

**Residential Development, Fortfield Road,
Terenure**

**Traffic & Transport Assessment
222102-PUNCH-XX-XX-RP-C-0008**

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Foreword

This 'Traffic and Transport Assessment' (TTA) has been updated to reflect an expanded basement and associated increase in car parking provision.

This has been provided as part of the First Party Appeal response, which includes proposals for an expanded basement to address the DCC Reason for Refusal, should An Bord Pleanála consider it appropriate to condition as part of a decision to grant.

We contend that DCC could have conditioned an additional number of car parking spaces to meet their opinion of adequate car parking quantum for the development. This would not constitute "*major alterations*" as localised extensions of the basement would address this issue. These basement extensions would still be contained within the proposed apartment block footprints.

Regarding the TTA, the updates contained within this report consist of updates relating to the following:

1. Car Parking Provision:

The total number of car park spaces (residential) proposed as part of the development is 195 no. residential spaces (19 no. for housing component and 176 no. for apartment component, including car club, visitor and disabled spaces).

Due to the increased car parking quantum, the Disabled Parking Spaces has increased to satisfy DCC's 5% requirement. This has resulted in an additional 2 no. Disabled Parking Spaces at Grade and an associated reduction in Visitor and Car Club spaces.

Summary of Residential Car Parking per the Appeal Option:

- 152 no. residential parking spaces (basement)
- 19 no. residential parking spaces (at-grade, in-curtilage)
- 7 no. Car Club parking spaces (at-grade)
- 9 no. Disabled parking spaces (at-grade)
- 8 no. Visitor parking spaces (at-grade)

The resulting Car Parking Ratio for the Apartment component is 0.57 (= 152/265), which excludes Car Club, Disabled and Visitor Spaces in accordance with the requirements of SPPR3 of the Compact Settlement Guidelines.

This is well in excess of the 0.5 car parking ratio referenced in DCC Transportation Planning's report:

"A car parking ratio of 0.5 spaces per unit or below, for a standard residential development is generally only considered acceptable for centrally located and highly accessible site locations such as those Zone 1 locations within the Canals, under the Dublin City Development Plan 2022-2028."

Given the site's legitimate 'Accessible' location under Compact Settlement Guidelines (as outlined and justified in the main Appeal Response), this increased car parking provision is considered appropriate and reasonable should An Bord Pleanála seek to condition an uplift in car parking provision.

There are no changes to the non-residential car parking provision.

There are no changes to the cycle parking provision.

2. Accessible Location Designation:

The justification of the development site as an ‘Accessible Location’ under the requirements of the ‘Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities’ (January 2024) has been further elaborated in Section 11.1.1.

As outlined in the Appeal, the designation as an ‘Accessible Location’ is completely valid on the basis of the site’s proximity to both a ‘High-Capacity Public Transport Node or Interchange’ and a ‘planned high frequency (i.e. 10-minute peak hour frequency) urban bus services’.

3. Traffic Assessment and Road Impact:

The proposed increase in car parking provision has no impact on the traffic analysis and assessment. The trip generation presented in Section 5 of this TTA is based on the traffic generation from the number of residential units using a combination of TRICS and recent Census data. This is not affected or influenced by the number of residential car parking spaces provided.

Therefore, the traffic assessment and conclusions outlined in the TTA (specifically Sections 5, 6, 7, 8, 9, 10 and 12) are completely unaffected by any increase in parking provision.

The only sections affected in the TTA report is Section 11 ‘Parking’ as it (naturally) relates to parking. There is no wider impact on the traffic and transport assessment, and this does not constitute a “major alteration” or indeed any alteration whatsoever with respect to traffic and local road impacts.

Note: See below comparison of residential parking for the LRD Application and this Appeal Option:

Residential Car Parking Proposals included in the WEBLRD6058/24-S3	Residential Car Parking Proposals included in the Appeal for An Bord Pleanála consideration
112 no. residential parking spaces (basement)	152 no. residential parking spaces (basement)
19 no. residential parking spaces (at-grade, in-curtilage)	19 no. residential parking spaces (at-grade, in-curtilage)
10 no. Car Club parking spaces (at-grade)	7 no. Car Club parking spaces (at-grade)
7 no. Disabled parking spaces (at-grade)	9 no. Disabled parking spaces (at-grade)
9 no. Visitor parking spaces (at-grade)	8 no. Visitor parking spaces (at-grade)
TOTAL = 157	TOTAL = 195

Nett Increase of 38 no. car parking spaces.

1 Non-Technical Summary

- 1 The development will comprise a Large-Scale Residential Development (LRD) on a site at Fortfield Road, Terenure of 284 no. units delivering 19 no. houses and 265 no. apartments made up of studios; 1 beds; 2 beds; 3 beds; and 4 beds. The development will also provide community, cultural and arts space and a creche. Communal internal space for residents will also be delivered. Provision of car, cycle and motorbike parking will be provided throughout the development, including at basement and surface level. Vehicular/pedestrian/cyclist access from Fortfield Road. Proposed upgrade works to the surrounding road network is also included. All associated site development works, open space, services provision, ESB substations, plant areas, waste management areas, landscaping (both public and communal) and boundary treatments.
- 2 For the purposes of our assessment, the TRICS database and statistics from the 2022 Census were consulted to provide an equivalent trip rate for the proposed development site. Refer to Section 5 for further detail.
- 3 It is proposed to access the proposed development via Fortfield Road. Capacity analysis was carried out on the following junctions:
 - i. Fortfield Road / College Drive / Proposed Development Junction
 - ii. Fortfield Road / Templeogue Junction
 - iii. Fortfield Road / Wainsfort Road Junction

The analysis shows that there is capacity for the proposed development traffic to utilise the proposed upgraded development junction, and the Fortfield Road/Wainsfort Road Junction up to the Design Year 2043. The Fortfield Road / Templeogue Junction was found to be above the practical capacity without the development in place in the 2028 Do Nothing scenario (AM Peak only) and made slightly worse with the proposed development in the 2028 Design Year, but this is considered acceptable/expected in an urban area.

- 4 Parking spaces for the proposed development have been provided to comply with the maximum permissible requirements set out in the Dublin City Council Development Plan 2022-2028 and 'Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities' (January 2024).
- 5 Secure cycle parking facilities have been provided within the development and exceed the requirements set out in the Dublin City Council Development Plan.

2 Introduction

2.1 Background

PUNCH Consulting Engineers were appointed by 1 Celbridge West Land Limited to prepare a Traffic and Transport Assessment for a proposed Large-Scale Residential Development (LRD) at a site located on Fortfield Road, Terenure, Dublin 6W.

This assessment has been carried out in accordance with the TII's Traffic and Transport Assessment Guidelines (May 2014) and refers to the Design Manual for Urban Roads & Streets (DMURS). Sections from the Dublin City Council (DCC) Development Plan (2022 - 2028) have been used to help describe the development location and its local context.

The purpose of the TTA report is to assess the potential impact of the proposed development on the existing local transport network and to ensure that the proposed site access and the existing junctions, which fall within the scope of the study, will have adequate capacity to carry the development traffic and the future growth in existing road traffic to the design year and beyond. An assessment of the accessibility of the site for cyclists, pedestrians, and public transport users has also been made.

2.2 Scoping

Consultation was undertaken with Dublin City Council (DCC) at S247 Meeting of 19th December 2023 to allow them to express their views/comments regarding the proposed development prior to progressing the planning stage design development.

A Draft copy of the TTA was supplied to DCC on the 29th of January 2024, together with a Draft Site Layout prior to a subsequent meeting with the DCC Transportation Planning representatives.

This document has been further informed by the LRD Opinion Meeting of 29th May, followed by receipt of the DCC Written Opinion on 24th June. This document was updated to address items raised by DCC in their LRD Opinion document 'Notice of LRD Opinion' (Planning Authority Ref No. LRD6058/24) that relate to the engineering aspects of the proposed development at Fortfield Road, Terenure.

As stated in the Foreword, this version of the BIA has now been updated to reflect an expanded basement to accommodate a potential increase in car parking provision. This has been provided as part of the First Party Appeal response, which includes proposals for an expanded basement to address the DCC Reason for Refusal, should An Bord Pleanála consider it appropriate to condition as part of a decision to grant.

A separate planning submission (with associated pre-planning engagement) has also been advanced with South Dublin County Council (SDCC) for the proposed Works located on lands that are within SDCC's remit.

3 Existing Conditions

3.1 Site Location

The main site consists of a greenfield site which was previously used for growing vegetables and as sports fields. The site is now vacant having been surplus to requirements since 2018. The topography of the site is relatively flat falling gently from south to north. The site is located in Terenure, Co. Dublin, within 1km from Terenure Village. It was part of a larger site which has been used for educational purposes by the Carmelite Community at Terenure College.

The proposed development is to be accessed via Fortfield Road. The site is bounded to the north by existing housing on Greenlea Road, by the Carmelite Order (Terenure college) to the south, existing residential development to the west on Fortfield Road and by Terenure College Rugby Club to the northeast. Refer to Figure 3-1 below. There is one existing access route onto the site from Fortfield Road as shown in Figure 3-2. This serves as direct access to the pre-existing sports pitches on the site. The proposed scheme will integrate the site into the surrounding footpath networks providing convenient pedestrians routes linking the site with the surrounding area.

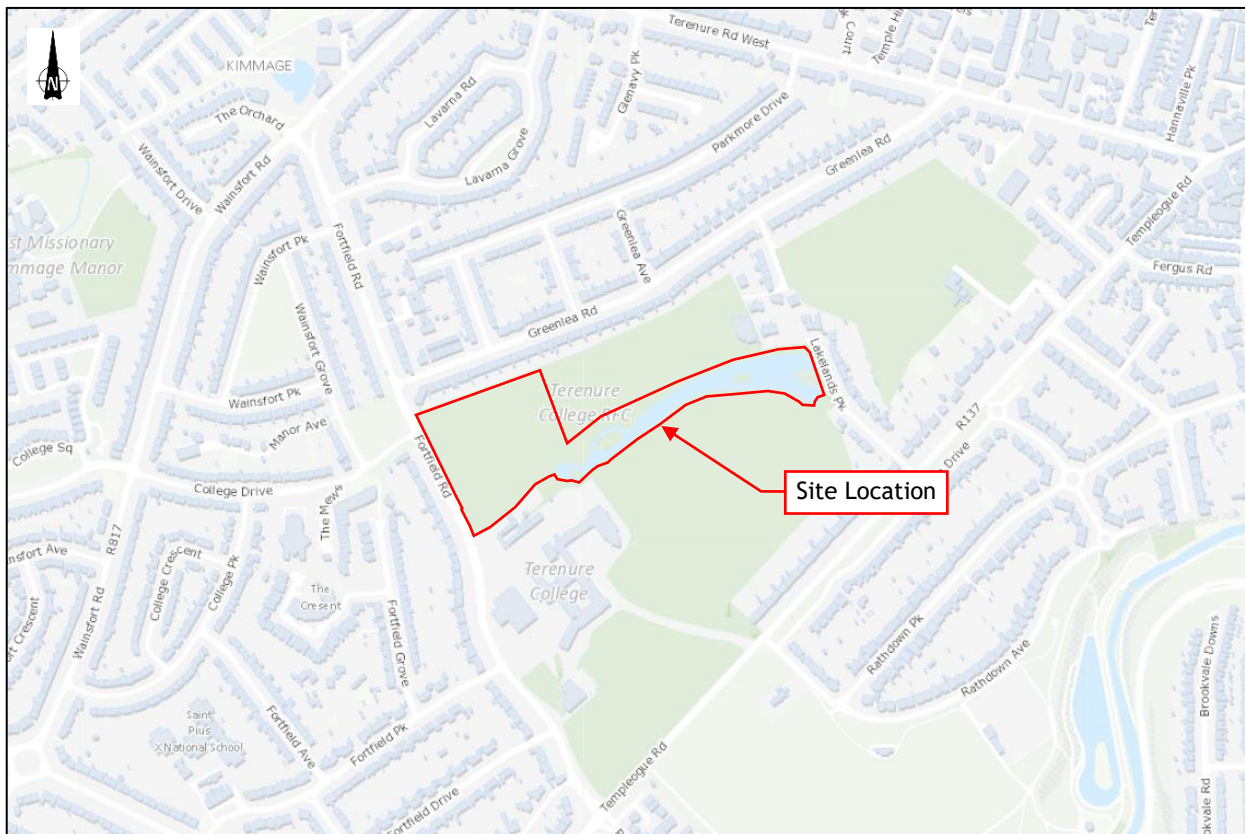


Figure 3-1: Site Location Plan (Ref: <https://viewer.myplan.ie/>)



Figure 3-2: Existing Access on Fortfield Road (Photo from PUNCH site visit)

3.2 Existing Road Network

The site location in relation to the wider road network is detailed in Figure 3-1. The layout of the local road network is presented in Figure 3-3. A brief description of the local road network is provided below. All the roads in the vicinity described below have a speed limit of 50 km/hr and are illuminated by public lighting.

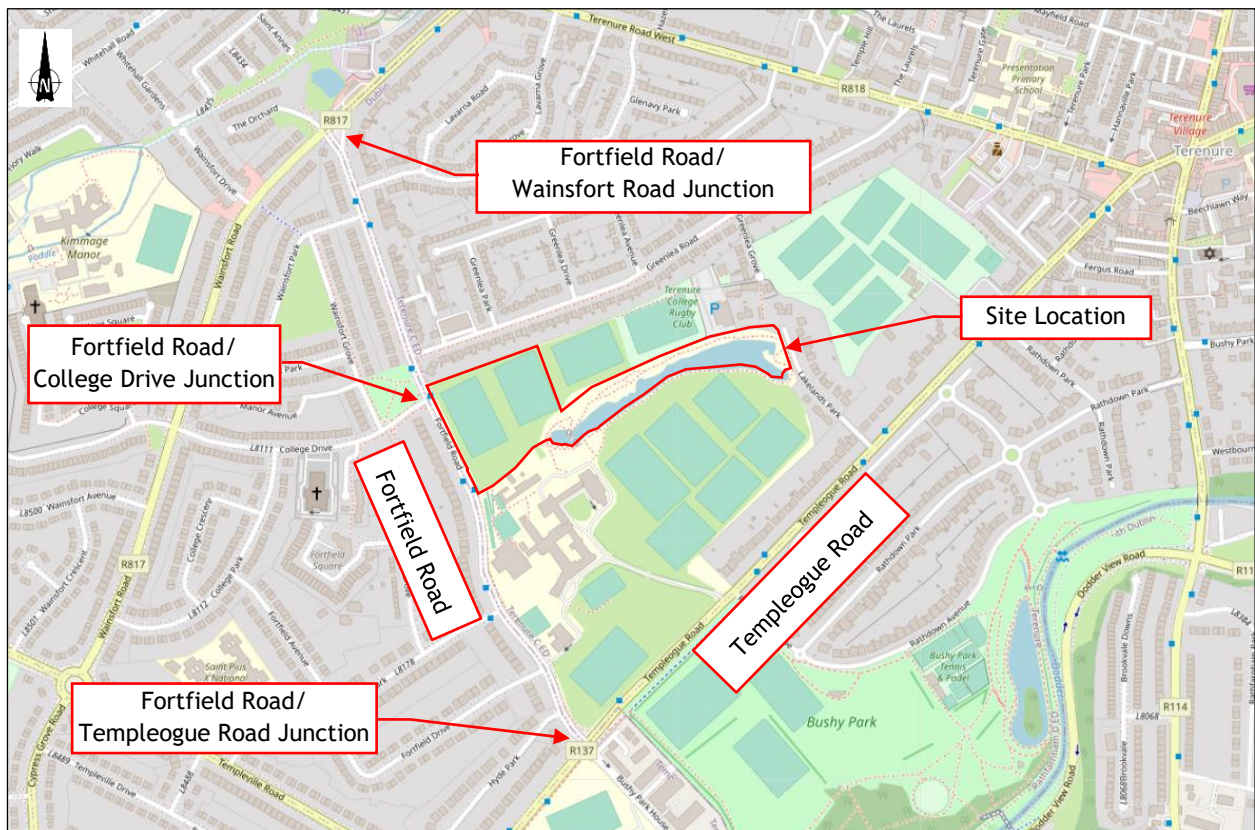


Figure 3-3: Site location and surrounding road network
(Ref: <https://www.openstreetmap.org/#map=17/53.30594/-6.29768>)

3.2.1 Fortfield Road

Fortfield Road is the principal road serving the proposed development. It links the site with the R137 Templeogue Road (to the south) and the R817 Wainsfort Road (to the north). The road provides vehicular access to several residential housing estates as well as many residential driveway accesses along the road. Refer to Figure 3-4. It is a single lane two-way carriageway with footpaths on both sides of the carriageway.



Figure 3-4: Fortfield Road (Looking South)

Along Fortfield Road there is an unsignalised T-junction with College Drive, providing access to the R817 to the west. Refer to Figure 3-5. Please note that it is an intention of the proposed development to introduce a site entrance aligned with College Drive resulting in the proposed establishment of a 4 arm signalised junction at this location.

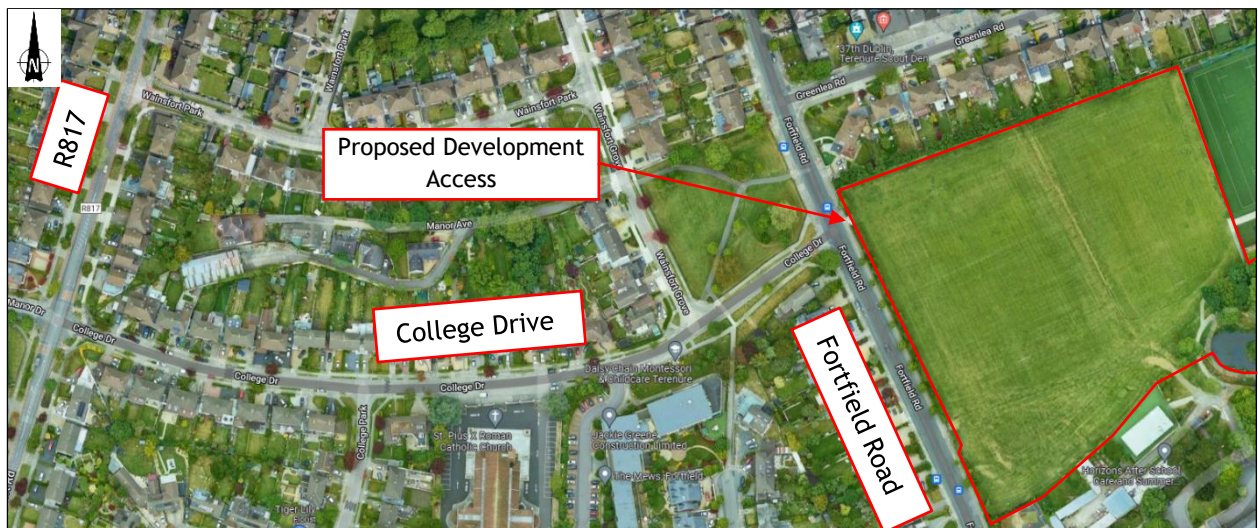


Figure 3-5: College Drive layout © Google Maps

3.2.2 Templeogue Road (R137)

Templeogue Road (R137) is a single lane two-way carriageway from the Fortfield Road Junction to the north east, and 2-lane two-way carriageway from the south-west with dedicated bus lanes in either direction. Footpaths are provided on both sides of the road.

The junction of Fortfield Road and Templeogue Road is located approximately 450m south of the proposed site's southern boundary. It is a 4-arm signal controlled junction with Fortfield Road/Bushy Park House heading northwest-southeast, connecting with Templeogue Road (R137). Refer to Figure 3-6.

