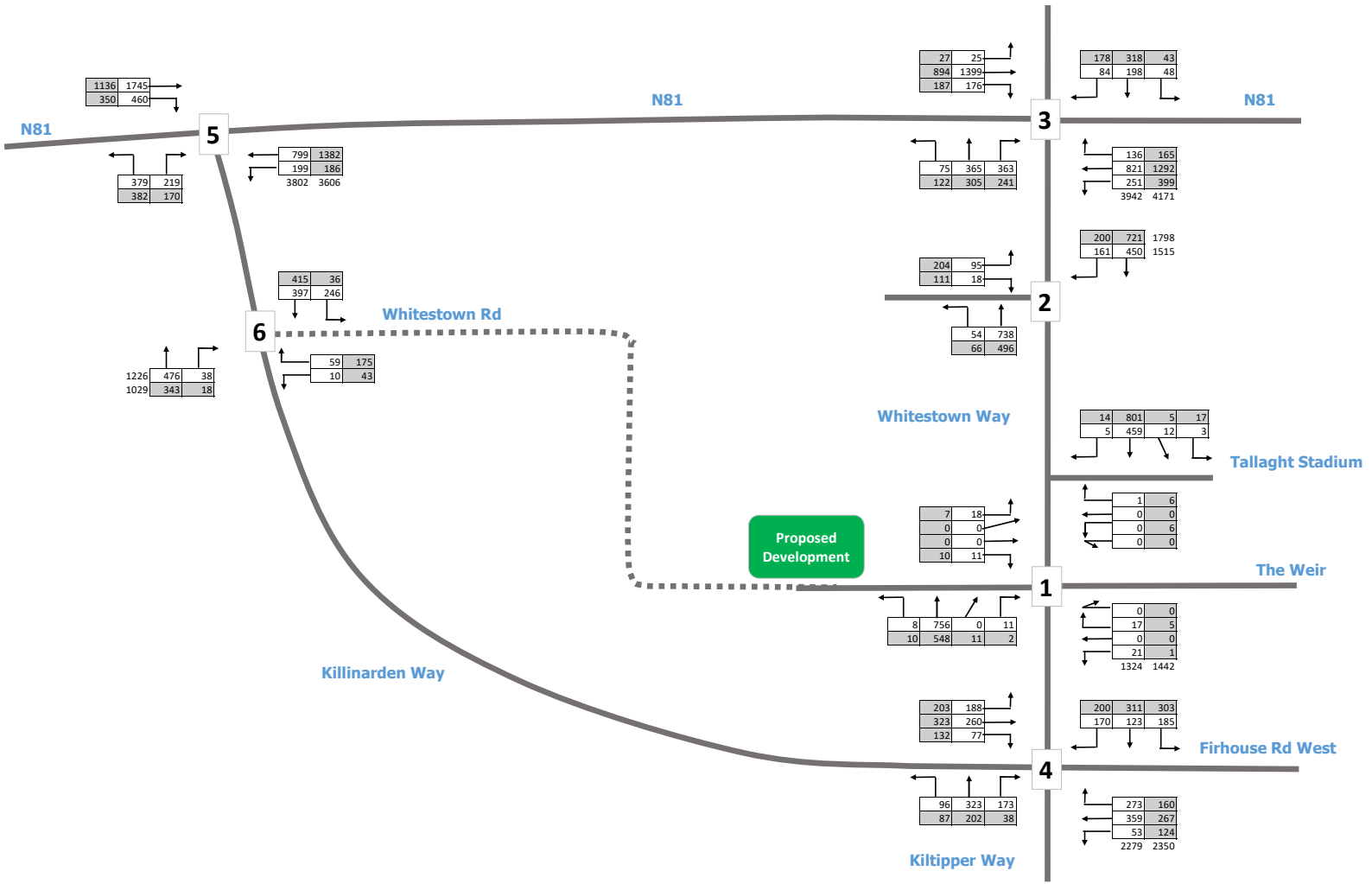
Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 10

Rev: -



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DRG. Title :
Network Traffic Flows - Vehicles
Do-Something 2033

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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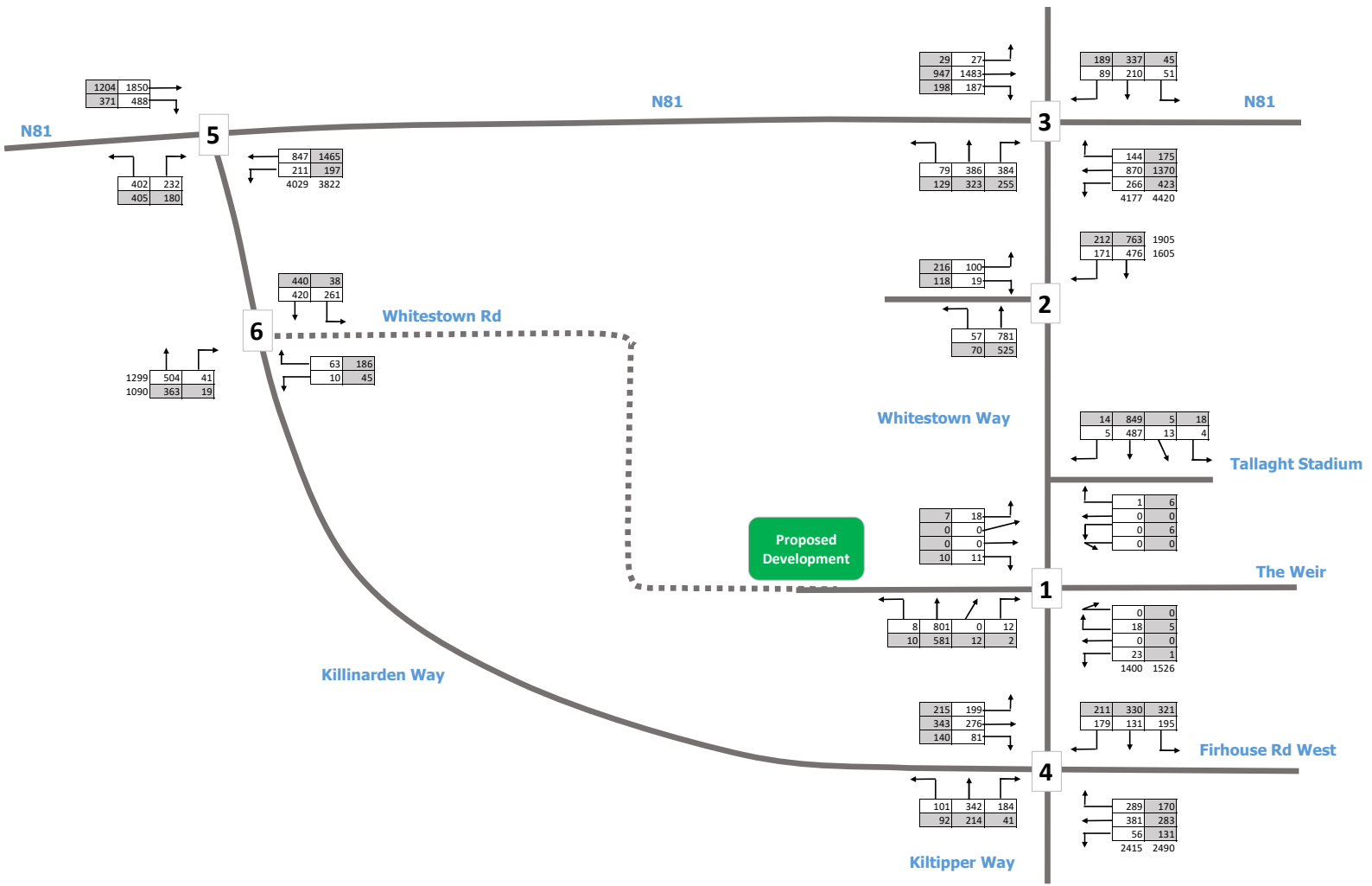
Rev: -



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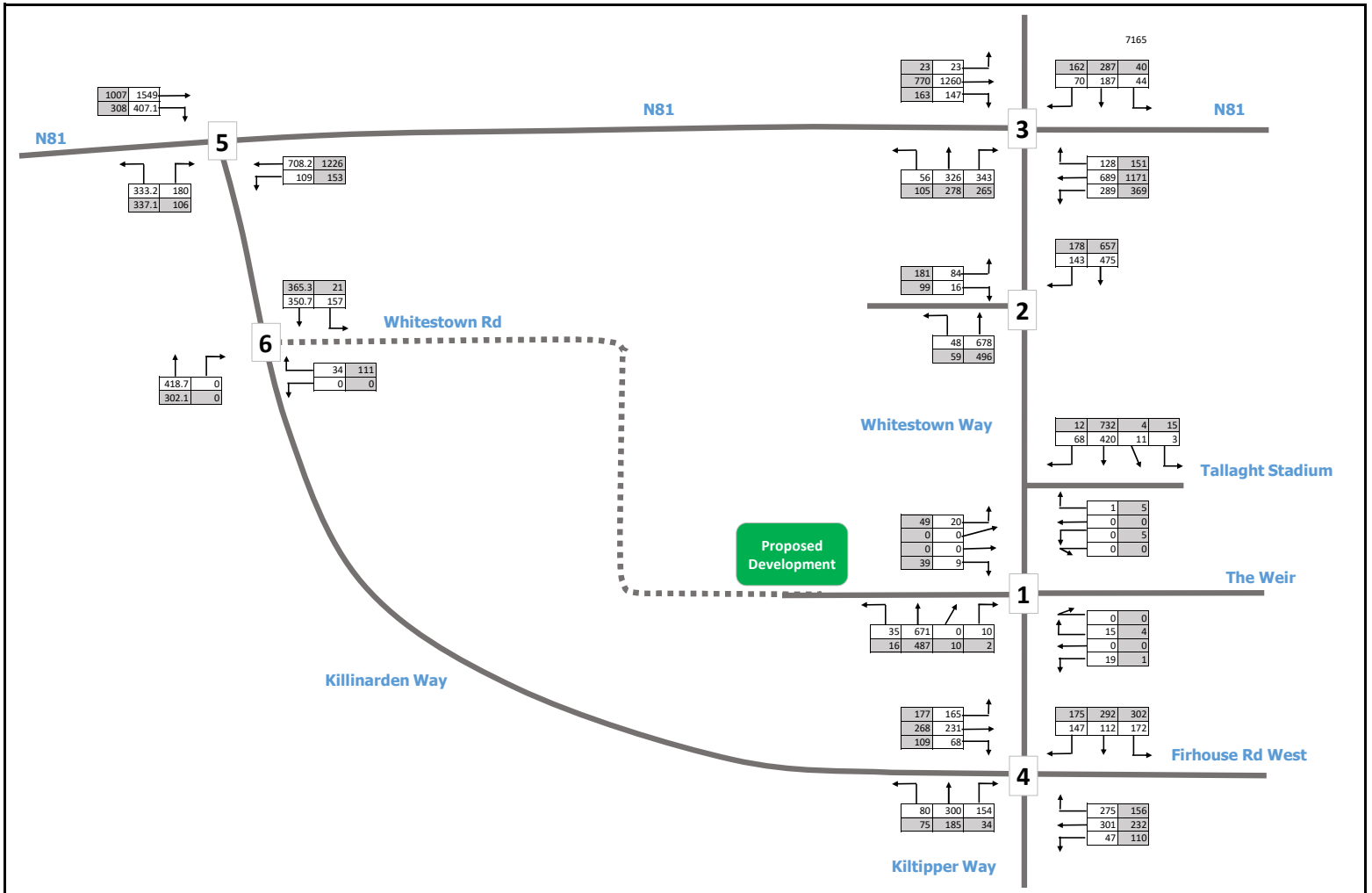
Appendix B : Traffic Flow Diagrams (Sensitivity Analysis)



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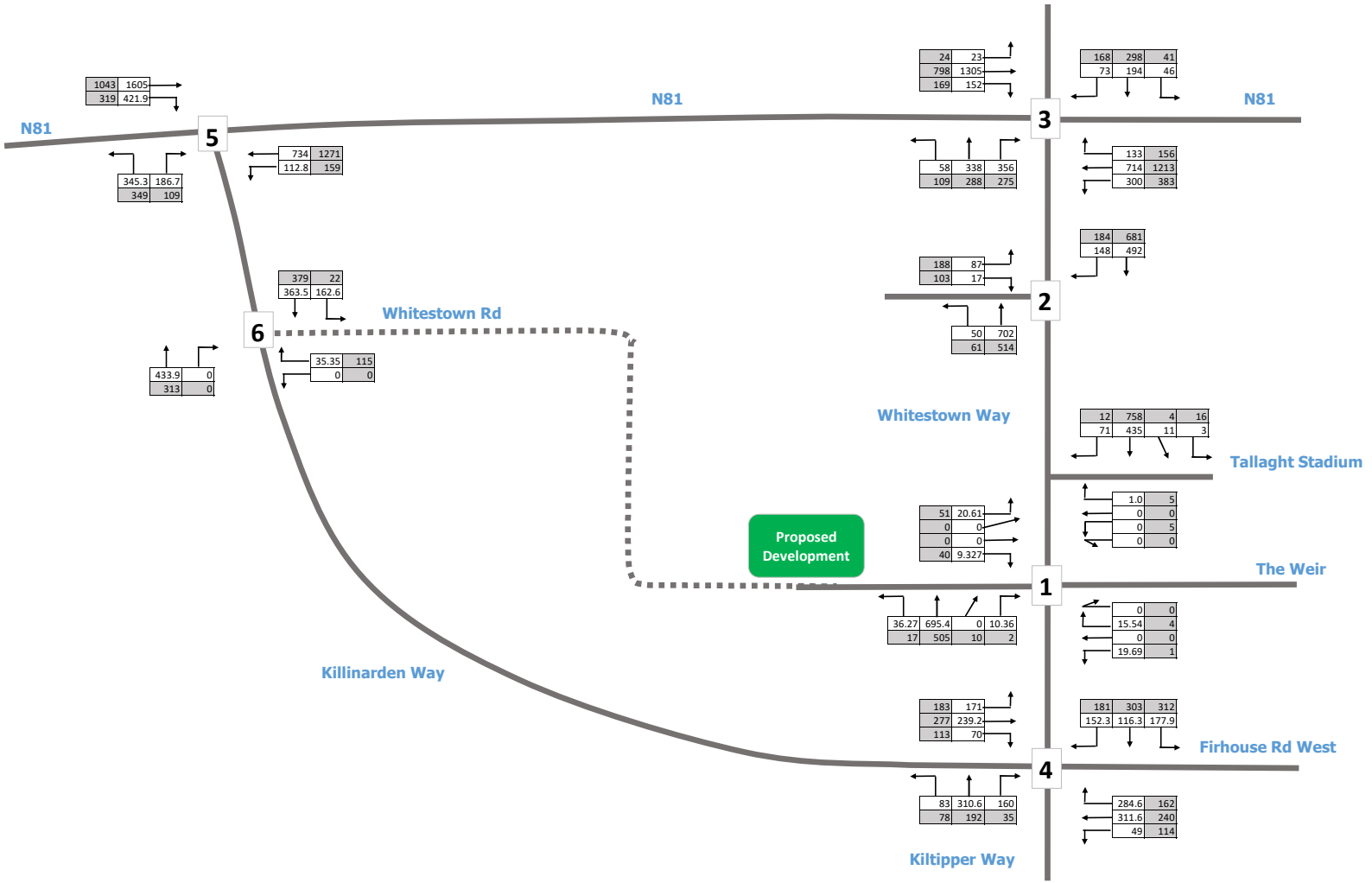

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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2028 Base Flows

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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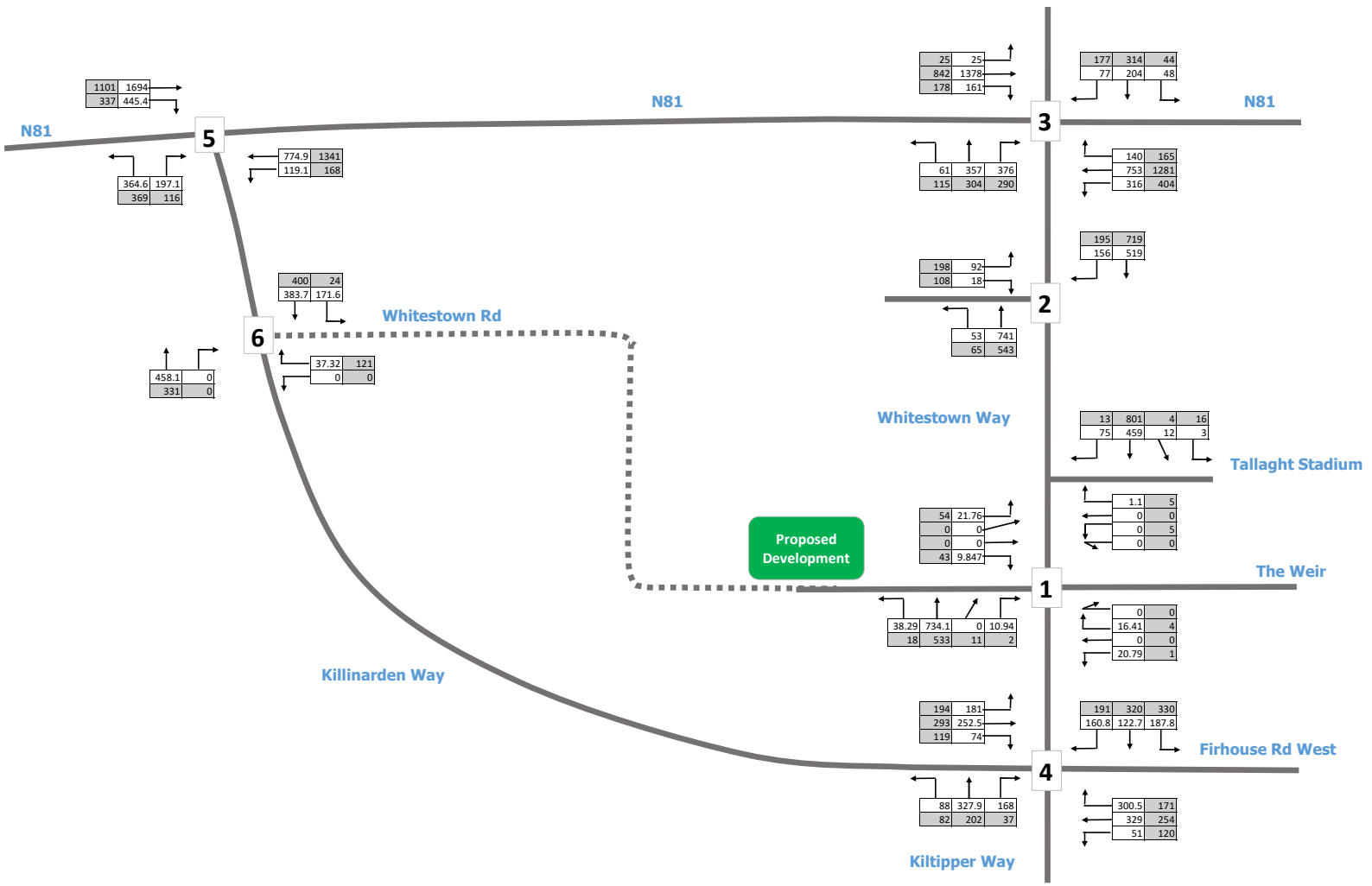

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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2033 Base Flows

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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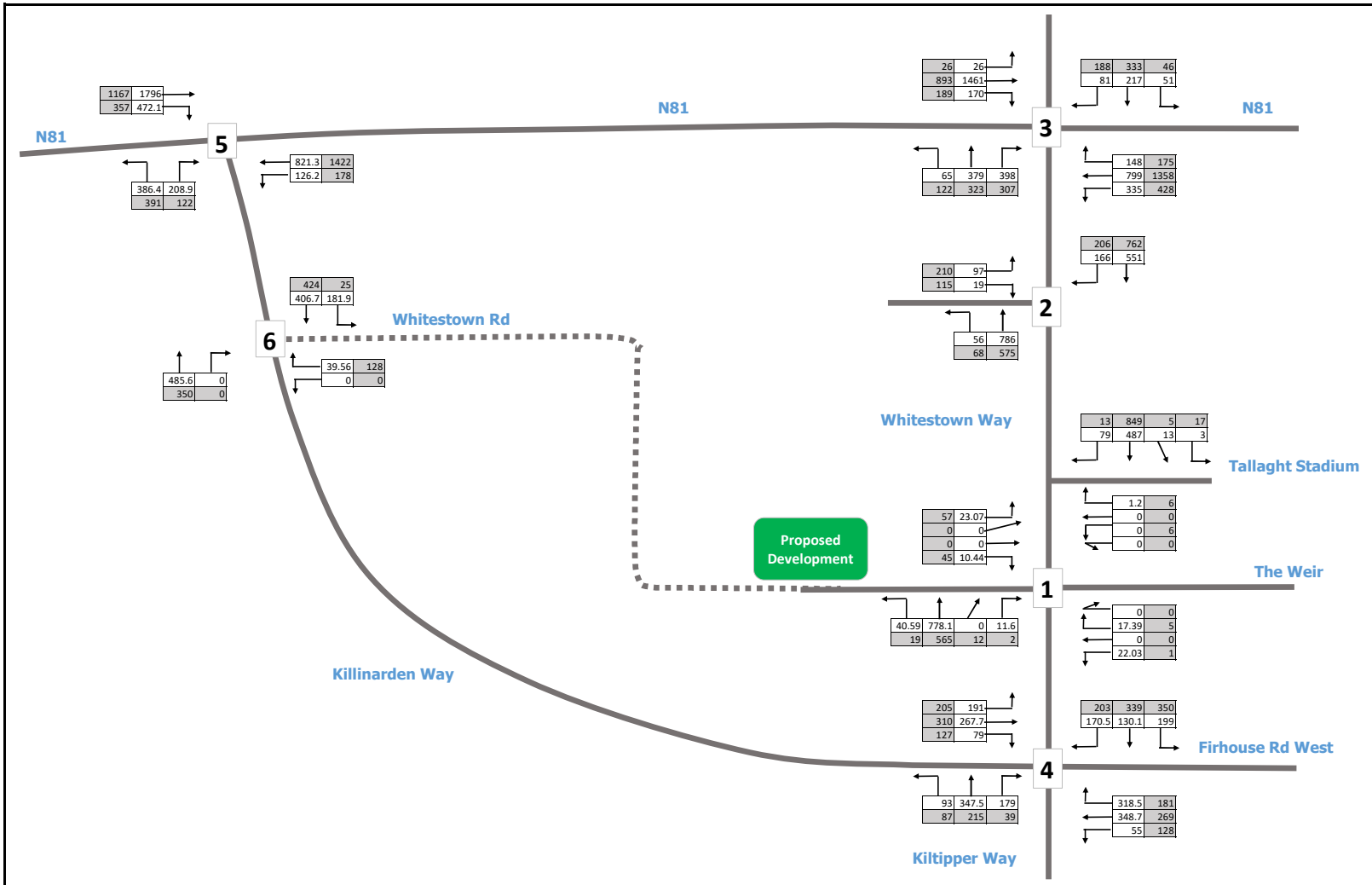

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Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
2043 Base Flows

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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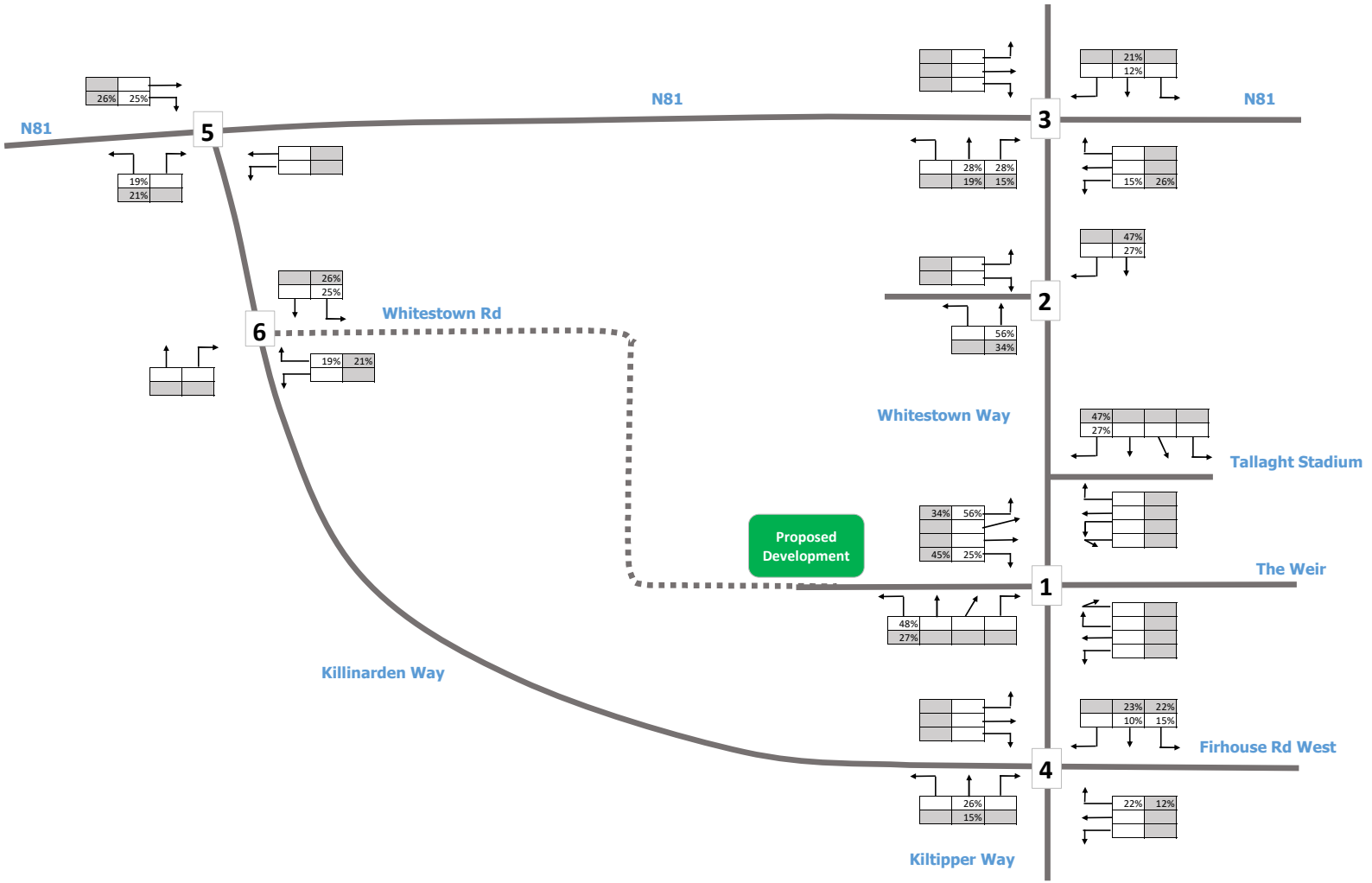