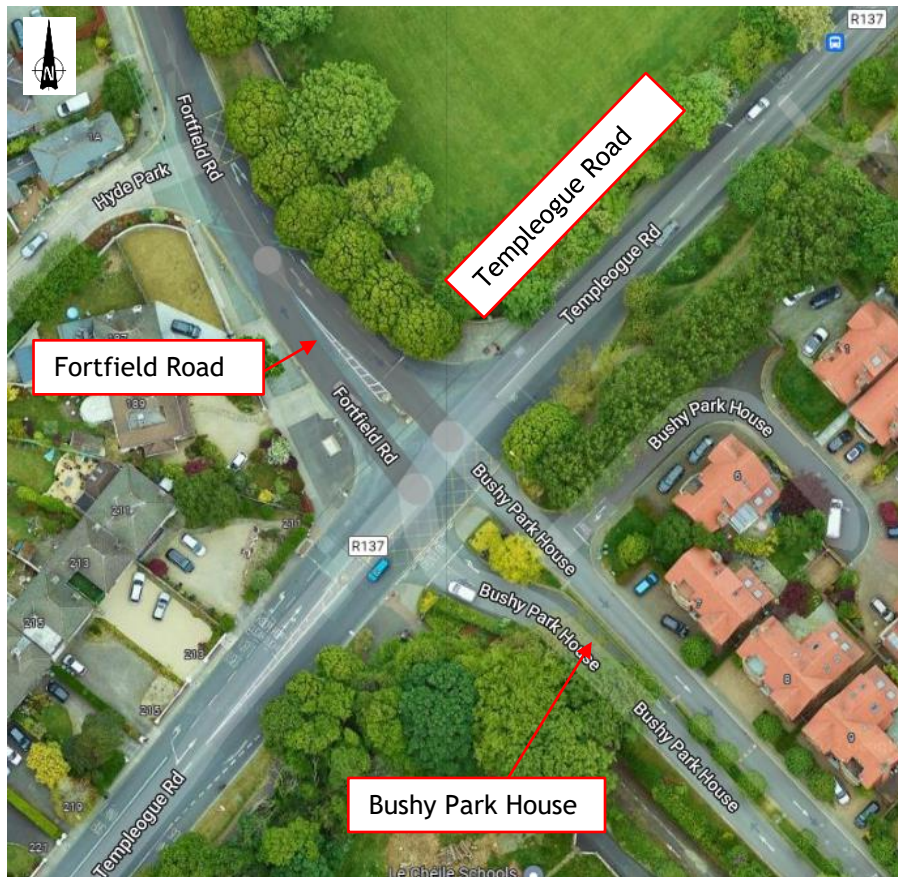


Figure 3-6: Junction of Templeogue Road and Fortfield Road © Google Maps



Figure 3-7: Templeogue Road (Looking North onto Fortfield Road junction) © Google Maps

3.2.3 Wainsfort Road (R817)

Wainsfort Road (R817) is a single lane two-way carriageway. Footpaths and designated cycle lanes are provided on both sides of the road. Refer to Figure 3-8 below.



Figure 3-8: Wainsfort Road (Looking North) © Google Maps

The junction of Fortfield Road and Wainsfort Road is located approximately 430m north of the proposed site's northern boundary. It is a 4-arm signalised junction with Fortfield Road/The Orchard heading northwest-southeast, connecting with Wainsfort Road (R817). Refer to Figure 3-9 below.



Figure 3-9: Junction of Wainsfort Road and Fortfield Road © Google Maps

The slip road at the south-east of the junction has been closed and is only open for access to local residential premises from Fortfield Road to the south. Refer to Figure 3-10.



**Figure 3-10: Now Closed Off Slip Road at Junction of Wainsfort Road and Fortfield Road
(Looking South-West) © Google Maps**

3.2.4 M50 Junction 11

Templeogue Road links with the at the M50 interchange Roundabout at Junction 11 M50 approximately 2.5 km to the west. Refer to Figure 3-11.



Figure 3-11: M50 junction 11 © Google Maps

3.3 Existing Traffic Flows

Traffic surveys of the following junctions were carried out in order to assess traffic on the existing road network adjacent to the proposed site:

1. Fortfield Road/College Drive Priority Junction
2. Fortfield Road/Templeogue Road/Bushy Park House Signal Controlled Junction
3. Fortfield Road/Wainsford Road/The Orchard Signal Controlled Junction

The surveys were completed by IDASO on behalf of the client on Thursday 11th January, Saturday 13th January, and Sunday 14th January 2024. The traffic survey locations and full traffic survey results are included in Appendix A.

The traffic surveys undertaken at the existing junctions surrounding the development found that on weekdays the mean morning peak hour traffic flows at the generally occurred between 08:00 and 09:45 (AM), and the evening peak hour flows were found to be between 15:15 and 18:15 (PM).

On weekends, Saturday was found to have the highest flows, and the mean morning peak hour traffic flows generally occurred between 11:00 and 12:00 (AM), and the inter/evening peak hour flows were found to be between 11:30 and 15:30 (PM). Therefore, generally at the weekend the flows were consistently high for a period between 11:00 and 15:30. Weekend peak figures were considerably lower than weekday peak figures therefore only weekday peak hours were further tested in the Junction Analysis Section of this report.

The surveyed peak hour turning PCUs for Thursday and Saturday are presented in Figure 3-12 and Figure 3-13 below. It is noted that the surveyed junctions had some variation in their peak hours, e.g. for the weekday peak hour flows, the Fortfield Road/Wainsford Road Junction had an AM peak between 08:45 and 09:45 while Fortfield Road/College Drive Junction had an AM peak between 08:00 - 09:00 therefore peak figures presented in the network diagram are not consistent but are the worst case surveyed figures.

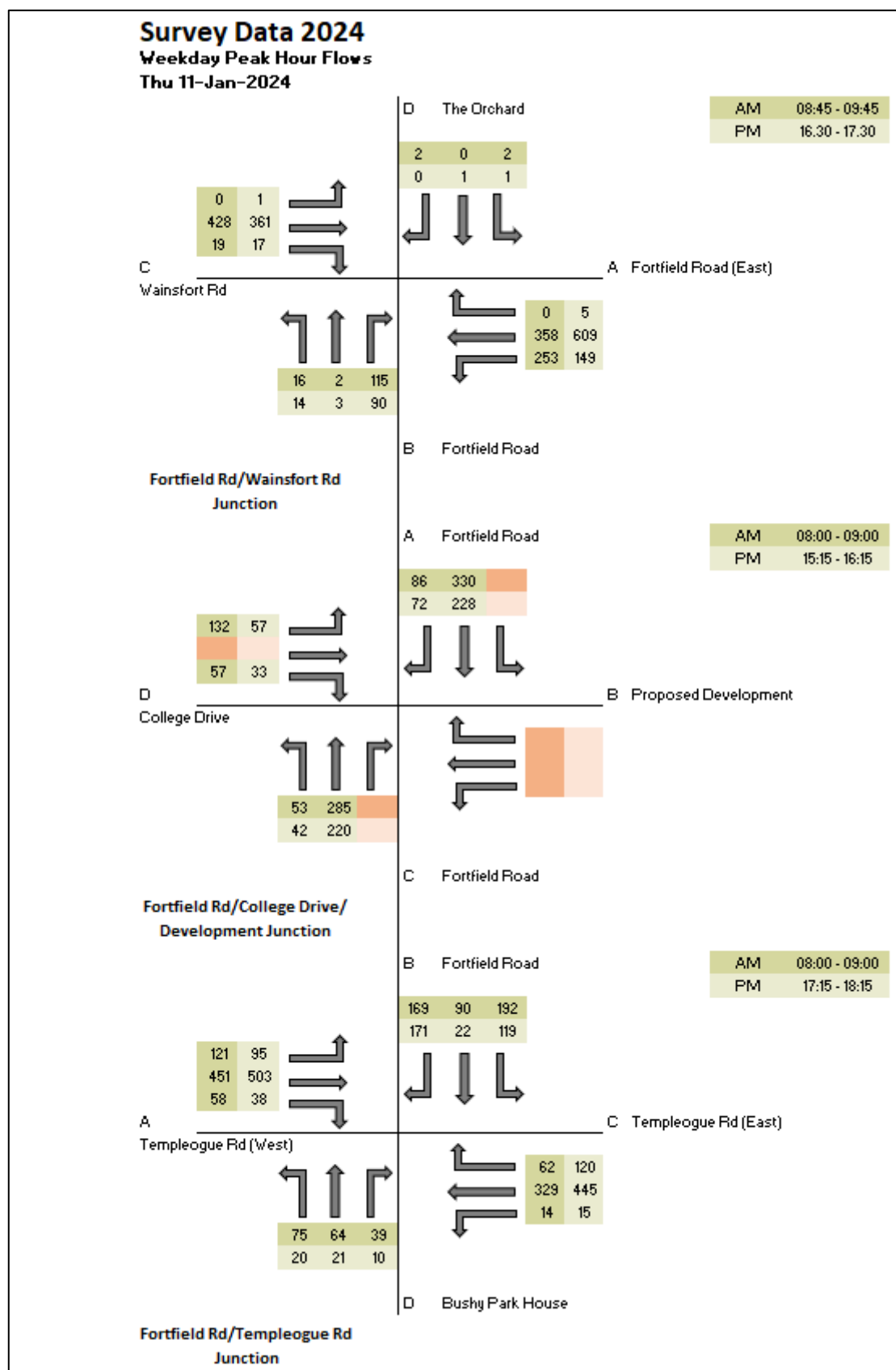


Figure 3-12: Surrounding Junctions Weekday Peak Hour Traffic Survey Results (PCUs)

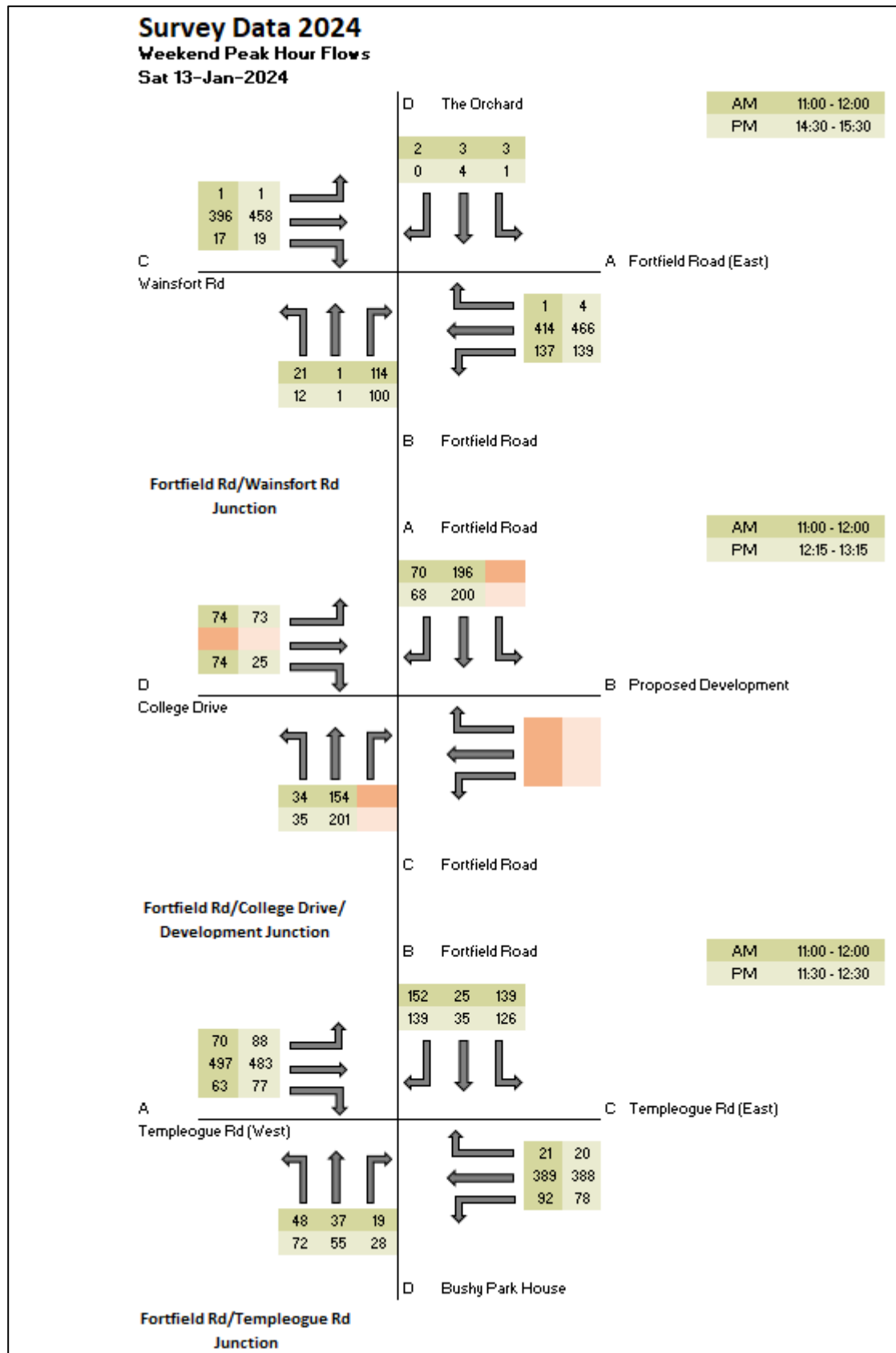


Figure 3-13: Surrounding Junctions Weekend Peak Hour Traffic Survey Results (PCUs)

3.4 Future Transport Proposals

The site is located in the Dublin City Council Development Plan. General proposals and objectives as noted in the Development Plan are to reduce car dependency and increase the use of sustainable means of transport such as walking, cycling and the use of public transport. The bulk of the proposed site is zoned as Z15- “Community and Social Infrastructure” in the Dublin City Council Development Plan. Residential development is permitted in principle subject to relevant justifications. The remainder of the site is zoned Z11 (Waterway Protection) where the objective is ‘to protect and improve canal, coastal and river amenities.’

3.4.1 Cycle Routes

The National Transport Authority in conjunction with DCC has proposals to upgrade the cycle network. shows the proposed improvements in the vicinity of the site. Fortfield Road, adjacent to the site, is noted as a Feeder Route on the maps.

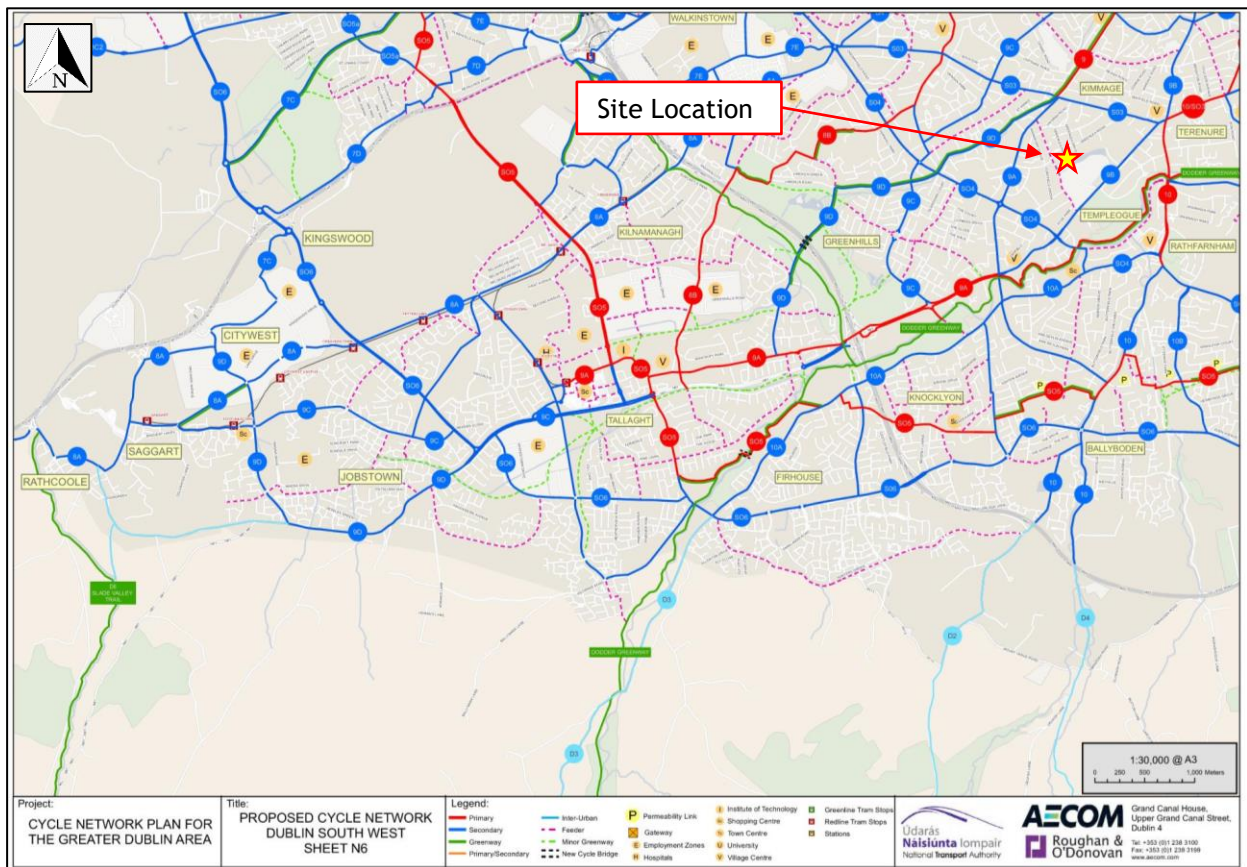


Figure 3-14: Proposed upgrade to the Dublin Cycle Network
(Ref: NTA Cycle Network Plan for Greater Dublin)

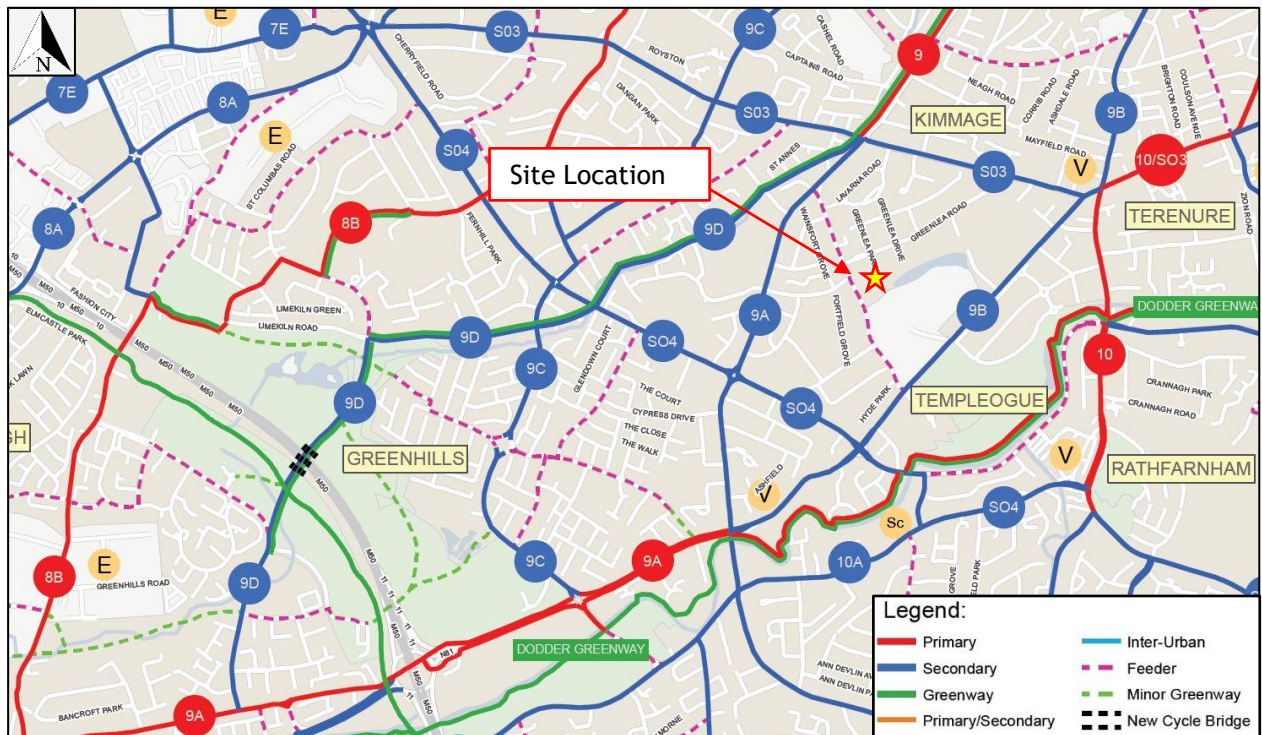


Figure 3-15: Detail from Proposed upgrade to the Dublin Cycle Network

There are large-scale existing cycle networks in place by DCC across the city and suburbs. It is noted that there are dedicated existing bicycle lanes running along Templeogue Road to the south of the development, and a network of urban cycle routes surrounding the development, facilitating the use of this sustainable form of transport. These cycle lanes are separated from the main vehicular lanes.

3.4.2 Public Transport

The site of the proposed development is well served by public transport. The 54A bus route serves along Fortfield Road generally every 30 minutes. The Proposed Development is also approximately a 10 minute walk from the 15, 49, 65 and 65B bus routes on the Templeogue Road to the south. A Mobility Management Plan has been prepared to accompany this report and provides further details of the existing public transport services available in the area.

In terms of future public transport proposals, the proposed site is located close to the BusConnects 'Templeogue/Rathfarnham to City Centre Bus Corridor Scheme'. BusConnects is a key part of the Government's policies to improve public transport and address climate change in Dublin. The aim of BusConnects is:

"to provide improved walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The Proposed Scheme is a key measure that delivers on commitments within the National Development Plan (2021-2030), the Transport Strategy for the Greater Dublin Area (2022-2042) the Climate Action Plan (2023) and the National Planning Framework 2040.