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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
Trip Distribution

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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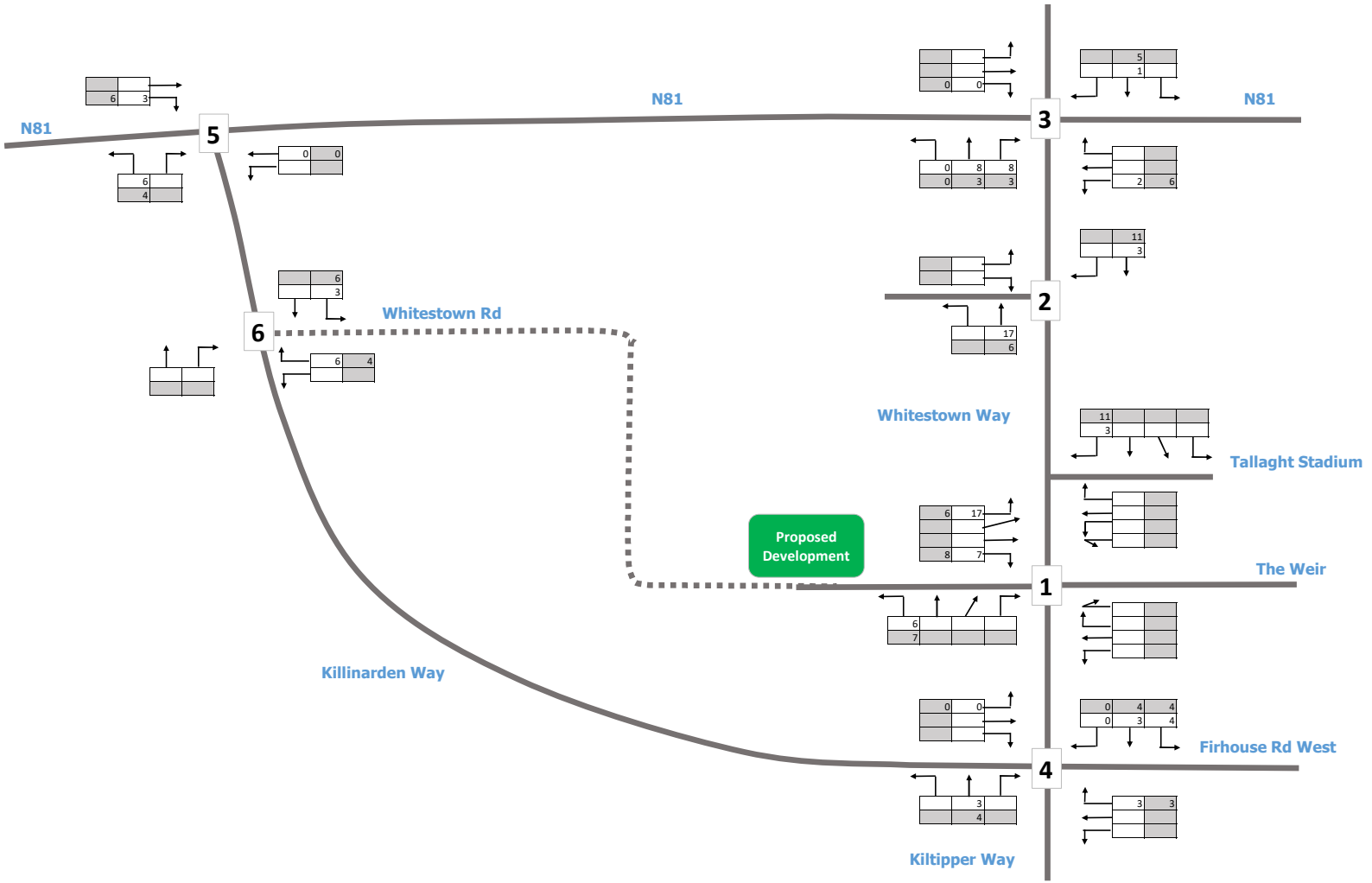

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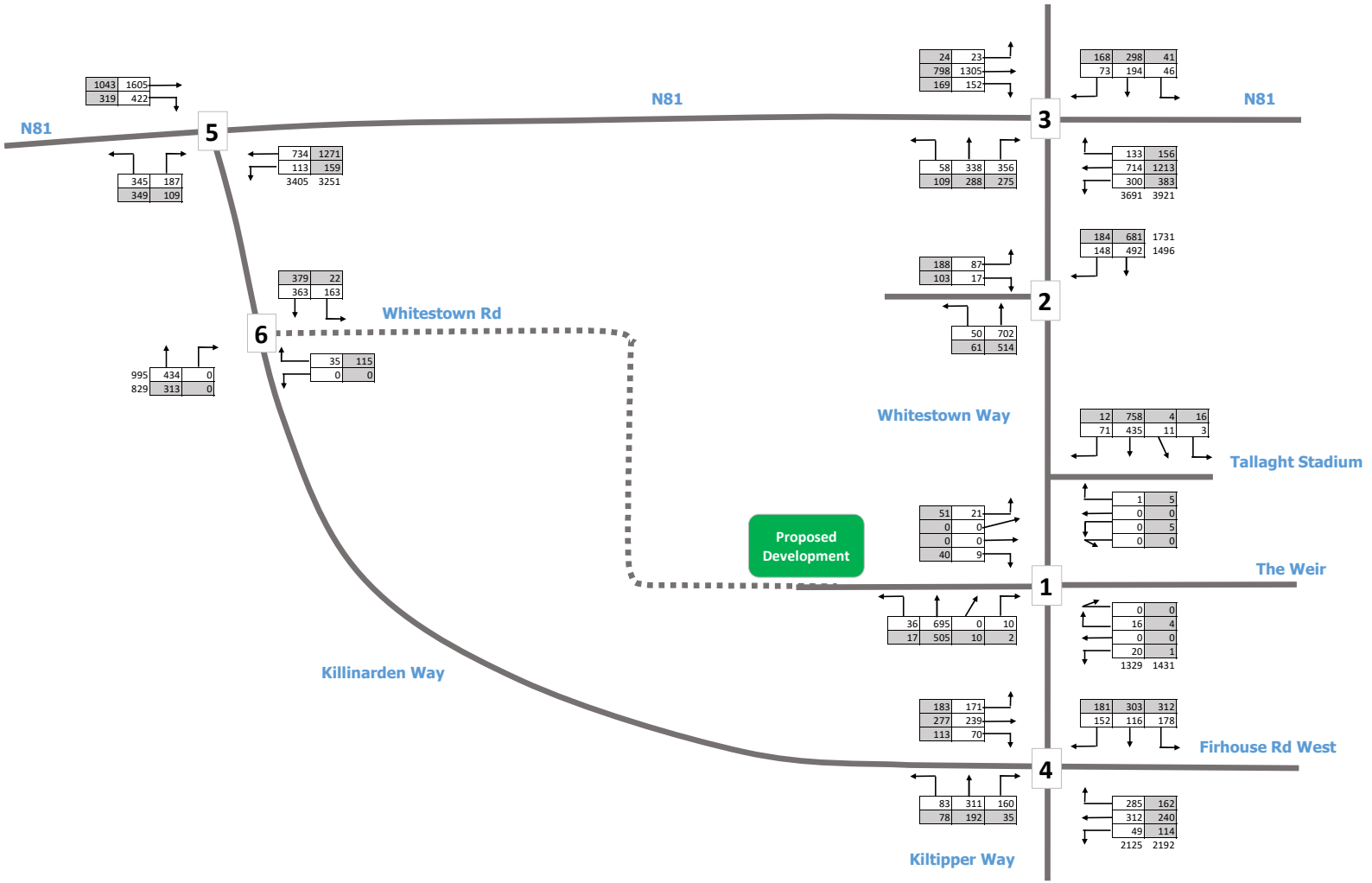

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Project :
Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
Do-Nothing 2028

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

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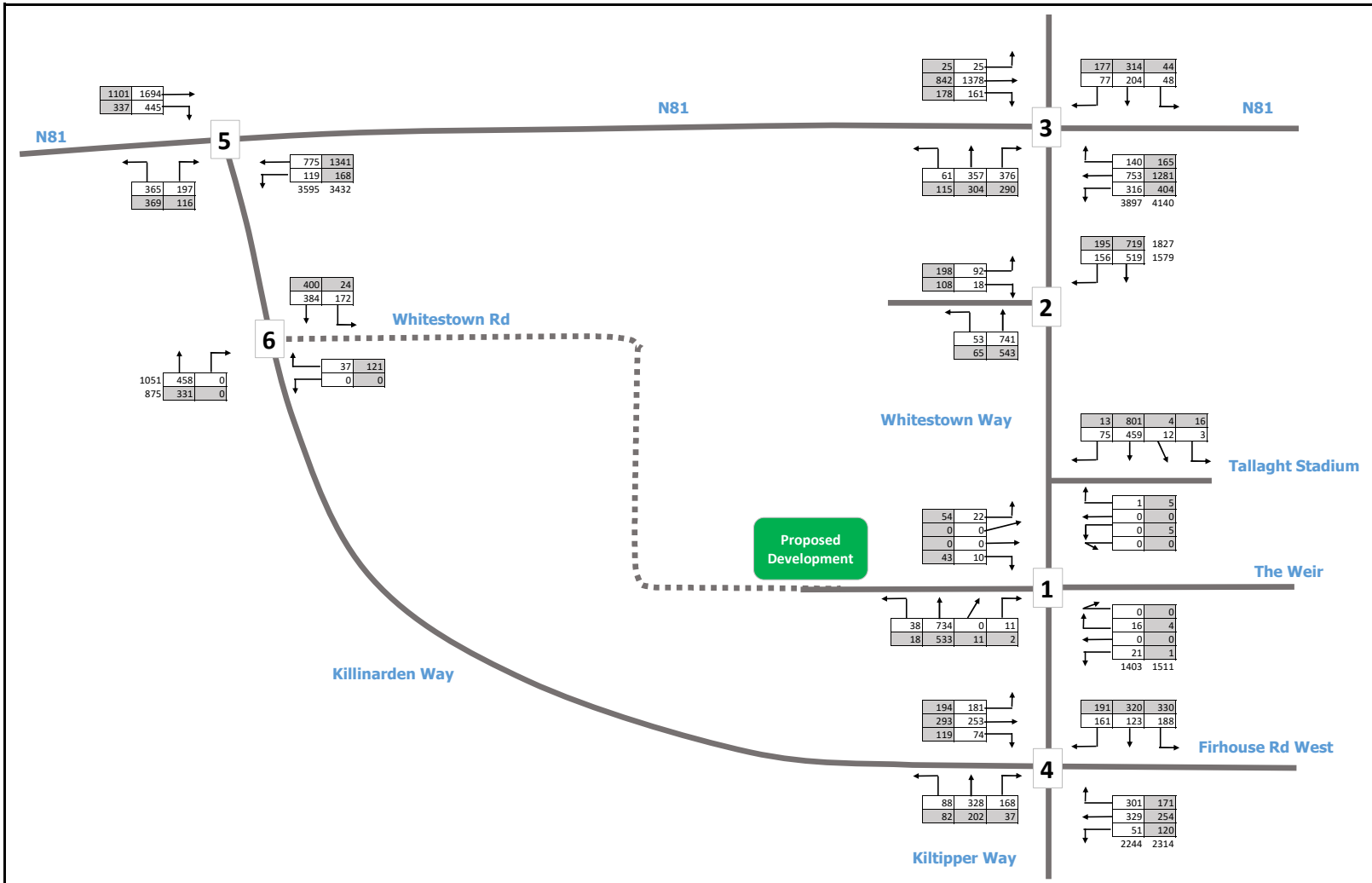

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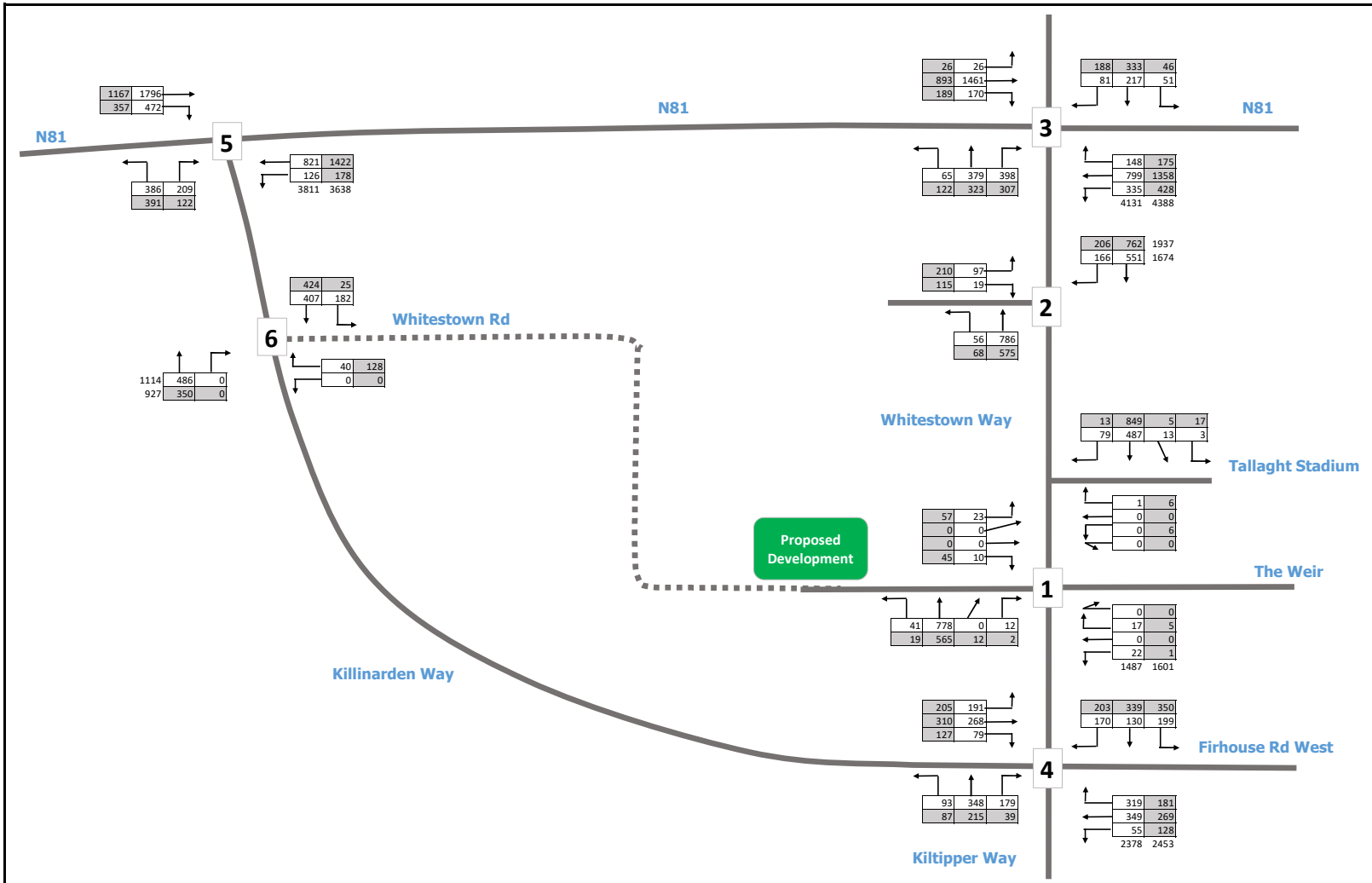

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Proposed Development at Whitestown Way Tallaght

DRG. Title :
Network Traffic Flows - Vehicles
Do-Nothing 2043

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

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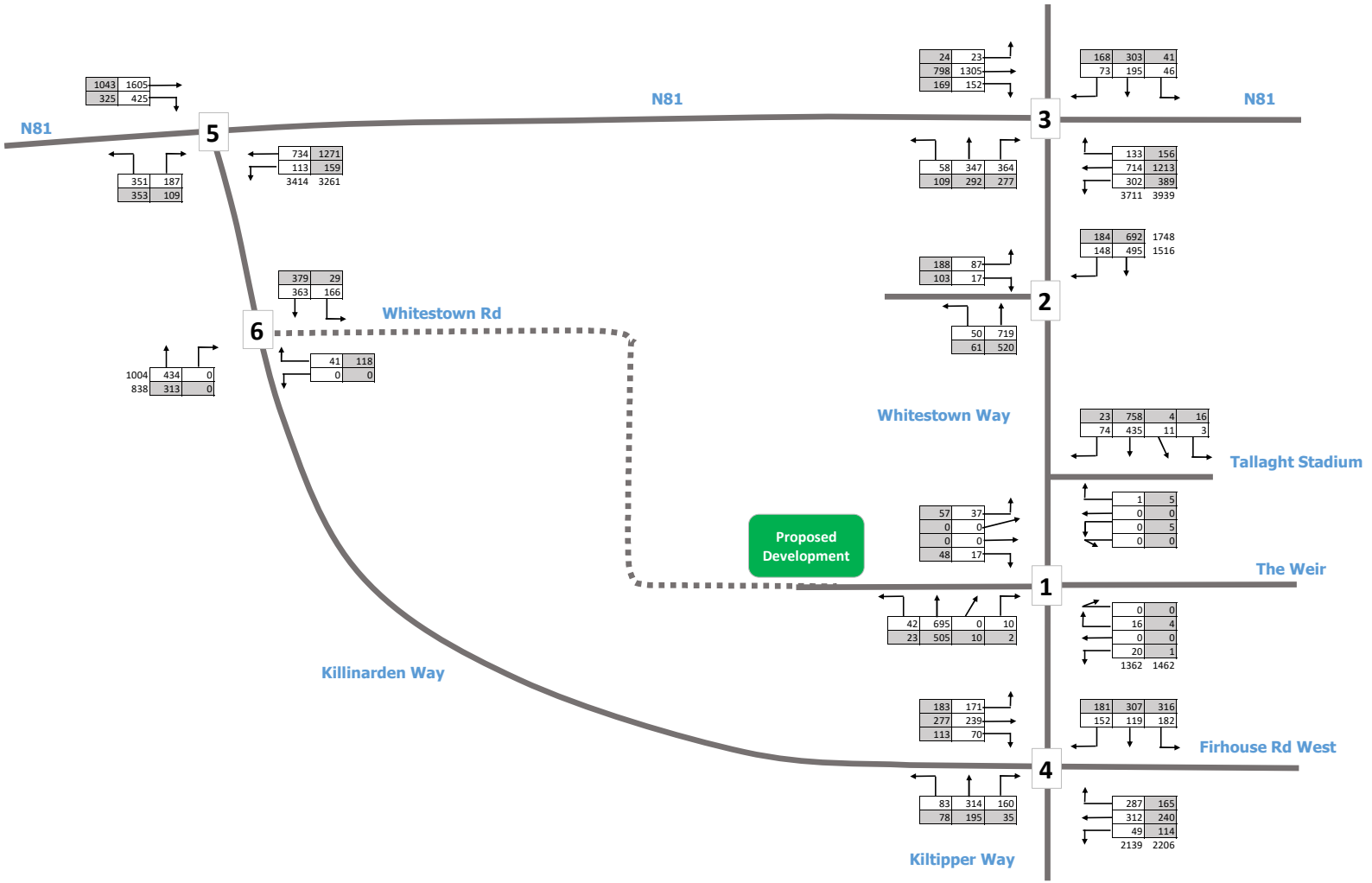

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Do-Something 2028

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

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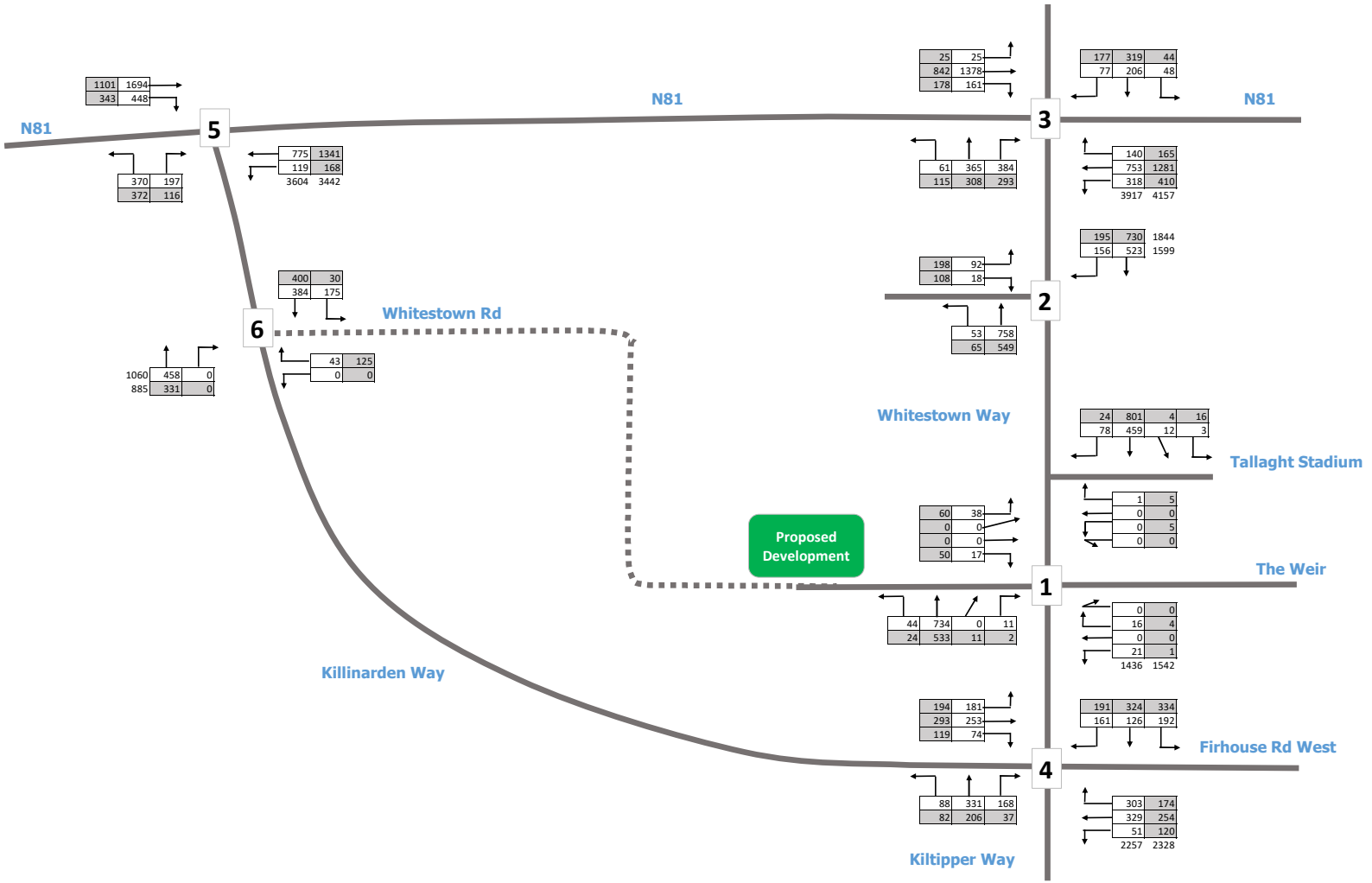

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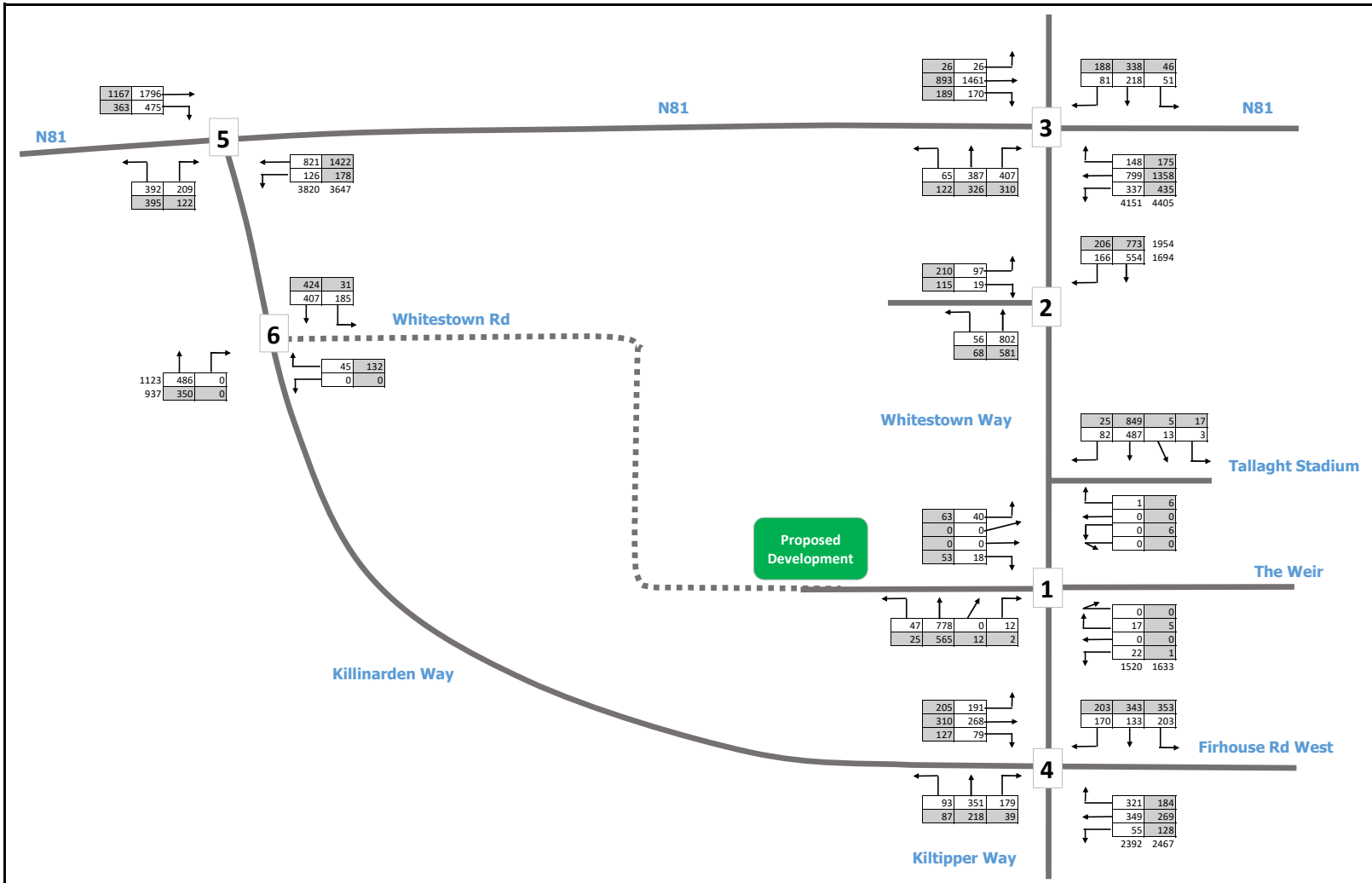