- Taken from www.templeoguerathfarnhamscheme.ie in August 2024

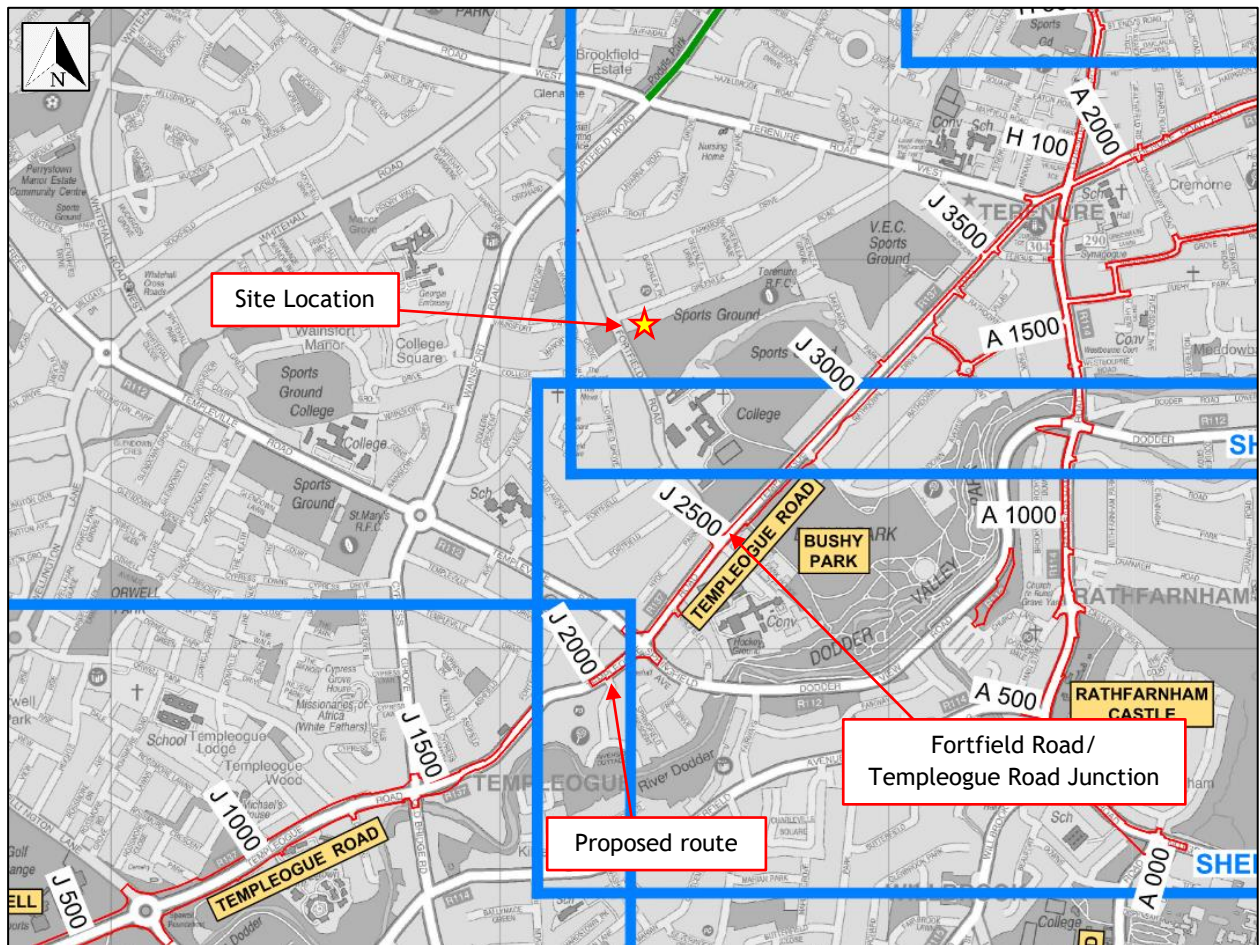


Figure 3-16: Extract from Site Location Map, BusConnects 'Templeogue/Rathfarnham to City Centre Bus Corridor Scheme' (Ref: www.templeoguerathfarnhamscheme.ie/)

3.5 Coordination with Other Projects

Adjacent planning consents/applications granted/submitted in the area via DCC and SDCC planning websites have been reviewed. In assessing the traffic impacts of the subject development, the following other developments were considered based on the current data available:

3.5.1 BusConnects

The BusConnects 'Templeogue/Rathfarnham to City Centre Bus Corridor', as noted in section 3.4.2, is located to the south of the proposed development. Traffic implications for the proposed development due to the BusConnects scheme have been reviewed as part of this TTA using publicly available documentation found at www.templeoguerathfarnhamscheme.ie/ (accessed August 2024).

3.5.1.1 Junction alterations

- a. A number of changes are proposed at the Fortfield Road/Templeogue Road/Bushy Park House Signal Controlled Junction (Junction 2) including an extension of the eastbound bus lane along Templeogue Road, revised cycle path arrangements, and a new toucan crossing at the eastern side of the junction on Templeogue Road. There are no changes proposed in the directional flow of traffic at the Fortfield Road/Templeogue Road/Bushy Park House Signal Controlled Junction (Junction 2). Thus, traffic can still move in all directions as per the existing layout. Refer to Figure 3-17 which shows the proposed junction layout.
- b. A right turn ban from Fortfield Road to Greenlea Road at Fortfield Road/College Drive Priority Junction (Junction 1) located to the north of the site is proposed. Currently, existing traffic can turn right from Fortfield Road to Greenlea Road. Refer to Figure 3-18.

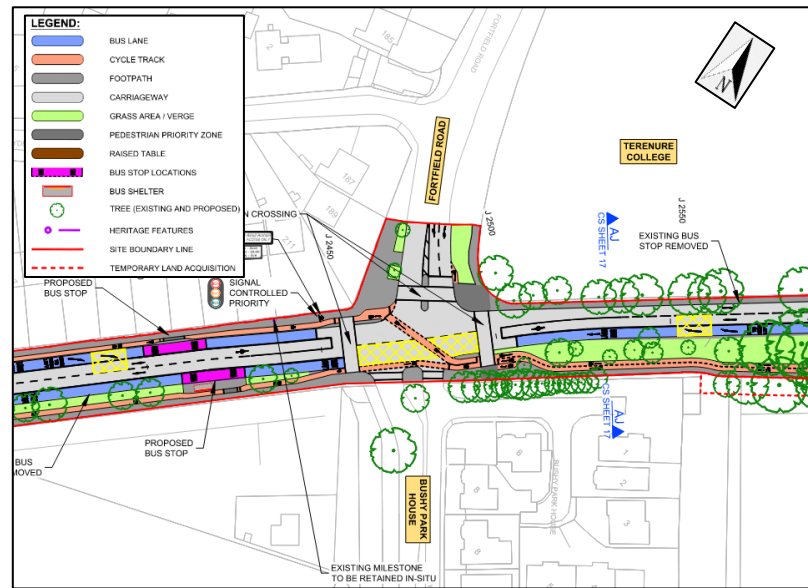


Figure 3-17: Fortfield Road/Templeogue Road/Bushy Park House Signal Controlled Junction (Junction 2).
Extract from Sheet 34 General Arrangement drawings (Ref: NTA)

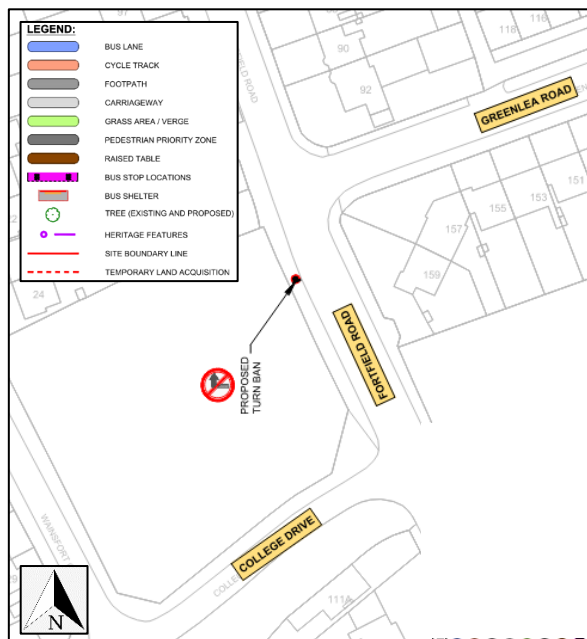


Figure 3-18: Fortfield Road/College Drive Priority Junction (Junction 1).
Extract from Sheet 38 General Arrangement drawings (Ref: NTA)

3.5.1.2 Traffic Impact Assessment

A traffic impact assessment was carried out as part of the BusConnects 'Environmental Impact Assessment' (EIA) for the proposed scheme. Refer to Chapter 6 of the EIA report at www.templeogueathfarnhamscheme.ie/ (accessed August 2024).

Potential impacts relating to Construction Phase traffic were analysed. As noted in section 6.4.5.5 of the EIA report additional construction traffic flows upon the surrounding network are expected to be 'Negative, Slight and Temporary'. The cumulative impact of the scheme during the Construction Phase on traffic along Fortfield Road, which is not included as a proposed construction route, is thus assessed to be minimal.

For the Operational Phase, the peak hour people movement was accessed as part of the EIA report (section 6.4.6.1.8), for 'Do Nothing', 'Do Minimum' and 'Do Something' scenarios.

- a. As shown in Figure 3-19 below, a 38% reduction in people travelling via car, an increase of 61% in the number of people travelling via bus, and an increase of 83% in people walking or cycling along the Proposed Scheme is predicted in the 'Do Something' Design Year (2043) AM Peak Hour. This relates to traffic that is inbound towards the city centre.

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Inbound towards the City Centre	AM Peak Period	General Traffic	370	18%	231	7%	-140	-38%
		Public Transport	1,298	62%	2,094	68%	797	61%
		Walking	196	9%	207	7%	12	6%
		Cycling	215	10%	546	18%	331	154%
		Combined Walking/Cycling	411	20%	753	24%	342	83%
		Sustainable Modes Total	1,708	82%	2,847	93%	1,139	67%
		Total (All modes)	2,079	100%	3,078	100%	999	48%

Figure 3-19: "Table 6.44" Modal Shift of 2043 AM Peak Hour along the Proposed Scheme (Ref: NTA)

- b. As shown in Figure 3-20, a 38% reduction in people travelling via car, an increase of 66% in the number of people travelling via bus, and an increase of 133% in people walking or cycling along the Proposed Scheme is predicted in the 'Do Something' Design Year AM Peak Hour. This relates to traffic that is outbound from the city centre.

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Outbound from the City Centre	PM Peak Period	General Traffic	369	22%	230	9%	-139	-38%
		Public Transport	1,032	61%	1,715	66%	684	66%
		Walking	86	5%	173	7%	88	102%
		Cycling	198	12%	488	19%	289	146%
		Combined Walking/Cycling	284	17%	661	25%	377	133%
		Sustainable Modes Total	1,316	78%	2,376	91%	1,061	81%
		Total (All modes)	1,685	100%	2,606	100%	921	55%

Figure 3-20: "Table 6.45" Modal Shift of 2043 PM Peak Hour along the Proposed Scheme (Ref: NTA)

The above shows that a general move away from private car use, accompanied by an increase in more sustainable forms of transport is expected.

The assessment also looked at changes to the operational capacity for general traffic due to the modal shift and new road layout of the proposed scheme (section 6.4.6.1.15). It is noted that while "some reduction in operational capacity for general traffic along the Proposed Scheme will likely create some

level of trip redistribution onto the surrounding road network”, the reductions in general traffic flows will have a “positive impact to the environment”.

The significance of redistribution impacts along Fortfield Road have been reviewed as part of this TTA. Figure 3-21 best illustrates the change in traffic flows and any redistribution in traffic due the proposed scheme. This includes decreased traffic flows (shown in blue) and redistributed traffic (or increased traffic flows) along alternative routes (shown in red). No redistribution of traffic is shown along Fortfield Road.

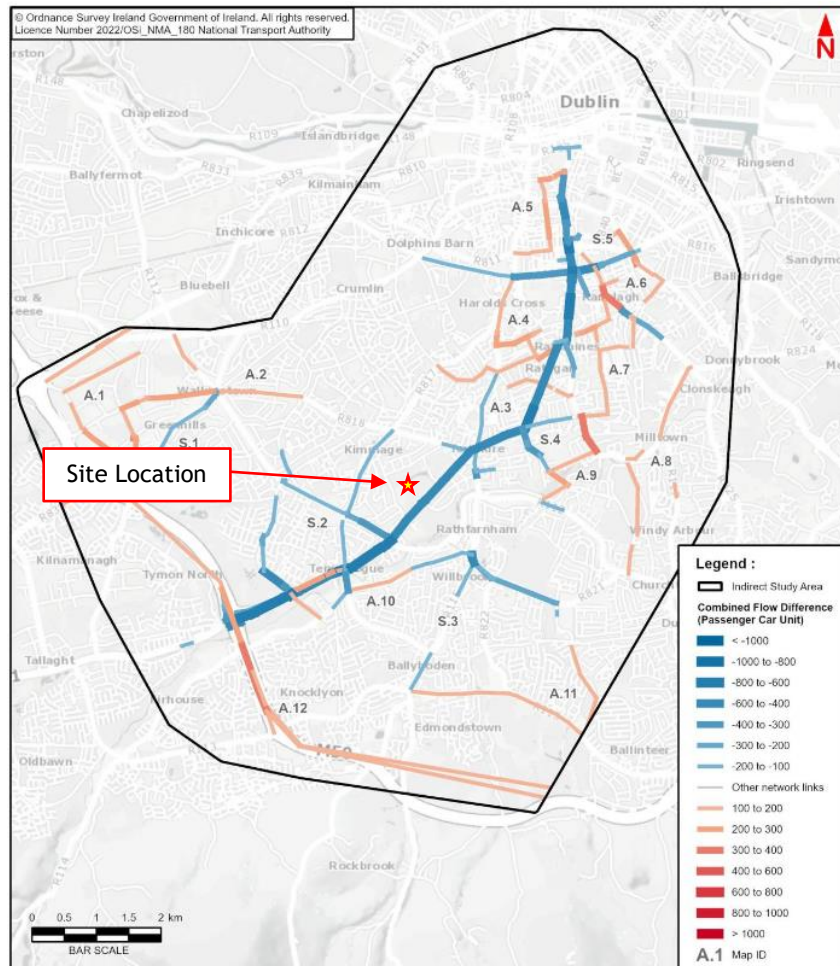


Figure 3-21: “Diagram 6.40” Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year. Chapter 6 EIAR.

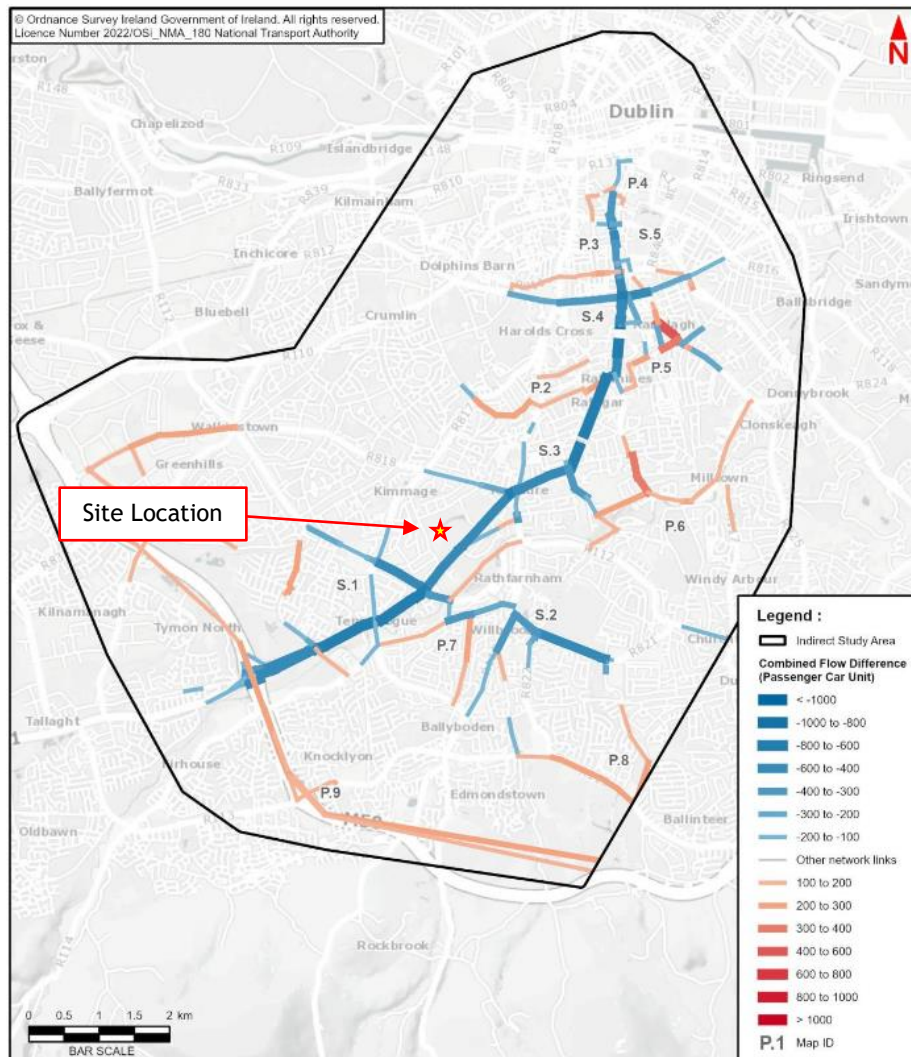


Figure 3-22: “Diagram 6.41” Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year. Chapter 6 EIAR.

Finally, it is noted in section 6.4.6.2 that “overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area.”

Thus, it is PUNCH’s view that the BusConnects scheme is unlikely to have any long-term negative impacts on traffic along Fortfield Road and/or on the road network in the close vicinity of the Proposed Development. No further analysis has been carried out regarding the BusConnects scheme as part of this TTA.

4 Proposed Development

4.1 Description

The development will comprise a Large-Scale Residential Development (LRD) on a site at Fortfield Road, Terenure of 284 no. units delivering 19 no. houses and 265 no. apartments made up of studios; 1 beds; 2 beds; 3 beds; and 4 beds. The development will also provide community, cultural and arts space and a creche. Communal internal space for residents will also be delivered. Provision of car, cycle and motorbike parking will be provided throughout the development, including at basement and surface level. Vehicular/pedestrian/cyclist access from Fortfield Road. Proposed upgrade works to the surrounding road network is also included. All associated site development works, open space, services provision, ESB substations, plant areas, waste management areas, landscaping (both public and communal) and boundary treatments.

The proposed layout for the development is detailed in the series of drawings by Urban Agency Architects accompanying this report and an extract is included in Figure 4-1.

4.2 Development Phasing

The development will be completed in one phase only.



Figure 4-1: Proposed Site Layout (Ref: Urban Agency Architects)

5 Person Trip Generation

5.1 Generated Vehicle Trips

The purpose of this section is to determine the overall number of trips that will be generated by the proposed development. The proposed development includes Apartments and Houses.

5.2 TRICS Estimate

In order to estimate the likely volumes of traffic that will be generated by the proposed development, trip rates recommended by TRICS (Trip Rate Information Computer System) based on *Total Vehicle Counts* surveys were extracted from the database and applied pro-rata to the relevant number of houses and apartments within the development. TRICS® (v7.10.4) enables its users to undertake calculations, using a number of calculation parameter options, to ascertain potential levels of trip generation for a user-defined development scenario.

It is assumed that the communal amenities are provided for residents alone and therefore will not generate any additional travel journeys to or from the development during peak times. The TRICS generated trip rates based off Total Vehicle Count Surveys for the weekday peak times are presented in Table 5-1 below.

Full details of the TRICS *Total Vehicle Counts* analysis are reproduced in Appendix B.

Table 5-1: Estimated AM and PM peak hour traffic (PCUs) generated by proposed development using TRICS *Total Vehicle Counts*

Land Use	Calculation Factor	TRICS 'Vehicular' Trip rate				Additional Number of Trips			
		AM Peak		PM Peak		AM Peak		PM Peak	
	No. of Units	AM Arrive	AM Depart	PM Arrive	PM Depart	AM Arrive	AM Depart	PM Arrive	PM Depart
Apartments	265	0.038	0.117	0.105	0.061	10	31	28	16
Houses	19	0.038	0.117	0.105	0.061	1	2	2	1
Total						11	33	30	17

5.3 Census Estimate

At the request of DCC, 2022 Census Data relating to means of travel (*Census 2022, Profile 7 - Employment, Occupations and Commuting, Table: F7065*) was also reviewed and applied to trip rates recommended by TRICS results based off of surveys which recorded *Total People Counts* (i.e. the total number of people predicted to arrive at and leave the development during the peak hours across all modes of transport: driving, walking, cycling etc).

The 2022 Census data for Motor Car Driver found 18% of residents in Dublin City, and 35% of residents in South Dublin had listed Motor Car Driver as their primary commuting method.

Due to the proposed site being located on the Dublin City Council and South Dublin City Council Local Authority borders, the higher South Dublin Census motor car usage percentage (35%) was applied to the total predicted number of people to arrive at or leave the proposed development during peak hours. The trip rates based off this information for the weekday peak times are presented in Table 5-2 below.

Full details of the TRICS *Total People Counts* analysis are reproduced in Appendix B.

Table 5-2: Estimated AM and PM peak hour traffic (PCUs) generated by proposed using 2022 Census Data and TRICS *Total People Counts*

Land Use	Calculation Factor	TRICS 'People' Trip rate				% Motor Car Drivers	Additional Number of Trips			
		AM Peak		PM Peak			AM Peak		PM Peak	
	No. of Units	AM Arrive	AM Depart	PM Arrive	PM Depart		AM Arrive	AM Depart	PM Arrive	PM Depart
Apartments	265	0.093	0.51	0.371	0.173	35%	9	48	35	16
Houses	19	0.093	0.51	0.371	0.173	35%	1	3	2	1
Total							9	51	37	17

As the above figures in Table 5-2 predict an overall higher vehicular trip generation for the proposed development, these figures have been used in the Junction Analysis Section of this report.

6 Trip Assignment and Distribution

There will be an increase in traffic generated by the proposed development. All traffic entering and exiting the proposed development will be obliged to obey all road traffic regulatory requirements.

The proposed development traffic was apportioned during the analysis in accordance with the directional flow of the surveyed traffic, refer to Figure 6-1.

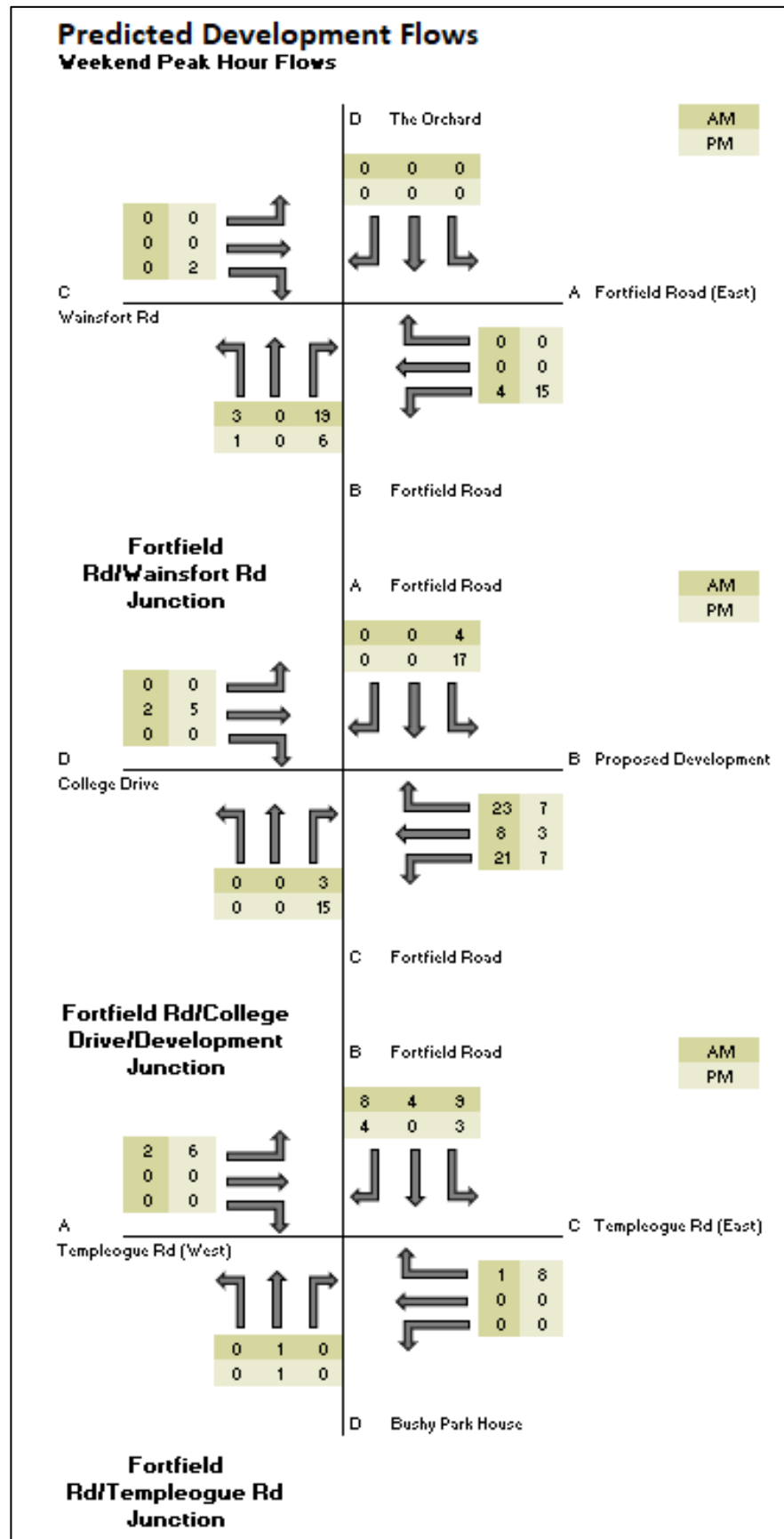


Figure 6-1: Distribution of Proposed Development Peak Hour Traffic onto Surrounding Junctions

7 Traffic Forecasting

7.1 Future Baseline Traffic Growth

In the absence of any specific local traffic growth information, it is assumed that baseline traffic will continue to grow at the levels recommended by the TII in the “Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections” publication (October 2021). The Project Appraisal Guidelines describe three levels of transport model functionality. The static model, which reflects traffic volumes on the basis of link flows, is best suited to the proposed development. Such models do not attempt any route assignment, and hence are applicable for networks where no change in traffic flows will result from a proposed scheme. This model recommends using growth rates in the “Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections” publication. The appropriate figures to use are those for the Dublin Metropolitan Area.

The year of opening of the project is assumed to be 2028. A 15-year analysis period for the scheme would give a design year of 2043. The central growth factors for light vehicles from the Project Appraisal Guidelines - Unit 5.5 ‘Link-Based Traffic Growth Forecasting’ publication are appropriate and are detailed below:

- TII Metropolitan Area (Dublin) Annual Traffic Growth Factor for 2016-2030 = 1.0162
- TII Metropolitan Area (Dublin) Annual Traffic Growth Factor for 2030-2040 = 1.0051
- TII Metropolitan Area (Dublin) Annual Traffic Growth Factor for 2040-2050 = 1.0044

Estimated future baseline traffic flows on the road network in the vicinity of the proposed development were calculated by applying these factors to the 2024 surveyed flows.

8 Assessment and Road Impact

The impact on the local external road network has been assessed in this TTA.

This involved examining the projected traffic flows on the local road network both 'with' and 'without' the proposed development in place. The morning peak period and the evening peak period have been examined in order to assess the busiest case in terms of local traffic on the road network and traffic generated by the proposed development.

8.1 Junction Analysis

Capacity analysis was carried out for the junctions listed below:

1. Fortfield Road / College Drive / Development Signal Controlled Junction
2. Fortfield Road / Templeogue / Bushy Park House Signal Controlled Junction
3. Fortfield Road / Wainsfort Road / The Orchard Signal Controlled Junction

The following development scenarios were analysed, using the results of the traffic survey, for the weekday AM and PM peak times:

1. Survey year: 2024
2. Opening year: 2028
3. Design year: opening year + 5 years: 2033
4. Design year: opening year + 15 years: 2043

Weekend AM and PM peak times were not assessed as the weekday AM and PM peak times traffic flows were found to be higher and as such the more conservative figures were analysed.

LinSig software was used for the analysis of the signalised junctions.

LinSig Analysis Note:

The degree of saturation (DOS) is defined as the ratio of demand flow to the maximum flow which can be passed through the junction from a particular approach. If an approach is found to have a DOS greater than 100%, then it is "over saturated" and long queues will result. The practical capacity is the level of capacity above which the junction is assumed to work inefficiently (usually taken to be 90%).

Junction capacities shown below are only one theoretical interpretation of the phase/stage setup for the existing junctions. The results should be viewed more for a comparative assessment of with and without proposed development for the various scenarios.

8.1.1 Fortfield Road / College Drive / Development Junction Signal Controlled Junction

The LinSig output is summarised below and the full detailed output is included in greater detail in Appendix C.

Table 8-1: Summary of LinSig Analysis Results for Fortfield Road / College Drive / Development Junction

	Without Development	With Development
Peak Hour Flow	Max Degree of Saturation (%)	Max Degree of Saturation (%)
AM 2028 Opening Year	-	59.1
AM 2033 Design Year	-	62.1
AM 2043 Design Year	-	65.3
PM 2028 Opening Year	-	38.5
PM 2033 Design Year	-	40.3
PM 2043 Design Year	-	42.4

The above analysis predicts that by the Design Year 2043 the proposed junction would be operating within the design threshold with the full development in operation during both the AM and PM peak hours. The above results are based on a 105 second cycle time and calling pedestrians every cycle during peak times which is a conservative approach.

8.1.2 Fortfield Road / Templeogue / Bushy Park House Signal Controlled Junction

The LinSig output is summarised below and the full detailed output is included in greater detail in Appendix D. No stage/phase timings were available from DCC for the below junction. As such stage and phase timings were estimated from a site visit during peak hours. The below results are based on a 120 second cycle time and calling pedestrians every cycle during peak times, which was witnessed onsite.

Table 8-2: Summary of LinSig Analysis Results for Fortfield Road / Templeogue / Bushy Park House Junction

	Without Development	With Development
Peak Hour Flow	Max Degree of Saturation (%)	Max Degree of Saturation (%)
AM 2024 Survey Year	85.9	-
AM 2028 Opening Year	91.6	93.8
AM 2033 Design Year	96.0	98.2
AM 2043 Design Year	100.7	103.1
PM 2024 Survey Year	73.2	-
PM 2028 Opening Year	78.0	78.9
PM 2033 Design Year	81.8	82.6
PM 2043 Design Year	85.9	87.1

As shown above it is predicted that existing Fortfield Road/Templeogue/Bushy Park House Signal Controlled Junction will be operating slightly above capacity by the year 2028 in the AM Peak without the development. The Proposed Development increases the DOS by a maximum of 2.2% in the 2043 AM scenario.

The above analysis predicts that by the Design Year 2043 the proposed junction would be operating within the design threshold with the full development in operation during the PM peak hours. The Proposed Development increases the DOS by a maximum of 1.2% in the 2043 PM scenario.

While the junction will be operating beyond theoretical capacity by 2028 (AM only) both with and without the development, this level of service for a signalised junction is considered acceptable in an urban environment. There are always opportunities available for signalised junction improvements in the future on the ground by altering the cycle time to respond to actual traffic loading or by providing on-crossing detectors to improve pedestrian impact on the junction capacity.

8.1.3 Fortfield Road / Wainsfort Road / The Orchard Signal Controlled Junction

The LinSig output is summarised below and the full detailed output is included in greater detail in Appendix E. Phase and Stage information was provided by DCC for the below junction. The below results are based on a 90 second cycle time during peak times, which was witnessed onsite during the peak hours.

Table 8-3: Summary of LinSig Analysis Results for Fortfield Road / Wainsfort Road / The Orchard Junction

	Without Development	With Development
Peak Hour Flow	Max Degree of Saturation (%)	Max Degree of Saturation (%)
AM 2024 Survey Year	49.5	-
AM 2028 Opening Year	52.9	54.3
AM 2033 Design Year	55.9	57.0
AM 2043 Design Year	58.1	59.8
PM 2024 Survey Year	60.1	-
PM 2028 Opening Year	64.0	65.1
PM 2033 Design Year	67.2	68.8
PM 2043 Design Year	70.5	71.6

The above analysis predicts that by the Design Year 2043 the proposed junction would be operating well within the design threshold with the full development in operation during both the AM and PM peak hours.

8.1.4 Analysis Summary

The results show that the proposed development signalised junction and the adjacent junctions can cater for the existing traffic growth as well as the full development traffic predicted.

As noted previously the worst case scenario is presented in the results above by adding the development traffic to the existing peak hour traffic selected from the traffic count survey and by calling pedestrians during every peak hour cycle analysis.

Table 9-4: Summary Results all Surrounding Junctions

Junction	2043 Without Development Max DOS (%)	2043 With Development Max DOS (%)
Fortfield Road / College Drive / Development Junction	n/a	65.3%
Fortfield Road / Templeogue / Bushy Park House Junction	100.7%	103.1%
Fortfield Road / Wainsfort Road / The Orchard Junction	70.5%	71.6%

The Fortfield Road/Templeogue/Bushy Park House Signal Controlled Junction is predicted to be operating above practical capacity by 2028 (AM Peak) both with and without the Proposed Development. It is considered that in urban areas a certain level of congestion is to be expected during peak times. This level of service for a signalised junction is considered acceptable in an urban environment. There are always opportunities available for signalised junction improvements in the future on the ground by altering the cycle time to respond to actual traffic loading or by providing on-crossing detectors to improve pedestrian impact on the junction capacity.

From the above modelling results we conclude that the development will have little impact on the operational capacity of the surrounding network of roads and junctions.

9 Road Safety

A Road Safety Audit for the development will be undertaken and supplied as a separate report.

10 Internal layout

The layout of the proposed development is detailed in the architect and landscape architect's drawings submitted as part of this application.

10.1 DMURS

The proposed development has been assessed for compliance with "Design Manual for Urban Roads and Streets" (DMURS) published by the Department of Transport, Tourism and Sport & the Department of Environment, Community and Local Government. A DMURS Compliance Statement is also included within the planning documentation for this proposed development and concludes that the proposed development is considered to be in compliance with the Design Manual for Urban Roads and Streets (DMURS) 2019.

10.2 Development Access

The development will be accessed by vehicles via a single proposed junction off Fortfield Road.

On entering the development via the north-western proposed signal controlled site entrance, attendees will be guided to the relevant parking facilities:

- Basement carpark
- In-curtilage parking associated with the 19 no. houses
- At-grade visitor and disabled car parking spaces

Circulation and access for refuse vehicles and fire tenders is illustrated in the supplied Autotrack drawings included in the planning submission. Please note that the fire tender circulation through the development consists of a one-way circulatory system entering via the development's northern access and permeating the development to ensure compliance with fire regulations with a turning facility accommodating turnaround and return along the fire tender route.

As outlined in Operational Waste Management Plan, the refuse vehicles will access the development via the signalised junction on Fortfield Road, travel to the end of the roadway, undertake a turning manoeuvre and depart the development whilst collecting the refuse from the private dwellings and apartment Waste Collection Areas (WCA's).

On entering the development via the site's only vehicular entrance, attendees will be guided to the relevant parking facilities adjacent to the development's principal amenity/concierge function:

- Drop-off / Set-down area for deliveries and taxis
- This facility will be for exclusive use by the proposed development and will be actively managed by the development management team to ensure that use by external users (e.g. school drop-off) is prohibited. Refer to Autotrack drawings for illustration of swept path manoeuvres.

Pedestrians will have access at street level to Fortfield Road providing convenient access to existing bus stops located on Fortfield Road and Templeogue Road. The site layout proposed will integrate the site into the existing surroundings providing pedestrian routes to serve the site and the surrounding area. The development allows for future pedestrian permeability/access around the lake area (and associated amenity value). See Architect and Landscape Architect drawings for proposed site layout.

Due to the limited extent of the road network, it is believed that traffic will be moving at a slow speed. Traffic management by means of road markings and signage will be supplied within the development where necessary.

The assessment concludes the proposed development is considered to be in compliance with DMURS. The proposals have also been assessed independently via a Quality Audit.

10.3 Visibility Splays

The site layout has been developed to provide adequate turning provision and fire tender access. Forward visibility and visibility splays have been provided on the basis of the requirements of Sections 4.4.4 and 4.4.5 of the DMURS manual. Compliance with the requirements is set out on PUNCH drawing 222102-PUNCH-XX-XX-DR-C-0625.

10.4 Vehicle Manoeuvring

Access to the buildings by a fire appliance can be provided. Delivery vehicles will be able to access and leave the site in forward gear with a turning area provided for in the design. Autotrack analysis has been undertaken to ensure there are no issues with swept paths and manoeuvrability of fire appliances, refuse vehicles, buses, and other heavy goods vehicles.

11 Parking

11.1 Car Parking

Car parking serving the subject development is provided within the on-site shared basement car park located below the three building blocks (Blocks A, B and C).

In accordance with the DCC Development Plan Requirements provision will be made for:

1. Disabled car parking (5% of spaces)
2. Motorcycle parking (4% of the number of car parking spaces)
3. A minimum of 50% of all car parking spaces shall be equipped with fully functional EV Charging Point(s). The remaining spaces shall be designed to facilitate the relevant infrastructure to accommodate future EV charging.
4. Cycle parking

The breakdown of the proposed 203 no. car parking spaces (including drop-off bays/spaces), in line with the above, is as follows:

Residential Car Parking

- 152 no. residential parking spaces (basement)
- 19 no. residential parking spaces (at-grade, in-curtilage)
- 7 no. Car Club parking spaces (at-grade)
- 9 no. Disabled parking spaces (at-grade)
- 8 no. Visitor parking spaces (at-grade)

Non-Residential Car Parking

- 4 no. Indoor Cultural/Art Space parking spaces (basement)
- 1 no. Creche Staff parking space (basement)
- 2 no. Creche drop-off spaces (at-grade)
- 1 no. Delivery/Service Vehicle Loading Bay (at-grade)

The following section outlines the proposed vehicular and cycle parking quantum associated with the new development designed to facilitate and encourage a positive modal shift at the development towards alternative sustainable modes of transport.

The general objectives are as follows:

1. Reduce and discourage the reliance on the use of private car travel.
1. Increase and facilitate the use of alternative sustainable forms of transport such as walking, cycling, or traveling by public transport to/from the development.
2. Develop an integrated and unified approach to traffic management for the site which will include public transport, private vehicles, cycle facilities and car sharing services.
3. Engage with Dublin City Council (DCC), the National Transport Authority (NTA), Irish Rail, Dublin Bus, Transport Infrastructure Ireland, Transdev, Bus Éireann and all other relevant stakeholders in a partnership model to promote an increased uptake in public transport.

It is an objective of this plan to limit the level of parking available on-site wherever possible in order to minimise and discourage dependency on private car travel. This will also continue to take into consideration the necessary demand to prevent overspill parking issues in nearby locations.

11.1.1 Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities

The ‘Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities’ (January 2024), Section 5.3.4 states the following:

“The availability of car parking has a critical impact on travel choices for all journeys, including local trips. With ongoing investment in active travel and public transport across all urban areas and particularly in our cities and larger towns, the number of locations with access to everyday needs and employment within a short walk or cycle or via a regular public transport connection is increasing all the time. In areas where car-parking levels are reduced studies show that people are more likely to walk, cycle, or choose public transport for daily travel. In order to meet the targets set out in the National Sustainable Mobility Policy 2022 and in the Climate Action Plan 2023 for reduced private car travel it will be necessary to apply a graduated approach to the management of car parking within new residential development.

The approach should take account of proximity to urban centres and sustainable transport options, in order to promote more sustainable travel choices. Car parking ratios should be reduced at all urban locations, and should be minimised, substantially reduced or wholly eliminated at locations that have good access to urban services and to public transport.”

In accordance with the definitions outlined in the ‘Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities’ (specifically Table 3.8 - see extract below), the Fortfield LRD is located within an ‘Accessible Location’ given its proximity to a ‘High-Capacity Public Transport Node or Interchange’.

“High-Capacity Public Transport Node or Interchange

Lands within 1,000 metres (1km) walking distance of an existing or planned high-capacity urban public transport node or interchange, namely an interchange or node that includes DART, high frequency Commuter Rail, light rail or MetroLink services; or locations within 500 metres walking distance of an existing or planned BusConnects ‘Core Bus Corridor’ stop...”

The distance from the development’s entrance on Fortfield to the planned BusConnects ‘Core Bus Corridor’ stop on Templeogue Road is just within 500m as illustrated by the travel distance measured along the Fortfield Road eastern footpath and pedestrian crossing point at the junction with Templeogue Road.

Table 3.8 of the 2024 Compact Settlement Guidelines states “...locations within 500 metres walking distance of an existing or planned BusConnects ‘Core Bus Corridor’ stop”. It does not state the development must be encompassed within 500 metres - only that the location is within 500m walking distance.