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Do-Something 2043

Key:
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PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 12

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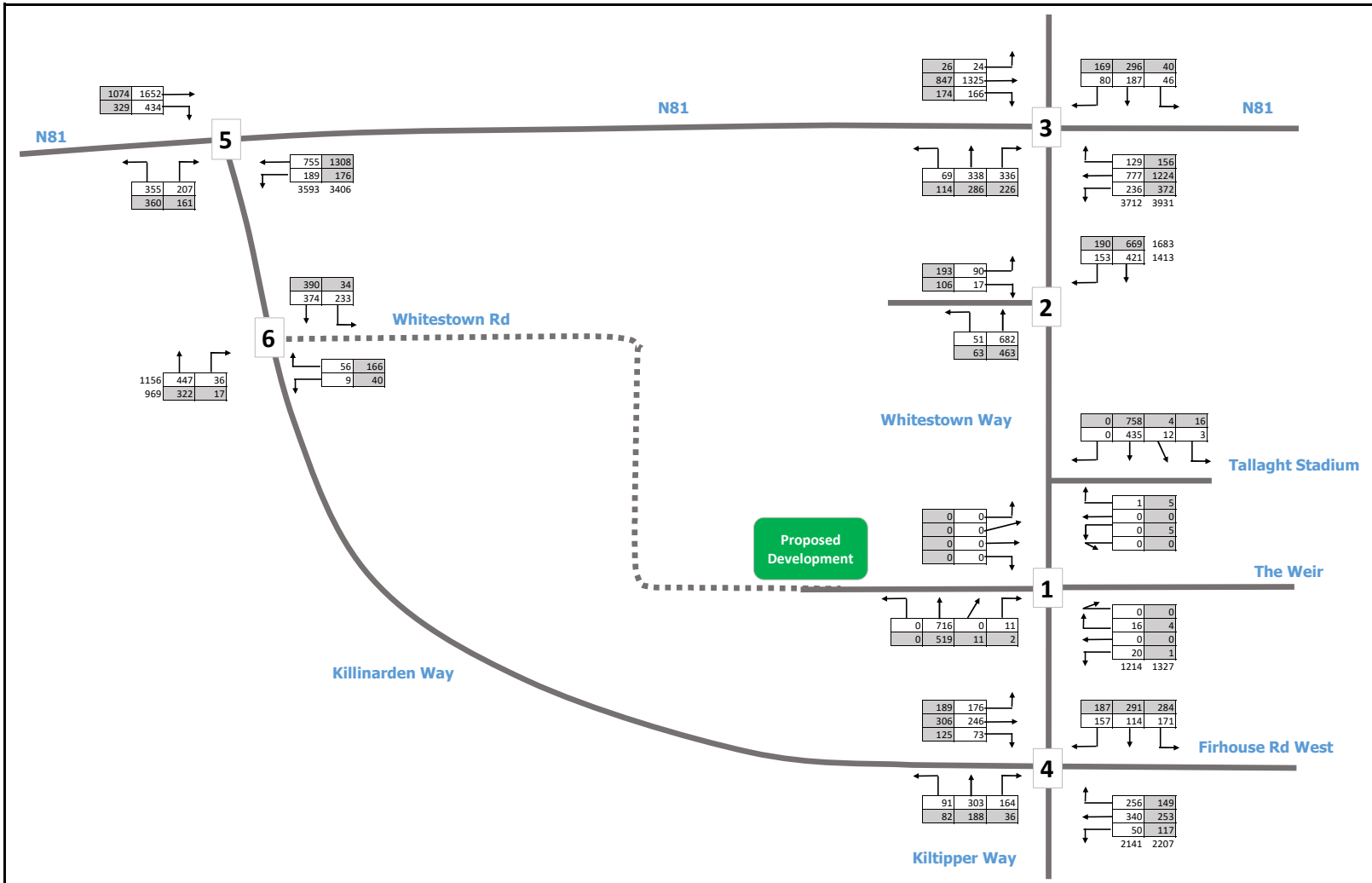
Appendix C : Picady Outputs



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DRG. Title :
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Do-Nothing 2028

Key:
AM Peak Hour (08:00 to 09:00)
PM Peak Hour (16:45 to 17:45)

Dwn:	Ckd:	Date:
DG	MK	24/04/2026

Ref: G:\2024\p240192\calcs\excel\Transport

Figure: 7

Rev: -

Junctions 11

PICADY 11 - Priority Intersection Module

Filename: Whitestown Way-Proposed Development-The Weir.j11
Path: \\dbfl-server4\documents\2024\p240192\calcs\picady
Report generation date: 24/04/2026 12:28:39

Summary of junction performance

	AM					PM				
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	Do Something - 2028 - Base									
Stream B-ACD	D1	0.1	12.40	0.12	B	D2	0.0	16.54	0.02	C
Stream A-BCD		0.0	4.57	0.02	A		0.1	3.76	0.05	A
Stream D-ABC		0.1	11.41	0.09	B		0.1	11.92	0.06	B
Stream C-ABD		0.1	3.99	0.04	A		0.0	4.64	0.01	A
	Do Something - 2033 - Base									
Stream B-ACD	D3	0.2	13.03	0.13	B	D4	0.0	18.22	0.03	C
Stream A-BCD		0.0	4.54	0.02	A		0.1	3.70	0.06	A
Stream D-ABC		0.1	11.99	0.10	B		0.1	12.57	0.06	B
Stream C-ABD		0.1	3.92	0.04	A		0.0	4.58	0.01	A
	Do Something - 2043 - Base									
Stream B-ACD	D5	0.2	13.78	0.15	B	D6	0.0	19.90	0.04	C
Stream A-BCD		0.0	4.49	0.02	A		0.1	3.64	0.06	A
Stream D-ABC		0.1	12.76	0.10	B		0.1	13.41	0.07	B
Stream C-ABD		0.1	3.86	0.05	A		0.0	4.52	0.01	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

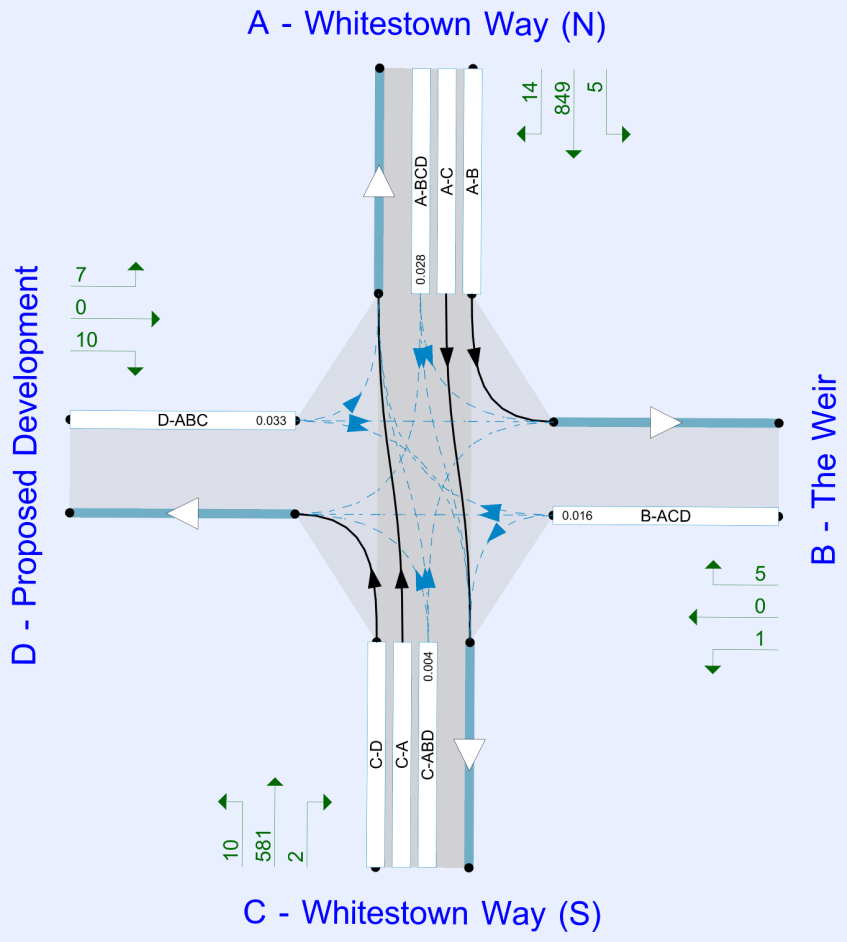
File summary

File Description

Title	
Location	
Site number	
Date	28/01/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\GarveyD
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	Base	AM	ONE HOUR	07:45	09:15	15
D2	2028	Base	PM	ONE HOUR	16:30	18:00	15
D3	2033	Base	AM	ONE HOUR	07:45	09:15	15
D4	2033	Base	PM	ONE HOUR	16:30	18:00	15
D5	2043	Base	AM	ONE HOUR	07:45	09:15	15
D6	2043	Base	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Something - 2028 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.77	A

Arms

Arms

Arm	Name	Description	Arm type
A	Whitestown Way (N)		Major
B	The Weir		Minor
C	Whitestown Way (S)		Major
D	Proposed Development		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Whitestown Way (N)	6.00			250.0	✓	0.00
C - Whitestown Way (S)	6.00			115.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - The Weir	One lane	2.20	40	25
D - Proposed Development	One lane	3.00	85	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	719	-	-	-	-	-	-	0.278	0.398	0.278	-	-	-
B-A	463	0.084	0.213	0.213	-	-	-	0.134	0.304	-	0.213	0.213	0.106
B-C	588	0.090	0.228	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	463	0.084	0.213	0.213	-	-	-	0.134	0.304	0.134	-	-	-
B-D, offside lane	463	0.084	0.213	0.213	-	-	-	0.134	0.304	0.134	-	-	-
C-B	641	0.248	0.248	0.355	-	-	-	-	-	-	-	-	-
D-A	655	-	-	-	-	-	-	0.254	-	0.100	-	-	-
D-B, nearside lane	530	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-
D-B, offside lane	530	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-
D-C	530	-	0.154	0.349	0.122	0.244	0.244	0.244	0.244	0.097	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	452	100.000
B - The Weir		✓	36	100.000
C - Whitestown Way (S)		✓	735	100.000
D - Proposed Development		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	12	435	5
	B - The Weir	16	0	20	0
	C - Whitestown Way (S)	716	11	0	8
	D - Proposed Development	18	0	11	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	12.40	0.1	B
A-BCD	0.02	4.57	0.0	A
A-B				
A-C				
D-ABC	0.09	11.41	0.1	B
C-ABD	0.04	3.99	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	27	0.00	399	0.068	27	0.1	9.823	A
A-BCD	7	0.00	795	0.008	6	0.0	4.566	A
A-B	9	0.00			9			
A-C	325	0.00			325			
D-ABC	22	0.00	432	0.051	22	0.1	8.775	A
C-ABD	20	0.00	932	0.021	20	0.0	3.989	A
C-D	6	0.00			6			
C-A	528	0.00			528			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	0.00	373	0.087	32	0.1	10.742	B
A-BCD	9	0.00	816	0.011	9	0.0	4.458	A
A-B	11	0.00			11			
A-C	387	0.00			387			
D-ABC	26	0.00	397	0.066	26	0.1	9.704	A
C-ABD	29	0.00	995	0.029	29	0.0	3.769	A
C-D	7	0.00			7			
C-A	625	0.00			625			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	40	0.00	335	0.118	39	0.1	12.390	B
A-BCD	13	0.00	850	0.015	13	0.0	4.303	A
A-B	13	0.00			13			
A-C	472	0.00			472			
D-ABC	32	0.00	347	0.092	32	0.1	11.398	B
C-ABD	46	0.00	1085	0.042	46	0.1	3.511	A
C-D	8	0.00			8			
C-A	755	0.00			755			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	40	0.00	335	0.118	40	0.1	12.404	B
A-BCD	13	0.00	850	0.015	13	0.0	4.305	A
A-B	13	0.00			13			
A-C	472	0.00			472			
D-ABC	32	0.00	347	0.092	32	0.1	11.412	B
C-ABD	46	0.00	1085	0.042	46	0.1	3.514	A
C-D	8	0.00			8			
C-A	755	0.00			755			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	0.00	373	0.087	33	0.1	10.757	B
A-BCD	9	0.00	816	0.011	9	0.0	4.458	A
A-B	11	0.00			11			
A-C	387	0.00			387			
D-ABC	26	0.00	397	0.066	26	0.1	9.716	A
C-ABD	29	0.00	995	0.029	29	0.0	3.776	A
C-D	7	0.00			7			
C-A	625	0.00			625			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	27	0.00	399	0.068	27	0.1	9.838	A
A-BCD	7	0.00	795	0.008	7	0.0	4.568	A
A-B	9	0.00			9			
A-C	325	0.00			325			
D-ABC	22	0.00	432	0.051	22	0.1	8.790	A
C-ABD	20	0.00	933	0.021	20	0.0	3.995	A
C-D	6	0.00			6			
C-A	527	0.00			527			