Figure 11-1: Travel Distance from Proposed Development Entrance to permitted Templeogue/Rathfarnham to City Centre CBC Bus Stop

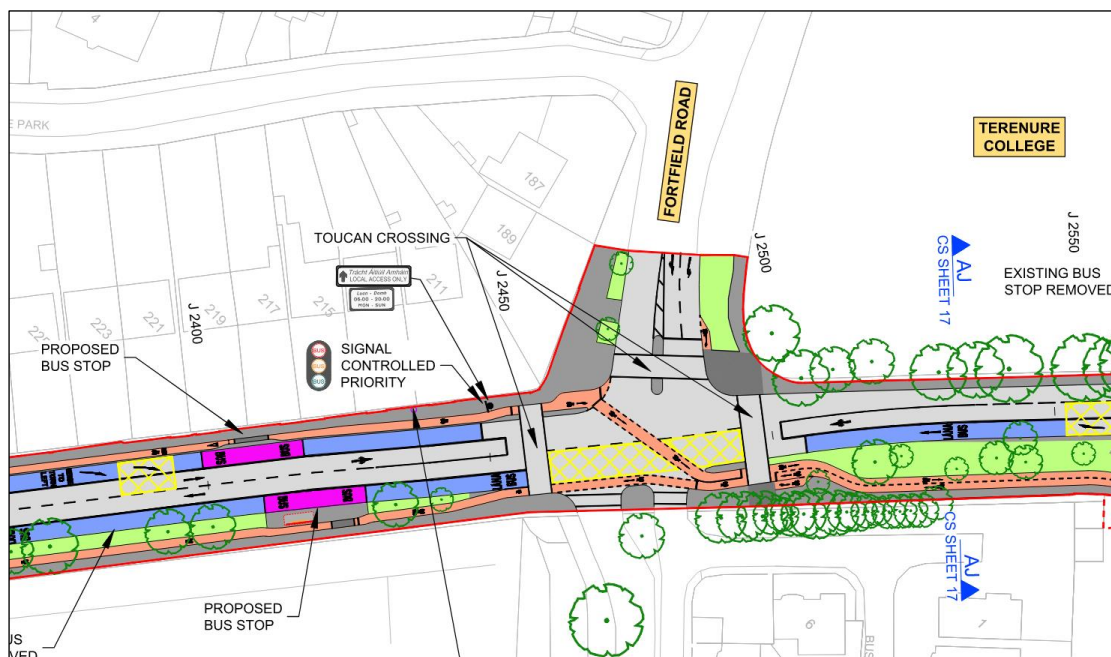


Figure 11-2: Templeogue/Rathfarnham to City Centre CBC General Arrangement - Sheet Number 34 of 42 (Rev M01)

Irrespective of the Templeogue/Rathfarnham to City Centre CBC, the development site is still correctly designated as an ‘Accessible’ location due the definition in Table 3.8:

“Accessible Location

Lands 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.”

As stated in the ‘Residential Travel Plan’ Section 2.4.5.2 (included in the original planning submission), Route No. 54A satisfies this planned high frequency urban bus service under the NTA’s 2025 upgrade to the 54A service - please see extract below.

On Fortfield Road (stops 2397, 2410, 2409 and 2398)

a) Route No. 54A: From Pearse St. to Ellensborough / Kiltipper Way

It is understood from correspondence with DCC Transportation Planning that it is the intention of the NTA to upgrade the 54A service, which is currently running at a 30 minutes off-peak frequency to the F1 service which will run every 15 minutes off-peak and every 10 minutes at peak hours next year under BusConnects.

Satisfying this definition is dependent on two factors (1) Proximity of relevant Bus Stops and (2) Peak Hour Frequency of Existing or Planned Urban Bus Service.

1. Proximity of Relevant Bus Stops:

Please see below detail of the existing and proposed Bus Stops on Fortfield Road on the Route No. 54A service. The entirety of the proposed residential units are contained within 500m of these Bus Stops.



Location of Bus Stops on Fortfield Road (Planned High Frequency 54A Urban Bus Service)

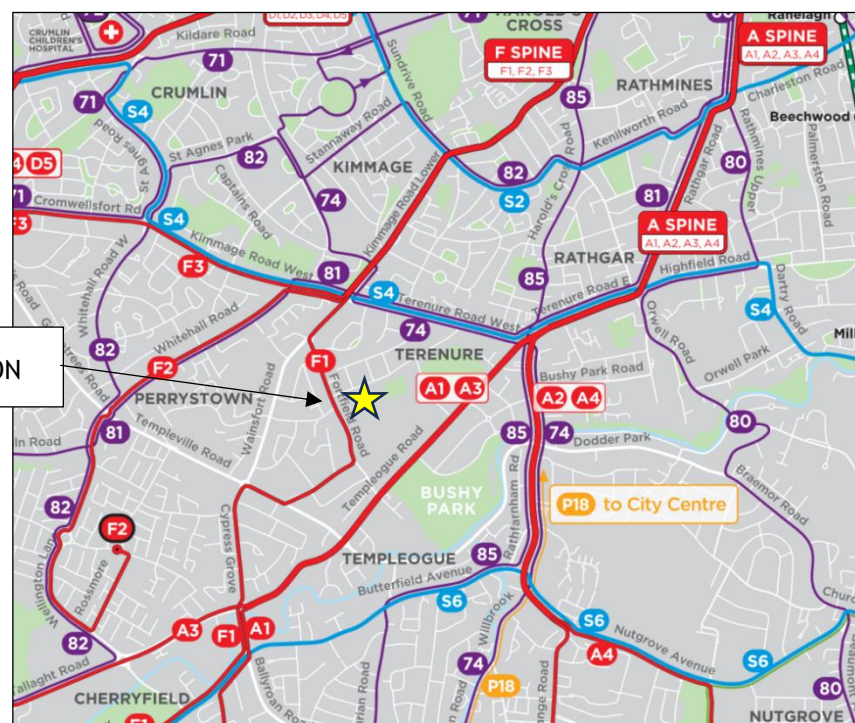
2. Peak Hour Frequency of Existing or Planned Urban Bus Service:

Please see below details of the Route and Frequency of the planned 54A bus service under the phased implementation of the Bus Connects Dublin Network Redesign.

The number in each box is the expected time in minutes between buses. It is subject to adjustment in line with future passenger numbers.

Spines & Branches		Weekday											Saturday											Sunday																														
Route no.	To and From	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
F-SPINE	Finglas - City Centre - Kimmage	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	10	7	7	7	5	5	5	5	5	5	5	5	5	5	7	7	7	7	10	10	10	7	7	7	7	7	7	7	7	10	10	10			
F1	Charlestown - Finglas Bypass - City Centre - Tallaght	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	30	30	30	30				
F2	Charlestown - Finglas NW - City Centre - Templeogue	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	30	30	30	30				
F3	Charlestown - Finglas SW - City Centre - Greenhills	30	15	10	10	15	15	15	15	15	15	10	10	10	15	15	15	15	15	30	20	20	20	15	15	15	15	15	15	15	15	15	15	20	20	20	20	30	30	30	20	20	20	20	20	20	30	30	30	30				

SITE LOCATION



Revised Network Map Extract (Source: [Dublin Network Redesign | Busconnects](#)). For further details, refer to [Dublin Bus 54A bus - Dublin](#)

As a result, the default position per specific planning policy requirements (SPPR) 3 of the Guidelines is that car-parking provision should be **substantially reduced**. Per the extract taken from SPPR 3 below:

“(ii) In accessible locations, defined in Chapter 3 (Table 3.8) car- parking provision should be substantially reduced. The maximum rate of car parking provision for residential development, where such provision is justified to the satisfaction of the planning authority, shall be 1.5 no. spaces per dwelling.”

Furthermore, as per Map J of the DCC Development Plan, the development lands are within Zone 2 and therefore the maximum car spaces are 1 per dwelling (Appendix 5, Table 2).

As a result, the default position per specific planning policy requirements (SPPR) 3 of the Guidelines is that car-parking provision should be **substantially reduced**.

The car parking proposals for the development comply with these requirements.

11.1.2 Census 2022 Travel Patterns

Information on current travel patterns in the Terenure area is set out in Central Statistics Office 2022 Census data, specifically relating to the Small Area A267150005 modal split given the location of the site on the border of the SDCC and DCC boundaries. The modal splits given in the table below provides an accurate representation of the existing mode share split in the local area.

Table 11-1: Travel Plan - Existing Modal Splits

Mode	Commuting Patterns (Based on Small Area A267150005 Modal Split from the 2022 Census Data)
On foot	22.36%
Bicycle	8.7%
Bus, minibus or coach	8.7%
Train, DART or LUAS	0.62%
Motorcycle or scooter	1.24%
Motor car: Driver	33.54%
Motor car: Passenger	4.35%
Van	0.62%
Other, incl. lorry	0.62%
Work mainly at or from home	13.04%
Not stated	6.21%

Private vehicle use accounts for 39.13% of all trips to school or work at the Small Area level. Walking/cycling comprises 31.06% of trips respectively. It is noteworthy that public transport is also

significant at around 9.32% respectively. Furthermore, 13.04% of the local area population work mainly at or from home.

These existing travel patterns are supportive of a shift towards promoting sustainable transport modes. The car parking proposals for this development reflect and support a sustainable approach to discourage reliance on private vehicle use and promote more sustainable transport modes.

11.2 Proposed Car Parking

Car parking serving the subject development is provided within the on-site shared basement car park located below the three building blocks.

The DCC Development Plan 2022-2028 (Appendix 5, Table 2) car parking standards are noted in Table 11-3 below:

Table 11-2: DCC Development Plan (2022-2028) Car Parking Requirements

Land Use	Units	Car Parking Standards	Maximum Car Parking Standards
Residential (Zone 2)	284 ⁽¹⁾	1.0 per dwelling	284
Total	284		284

⁽¹⁾ This 284 overall figure consists of 19 no. house units and 265 no. apartment units.

19 no. parking spaces are provided for the housing component in-curtilage.

Apartment car parking is provided predominantly at basement level. 152 no. car parking spaces will be provided at this location.

Table 11-3: Summary of Basement Residential Car Parking Spaces

Level	Residential Car Parking
Basement Level	152 (standard spaces)
Total	152

The total number of car park spaces (residential) proposed as part of the development is 195 no. residential spaces (19 no. for housing component and 176 no. for apartment component, including car club, visitor and disabled spaces).

Residential Car Parking:

- 152 no. residential parking spaces (basement)
- 19 no. residential parking spaces (at-grade, in-curtilage)
- 7 no. Car Club parking spaces (at-grade)
- 9 no. Disabled parking spaces (at-grade)
- 8 no. Visitor parking spaces (at-grade)

Please note that GoCar have advised that 1 No. GoCar vehicle can replace up to 15 private cars. Applying this rationale results in an 'equivalent provision' of $169 + (7 \times 15) = 274$ no. private car spaces (inclusive of Car Club, Disabled and Visitor Spaces).

This level of residential apartment parking provision represents 103% of the maximum quantum allowed under the DCC Development Plan parking standards for the residential apartment component. The 'equivalent parking provision' also equates to 1.03 car parking spaces per residential unit (i.e. 274/265).

The DCC Development Plan 2022-2028 (Appendix 5, Table 2) car parking standards for non-residential use applicable to the proposed development are noted below:

Table 11-4: DCC Development Plan (2022-2028) Non-Residential Car Parking Requirements

Category	Land Use	GFA	Car Parking Standards	Maximum Car Parking Standards
Civic, Community and Religious	Bank Community Centre Library Public Institution	1,200sqm	1 per 275sqm GFA	4.36
Education	Creche/ Childcare Services	100sqm	1 per 100sqm GFA	1
Total				5.36

It is proposed to provide 1 No. car parking spaces for the creche staff within the basement parking facility. In addition, 2 no. creche drop-off parking spaces are provided at the creche location.

It is proposed to provide 4 no. car parking spaces for the Cultural/Arts Space within the basement parking facility.

11.2.1 Electric Vehicle Charging Points

In accordance with Appendix 5, Section 5.0, the development will be futureproofed to include EV charging points and infrastructure. A minimum of 50% of all car parking spaces shall be equipped with fully functional EV Charging Point(s). The remaining spaces shall be designed to facilitate the relevant infrastructure to accommodate future EV charging.

EV charging infrastructure will be provided for 100% of parking spaces allocated to dwellings (19 no. EV spaces) and car share (7 no. EV spaces) and for 50% of all spaces serving apartment units. 100% of spaces proposed will be future proofed for electrical charging.

11.2.2 Designated Disabled/Accessible Car Parking

In accordance with the DCC Development Plan (2022-2028), Appendix 5, Section 4.2 requirements requesting provision for accessible parking “At least 5% of the total number of spaces” be designated for Disabled/Accessible Car Parking.

9 no. parking spaces at ground level (i.e. 5% of the 176 no. apartment spaces) will be designated disabled user car-parking spaces. The disabled spaces are to be demarcated with yellow lines, a protected hatched area and appropriate road markings to identify these spaces. The proposed location of the disabled parking spaces will be in close proximity to the building entrances.

11.2.3 Motorcycle Parking Provision

The DCC Development Plan requires developments to provide motorcycle parking spaces at a rate of 4% of the number of car parking spaces provided.

Motorcycle parking spaces are provided at basement level. 16 no. motorcycle parking spaces will be provided.

11.3 Cycle Parking

Cycling is to be significantly encouraged as part of the development. Cycle parking is provided externally at ground level and distributed throughout the development extents. A total of 611 no. residential cycle parking spaces will be provided for the apartment units. This figure excludes the non-residential cycle parking component.

Please note that cycle parking facilities for the house units will be provided in-curtilage.

Please see table below for summary of the cycle parking quantum as defined by requirements outlined in the DCC Development Plan 2022-2028, Appendix 5, Section 3.1, Table 1:

Table 11-5: DCC Development Plan Parking Standards

Development Type	Units	Long Term Cycle Parking Requirement	Short Term Cycle Parking Requirement	Minimum Long Term Cycle Parking	Minimum Short Term Cycle Parking
Apartment	265	1 space per bedroom	1 per 2 Apartments	412	133
Total	265			412	133

Table 11-6: Individual Block Requirements in accordance with the 'DCC Development Plan 2022-2028'

Blocks	Long Term Cycle Parking	Short Term Cycle Parking
A	93	31
B	105	33
C	117	37
D	97	32
Total	412	133

For the proposed Fortfield Road development, we are proposing cycle parking numbers as follows:

Table 11-7: Proposed Cycle Parking Quantum for the Fortfield Road Development

Blocks	Long Term Cycle Parking	Short Term Cycle Parking
A	114 (incl. 7 no. non-standard)	34 (incl. 2 no. non-standard)
B	120 (incl. 6 no. non-standard)	38 (incl. 2 no. non-standard)
C	133 (incl. 7 no. non-standard)	40 (incl. 2 no. non-standard)
D	98 (incl. 5 no. non-standard)	34 (incl. 2 no. non-standard)
TOTAL	465	146

The cycle parking facilities and their utilisation will be monitored to determine actual vs forecast demands and amendments to the cycle parking arrangements will be actioned as required as part of the on-going mobility management strategy for the development.

Table 11-8: DCC Development Plan Non-Residential Cycle Parking Standards

Category	Land Use	Long Term	Short Stay/Visitor
Civic, Community and Religious	Bank Community Centre Library Public Institution	Rate = 1 per 5 staff 15 no. staff 3no. Long Term	Rate = 1 per 100sqm GFA 1,200sqm 12no. Short Stay
Education	Creche/ Childcare Services	Rate = 1 per 5 staff 5 no. staff 1no. Long Term	Rate = 1 per 10 children 17 no. children based on 6sqm per child 2no. Short Stay
Total		4	14

It is proposed to provide 1 No. Long Term cycle parking space for the creche staff and 4 No. Short Term cycle parking spaces (including 2 No. non-standard spaces) adjacent to the creche.

It is proposed to provide 4 No. Long Term cycle parking space for the creche staff and 12 No. Short Term cycle parking spaces (including 1 No. non-standard spaces) adjacent to the Cultural/Arts Space.

11.4 Parking Summary

The proposed vehicular and cycle parking quantum associated with the new development is designed to facilitate and encourage a positive modal shift at the development towards alternative sustainable modes of transport.

In accordance with the ‘Sustainable Urban Housing: Design Standards for New Apartments’ (July 2023) and the ‘Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities’ (January 2024), a reduced provision of private vehicle car parking is proposed for the Fortfield Road Development.

This is consistent with National Policy and applicable to the development given the context of proposals:

“In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances”

“High-Capacity Public Transport Node or Interchange

Lands within 1,000 metres (1km) walking distance of an existing or planned high-capacity urban public transport node or interchange, namely an interchange or node that includes DART, high frequency Commuter Rail, light rail or MetroLink services; or locations within 500 metres walking distance of an existing or planned BusConnects ‘Core Bus Corridor’ stop...”

“Accessible Location

Lands 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.”

“In accessible locations, defined in Chapter 3 (Table 3.8) car- parking provision should be substantially reduced.

As referenced in the Residential Travel Plan, the necessity of reducing car dependency associated with this proposed development is also supported in the interest of compliance with the following sustainable transport initiatives:

- National Planning Framework (2018)
- Housing for All (2021)
- Housing for All Action Plan Update (2022)
- National Sustainable Mobility Policy (2022)
- Climate Action Plan (2023)

The reduced car parking provision is justified on the basis of existing modal split patterns in the area, the availability of public transport (as detailed above and in the Residential Travel Plan), the provision of car sharing facilities and a generous provision of cycle parking facilities as outlined in detail above.

12 Summary and Conclusion

- 1 The development will comprise a Large-Scale Residential Development (LRD) on a site at Fortfield Road, Terenure of 284 no. units delivering 19 no. houses and 265 no. apartments made up of studios; 1 beds; 2 beds; 3 beds; and 4 beds. The development will also provide community, cultural and arts space and a creche. Communal internal space for residents will also be delivered. Provision of car, cycle and motorbike parking will be provided throughout the development, including at basement and surface level. Vehicular/pedestrian/cyclist access from Fortfield Road. Proposed upgrade works to the surrounding road network is also included. All associated site development works, open space, services provision, ESB substations, plant areas, waste management areas, landscaping (both public and communal) and boundary treatments.
- 2 For the purposes of our assessment, the TRICS database and statistics from the 2022 Census were consulted to provide an equivalent trip rate for the proposed development site. Refer to Section 5 for further detail.
- 3 It is proposed to access the proposed development via Fortfield Road. Capacity analysis was carried out on the following junctions:
 - i. Fortfield Road / College Drive / Proposed Development Junction
 - ii. Fortfield Road / Templeogue Junction
 - iii. Fortfield Road / Wainsfort Road Junction

The analysis shows that there is capacity for the proposed development traffic to utilise the proposed upgraded development junction, and the Fortfield Road/Wainsfort Road Junction up to the Design Year 2043. The Fortfield Road / Templeogue Junction was found to be above the practical capacity without the development in place in the 2028 Do Nothing scenario (AM Peak only) and made slightly worse with the proposed development in the 2028 Design Year, but this is considered acceptable/expected in an urban area.

- 4 Parking spaces for the proposed development have been provided to comply with the maximum permissible requirements set out in the Dublin City Council Development Plan 2022-2028 and 'Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities' (January 2024).
- 5 Secure cycle parking facilities have been provided within the development and exceed the requirements set out in the Dublin City Council Development Plan.