Do Something - 2028 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.36	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	776	100.000
B - The Weir		✓	5	100.000
C - Whitestown Way (S)		✓	531	100.000
D - Proposed Development		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	4	758	14
	B - The Weir	4	0	1	0
	C - Whitestown Way (S)	519	2	0	10
	D - Proposed Development	7	0	10	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	16.54	0.0	C
A-BCD	0.05	3.76	0.1	A
A-B				
A-C				
D-ABC	0.06	11.92	0.1	B
C-ABD	0.01	4.64	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	307	0.012	4	0.0	11.861	B
A-BCD	25	0.00	987	0.025	25	0.0	3.761	A
A-B	3	0.00			3			
A-C	556	0.00			556			
D-ABC	13	0.00	406	0.032	13	0.0	9.147	A
C-ABD	3	0.00	783	0.004	3	0.0	4.636	A
C-D	7	0.00			7			
C-A	389	0.00			389			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	272	0.017	4	0.0	13.448	B
A-BCD	36	0.00	1048	0.035	36	0.0	3.580	A
A-B	3	0.00			3			
A-C	658	0.00			658			
D-ABC	15	0.00	371	0.041	15	0.0	10.118	B
C-ABD	4	0.00	818	0.005	4	0.0	4.445	A
C-D	9	0.00			9			
C-A	464	0.00			464			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	223	0.025	5	0.0	16.536	C
A-BCD	59	0.00	1136	0.052	59	0.1	3.366	A
A-B	4	0.00			4			
A-C	791	0.00			791			
D-ABC	19	0.00	321	0.058	19	0.1	11.916	B
C-ABD	7	0.00	871	0.008	7	0.0	4.189	A
C-D	11	0.00			11			
C-A	567	0.00			567			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	223	0.025	6	0.0	16.544	C
A-BCD	59	0.00	1136	0.052	59	0.1	3.370	A
A-B	4	0.00			4			
A-C	791	0.00			791			
D-ABC	19	0.00	321	0.058	19	0.1	11.922	B
C-ABD	7	0.00	871	0.008	7	0.0	4.192	A
C-D	11	0.00			11			
C-A	567	0.00			567			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	272	0.017	5	0.0	13.454	B
A-BCD	37	0.00	1048	0.035	37	0.0	3.587	A
A-B	3	0.00			3			
A-C	658	0.00			658			
D-ABC	15	0.00	371	0.041	15	0.0	10.125	B
C-ABD	4	0.00	818	0.005	4	0.0	4.449	A
C-D	9	0.00			9			
C-A	464	0.00			464			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	307	0.012	4	0.0	11.868	B
A-BCD	25	0.00	987	0.026	25	0.0	3.764	A
A-B	3	0.00			3			
A-C	556	0.00			556			
D-ABC	13	0.00	406	0.032	13	0.0	9.155	A
C-ABD	3	0.00	783	0.004	3	0.0	4.640	A
C-D	7	0.00			7			
C-A	389	0.00			389			

Do Something - 2033 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.79	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	476	100.000
B - The Weir		✓	38	100.000
C - Whitestown Way (S)		✓	775	100.000
D - Proposed Development		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	12	459	5
	B - The Weir	17	0	21	0
	C - Whitestown Way (S)	756	11	0	8
	D - Proposed Development	18	0	11	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.13	13.03	0.2	B
A-BCD	0.02	4.54	0.0	A
A-B				
A-C				
D-ABC	0.10	11.99	0.1	B
C-ABD	0.04	3.92	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	0.00	392	0.073	28	0.1	10.062	B
A-BCD	7	0.00	800	0.008	7	0.0	4.535	A
A-B	9	0.00			9			
A-C	343	0.00			343			
D-ABC	22	0.00	422	0.052	22	0.1	8.988	A
C-ABD	21	0.00	950	0.022	21	0.0	3.919	A
C-D	6	0.00			6			
C-A	557	0.00			557			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	34	0.00	363	0.094	34	0.1	11.105	B
A-BCD	9	0.00	824	0.011	9	0.0	4.419	A
A-B	11	0.00			11			
A-C	408	0.00			408			
D-ABC	26	0.00	385	0.068	26	0.1	10.023	B
C-ABD	31	0.00	1017	0.030	31	0.0	3.694	A
C-D	7	0.00			7			
C-A	659	0.00			659			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	42	0.00	323	0.130	42	0.1	13.018	B
A-BCD	14	0.00	860	0.016	14	0.0	4.254	A
A-B	13	0.00			13			
A-C	497	0.00			497			
D-ABC	32	0.00	332	0.096	32	0.1	11.981	B
C-ABD	50	0.00	1113	0.045	50	0.1	3.433	A
C-D	8	0.00			8			
C-A	795	0.00			795			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	42	0.00	323	0.130	42	0.2	13.035	B
A-BCD	14	0.00	860	0.016	14	0.0	4.256	A
A-B	13	0.00			13			
A-C	497	0.00			497			
D-ABC	32	0.00	332	0.096	32	0.1	11.993	B
C-ABD	50	0.00	1113	0.045	50	0.1	3.436	A
C-D	8	0.00			8			
C-A	795	0.00			795			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	34	0.00	363	0.094	34	0.1	11.125	B
A-BCD	9	0.00	824	0.011	9	0.0	4.419	A
A-B	11	0.00			11			
A-C	408	0.00			408			
D-ABC	26	0.00	385	0.068	26	0.1	10.037	B
C-ABD	31	0.00	1017	0.030	31	0.0	3.704	A
C-D	7	0.00			7			
C-A	659	0.00			659			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	0.00	392	0.073	29	0.1	10.088	B
A-BCD	7	0.00	800	0.008	7	0.0	4.537	A
A-B	9	0.00			9			
A-C	343	0.00			343			
D-ABC	22	0.00	422	0.052	22	0.1	9.004	A
C-ABD	21	0.00	950	0.022	21	0.0	3.923	A
C-D	6	0.00			6			
C-A	557	0.00			557			

Do Something - 2033 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.37	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.37	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	820	100.000
B - The Weir		✓	6	100.000
C - Whitestown Way (S)		✓	560	100.000
D - Proposed Development		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	5	801	14
	B - The Weir	5	0	1	0
	C - Whitestown Way (S)	548	2	0	10
	D - Proposed Development	7	0	10	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	18.22	0.0	C
A-BCD	0.06	3.70	0.1	A
A-B				
A-C				
D-ABC	0.06	12.57	0.1	B
C-ABD	0.01	4.58	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	293	0.015	4	0.0	12.470	B
A-BCD	27	0.00	1005	0.026	26	0.0	3.699	A
A-B	4	0.00			4			
A-C	587	0.00			587			
D-ABC	13	0.00	396	0.032	13	0.0	9.382	A
C-ABD	3	0.00	793	0.004	3	0.0	4.582	A
C-D	7	0.00			7			
C-A	411	0.00			411			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	256	0.021	5	0.0	14.361	B
A-BCD	39	0.00	1070	0.037	39	0.1	3.513	A
A-B	4	0.00			4			
A-C	694	0.00			694			
D-ABC	15	0.00	359	0.043	15	0.0	10.475	B
C-ABD	5	0.00	831	0.005	5	0.0	4.381	A
C-D	9	0.00			9			
C-A	490	0.00			490			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	204	0.032	7	0.0	18.208	C
A-BCD	65	0.00	1165	0.056	65	0.1	3.296	A
A-B	5	0.00			5			
A-C	833	0.00			833			
D-ABC	19	0.00	305	0.061	19	0.1	12.567	B
C-ABD	7	0.00	888	0.008	7	0.0	4.114	A
C-D	11	0.00			11			
C-A	598	0.00			598			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	204	0.032	7	0.0	18.219	C
A-BCD	65	0.00	1165	0.056	65	0.1	3.298	A
A-B	5	0.00			5			
A-C	833	0.00			833			
D-ABC	19	0.00	305	0.061	19	0.1	12.573	B
C-ABD	7	0.00	888	0.008	7	0.0	4.116	A
C-D	11	0.00			11			
C-A	598	0.00			598			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	256	0.021	5	0.0	14.370	B
A-BCD	39	0.00	1070	0.037	39	0.1	3.519	A
A-B	4	0.00			4			
A-C	694	0.00			694			
D-ABC	15	0.00	359	0.043	15	0.0	10.484	B
C-ABD	5	0.00	831	0.005	5	0.0	4.387	A
C-D	9	0.00			9			
C-A	490	0.00			490			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	293	0.015	5	0.0	12.480	B
A-BCD	27	0.00	1005	0.027	27	0.0	3.704	A
A-B	4	0.00			4			
A-C	587	0.00			587			
D-ABC	13	0.00	396	0.032	13	0.0	9.393	A
C-ABD	3	0.00	793	0.004	3	0.0	4.584	A
C-D	7	0.00			7			
C-A	411	0.00			411			

Do Something - 2043 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.83	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2043	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	505	100.000
B - The Weir		✓	41	100.000
C - Whitestown Way (S)		✓	821	100.000
D - Proposed Development		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	13	487	5
	B - The Weir	18	0	23	0
	C - Whitestown Way (S)	801	12	0	8
	D - Proposed Development	18	0	11	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.15	13.78	0.2	B
A-BCD	0.02	4.49	0.0	A
A-B				
A-C				
D-ABC	0.10	12.76	0.1	B
C-ABD	0.05	3.86	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	31	0.00	385	0.080	31	0.1	10.321	B
A-BCD	7	0.00	808	0.009	7	0.0	4.494	A
A-B	10	0.00			10			
A-C	363	0.00			363			
D-ABC	22	0.00	411	0.053	22	0.1	9.249	A
C-ABD	24	0.00	970	0.025	24	0.0	3.852	A
C-D	6	0.00			6			
C-A	588	0.00			588			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	37	0.00	355	0.104	37	0.1	11.507	B
A-BCD	10	0.00	834	0.012	10	0.0	4.369	A
A-B	12	0.00			12			
A-C	433	0.00			433			
D-ABC	26	0.00	371	0.070	26	0.1	10.427	B
C-ABD	36	0.00	1042	0.034	36	0.0	3.625	A
C-D	7	0.00			7			
C-A	695	0.00			695			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	45	0.00	311	0.145	45	0.2	13.759	B
A-BCD	15	0.00	874	0.017	15	0.0	4.192	A
A-B	14	0.00			14			
A-C	527	0.00			527			
D-ABC	32	0.00	314	0.102	32	0.1	12.742	B
C-ABD	60	0.00	1144	0.052	60	0.1	3.367	A
C-D	8	0.00			8			
C-A	836	0.00			836			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	45	0.00	311	0.145	45	0.2	13.783	B
A-BCD	15	0.00	874	0.017	15	0.0	4.192	A
A-B	14	0.00			14			
A-C	527	0.00			527			
D-ABC	32	0.00	314	0.102	32	0.1	12.758	B
C-ABD	60	0.00	1144	0.052	60	0.1	3.372	A
C-D	8	0.00			8			
C-A	836	0.00			836			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	37	0.00	355	0.104	37	0.1	11.534	B
A-BCD	10	0.00	834	0.012	10	0.0	4.370	A
A-B	12	0.00			12			
A-C	433	0.00			433			
D-ABC	26	0.00	371	0.070	26	0.1	10.445	B
C-ABD	36	0.00	1042	0.034	36	0.0	3.632	A
C-D	7	0.00			7			
C-A	695	0.00			695			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	31	0.00	385	0.080	31	0.1	10.348	B
A-BCD	7	0.00	808	0.009	7	0.0	4.495	A
A-B	10	0.00			10			
A-C	363	0.00			363			
D-ABC	22	0.00	411	0.053	22	0.1	9.264	A
C-ABD	24	0.00	970	0.025	24	0.0	3.858	A
C-D	6	0.00			6			
C-A	588	0.00			588			