Appendix A Traffic Surveys

[illegible]

D => A										D => B										D => C										D => D										
P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	1	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	1	0	0	0	0	0	2	1,2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	2	2	0	0	0	0	3	2,2	0	0	0	1	1	0	0	0	0	2	2	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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0	0	15	0	0	0	0	0	15	15	0	0	0	1	0	0	0	0	0	0	1	1	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	0	6	6	1	0	0	0	0	0	0	0	0	1	0,2	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	10	0	1	0	0	0	11	11	0	0	0	3	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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5	0	115	1	3	1	0	0	125	121,5	1	0	22	0	0	0	0	0	0	23	22,2	2	0	86	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	0	0	0	0	0	24	24	0	0	10	0	0	0	0	0	0	10	10	0	0	32	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	25	0	0	0	0	0	25	25	0	0	5	0	0	0	0	0	0	4	4	1	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	105	0	4	0	0	0	110	109,2	0	0	21	0	0	0	0	0	0	21	21	2	1	129	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	32	0	0	0	0	0	35	32,6	0	0	2	0	0	0	0	0	2	2	1	0	46	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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2	0	34	0	4	0	0	0	36	34,4	0	0	2	0	0	0	0	0	0	2	2	0	0	33	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	5	136	1	0	0	0	0	143	139	0	0	29	0	0	0	0	0	0	34	34,4	1	0	148	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	31	1	1	2	0	0	35	34,4	0	0	9	0	0	0	0	0	0	9	9	0	0	44	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	106	1	6	0	0	0	115	113,6	1	1	36	0	0	0	0	0	0	38	36,6	4	0	149	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	25	0	1	0	0	0	26	26	0	0	5	0	0	0	0	0	0	5	5	0	0	37	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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1	0	88	4	3	0	0	0	96	95,2	0	0	22	0	0	0	0	0	0	22	22	4	2	139	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	1	21	0	0	0	0	0	22	21,4	0	0	12	0	0	0	0	0	0	12	12	0	0	30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	47	3	1	0	0	0	51	51	0	0	13	0	0	0	0	0	0	13																					

D ==> A										D ==> B										D ==> C										D ==> D																				
P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU											
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
1	0	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
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0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	4	1	0	0	0	0	5	5	0	0	1	0	0	0	0	0	1	1	0	0	6	3	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	7	0	0	0	0	0	7	7	1	0	0	0	0	0	0	0	1	0.2	1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
0	0	23	0	0	0	0	0	23	23	1	0	0	0	0	0	0	0	1	0.2	1	0	15	2	3	0	0	21	20.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1	0	13	0	1	0	0	0	15	14.2	0	0	1	0	0	0	0	0	1	1	2	0	7	0	0	0	0	9	7.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1	0	16	0	0	0	0	0	17	16.2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	18	0	1	0	0	0	19	19	0	0	1	0	0	0	0	0	1	1	2	0	12	0	0	0	0	14	12.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1	0	31	0	1	0	0	0	33	32.2	0	0	14	0	0	0	0	0	14	14	1	0	14	1	0	0	0	16	15.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	78	0	3	0	0	0	84	81.6	0	0	16	0	0	0	0	0	16	16	7	0	34	1	0	0	0	42	36.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	13	0	0	0	0	0	14	13.2	0	0	18	0	0	0	0	0	18	18	0	1	19	1	0	0	0	21	20.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	13	0	0	0	0	0	13	13	0	0	2	0	0	0	0	0	0	0	0	0	26	2	0	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	22	0	0	0	0	0	22	22	0	0	1	0	0	0	0	0	1	1	0	0	26	0	0	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	30	0	0	0	0	0	30	30	1	0	24	0	0	0	0	0	25	24.2	0	0	25	0	2	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	78	0	0	0	0	0	79	78.2	1	0	45	0	0	0	0	0	46	45.2	0	1	96	3	2	0	0	0	102	101.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	25	0	0	0	0	0	26	25.2	0	0	3	0	0	0	0	0	3	3	3	0	19	0	0	0	0	0	22	19.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	0	16	16	1	0	0	0	0	0	0	0	1	0.2	0	0	27	0	1	0	0	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	23	0	2	0	0	0	26	25.2	3	0	5	0	0	0	0	0	8	5.6	1	0	40	0	0	0	0	41	40.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	25	0	1	0	0	0	26	26	0	0	7	0	0	0	0	0	7	7	3	0	38	1	1	0	0	43	40.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	89	0	3	0	0	0	94	92.4	4	0	15	0	0	0	0	0	19	15.8	7	0	124	1	2	0	0	0	134	126.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	28	0	0	0	0	0	29	28.2	0	0	6	0	0	0	0	0	6	6	3	0	35	0	0	1	0	0	39	37.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	23	0	0	0	0	0	24	23.2	0	0	3	0	0	0	0	0	3	3	0	0	40	0	1	0	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	25	0	0	0	0	0	26	25.2	0	0	7	0	0	0	0	0	7	7	0	0	27	0	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	25	1	0	0	0	0	26	26	0	0	2	0	1	0	0	0	3	3	2	0	31	0	1	0	0	34	32.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	101	1	0	0	0	0	105	102.6	0	0	18	0	1	0	0	0	19	15	0	0	133	2	2	1	0	141	137.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	33	0	0	0	0	0	35	33.4	0	0	6	0	0	0	0	0	6	6	1	0	38	0	1	1	0	41	40.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	23	1	0	0	0	0	26	24.6	0	0	4	0	0																																				

[illegible]

1



IDASO

Survey Name: 011 24005 - Fortfield Road, Terenure, Dublin
Site: S06-3
Location: Fortfield Road/Wainsfort Road/The Orchard
Date: Sat 13-Jan-2024

TIME	P/C	M/C	A ==> A										A ==> B										A ==> C										A ==> D										
			CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU			
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5	1	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	1	1		
06:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	0	8	0	1	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0	0	0			
06:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	2	0	0	13	0	2	1	0	0	16	16.5	0	0	0	0	0	0	0	0	0	0	0			
06:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	15	2	0	0	0	0	18	17.2	0	0	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	0	41	3	3	3	0	51	51.7	0	0	1	0	0	0	0	0	0	0	1	1		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	29	0	0	0	1	30	31.3	0	0	0	0	0	0	0	0	0	0	0			
07:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	1	0	13	1	1	2	0	18	18.2	0	0	0	0	0	0	0	0	0	0	0			
07:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	5	0	0	26	0	5	1	1	33	34.8	0	0	0	0	0	0	0	0	0	0	0			
07:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	1	1	24	1	1	1	0	29	31.1	0	0	0	0	0	0	0	0	0	0	0			
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	1	14	15	2	1	92	2	7	4	2	110	112.4	0	0	0	0	0	0	0	0	0	0	0	0		
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2	0	0	20	0	4	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0			
08:15	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	6	6	1	0	38	2	4	1	0	46	45.7	0	0	0	0	0	0	0	0	0	0	0			
08:30	0	0	0	0	0	0	0	0	0	0	0	0	12	0	3	0	0	1	16	17	1	0	29	4	2	0	0	36	35.2	0	0	0	0	0	0	0	0	0	0	0			
08:45	0	0	0	0	0	0	0	0	0	0	1	0	23	0	3	0	0	0	27	28.2	1	0	47	5	3	1	0	57	56.7	0	0	1	0	0	0	0	0	0	0	1	1		
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	44	1	6	0	0	1	54	53.6	3	0	134	11	13	2	0	183	181.6	0	0	1	0	0	0	0	0	0	0	1	1		
09:00	0	0	0	0	0	0	0	0	0	0	1	0	19	0	0	0	0	0	20	19.2	0	0	59	3	5	0	0	68	67.2	0	0	0	0	0	0	0	0	0	0	0	0		
09:15	0	0	1	0	0	0	0	0	1	1	2	0	22	0	1	0	0	0	25	23.4	0	1	57	3	4	2	0	67	67.4	0	0	0	0	0	0	0	0	0	0	0	0		
09:30	0	0	0	0	0	0	0	0	0	0	0	0	18	0	1	0	0	1	20	21	4	0	51	2	4	2	0	63	60.8	0	0	1	0	0	0	0	0	0	0	1	1		
09:45	0	0	0	0	0	0	0	0	0	0	1	0	30	1	0	3	0	0	35	35.7	2	0	72	3	5	1	0	83	81.9	0	0	1	0	0	0	0	0	0	0	1	1		
H/TOT	0	0	1	0	0	0	0	0	1	1	4	0	89	1	2	3	0	1	100	99.3	7	1	239	11	18	5	0	281	277.3	0	0	2	0	0	0	0	0	0	0	2	2		
10:00	0	0	0	0	0	0	0	0	0	0	0	0	21	1	2	0	0	1	25	26	3	1	72	7	3	2	0	89	88	0	0	1	0	0	0	0	0	0	0	1	1		
10:15	0	0	0	0	0	0	0	0	0	0	1	0	16	1	5	0	0	0	23	23.2	2	2	74	1	3	2	1	85	84	1	1	1	0	0	0	0	0	0	0	3	1.2		
10:30	0	0	0	0	0	0	0	0	0	0	0	0	29	0	3	0	0	1	33	34	0	0	78	4	9	1	0	92	92.5	0	0	0	0	0	0	0	0	0	0	0	0		
10:45	0	0	0	0	0	0	0	0	0	0	0	1	24	0	0	0	0	0	25	24.2	2	1	105	2	7	0	0	117	114.8	0	0	2	0	0	0	0	0	0	0	0	2	2	
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	90	2	10	0	0	2	106	106.4	7	4	329	14	22	5	1	1	383	379.8	1	0	4	0	0	0	0	0	5	4.2			
11:00	0	0	0	0	0	0	0	0	0	0	2	0	35	1	1	0	0	1	40	39.4	2	2	94	3	6	0	0	107	104.2	0	0	1	0	0	0	0	0	0	0	1	1		
11:15	0	0	0	0	0	0	0	0	0	0	0	1	35	0	1	0	0	0	37	36.4	1	2	93	1	3	2	0	102	101	0	0	0	0	0	0	0	0	0	0	0	0		
11:30	0	0	0	0	0	0	0	0	0	0	2	0	26	2	0	0	0	1	31	30.4	0	1	87	1	9	0	0	98	97.4	0	0	0	0	0	0	0	0	0	0	0	0		
11:45	0	0	0	0	0	0	0	0	0	0	2	0	29	0	1	0	0	0	32	30.4	13	2	103	3	0	0	0	1	122	111.4	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	6	1	125	3	3	0	0	2	140	136.6	16	7	377	8	18	2	0	1	429	414	0	0	1	0	0	0	0	0	0	0	1	1	
12:00	0	0	0	0	0	0	0	0	0	0	2	0	32	0	3	0	0	1	38	37.4	3	0	102	4	8	0	0	1	118	116.6	0	0	0	0	0	0	0	0	0	0	0	0	
12:15	0	0	0	0	0	0	0	0	0	0	0	1	36	0	3	0	0	0	40	39.4	1	1	104	4	4	2	1	117	117.9	0	0	1	0	0	0	0	0	0	0	0	1	1	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	21	1	2	0	0	1	25	26	2	1	98	4	5	0	0	110	107.8	0	0	2	0	0	0	0	0	0	0	0	2	2	
12:45	0	0	0	0	0	0	0	0	0	0	0	1	25	0	2	0	0	0	28	27.4	2	0	110	4	3	2	1	122	122.7	0	0	0	0	0	0	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	2	2	114	1	10	0	0	2	131	130.2	8	2	414	16	20	4	2	1	467	465	0	0	3	0	0	0	0	0	0	0	0	3	3
13:00	0	0	0	0	0	0	0	0	0	0	1	0	32	2	0	1	0	1	37	37.7	3	1	81	1	5	0	0	91	88	0	0	1	0	0	0	0	0	0	0	0	1	1	
13:15	0	0	0	0	0	0	0	0	0	0	2	0	38	1	0	0	0	0	41	39.4	4	3	108	3	7	2	0	127	123	0	0	0	0	0	0	0	0	0	0	0	0		
13:30	0	0	0	0	0	0	0	0	0	0	2	0	36	2	0	0	0	0	41	40.4	3	0	96	0	5	0	0	104	101.6	0	0	1	0	0	0	0	0	0	0	0	1	1	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	27	1	1	1	0	0	30	30.5	5	0	116	5	8	1	0	1	136	133.5	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	5	0	133	6	1	2	0	2	149	148	15	4	401	9	25	3	0	1	458	446.1	0	0	2	0	0	0	0	0	0	0	0	2	2
14:00	0	0	0	0	0	0	0	0	0	0	4	0	18	1	2	0	0	0	25	21.8	1	2	116	4	9	0	0	1	133	132	0	0	0	0	0	0	0	0					

C ==> A										C ==> B										C ==> C										C ==> D									
P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
0	0	7	0	1	1	0	0	9	9.5	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	19	0	3	1	0	0	24	23.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	16	1	0	3	0	0	21	21.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	0	6	0	0	0	26	26	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	62	1	10	5	0	0	80	80.9	0	0	1	0	1	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	29	1	6	1	0	0	37	37.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	30	1	7	1	0	0	38	38	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	29	0	7	1	0	0	38	37.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	22	1	4	2	1	0	32	32.7	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	110	3	24	4	1	0	145	146.1	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	28	1	7	2	0	1	42	41.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	42	1	4	2	0	0	52	50.6	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	48	2	6	1	0	0	63	58.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	50	1	6	0	0	0	60	57.8	0	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	2	168	5	23	5	0	1	217	208.9	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	56	5	5	3	0	0	69	70.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	71	0	6	1	1	0	79	80.8	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	62	6	3	2	0	0	75	74.6	0	0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	90	3	3	2	0	0	103	100	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	279	14	17	8	1	0	326	325.9	0	0	6	0	0	0	1	0	7	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	71	2	7	1	0	0	84	82.5	1	0	5	5	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	75	6	8	1	0	0	93	91.1	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	92	7	7	0	0	0	109	106.8	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	82	4	5	1	0	0	96	93.5	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	4	320	19	27	3	0	0	382	373.9	1	0	19	0	0	0	0	0	20	19.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	82	6	3	0	1	0	95	94.3	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	83	5	7	2	0	0	99	98.6	1	0	4	0	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	96	3	3	1	1	0	106	106.2	1	0	6	0	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	1	89	4	3	0	0	0	99	96.8	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	4	350	18	16	3	2	0	399	395.9	2	0	17	0	0	0	0	0	19	17.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	1	96	2	11	0	0	0	114	110.2	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	1	91	4	2	0	0	0	100	97.8	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	92	2	7	1	0	0	102	102.5	0	0	8	1	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	76	1	5	0	0	0	84	82.4	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	2	355	9	25	1	0	0	400	392.9	0	0	23	1	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	121	5	4	1	0	0	139	133.7	0	0	2	5	0	0	0	0	7	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	2	104	7	7	2	0	0	124	122.2	0	0	8	1	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	1	100	3	2	0	0	0	109	106	0	0	6	1	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	86	4	3	1	0	0	95	94.7	0	1	0	0	0	0	0	0	1	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	6	411	19	16	4	0	0	467	456.6	0	0	19	2	0	0	0	0	24	22.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	1	106	3	3	0	0	0	117	113.2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	97	5	5	1	0	0	109	108.7	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	93	6	4	1	0	0	105	104.7	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	2	86	7	6	0	0	0	103	100.2	0	0																												

B ==> A										B ==> B										B ==> C										B ==> D										
P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	
0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
1	0	1	0	1	0	0	0	0	3	2,2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	
0	0	4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
1	0	3	0	0	0	0	0	0	4	3,2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	10	0	1	0	0	0	0	13	11,4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1
1	0	3	0	1	0	0	0	0	5	4,2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
1	0	6	0	1	0	0	0	1	9	9,2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2,2	0	0	1	0	0	0	0	0	0	
1	0	7	0	0	0	0	0	0	8	7,2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	1	1	
0	0	13	0	3	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	
3	0	29	0	5	0	0	0	1	38	36,6	0	0	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10,2	0	0	1	0	0	0	0	0	1	1
2	0	5	0	1	0	0	0	0	8	6,4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	
0	0	16	0	0	0	0	0	1	17	18	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
1	0	15	1	0	0	0	0	0	17	16,2	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	
0	1	21	1	2	0	0	0	0	25	24,4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5	0	0	1	0	0	0	0	0	0	
3	1	57	2	3	0	0	0	1	67	65	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	14	14	0	0	1	0	0	0	0	0	1	1
0	0	18	1	0	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	4	4	0	0	0	0	0	0	0	0	0	
1	0	13	1	0	0	0	0	1	16	16,2	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	2,4	0	0	0	0	0	0	0	0	0	
0	0	14	0	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	
2	0	28	1	1	0	0	0	0	32	30,4	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	
3	0	73	3	1	0	0	0	1	81	79,6	0	0	0	0	0	0	0	0	0	0	0	2	0	12	1	1	0	0	16	14,4	0	0	0	0	0	0	0	0	0	
2	0	22	1	0	1	0	0	0	26	24,9	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	
0	0	17	0	0	0	0	0	1	18	19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
1	0	17	0	0	0	0	0	1	19	19,2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	
1	1	28	0	0	0	0	0	0	30	28,6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	
4	1	84	1	0	0	0	0	2	93	91,7	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	
3	0	12	1	1	0	0	0	0	17	14,6	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	
0	0	24	1	0	0	0	0	1	26	27	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	1	0	6	6,5	0	0	2	0	0	0	0	0	2	
0	0	14	2	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	
2	0	25	1	1	0	0	0	0	29	27,4	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	
5	0	75	5	2	0	0	0	1	88	85	0	0	0	0	0	0	0	0	0	0	0	0	25	1	2	1	0	0	29	26,5	0	0	2	0	0	0	0	0	2	
4	0	24	0	0	0	0	0	0	28	24,8	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	
3	1	17	1	0	0	0	0	0	22	19	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	5	4,4	0	0	2	0	0	0	0	0	2	
0	0	27	0	1	0	0	0	1	29	30	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	
3	0	16	1	1	0	0	0	0	21	18,6	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	
10	1	84	2	2	0	0	0	1	100	92,4	0	0	0	0	0	0	0	0	0	0																				

Appendix B TRICS Data

Calculation Reference: AUDIT-434201-240130-0157

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BE BEXLEY	2 days
	BM BROMLEY	1 days
	BN BARNET	1 days
	BT BRENT	2 days
	EN ENFIELD	1 days
	HG HARINGEY	1 days
	HM HAMMERSMITH AND FULHAM	1 days
	HO HOUNSLOW	3 days
	HV HAVERING	1 days
	IS ISLINGTON	3 days
	KI KINGSTON	1 days
	RD RICHMOND	1 days
	SK SOUTHWARK	2 days
	TH TOWER HAMLETS	1 days
	WF WALTHAM FOREST	6 days
02	SOUTH EAST	
	CT CENTRAL BEDFORDSHIRE	3 days
	HF HERTFORDSHIRE	4 days
	PO PORTSMOUTH	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days
	NG NOTTINGHAM	2 days
08	NORTH WEST	
	MS MERSEYSIDE	3 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CO CONWY	1 days
11	SCOTLAND	
	EB CITY OF EDINBURGH	1 days
	HI HIGHLAND	1 days
12	CONNAUGHT	
	MA MAYO	1 days
14	LEINSTER	
	LU LOUTH	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 6 to 493 (units:)
 Range Selected by User: 6 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 14/06/23

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

Selected survey days:

Monday	8 days
Tuesday	18 days
Wednesday	15 days
Thursday	6 days
Friday	5 days

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

Selected survey types:

Manual count	52 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	2
Edge of Town Centre	21
Suburban Area (PPS6 Out of Centre)	15
Edge of Town	5
Neighbourhood Centre (PPS6 Local Centre)	9

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:

Industrial Zone	1
Development Zone	8
Residential Zone	28
Built-Up Zone	8
No Sub Category	7

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	45 days - Selected
Servicing vehicles Excluded	13 days - Selected

Secondary Filtering selection:

Use Class:

C3 52 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	11 days
25,001 to 50,000	24 days
50,001 to 100,000	5 days
100,001 or More	4 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	4 days
125,001 to 250,000	12 days
250,001 to 500,000	7 days
500,001 or More	27 days

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

Car ownership within 5 miles:

0.5 or Less	5 days
0.6 to 1.0	33 days
1.1 to 1.5	13 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	15 days
No	37 days

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

PTAL Rating:

No PTAL Present	26 days
1a (Low) Very poor	1 days
1b Very poor	2 days
2 Poor	5 days
3 Moderate	5 days
4 Good	3 days
5 Very Good	4 days
6a Excellent	4 days
6b (High) Excellent	2 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	BE-03-C-01 CROOK LOG BEXLEYHEATH	BLOCKS OF FLATS		BEXLEY
	Edge of Town Centre Residential Zone Total No of Dwellings:		79	
	Survey date: WEDNESDAY		19/09/18	Survey Type: MANUAL
2	BE-03-C-02 CLYDESDALE WAY BELVEDERE	BLOCKS OF FLATS		BEXLEY
	Edge of Town Industrial Zone Total No of Dwellings:		402	
	Survey date: WEDNESDAY		19/09/18	Survey Type: MANUAL
3	BM-03-C-01 RINGER'S ROAD BROMLEY	BLOCKS OF FLATS		BROMLEY
	Town Centre Built-Up Zone Total No of Dwellings:		160	
	Survey date: MONDAY		12/11/18	Survey Type: MANUAL
4	BN-03-C-01 VICTORIA ROAD NEW BARNET	FLATS IN HOUSES		BARNET
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings:		33	
	Survey date: THURSDAY		09/06/22	Survey Type: MANUAL
5	BT-03-C-01 LAKESIDE DRIVE PARK ROYAL	BLOCKS OF FLATS		BRENT
	Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:		170	
	Survey date: WEDNESDAY		28/09/16	Survey Type: MANUAL
6	BT-03-C-02 ENGINEERS WAY WEMBLEY	BLOCKS OF FLATS		BRENT
	Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:		472	
	Survey date: WEDNESDAY		30/11/16	Survey Type: MANUAL
7	CA-03-C-03 CROMWELL ROAD CAMBRIDGE	BLOCKS OF FLATS		CAMBRIDGESHIRE
	Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings:		82	
	Survey date: MONDAY		18/09/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	CO-03-C-01	BLOCKS OF FLATS	CONWY
	MOSTYN BROADWAY		
	LLANDUDNO		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	37	
	Survey date: MONDAY	26/03/18	Survey Type: MANUAL
9	CT-03-C-01	BLOCKS OF FLATS	CENTRAL BEDFORDSHIRE
	WING ROAD		
	LEIGHTON BUZZARD		
	LINSLADE		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	175	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
10	CT-03-C-02	BLOCKS OF FLATS	CENTRAL BEDFORDSHIRE
	STANBRIDGE ROAD		
	LEIGHTON BUZZARD		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
11	CT-03-C-03	BLOCKS OF FLATS	CENTRAL BEDFORDSHIRE
	COURT DRIVE		
	DUNSTABLE		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	146	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
12	DL-03-C-18	BLOCKS OF FLATS	DUBLIN
	HAROLD'S CROSS ROAD		
	DUBLIN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	102	
	Survey date: WEDNESDAY	19/05/21	Survey Type: MANUAL
13	DY-03-C-03	BLOCKS OF FLATS	DERBY
	CAESAR STREET		
	DERBY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	30	
	Survey date: WEDNESDAY	25/09/19	Survey Type: MANUAL
14	EB-03-C-01	BLOCKS OF FLATS	CITY OF EDINBURGH
	MYRESIDE ROAD		
	EDINBURGH		
	CRAIGLOCKHART		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	32	
	Survey date: TUESDAY	26/05/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15	EN-03-C-03	BLOCKS OF FLATS		ENFIELD
		NORTH CIRCULAR ROAD		
		PALMERS GREEN		
		Suburban Area (PPS6 Out of Centre)		
		Residential Zone		
		Total No of Dwellings:	27	
		Survey date: WEDNESDAY	08/11/17	Survey Type: MANUAL
16	HF-03-C-01	BLOCKS OF FLATS		HERTFORDSHIRE
		HAYLING ROAD		
		WATFORD		
		SOUTH OXHEY		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	22	
		Survey date: WEDNESDAY	09/06/21	Survey Type: MANUAL
17	HF-03-C-03	BLOCK OF FLATS		HERTFORDSHIRE
		SHENLEY ROAD		
		BOREHAMWOOD		
		Edge of Town Centre		
		Built-Up Zone		
		Total No of Dwellings:	91	
		Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
18	HF-03-C-04	BLOCKS OF FLATS		HERTFORDSHIRE
		OXHEY DRIVE		
		WATFORD		
		SOUTH OXHEY		
		Neighbourhood Centre (PPS6 Local Centre)		
		Residential Zone		
		Total No of Dwellings:	84	
		Survey date: THURSDAY	10/06/21	Survey Type: MANUAL
19	HF-03-C-05	BLOCKS OF FLATS		HERTFORDSHIRE
		FERNDOWN ROAD		
		WATFORD		
		SOUTH OXHEY		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	26	
		Survey date: MONDAY	07/06/21	Survey Type: MANUAL
20	HG-03-C-01	BLOCKS OF FLATS		HARINGEY
		BREAM CLOSE		
		TOTTENHAM HALE		
		Neighbourhood Centre (PPS6 Local Centre)		
		Residential Zone		
		Total No of Dwellings:	255	
		Survey date: TUESDAY	18/06/19	Survey Type: MANUAL
21	HI-03-C-02	BLOCK OF FLATS		HIGHLAND
		KING STREET		
		NAIRN		
		Edge of Town Centre		
		Residential Zone		
		Total No of Dwellings:	16	
		Survey date: WEDNESDAY	19/04/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22	HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	BLOCKS OF FLATS		HAMMERSMITH AND FULHAM
	Town Centre Built-Up Zone Total No of Dwellings:		194	
	Survey date: TUESDAY		30/04/19	Survey Type: MANUAL
23	HO-03-C-03 COMMERCE ROAD BRENTFORD	BLOCKS OF FLATS		HOUNSLOW
	Edge of Town Centre Development Zone Total No of Dwellings:		150	
	Survey date: FRIDAY		18/11/16	Survey Type: MANUAL
24	HO-03-C-04 LONDON ROAD ISLEWORTH	BLOCKS OF FLATS		HOUNSLOW
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings:		203	
	Survey date: TUESDAY		03/07/18	Survey Type: MANUAL
25	HO-03-C-05 PARK LANE HOUNSLOW CRANFORD	BLOCK OF FLATS		HOUNSLOW
	Edge of Town Residential Zone Total No of Dwellings:		14	
	Survey date: FRIDAY		06/03/20	Survey Type: MANUAL
26	HV-03-C-02 WATERLOO ROAD ROMFORD	BLOCKS OF FLATS		HAVERING
	Suburban Area (PPS6 Out of Centre) Built-Up Zone Total No of Dwellings:		493	
	Survey date: TUESDAY		22/11/16	Survey Type: MANUAL
27	IS-03-C-05 LEVER STREET FINSBURY	BLOCK OF FLATS		ISLINGTON
	Edge of Town Centre Built-Up Zone Total No of Dwellings:		15	
	Survey date: WEDNESDAY		29/06/16	Survey Type: MANUAL
28	IS-03-C-06 CALEDONIAN ROAD HOLLOWAY	BLOCK OF FLATS		ISLINGTON
	Edge of Town Centre Residential Zone Total No of Dwellings:		14	
	Survey date: MONDAY		27/06/16	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

29	IS-03-C-08 CITY ROAD ISLINGTON	BLOCK OF FLATS	ISLINGTON
	Edge of Town Centre Development Zone Total No of Dwellings:	190	
	Survey date: THURSDAY	20/10/22	Survey Type: MANUAL
30	KI-03-C-03 PORTSMOUTH ROAD SURBITON	BLOCK OF FLATS	KINGSTON
	Edge of Town Centre Residential Zone Total No of Dwellings:	20	
	Survey date: MONDAY	11/07/16	Survey Type: MANUAL
31	LU-03-C-04 RIVER COURT DROGHEDA	BLOCKS OF FLATS	LOUTH
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings:	42	
	Survey date: WEDNESDAY	22/09/21	Survey Type: MANUAL
32	MA-03-C-01 KNOCK ROAD CLAREMORRIS	BLOCKS OF FLATS	MAYO
	Edge of Town Centre No Sub Category Total No of Dwellings:	22	
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL
33	MS-03-C-02 SOUTH FERRY QUAY LIVERPOOL BRUNSWICK DOCK Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:	184	
	Survey date: TUESDAY	13/11/18	Survey Type: MANUAL
34	MS-03-C-03 MARINERS WHARF LIVERPOOL QUEENS DOCK Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:	9	
	Survey date: TUESDAY	13/11/18	Survey Type: MANUAL
35	MS-03-C-04 HOY DRIVE NEWTON-LE-WILLOWS EARLESTOWN Edge of Town Centre Residential Zone Total No of Dwellings:	24	
	Survey date: MONDAY	12/04/21	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

36	NF-03-C-02	MIXED FLATS & HOUSES	NORFOLK
	HALL ROAD		
	NORWICH		
	LAKENHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	82	
	Survey date: MONDAY	18/11/19	Survey Type: MANUAL
37	NG-03-C-01	HOUSES (SPLIT INTO FLATS)	NOTTINGHAM
	LAWRENCE WAY		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	56	
	Survey date: TUESDAY	08/11/16	Survey Type: MANUAL
38	NG-03-C-02	HOUSES (SPLIT INTO FLATS)	NOTTINGHAM
	CASTLE MARINA ROAD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	135	
	Survey date: WEDNESDAY	09/11/16	Survey Type: MANUAL
39	PO-03-C-01	BLOCKS OF FLATS	PORTSMOUTH
	CROSS STREET		
	PORTSMOUTH		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	90	
	Survey date: TUESDAY	05/06/18	Survey Type: MANUAL
40	RD-03-C-07	BLOCKS OF FLATS	RICHMOND
	BESSANT DRIVE		
	KEW		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	170	
	Survey date: WEDNESDAY	14/06/23	Survey Type: MANUAL
41	SF-03-C-05	BLOCKS OF FLATS	SUFFOLK
	FORE STREET		
	IPSWICH		
	IPSWICH WATERFRONT		
	Edge of Town Centre		
	Development Zone		
	Total No of Dwellings:	69	
	Survey date: WEDNESDAY	23/06/21	Survey Type: MANUAL
42	SK-03-C-02	BLOCK OF FLATS	SOUTHWARK
	LAMB WALK		
	BERMONDSEY		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	29	
	Survey date: THURSDAY	23/04/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

43	SK-03-C-03 MARITIME STREET SURREY QUAYS	BLOCKS OF FLATS		SOUTHWARK
	Neighbourhood Centre (PPS6 Local Centre) Development Zone Total No of Dwellings:		233	
	Survey date: THURSDAY		14/11/19	Survey Type: MANUAL
44	TH-03-C-04 LEVEN ROAD POPLAR ABERFELDY VILLAGE	BLOCK OF FLATS		TOWER HAMLETS
	Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings:		83	
	Survey date: FRIDAY		21/06/19	Survey Type: MANUAL
45	TW-03-C-01 CAULDWELL AVENUE WHITLEY BAY MONKESEATON	BLOCKS OF FLATS		TYNE & WEAR
	Edge of Town Residential Zone Total No of Dwellings:		45	
	Survey date: FRIDAY		15/10/21	Survey Type: MANUAL
46	WF-03-C-01 ERSKINE ROAD WALTHAMSTOW	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		97	
	Survey date: TUESDAY		05/11/19	Survey Type: MANUAL
47	WF-03-C-02 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		28	
	Survey date: TUESDAY		25/05/21	Survey Type: MANUAL
48	WF-03-C-03 FOREST ROAD WALTHAMSTOW	FLATS & TERRACED HOUSES		WALTHAM FOREST
	Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings:		22	
	Survey date: FRIDAY		21/05/21	Survey Type: MANUAL
49	WF-03-C-04 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		42	
	Survey date: TUESDAY		25/05/21	Survey Type: MANUAL
50	WF-03-C-05 NEW WANSTEAD WANSTEAD	BLOCK OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		6	
	Survey date: TUESDAY		25/05/21	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

51	WF-03-C-06	BLOCKS OF FLATS	WALTHAM FOREST
	BELGRAVE ROAD		
	WANSTEAD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	44	
	Survey date: TUESDAY	25/05/21	Survey Type: MANUAL
52	WS-03-C-01	BLOCKS OF FLATS	WEST SUSSEX
	GORING ROAD		
	WORTHING		
	GORING-BY-SEA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	18	
	Survey date: WEDNESDAY	11/05/22	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 3.15

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	32	0.000	2	32	0.000	2	32	0.000
07:00 - 08:00	52	102	0.029	52	102	0.100	52	102	0.129
08:00 - 09:00	52	102	0.038	52	102	0.117	52	102	0.155
09:00 - 10:00	52	102	0.054	52	102	0.060	52	102	0.114
10:00 - 11:00	52	102	0.050	52	102	0.062	52	102	0.112
11:00 - 12:00	52	102	0.050	52	102	0.060	52	102	0.110
12:00 - 13:00	52	102	0.054	52	102	0.061	52	102	0.115
13:00 - 14:00	52	102	0.050	52	102	0.058	52	102	0.108
14:00 - 15:00	52	102	0.045	52	102	0.050	52	102	0.095
15:00 - 16:00	52	102	0.071	52	102	0.052	52	102	0.123
16:00 - 17:00	52	102	0.087	52	102	0.057	52	102	0.144
17:00 - 18:00	52	102	0.107	52	102	0.058	52	102	0.165
18:00 - 19:00	52	102	0.105	52	102	0.061	52	102	0.166
19:00 - 20:00	24	119	0.069	24	119	0.042	24	119	0.111
20:00 - 21:00	24	119	0.053	24	119	0.037	24	119	0.090
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.862			0.875			1.737

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.

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Parameter summary

Trip rate parameter range selected:	6 - 493 (units:)
Survey date range:	01/01/15 - 14/06/23
Number of weekdays (Monday-Friday):	52
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	6
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 3.15

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	32	0.031	2	32	0.000	2	32	0.031
07:00 - 08:00	52	102	0.059	52	102	0.327	52	102	0.386
08:00 - 09:00	52	102	0.093	52	102	0.510	52	102	0.603
09:00 - 10:00	52	102	0.131	52	102	0.227	52	102	0.358
10:00 - 11:00	52	102	0.124	52	102	0.176	52	102	0.300
11:00 - 12:00	52	102	0.135	52	102	0.167	52	102	0.302
12:00 - 13:00	52	102	0.160	52	102	0.164	52	102	0.324
13:00 - 14:00	52	102	0.148	52	102	0.165	52	102	0.313
14:00 - 15:00	52	102	0.149	52	102	0.148	52	102	0.297
15:00 - 16:00	52	102	0.245	52	102	0.161	52	102	0.406
16:00 - 17:00	52	102	0.275	52	102	0.155	52	102	0.430
17:00 - 18:00	52	102	0.340	52	102	0.164	52	102	0.504
18:00 - 19:00	52	102	0.371	52	102	0.173	52	102	0.544
19:00 - 20:00	24	119	0.317	24	119	0.134	24	119	0.451
20:00 - 21:00	24	119	0.215	24	119	0.114	24	119	0.329
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.793			2.785			5.578

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.*

Calculation Reference: AUDIT-434201-240130-0122

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BN BARNET	1 days
	EN ENFIELD	2 days
	HG HARINGEY	1 days
	HO HOUNSLOW	1 days
	WF WALTHAM FOREST	1 days
02	SOUTH EAST	
	CT CENTRAL BEDFORDSHIRE	1 days
	ES EAST SUSSEX	6 days
	EX ESSEX	1 days
	HC HAMPSHIRE	11 days
	HF HERTFORDSHIRE	2 days
	IW ISLE OF WIGHT	1 days
	KC KENT	8 days
	MW MEDWAY	2 days
	SC SURREY	4 days
	SP SOUTHAMPTON	1 days
	WB WEST BERKSHIRE	1 days
	WS WEST SUSSEX	11 days
03	SOUTH WEST	
	DC DORSET	2 days
	DV DEVON	2 days
	SD SWINDON	1 days
	SM SOMERSET	3 days
	TB TORBAY	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	20 days
	PB PETERBOROUGH	1 days
	SF SUFFOLK	4 days
05	EAST MIDLANDS	
	DY DERBY	1 days
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	3 days
09	NORTH	
	DH DURHAM	3 days
	FU WESTMORLAND & FURNESS	1 days
10	WALES	
	PS POWYS	2 days
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days
	HI HIGHLAND	1 days
12	CONNAUGHT	
	CS SLIGO	2 days
	LT LEITRIM	1 days
	MA MAYO	1 days
13	MUNSTER	
	TI TIPPERARY	1 days
14	LEINSTER	
	LU LOUTH	1 days
	WC WICKLOW	2 days
15	GREATER DUBLIN	
	DL DUBLIN	2 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	2 days

	DN	DONEGAL	1 days
	MG	MONAGHAN	2 days
17		ULSTER (NORTHERN IRELAND)	
	AN	ANTRIM	1 days
	DE	DERRY	2 days
	TY	TYRONE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 6 to 1817 (units:)
 Range Selected by User: 4 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 04/07/23

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

Selected survey days:

Monday	25 days
Tuesday	32 days
Wednesday	36 days
Thursday	26 days
Friday	14 days

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

Selected survey types:

Manual count	133 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	11
Suburban Area (PPS6 Out of Centre)	18
Edge of Town	75
Neighbourhood Centre (PPS6 Local Centre)	28
Free Standing (PPS6 Out of Town)	1

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

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	93
Village	23
Out of Town	6
High Street	1
No Sub Category	8

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	51 days - Selected
Servicing vehicles Excluded	96 days - Selected

Secondary Filtering selection:

Use Class:

C3	133 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	4 days
1,001 to 5,000	24 days
5,001 to 10,000	37 days
10,001 to 15,000	30 days
15,001 to 20,000	13 days
20,001 to 25,000	12 days
25,001 to 50,000	10 days
50,001 to 100,000	3 days

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

Population within 5 miles:

5,000 or Less	3 days
5,001 to 25,000	27 days
25,001 to 50,000	19 days
50,001 to 75,000	20 days
75,001 to 100,000	13 days
100,001 to 125,000	4 days
125,001 to 250,000	32 days
250,001 to 500,000	9 days
500,001 or More	6 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	33 days
1.1 to 1.5	85 days
1.6 to 2.0	14 days

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

Travel Plan:

Yes	63 days
No	70 days

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

PTAL Rating:

No PTAL Present	127 days
1a (Low) Very poor	1 days
1b Very poor	1 days
2 Poor	1 days
3 Moderate	1 days
4 Good	1 days
5 Very Good	1 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES	CHESHIRE WEST & CHESTER
	LONDON ROAD		
	NORTHWICH		
	LEFTWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL
2	AC-03-A-05	SEMI-DETACHED & TERRACED	CHESHIRE WEST & CHESTER
	MEADOW DRIVE		
	NORTHWICH		
	BARNTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	40	
	Survey date: FRIDAY	30/04/21	Survey Type: MANUAL
3	AC-03-A-06	DETACHED HOUSES	CHESHIRE WEST & CHESTER
	COMMON LANE		
	NEAR CHESTER		
	WAVERTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	99	
	Survey date: FRIDAY	29/04/22	Survey Type: MANUAL
4	AN-03-A-09	DETACHED & SEMI-DETACHED	ANTRIM
	SLOEFIELD DRIVE		
	CARRICKFERGUS		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	151	
	Survey date: WEDNESDAY	12/10/16	Survey Type: MANUAL
5	AS-03-A-02	MIXED HOUSES	ABERDEENSHIRE
	FARROCHIE ROAD		
	STONEHAVEN		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	131	
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL
6	BN-03-A-04	MIXED HOUSES & FLATS	BARNET
	SWEETS WAY		
	WHETSTONE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	231	
	Survey date: TUESDAY	21/09/21	Survey Type: MANUAL
7	CA-03-A-07	MIXED HOUSES	CAMBRIDGESHIRE
	FIELD END		
	NEAR ELY		
	WITCHFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	32	
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL
8	CA-03-A-08	DETACHED & SEMI-DETACHED	CAMBRIDGESHIRE
	GIDDING ROAD		
	SAWTRY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	83	
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	CS-03-A-03	MIXED HOUSES	SLIGO
	TOP ROAD		
	STRANDHILL		
	STRANDHILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	30	
	Survey date: THURSDAY	27/10/16	Survey Type: MANUAL
10	CS-03-A-04	DETACHED & SEMI-DETACHED	SLIGO
	R292		
	STRANDHILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	63	
	Survey date: THURSDAY	27/10/16	Survey Type: MANUAL
11	CT-03-A-01	MIXED HOUSES	CENTRAL BEDFORDSHIRE
	ARLESEY ROAD		
	STOTFOLD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	46	
	Survey date: WEDNESDAY	22/06/22	Survey Type: MANUAL
12	CV-03-A-02	DETACHED & SEMI DETACHED	CAVAN
	R212 DUBLIN ROAD		
	CAVAN		
	KILLYNEBBBER		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	80	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
13	CV-03-A-03	DETACHED HOUSES	CAVAN
	R212 DUBLIN ROAD		
	CAVAN		
	PULLAMORE NEAR		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	37	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
14	DC-03-A-09	MIXED HOUSES	DORSET
	A350		
	SHAFTESBURY		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	50	
	Survey date: FRIDAY	19/11/21	Survey Type: MANUAL
15	DC-03-A-10	MIXED HOUSES	DORSET
	ADDISON CLOSE		
	GILLINGHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	26	
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL
16	DE-03-A-04	SEMI-DETACHED & TERRACED	DERRY
	GREENHALL HIGHWAY		
	COLERAINE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	38	
	Survey date: THURSDAY	19/05/22	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	DE-03-A-05 CLOYFIN ROAD COLERAINE LOGUESTOWN IND. ESTATE Edge of Town Industrial Zone Total No of Dwellings: 51 Survey date: FRIDAY 20/05/22	SEMI-DETACHED & TERRACED	DERRY	Survey Type: MANUAL
18	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 50 Survey date: TUESDAY 28/03/17	SEMI DETACHED	DURHAM	Survey Type: MANUAL
19	DH-03-A-02 LEAZES LANE BISHOP AUCKLAND ST HELEN AUCKLAND Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 125 Survey date: MONDAY 27/03/17	MIXED HOUSES	DURHAM	Survey Type: MANUAL
20	DH-03-A-03 PILGRIMS WAY DURHAM Edge of Town Residential Zone Total No of Dwellings: 57 Survey date: FRIDAY 19/10/18	SEMI-DETACHED & TERRACED	DURHAM	Survey Type: MANUAL
21	DL-03-A-10 R124 MALAHIDE SAINT HELENS Edge of Town Residential Zone Total No of Dwellings: 65 Survey date: WEDNESDAY 20/06/18	SEMI DETACHED & DETACHED	DUBLIN	Survey Type: MANUAL
22	DL-03-A-11 GRACE PARK ROAD DUBLIN WHITEHALL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 19 Survey date: WEDNESDAY 19/05/21	SEMI-DETACHED HOUSES	DUBLIN	Survey Type: MANUAL
23	DN-03-A-06 GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Total No of Dwellings: 6 Survey date: WEDNESDAY 10/10/18	DETACHED HOUSING	DONEGAL	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

24	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 Survey date: FRIDAY 25/09/15 Survey Type: MANUAL		
25	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 Survey date: MONDAY 28/09/15 Survey Type: MANUAL		
26	DY-03-A-01 RADBOURNE LANE DERBY	MIXED HOUSES	DERBY
	Edge of Town Residential Zone Total No of Dwellings: 371 Survey date: TUESDAY 10/07/18 Survey Type: MANUAL		
27	EN-03-A-01 BOLLINGBROKE PARK COCKFOSTERS	TERRACED & SEMI-DETACHED	ENFIELD
	Edge of Town Residential Zone Total No of Dwellings: 32 Survey date: WEDNESDAY 24/11/21 Survey Type: MANUAL		
28	EN-03-A-02 DUCHY ROAD HADLEY WOOD	DETACHED HOUSES	ENFIELD
	Edge of Town Residential Zone Total No of Dwellings: 9 Survey date: WEDNESDAY 14/09/22 Survey Type: MANUAL		
29	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: MONDAY 11/07/16 Survey Type: MANUAL		
30	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19 Survey Type: MANUAL		
31	ES-03-A-06 BISHOPS LANE RINGMER	MIXED HOUSES	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 12 Survey date: WEDNESDAY 16/06/21 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