Do Something - 2043 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.38	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2043	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	868	100.000
B - The Weir		✓	6	100.000
C - Whitestown Way (S)		✓	593	100.000
D - Proposed Development		✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	5	849	14
	B - The Weir	5	0	1	0
	C - Whitestown Way (S)	581	2	0	10
	D - Proposed Development	7	0	10	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	19.90	0.0	C
A-BCD	0.06	3.64	0.1	A
A-B				
A-C				
D-ABC	0.07	13.41	0.1	B
C-ABD	0.01	4.52	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	282	0.016	4	0.0	12.969	B
A-BCD	28	0.00	1025	0.028	28	0.0	3.633	A
A-B	4	0.00			4			
A-C	622	0.00			622			
D-ABC	13	0.00	385	0.033	13	0.0	9.664	A
C-ABD	3	0.00	804	0.004	3	0.0	4.519	A
C-D	7	0.00			7			
C-A	436	0.00			436			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	243	0.022	5	0.0	15.169	C
A-BCD	42	0.00	1095	0.039	42	0.1	3.442	A
A-B	4	0.00			4			
A-C	734	0.00			734			
D-ABC	15	0.00	345	0.044	15	0.0	10.912	B
C-ABD	5	0.00	845	0.006	5	0.0	4.308	A
C-D	9	0.00			9			
C-A	519	0.00			519			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	188	0.035	7	0.0	19.884	C
A-BCD	72	0.00	1197	0.060	72	0.1	3.224	A
A-B	5	0.00			5			
A-C	878	0.00			878			
D-ABC	19	0.00	287	0.065	19	0.1	13.396	B
C-ABD	8	0.00	907	0.009	8	0.0	4.029	A
C-D	11	0.00			11			
C-A	634	0.00			634			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	187	0.035	7	0.0	19.903	C
A-BCD	72	0.00	1197	0.060	72	0.1	3.228	A
A-B	5	0.00			5			
A-C	878	0.00			878			
D-ABC	19	0.00	287	0.065	19	0.1	13.406	B
C-ABD	8	0.00	907	0.009	8	0.0	4.030	A
C-D	11	0.00			11			
C-A	634	0.00			634			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	243	0.022	5	0.0	15.187	C
A-BCD	42	0.00	1095	0.039	43	0.1	3.446	A
A-B	4	0.00			4			
A-C	734	0.00			734			
D-ABC	15	0.00	345	0.044	15	0.0	10.922	B
C-ABD	5	0.00	845	0.006	5	0.0	4.313	A
C-D	9	0.00			9			
C-A	519	0.00			519			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	282	0.016	5	0.0	12.983	B
A-BCD	28	0.00	1025	0.028	28	0.0	3.636	A
A-B	4	0.00			4			
A-C	621	0.00			621			
D-ABC	13	0.00	385	0.033	13	0.0	9.673	A
C-ABD	3	0.00	804	0.004	3	0.0	4.523	A
C-D	7	0.00			7			
C-A	436	0.00			436			

Appendix C : PICADY Outputs (Sensitivity Analysis)

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: Whitestown Way-Proposed Development-The Weir - SA.j11
Path: G:\2024\p240192\calcs\picady
Report generation date: 01/05/2026 11:00:43

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Something - 2028 - Base									
Stream B-ACD	D1	0.1	13.11	0.12	B	D2	0.0	17.90	0.03	C
Stream A-BCD		0.6	5.54	0.23	A		0.2	3.83	0.09	A
Stream D-ABC		0.2	12.58	0.17	B		0.5	15.41	0.33	C
Stream C-ABD		0.1	4.01	0.04	A		0.0	4.65	0.01	A
	Do Something - 2033 - Base									
Stream B-ACD	D3	0.2	13.68	0.13	B	D4	0.0	19.46	0.03	C
Stream A-BCD		0.7	5.66	0.26	A		0.2	3.78	0.10	A
Stream D-ABC		0.2	13.36	0.18	B		0.6	16.88	0.36	C
Stream C-ABD		0.1	3.95	0.05	A		0.0	4.60	0.01	A
	Do Something - 2043 - Base									
Stream B-ACD	D5	0.2	14.72	0.15	B	D6	0.0	22.27	0.04	C
Stream A-BCD		0.8	5.80	0.28	A		0.2	3.72	0.11	A
Stream D-ABC		0.3	14.64	0.21	B		0.7	19.13	0.40	C
Stream C-ABD		0.1	3.88	0.06	A		0.0	4.54	0.01	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

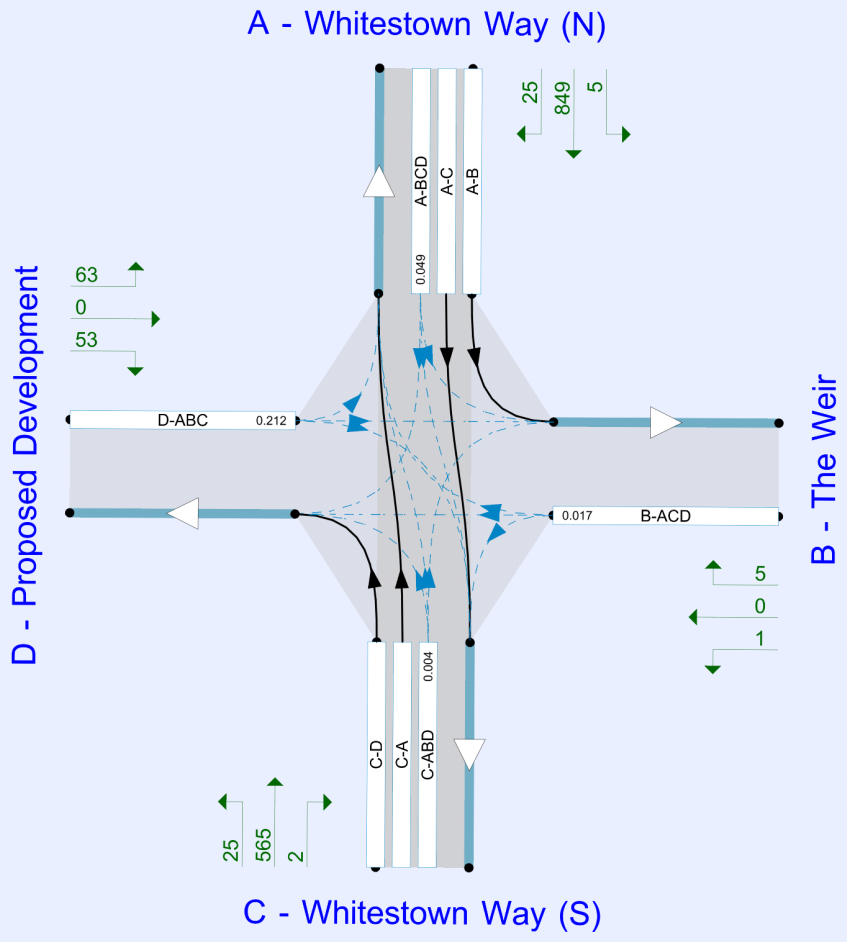
File summary

File Description

Title	
Location	
Site number	
Date	28/01/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\GarveyD
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	Base	AM	ONE HOUR	07:45	09:15	15
D2	2028	Base	PM	ONE HOUR	16:30	18:00	15
D3	2033	Base	AM	ONE HOUR	07:45	09:15	15
D4	2033	Base	PM	ONE HOUR	16:30	18:00	15
D5	2043	Base	AM	ONE HOUR	07:45	09:15	15
D6	2043	Base	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Something - 2028 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.58	A

Arms

Arms

Arm	Name	Description	Arm type
A	Whitestown Way (N)		Major
B	The Weir		Minor
C	Whitestown Way (S)		Major
D	Proposed Development		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Whitestown Way (N)	6.00			250.0	✓	0.00
C - Whitestown Way (S)	6.00			115.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - The Weir	One lane	2.20	40	25
D - Proposed Development	One lane	3.00	85	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	719	-	-	-	-	-	-	0.278	0.398	0.278	-	-	-
B-A	463	0.084	0.213	0.213	-	-	-	0.134	0.304	-	0.213	0.213	0.106
B-C	588	0.090	0.228	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	463	0.084	0.213	0.213	-	-	-	0.134	0.304	0.134	-	-	-
B-D, offside lane	463	0.084	0.213	0.213	-	-	-	0.134	0.304	0.134	-	-	-
C-B	641	0.248	0.248	0.355	-	-	-	-	-	-	-	-	-
D-A	655	-	-	-	-	-	-	0.254	-	0.100	-	-	-
D-B, nearside lane	530	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-
D-B, offside lane	530	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-
D-C	530	-	0.154	0.349	0.122	0.244	0.244	0.244	0.244	0.097	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	520	100.000
B - The Weir		✓	36	100.000
C - Whitestown Way (S)		✓	747	100.000
D - Proposed Development		✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	11	435	74
	B - The Weir	16	0	20	0
	C - Whitestown Way (S)	695	10	0	42
	D - Proposed Development	37	0	17	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	13.11	0.1	B
A-BCD	0.23	5.54	0.6	A
A-B				
A-C				
D-ABC	0.17	12.58	0.2	B
C-ABD	0.04	4.01	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	27	0.00	390	0.069	27	0.1	10.056	B
A-BCD	97	0.00	792	0.122	96	0.2	5.163	A
A-B	7	0.00			7			
A-C	288	0.00			288			
D-ABC	41	0.00	436	0.093	40	0.1	9.093	A
C-ABD	19	0.00	927	0.020	19	0.0	4.009	A
C-D	31	0.00			31			
C-A	513	0.00			513			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	0.00	361	0.090	32	0.1	11.118	B
A-BCD	132	0.00	814	0.162	131	0.3	5.283	A
A-B	8	0.00			8			
A-C	327	0.00			327			
D-ABC	49	0.00	399	0.122	48	0.1	10.262	B
C-ABD	27	0.00	989	0.028	27	0.0	3.785	A
C-D	37	0.00			37			
C-A	608	0.00			608			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	40	0.00	319	0.124	39	0.1	13.085	B
A-BCD	195	0.00	847	0.231	194	0.6	5.530	A
A-B	9	0.00			9			
A-C	368	0.00			368			
D-ABC	59	0.00	346	0.172	59	0.2	12.552	B
C-ABD	44	0.00	1080	0.041	44	0.1	3.521	A
C-D	44	0.00			44			
C-A	734	0.00			734			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	40	0.00	319	0.124	40	0.1	13.113	B
A-BCD	196	0.00	847	0.231	196	0.6	5.543	A
A-B	9	0.00			9			
A-C	368	0.00			368			
D-ABC	59	0.00	346	0.172	59	0.2	12.583	B
C-ABD	44	0.00	1080	0.041	44	0.1	3.527	A
C-D	44	0.00			44			
C-A	734	0.00			734			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	0.00	361	0.090	33	0.1	11.151	B
A-BCD	132	0.00	814	0.162	133	0.4	5.303	A
A-B	8	0.00			8			
A-C	327	0.00			327			
D-ABC	49	0.00	399	0.122	49	0.1	10.293	B
C-ABD	27	0.00	989	0.028	27	0.0	3.796	A
C-D	37	0.00			37			
C-A	607	0.00			607			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	27	0.00	390	0.069	27	0.1	10.089	B
A-BCD	97	0.00	793	0.123	98	0.2	5.190	A
A-B	7	0.00			7			
A-C	287	0.00			287			
D-ABC	41	0.00	435	0.093	41	0.1	9.124	A
C-ABD	19	0.00	926	0.020	19	0.0	4.014	A
C-D	31	0.00			31			
C-A	513	0.00			513			

Do Something - 2028 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.41	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	785	100.000
B - The Weir		✓	5	100.000
C - Whitestown Way (S)		✓	530	100.000
D - Proposed Development		✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	4	758	23
	B - The Weir	4	0	1	0
	C - Whitestown Way (S)	505	2	0	23
	D - Proposed Development	57	0	48	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	17.90	0.0	C
A-BCD	0.09	3.83	0.2	A
A-B				
A-C				
D-ABC	0.33	15.41	0.5	C
C-ABD	0.01	4.65	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	297	0.013	4	0.0	12.285	B
A-BCD	41	0.00	988	0.042	41	0.1	3.825	A
A-B	3	0.00			3			
A-C	547	0.00			547			
D-ABC	79	0.00	432	0.183	78	0.2	10.148	B
C-ABD	3	0.00	781	0.004	3	0.0	4.650	A
C-D	17	0.00			17			
C-A	379	0.00			379			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	259	0.017	4	0.0	14.128	B
A-BCD	60	0.00	1048	0.057	60	0.1	3.664	A
A-B	3	0.00			3			
A-C	642	0.00			642			
D-ABC	94	0.00	398	0.237	94	0.3	11.822	B
C-ABD	4	0.00	816	0.005	4	0.0	4.459	A
C-D	21	0.00			21			
C-A	452	0.00			452			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	207	0.027	5	0.0	17.881	C
A-BCD	97	0.00	1136	0.086	97	0.2	3.489	A
A-B	4	0.00			4			
A-C	763	0.00			763			
D-ABC	116	0.00	349	0.331	115	0.5	15.319	C
C-ABD	7	0.00	868	0.008	7	0.0	4.205	A
C-D	25	0.00			25			
C-A	552	0.00			552			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	207	0.027	6	0.0	17.900	C
A-BCD	97	0.00	1136	0.086	97	0.2	3.492	A
A-B	4	0.00			4			
A-C	763	0.00			763			
D-ABC	116	0.00	349	0.331	116	0.5	15.413	C
C-ABD	7	0.00	868	0.008	7	0.0	4.208	A
C-D	25	0.00			25			
C-A	552	0.00			552			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	259	0.017	5	0.0	14.147	B
A-BCD	60	0.00	1048	0.057	60	0.1	3.673	A
A-B	3	0.00			3			
A-C	642	0.00			642			
D-ABC	94	0.00	398	0.237	95	0.3	11.907	B
C-ABD	4	0.00	816	0.005	4	0.0	4.465	A
C-D	21	0.00			21			
C-A	452	0.00			452			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	296	0.013	4	0.0	12.300	B
A-BCD	42	0.00	988	0.042	42	0.1	3.829	A
A-B	3	0.00			3			
A-C	547	0.00			547			
D-ABC	79	0.00	432	0.183	79	0.2	10.221	B
C-ABD	3	0.00	781	0.004	3	0.0	4.652	A
C-D	17	0.00			17			
C-A	379	0.00			379			

Do Something - 2033 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	549	100.000
B - The Weir		✓	37	100.000
C - Whitestown Way (S)		✓	789	100.000
D - Proposed Development		✓	55	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	12	459	78
	B - The Weir	16	0	21	0
	C - Whitestown Way (S)	734	11	0	44
	D - Proposed Development	38	0	17	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.13	13.68	0.2	B
A-BCD	0.26	5.66	0.7	A
A-B				
A-C				
D-ABC	0.18	13.36	0.2	B
C-ABD	0.05	3.95	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	28	0.00	385	0.072	28	0.1	10.234	B
A-BCD	106	0.00	798	0.132	105	0.3	5.190	A
A-B	8	0.00			8			
A-C	300	0.00			300			
D-ABC	41	0.00	427	0.097	41	0.1	9.322	A
C-ABD	22	0.00	944	0.023	22	0.0	3.946	A
C-D	32	0.00			32			
C-A	540	0.00			540			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	33	0.00	354	0.094	33	0.1	11.407	B
A-BCD	145	0.00	821	0.177	145	0.4	5.330	A
A-B	9	0.00			9			
A-C	339	0.00			339			
D-ABC	49	0.00	388	0.128	49	0.1	10.636	B
C-ABD	32	0.00	1011	0.032	32	0.0	3.720	A
C-D	38	0.00			38			
C-A	639	0.00			639			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	41	0.00	309	0.132	41	0.2	13.646	B
A-BCD	219	0.00	858	0.255	218	0.7	5.640	A
A-B	10	0.00			10			
A-C	376	0.00			376			
D-ABC	61	0.00	330	0.183	60	0.2	13.316	B
C-ABD	53	0.00	1109	0.048	53	0.1	3.457	A
C-D	46	0.00			46			
C-A	769	0.00			769			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	41	0.00	308	0.132	41	0.2	13.682	B
A-BCD	219	0.00	858	0.256	219	0.7	5.660	A
A-B	10	0.00			10			
A-C	375	0.00			375			
D-ABC	61	0.00	330	0.183	61	0.2	13.357	B
C-ABD	54	0.00	1109	0.048	54	0.1	3.461	A
C-D	46	0.00			46			
C-A	769	0.00			769			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	33	0.00	353	0.094	33	0.1	11.446	B
A-BCD	146	0.00	822	0.178	147	0.4	5.352	A
A-B	9	0.00			9			
A-C	339	0.00			339			
D-ABC	49	0.00	387	0.128	50	0.1	10.673	B
C-ABD	32	0.00	1011	0.032	32	0.0	3.731	A
C-D	38	0.00			38			
C-A	639	0.00			639			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	28	0.00	385	0.072	28	0.1	10.269	B
A-BCD	106	0.00	799	0.133	107	0.3	5.214	A
A-B	8	0.00			8			
A-C	299	0.00			299			
D-ABC	41	0.00	426	0.097	42	0.1	9.359	A
C-ABD	22	0.00	944	0.023	22	0.0	3.952	A
C-D	32	0.00			32			
C-A	540	0.00			540			

Do Something - 2033 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.52	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	829	100.000
B - The Weir		✓	5	100.000
C - Whitestown Way (S)		✓	559	100.000
D - Proposed Development		✓	110	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	4	801	24
	B - The Weir	4	0	1	0
	C - Whitestown Way (S)	533	2	0	24
	D - Proposed Development	60	0	50	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	19.46	0.0	C
A-BCD	0.10	3.78	0.2	A
A-B				
A-C				
D-ABC	0.36	16.88	0.6	C
C-ABD	0.01	4.60	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	286	0.013	4	0.0	12.746	B
A-BCD	46	0.00	1005	0.045	45	0.1	3.773	A
A-B	3	0.00			3			
A-C	576	0.00			576			
D-ABC	83	0.00	423	0.196	82	0.2	10.520	B
C-ABD	3	0.00	790	0.004	3	0.0	4.596	A
C-D	18	0.00			18			
C-A	400	0.00			400			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	246	0.018	4	0.0	14.878	B
A-BCD	67	0.00	1070	0.063	67	0.1	3.611	A
A-B	3	0.00			3			
A-C	675	0.00			675			
D-ABC	99	0.00	387	0.256	98	0.3	12.458	B
C-ABD	5	0.00	828	0.006	5	0.0	4.396	A
C-D	21	0.00			21			
C-A	477	0.00			477			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	191	0.029	5	0.0	19.433	C
A-BCD	111	0.00	1164	0.096	111	0.2	3.442	A
A-B	4	0.00			4			
A-C	798	0.00			798			
D-ABC	121	0.00	334	0.362	120	0.6	16.742	C
C-ABD	7	0.00	884	0.008	7	0.0	4.129	A
C-D	26	0.00			26			
C-A	582	0.00			582			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	0.00	190	0.029	6	0.0	19.464	C
A-BCD	111	0.00	1164	0.096	111	0.2	3.448	A
A-B	4	0.00			4			
A-C	797	0.00			797			
D-ABC	121	0.00	334	0.362	121	0.6	16.876	C
C-ABD	7	0.00	884	0.008	7	0.0	4.131	A
C-D	26	0.00			26			
C-A	582	0.00			582			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	246	0.018	5	0.0	14.903	B
A-BCD	67	0.00	1070	0.063	67	0.1	3.618	A
A-B	3	0.00			3			
A-C	675	0.00			675			
D-ABC	99	0.00	387	0.256	100	0.3	12.569	B
C-ABD	5	0.00	828	0.006	5	0.0	4.402	A
C-D	21	0.00			21			
C-A	477	0.00			477			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	4	0.00	286	0.013	4	0.0	12.764	B
A-BCD	46	0.00	1005	0.046	46	0.1	3.780	A
A-B	3	0.00			3			
A-C	576	0.00			576			
D-ABC	83	0.00	423	0.196	83	0.2	10.609	B
C-ABD	3	0.00	790	0.004	3	0.0	4.600	A
C-D	18	0.00			18			
C-A	400	0.00			400			

Do Something - 2043 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.79	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2043	Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	582	100.000
B - The Weir		✓	39	100.000
C - Whitestown Way (S)		✓	837	100.000
D - Proposed Development		✓	58	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	13	487	82
	B - The Weir	17	0	22	0
	C - Whitestown Way (S)	778	12	0	47
	D - Proposed Development	40	0	18	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	0	0
	B - The Weir	0	0	3	0
	C - Whitestown Way (S)	2	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.15	14.72	0.2	B
A-BCD	0.28	5.80	0.8	A
A-B				
A-C				
D-ABC	0.21	14.64	0.3	B
C-ABD	0.06	3.88	0.1	A
C-D				
C-A				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	0.00	375	0.078	29	0.1	10.577	B
A-BCD	116	0.00	805	0.144	115	0.3	5.214	A
A-B	8	0.00			8			
A-C	314	0.00			314			
D-ABC	44	0.00	415	0.105	43	0.1	9.681	A
C-ABD	25	0.00	965	0.026	25	0.0	3.876	A
C-D	34	0.00			34			
C-A	570	0.00			570			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	35	0.00	341	0.103	35	0.1	11.937	B
A-BCD	161	0.00	831	0.194	161	0.5	5.382	A
A-B	9	0.00			9			
A-C	352	0.00			352			
D-ABC	52	0.00	373	0.140	52	0.2	11.225	B
C-ABD	38	0.00	1037	0.037	38	0.1	3.648	A
C-D	41	0.00			41			
C-A	674	0.00			674			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	0.00	292	0.147	43	0.2	14.670	B
A-BCD	247	0.00	871	0.284	246	0.8	5.779	A
A-B	10	0.00			10			
A-C	383	0.00			383			
D-ABC	64	0.00	310	0.206	63	0.3	14.578	B
C-ABD	65	0.00	1142	0.057	65	0.1	3.389	A
C-D	49	0.00			49			
C-A	808	0.00			808			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	0.00	292	0.147	43	0.2	14.722	B
A-BCD	248	0.00	872	0.285	248	0.8	5.805	A
A-B	10	0.00			10			
A-C	382	0.00			382			
D-ABC	64	0.00	310	0.206	64	0.3	14.639	B
C-ABD	65	0.00	1142	0.057	65	0.1	3.392	A
C-D	49	0.00			49			
C-A	808	0.00			808			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	35	0.00	341	0.103	35	0.1	11.992	B
A-BCD	162	0.00	832	0.195	164	0.5	5.411	A
A-B	9	0.00			9			
A-C	352	0.00			352			
D-ABC	52	0.00	372	0.140	53	0.2	11.276	B
C-ABD	38	0.00	1037	0.037	38	0.1	3.656	A
C-D	41	0.00			41			
C-A	674	0.00			674			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	0.00	374	0.078	29	0.1	10.618	B
A-BCD	117	0.00	806	0.145	117	0.3	5.243	A
A-B	8	0.00			8			
A-C	313	0.00			313			
D-ABC	44	0.00	414	0.105	44	0.1	9.725	A
C-ABD	25	0.00	965	0.026	26	0.0	3.883	A
C-D	34	0.00			34			
C-A	570	0.00			570			

Do Something - 2043 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.71	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2043	Base	PM	ONE HOUR	16:30	18:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whitestown Way (N)		✓	879	100.000
B - The Weir		✓	6	100.000
C - Whitestown Way (S)		✓	592	100.000
D - Proposed Development		✓	116	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	5	849	25
	B - The Weir	5	0	1	0
	C - Whitestown Way (S)	565	2	0	25
	D - Proposed Development	63	0	53	0

Vehicle Mix

Heavy Vehicle %

		To			
		A - Whitestown Way (N)	B - The Weir	C - Whitestown Way (S)	D - Proposed Development
From	A - Whitestown Way (N)	0	0	1	0
	B - The Weir	0	0	0	0
	C - Whitestown Way (S)	1	0	0	0
	D - Proposed Development	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	22.27	0.0	C
A-BCD	0.11	3.72	0.2	A
A-B				
A-C				
D-ABC	0.40	19.13	0.7	C
C-ABD	0.01	4.54	0.0	A
C-D				
C-A				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	270	0.017	4	0.0	13.561	B
A-BCD	50	0.00	1025	0.049	50	0.1	3.715	A
A-B	4	0.00			4			
A-C	608	0.00			608			
D-ABC	87	0.00	412	0.212	86	0.3	11.028	B
C-ABD	3	0.00	801	0.004	3	0.0	4.534	A
C-D	19	0.00			19			
C-A	424	0.00			424			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	228	0.024	5	0.0	16.190	C
A-BCD	75	0.00	1095	0.069	75	0.1	3.553	A
A-B	4	0.00			4			
A-C	711	0.00			711			
D-ABC	104	0.00	373	0.280	104	0.4	13.357	B
C-ABD	5	0.00	842	0.006	5	0.0	4.323	A
C-D	22	0.00			22			
C-A	505	0.00			505			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	169	0.039	7	0.0	22.206	C
A-BCD	129	0.00	1197	0.108	129	0.2	3.395	A
A-B	5	0.00			5			
A-C	834	0.00			834			
D-ABC	128	0.00	316	0.404	127	0.7	18.919	C
C-ABD	8	0.00	904	0.009	8	0.0	4.045	A
C-D	27	0.00			27			
C-A	617	0.00			617			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	0.00	168	0.039	7	0.0	22.272	C
A-BCD	129	0.00	1197	0.108	129	0.2	3.401	A
A-B	5	0.00			5			
A-C	834	0.00			834			
D-ABC	128	0.00	316	0.404	128	0.7	19.127	C
C-ABD	8	0.00	903	0.009	8	0.0	4.047	A
C-D	27	0.00			27			
C-A	617	0.00			617			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	227	0.024	5	0.0	16.234	C
A-BCD	76	0.00	1095	0.069	76	0.1	3.561	A
A-B	4	0.00			4			
A-C	710	0.00			710			
D-ABC	104	0.00	373	0.280	105	0.4	13.516	B
C-ABD	5	0.00	842	0.006	5	0.0	4.328	A
C-D	22	0.00			22			
C-A	505	0.00			505			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	0.00	269	0.017	5	0.0	13.588	B
A-BCD	51	0.00	1025	0.049	51	0.1	3.722	A
A-B	4	0.00			4			
A-C	607	0.00			607			
D-ABC	87	0.00	412	0.212	88	0.3	11.134	B
C-ABD	3	0.00	801	0.004	3	0.0	4.538	A
C-D	19	0.00			19			
C-A	424	0.00			424			

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