32	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone Total No of Dwellings: 91 Survey date: THURSDAY 07/11/19	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
33	ES-03-A-08 WRESTWOOD ROAD BEXHILL Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: WEDNESDAY 12/10/22	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
34	ES-03-A-09 THE FAIRWAY NEWHAVEN Edge of Town Residential Zone Total No of Dwellings: 47 Survey date: MONDAY 13/03/23	DETACHED & SEMI-DETACHED	EAST SUSSEX	Survey Type: MANUAL
35	EX-03-A-03 KESTREL GROVE RAYLEIGH Edge of Town Residential Zone Total No of Dwellings: 123 Survey date: MONDAY 27/09/21	MIXED HOUSES	ESSEX	Survey Type: MANUAL
36	FU-03-A-02 MACADAM WAY PENRITH Edge of Town Centre Residential Zone Total No of Dwellings: 50 Survey date: TUESDAY 21/06/16	DETACHED / TERRACED HOUSING	WESTMORLAND & FURNESS	Survey Type: MANUAL
37	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone Total No of Dwellings: 39 Survey date: TUESDAY 13/11/18	TERRACED & SEMI-DETACHED	HAMPSHIRE	Survey Type: MANUAL
38	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 31/10/18	MIXED HOUSES	HAMPSHIRE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

39	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 Survey date: TUESDAY 19/11/19 Survey Type: MANUAL		
40	HC-03-A-24 STONEHAM LANE EASTLEIGH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 243 Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL		
41	HC-03-A-26 BOTLEY ROAD WHITELEY	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Out of Town Total No of Dwellings: 270 Survey date: THURSDAY 24/06/21 Survey Type: MANUAL		
42	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 73 Survey date: TUESDAY 16/11/21 Survey Type: MANUAL		
43	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 125 Survey date: MONDAY 08/11/21 Survey Type: MANUAL		
44	HC-03-A-30 MEUDON AVENUE FARNBOROUGH	TERRACED HOUSES	HAMPSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 31 Survey date: FRIDAY 14/10/22 Survey Type: MANUAL		
45	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 44 Survey date: FRIDAY 07/10/22 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

46	HC-03-A-32	MIXED HOUSES & FLATS	HAMPSHIRE
	GREEN LANE		
	FARNHAM		
	WEYBOURNE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	105	
	Survey date: THURSDAY	29/06/23	Survey Type: MANUAL
47	HC-03-A-33	MIXED HOUSES & FLATS	HAMPSHIRE
	CROW LANE		
	RINGWOOD		
	CROW		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	195	
	Survey date: TUESDAY	04/07/23	Survey Type: MANUAL
48	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE
	HARE STREET ROAD		
	BUNTINGFORD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
49	HF-03-A-04	TERRACED HOUSES	HERTFORDSHIRE
	HOLMSIDE RISE		
	WATFORD		
	SOUTH OXHEY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	8	
	Survey date: TUESDAY	08/06/21	Survey Type: MANUAL
50	HG-03-A-01	DETACHED & SEMI-DETACHED	HARINGEY
	LAWRENCE ROAD		
	TOTTENHAM		
	WEST GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	High Street		
	Total No of Dwellings:	20	
	Survey date: TUESDAY	05/11/19	Survey Type: MANUAL
51	HI-03-A-14	SEMI-DETACHED & TERRACED	HIGHLAND
	KING BRUDE ROAD		
	INVERNESS		
	SCORGUIE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: WEDNESDAY	23/03/16	Survey Type: MANUAL
52	HO-03-A-02	MIXED HOUSES	HOUNSLOW
	HIBERNIAN ROAD		
	HOUNSLOW		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	50	
	Survey date: MONDAY	29/06/15	Survey Type: MANUAL
53	IW-03-A-01	DETACHED HOUSES	ISLE OF WIGHT
	MEDHAM FARM LANE		
	NEAR COWES		
	MEDHAM		
	Free Standing (PPS6 Out of Town)		
	Out of Town		
	Total No of Dwellings:	72	
	Survey date: TUESDAY	25/06/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

54	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 Survey date: THURSDAY 14/07/16	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
55	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17	SEMI-DETACHED & TERRACED	KENT	Survey Type: MANUAL
56	KC-03-A-06 MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 363 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
57	KC-03-A-07 RECVLVER ROAD HERNE BAY Edge of Town Residential Zone Total No of Dwellings: 288 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES	KENT	Survey Type: MANUAL
58	KC-03-A-08 MAIDSTONE ROAD CHARING Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 159 Survey date: TUESDAY 22/05/18	MIXED HOUSES	KENT	Survey Type: MANUAL
59	KC-03-A-09 WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone Total No of Dwellings: 14 Survey date: WEDNESDAY 09/06/21	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
60	KC-03-A-10 HEADCORN ROAD STAPLEHURST Edge of Town Residential Zone Total No of Dwellings: 106 Survey date: TUESDAY 09/05/23	MIXED HOUSES	KENT	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

61	KC-03-A-11	MIXED HOUSES & FLATS	KENT
	COLDHARBOUR ROAD GRAVESEND		
	Edge of Town No Sub Category Total No of Dwellings: 375 Survey date: MONDAY 20/03/23		Survey Type: MANUAL
62	LE-03-A-02	DETACHED & OTHERS	LEICESTERSHIRE
	MELBOURNE ROAD IBSTOCK		
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18		Survey Type: MANUAL
63	LN-03-A-04	DETACHED & SEMI-DETACHED	LINCOLNSHIRE
	EGERTON ROAD LINCOLN		
	Edge of Town Centre Residential Zone Total No of Dwellings: 30 Survey date: MONDAY 29/06/15		Survey Type: MANUAL
64	LT-03-A-01	SEMI-DETACHED & DETACHED	LEITRIM
	ARD NA SI CARRICK-ON-SHANNON ATTIRORY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 90 Survey date: FRIDAY 24/04/15		Survey Type: MANUAL
65	LU-03-A-01	TERRACED & SEMI-DETACHED	LOUTH
	RATHMULLAN ROAD DROGHEDA		
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 111 Survey date: TUESDAY 21/09/21		Survey Type: MANUAL
66	MA-03-A-02	SEMI-DETACHED HOUSES	MAYO
	CONVENT ROAD CLAREMORRIS		
	Edge of Town Centre No Sub Category Total No of Dwellings: 31 Survey date: WEDNESDAY 15/09/21		Survey Type: MANUAL
67	MG-03-A-01	SEMI-DETACHED HOUSES	MONAGHAN
	ORIEL WAY MONAGHAN		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 49 Survey date: TUESDAY 12/10/21		Survey Type: MANUAL
68	MG-03-A-02	MIXED HOUSES	MONAGHAN
	GLEN ROAD MONAGHAN		
	Edge of Town Centre Residential Zone Total No of Dwellings: 76 Survey date: TUESDAY 12/10/21		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

69	MW-03-A-01 ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 8 Survey date: FRIDAY 22/09/17	DETACHED & SEMI-DETACHED	MEDWAY	Survey Type: MANUAL
70	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM Edge of Town Residential Zone Total No of Dwellings: 19 Survey date: MONDAY 06/06/22	MIXED HOUSES	MEDWAY	Survey Type: MANUAL
71	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 16/09/15	DETACHED HOUSES	NORFOLK	Survey Type: MANUAL
72	NF-03-A-05 HEATH DRIVE HOLT Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19	MIXED HOUSES	NORFOLK	Survey Type: MANUAL
73	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL Edge of Town Residential Zone Total No of Dwellings: 275 Survey date: MONDAY 23/09/19	MIXED HOUSES	NORFOLK	Survey Type: MANUAL
74	NF-03-A-08 SIR ALFRED MUNNINGS RD NEAR NORWICH COSTESSEY Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 1817 Survey date: THURSDAY 19/09/19	MIXED HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
75	NF-03-A-09 ROUND HOUSE WAY NORWICH CRINGLEFORD Edge of Town Residential Zone Total No of Dwellings: 984 Survey date: TUESDAY 24/09/19	MIXED HOUSES & FLATS	NORFOLK	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

76	NF-03-A-23 SILFIELD ROAD WYMONDHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 514 Survey date: WEDNESDAY 22/09/21		Survey Type: MANUAL
77	NF-03-A-25 WOODFARM LANE GORLESTON-ON-SEA	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 55 Survey date: TUESDAY 21/09/21		Survey Type: MANUAL
78	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21	MIXED HOUSES & FLATS	NORFOLK
79	NF-03-A-28 ATLANTIC AVENUE NORWICH SPROWSTON Edge of Town Residential Zone Total No of Dwellings: 1146 Survey date: THURSDAY 22/09/22	MIXED HOUSES & FLATS	NORFOLK
80	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21		Survey Type: MANUAL
81	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22		Survey Type: MANUAL
82	NF-03-A-34 NORWICH ROAD SWAFFHAM	MIXED HOUSES	NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 80 Survey date: TUESDAY 27/09/22		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

83	NF-03-A-35 REPTON AVENUE NORWICH	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	116	
	Survey date: WEDNESDAY	28/09/22	Survey Type: MANUAL
84	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES	NORFOLK
	Edge of Town No Sub Category Total No of Dwellings:	75	
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL
85	NF-03-A-37 GREENFIELDS ROAD DEREHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	44	
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL
86	NF-03-A-38 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	537	
	Survey date: TUESDAY	20/09/22	Survey Type: MANUAL
87	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	212	
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL
88	NF-03-A-43 MILL LANE NEAR NORWICH HORSFORD Neighbourhood Centre (PPS6 Local Centre) Village	MIXED HOUSES	NORFOLK
	Total No of Dwellings:	125	
	Survey date: WEDNESDAY	15/09/21	Survey Type: MANUAL
89	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	300	
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

90	NF-03-A-51	SEMI-DETACHED	NORFOLK
	CITY ROAD		
	NORWICH		
	LAKENHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	34	
	Survey date: TUESDAY	13/09/22	Survey Type: MANUAL
91	NT-03-A-08	DETACHED HOUSES	NOTTINGHAMSHIRE
	WIGHAY ROAD		
	HUCKNALL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	36	
	Survey date: MONDAY	18/10/21	Survey Type: MANUAL
92	NY-03-A-12	TOWN HOUSES	NORTH YORKSHIRE
	RACECOURSE LANE		
	NORTHALLERTON		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	47	
	Survey date: TUESDAY	27/09/16	Survey Type: MANUAL
93	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD		
	CATTERICK GARRISON		
	OLD HOSPITAL COMPOUND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	10	
	Survey date: WEDNESDAY	10/05/17	Survey Type: MANUAL
94	NY-03-A-14	DETACHED & BUNGALOWS	NORTH YORKSHIRE
	PALACE ROAD		
	RIPON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	45	
	Survey date: WEDNESDAY	18/05/22	Survey Type: MANUAL
95	PB-03-A-04	DETACHED HOUSES	PETERBOROUGH
	EASTFIELD ROAD		
	PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	17/10/16	Survey Type: MANUAL
96	PS-03-A-01	MIXED HOUSES	POWYS
	BRYN GLAS		
	WELSHPOOL		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	16	
	Survey date: MONDAY	11/05/15	Survey Type: MANUAL
97	PS-03-A-02	DETACHED / SEMI-DETACHED	POWYS
	GUNROG ROAD		
	WELSHPOOL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	11/05/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

98	SC-03-A-07 FOLLY HILL FARNHAM	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:	41		
	Survey date: WEDNESDAY	11/05/22	Survey Type: MANUAL	
99	SC-03-A-08 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:	790		
	Survey date: WEDNESDAY	04/05/22	Survey Type: MANUAL	
100	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS		SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	136		
	Survey date: TUESDAY	24/05/22	Survey Type: MANUAL	
101	SC-03-A-10 GUILDFORD ROAD ASH	MIXED HOUSES		SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	32		
	Survey date: WEDNESDAY	14/09/22	Survey Type: MANUAL	
102	SD-03-A-01 HEADLANDS GROVE SWINDON	SEMI DETACHED		SWINDON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	27		
	Survey date: THURSDAY	22/09/16	Survey Type: MANUAL	
103	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES		SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:	18		
	Survey date: WEDNESDAY	09/09/15	Survey Type: MANUAL	
104	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED		SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	38		
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

105	SF-03-A-09 FOXHALL ROAD IPSWICH	MIXED HOUSES & FLATS	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 179 Survey date: THURSDAY 24/06/21 Survey Type: MANUAL		
106	SF-03-A-10 LOVETOFTS DRIVE IPSWICH WHITEHOUSE Edge of Town Residential Zone	TERRACED & SEMI-DETACHED	SUFFOLK
	Total No of Dwellings: 149 Survey date: TUESDAY 22/06/21 Survey Type: MANUAL		
107	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD Edge of Town Residential Zone	DETACHED & SEMI	SOMERSET
	Total No of Dwellings: 33 Survey date: THURSDAY 24/09/15 Survey Type: MANUAL		
108	SM-03-A-02 HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village	MIXED HOUSES	SOMERSET
	Total No of Dwellings: 42 Survey date: TUESDAY 25/09/18 Survey Type: MANUAL		
109	SM-03-A-03 HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village	MIXED HOUSES	SOMERSET
	Total No of Dwellings: 41 Survey date: TUESDAY 25/09/18 Survey Type: MANUAL		
110	SP-03-A-02 BARNFIELD WAY NEAR SOUTHAMPTON HEDGE END Edge of Town Out of Town	MIXED HOUSES & FLATS	SOUTHAMPTON
	Total No of Dwellings: 250 Survey date: TUESDAY 12/10/21 Survey Type: MANUAL		
111	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	Total No of Dwellings: 248 Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL		
112	TB-03-A-01 BRONSHILL ROAD TORQUAY	TERRACED HOUSES	TORBAY
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 37 Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

113	TI-03-A-01 BRITTAS ROAD THURLES	MIXED HOUSES	TIPPERARY
	Edge of Town Out of Town Total No of Dwellings:	76	
	Survey date: THURSDAY	17/06/21	Survey Type: MANUAL
114	TY-03-A-02 SANDHOLES ROAD COOKSTOWN DERRYLORAN	SEMI DETACHED & BUNGALOWS	TYRONE
	Edge of Town Industrial Zone Total No of Dwellings:	101	
	Survey date: THURSDAY	14/03/19	Survey Type: MANUAL
115	VG-03-A-01 ARTHUR STREET BARRY	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
	Edge of Town Residential Zone Total No of Dwellings:	12	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
116	WB-03-A-03 DORKING WAY READING CALCOT	MIXED HOUSES	WEST BERKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	108	
	Survey date: FRIDAY	09/09/22	Survey Type: MANUAL
117	WC-03-A-01 STATION ROAD WICKLOW CORPORATION MURRAGH	DETACHED HOUSES	WICKLOW
	Edge of Town No Sub Category Total No of Dwellings:	50	
	Survey date: MONDAY	28/05/18	Survey Type: MANUAL
118	WC-03-A-02 MARLTON ROAD WICKLOW FRIARSHILL	DETACHED HOUSES	WICKLOW
	Edge of Town Centre Residential Zone Total No of Dwellings:	45	
	Survey date: MONDAY	28/05/18	Survey Type: MANUAL
119	WF-03-A-02 PALMERSTON ROAD WALTHAMSTOW	SEMI DETACHED & TERRACED	WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:	9	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL
120	WK-03-A-04 DALEHOUSE LANE KENILWORTH	DETACHED HOUSES	WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	49	
	Survey date: FRIDAY	27/09/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

121	WM-03-A-04	TERRACED HOUSES	WEST MIDLANDS
	OSBORNE ROAD		
	COVENTRY		
	EARLSDON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:		39
	Survey date: MONDAY		21/11/16
			Survey Type: MANUAL
122	WM-03-A-05	TERRACED & DETACHED	WEST MIDLANDS
	COUNDON ROAD		
	COVENTRY		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:		89
	Survey date: MONDAY		21/11/16
			Survey Type: MANUAL
123	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE		
	NEAR HORSHAM		
	BROOKS GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:		57
	Survey date: THURSDAY		19/10/17
			Survey Type: MANUAL
124	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:		180
	Survey date: THURSDAY		19/04/18
			Survey Type: MANUAL
125	WS-03-A-11	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	WEST HORSHAM		
	S BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:		918
	Survey date: TUESDAY		02/04/19
			Survey Type: MANUAL
126	WS-03-A-12	MIXED HOUSES	WEST SUSSEX
	MADGWICK LANE		
	CHICHESTER		
	WESTHAMPNETT		
	Edge of Town		
	Village		
	Total No of Dwellings:		152
	Survey date: WEDNESDAY		16/06/21
			Survey Type: MANUAL
127	WS-03-A-13	MIXED HOUSES & FLATS	WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURRINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:		197
	Survey date: WEDNESDAY		23/06/21
			Survey Type: MANUAL
128	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:		117
	Survey date: WEDNESDAY		20/10/21
			Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

129	WS-03-A-15	MIXED HOUSES	WEST SUSSEX
	HILLAND ROAD		
	BILLINGSHURST		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	380	
	Survey date: TUESDAY	23/11/21	Survey Type: MANUAL
130	WS-03-A-16	DETACHED & SEMI-DETACHED	WEST SUSSEX
	BRACKLESHAM LANE		
	BRACKLESHAM BAY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	58	
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL
131	WS-03-A-17	MIXED HOUSES & FLATS	WEST SUSSEX
	SHOPWHYKE ROAD		
	CHICHESTER		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	86	
	Survey date: WEDNESDAY	01/03/23	Survey Type: MANUAL
132	WS-03-A-18	MIXED HOUSES & FLATS	WEST SUSSEX
	LONDON ROAD		
	HASSOCKS		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	156	
	Survey date: MONDAY	15/05/23	Survey Type: MANUAL
133	WS-03-A-19	MIXED HOUSES & FLATS	WEST SUSSEX
	TURNERS HILL ROAD		
	EAST GRINSTEAD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	92	
	Survey date: MONDAY	15/05/23	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.70

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	133	139	0.074	133	139	0.286	133	139	0.360
08:00 - 09:00	133	139	0.146	133	139	0.375	133	139	0.521
09:00 - 10:00	133	139	0.137	133	139	0.165	133	139	0.302
10:00 - 11:00	133	139	0.121	133	139	0.142	133	139	0.263
11:00 - 12:00	133	139	0.128	133	139	0.135	133	139	0.263
12:00 - 13:00	133	139	0.151	133	139	0.148	133	139	0.299
13:00 - 14:00	133	139	0.154	133	139	0.146	133	139	0.300
14:00 - 15:00	133	139	0.156	133	139	0.172	133	139	0.328
15:00 - 16:00	133	139	0.240	133	139	0.166	133	139	0.406
16:00 - 17:00	133	139	0.262	133	139	0.160	133	139	0.422
17:00 - 18:00	133	139	0.342	133	139	0.166	133	139	0.508
18:00 - 19:00	133	139	0.281	133	139	0.157	133	139	0.438
19:00 - 20:00	6	59	0.148	6	59	0.134	6	59	0.282
20:00 - 21:00	6	59	0.168	6	59	0.123	6	59	0.291
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.508			2.475			4.983

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.

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Parameter summary

Trip rate parameter range selected:	6 - 1817 (units:)
Survey date range:	01/01/15 - 04/07/23
Number of weekdays (Monday-Friday):	133
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.70

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	133	139	0.107	133	139	0.481	133	139	0.588
08:00 - 09:00	133	139	0.220	133	139	0.763	133	139	0.983
09:00 - 10:00	133	139	0.210	133	139	0.277	133	139	0.487
10:00 - 11:00	133	139	0.188	133	139	0.230	133	139	0.418
11:00 - 12:00	133	139	0.204	133	139	0.219	133	139	0.423
12:00 - 13:00	133	139	0.236	133	139	0.229	133	139	0.465
13:00 - 14:00	133	139	0.243	133	139	0.227	133	139	0.470
14:00 - 15:00	133	139	0.263	133	139	0.265	133	139	0.528
15:00 - 16:00	133	139	0.519	133	139	0.281	133	139	0.800
16:00 - 17:00	133	139	0.491	133	139	0.264	133	139	0.755
17:00 - 18:00	133	139	0.569	133	139	0.275	133	139	0.844
18:00 - 19:00	133	139	0.462	133	139	0.266	133	139	0.728
19:00 - 20:00	6	59	0.427	6	59	0.322	6	59	0.749
20:00 - 21:00	6	59	0.368	6	59	0.208	6	59	0.576
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.507			4.307			8.814

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

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

Appendix C Fortfield Rd / College Dr / Development Junction LinSig Results

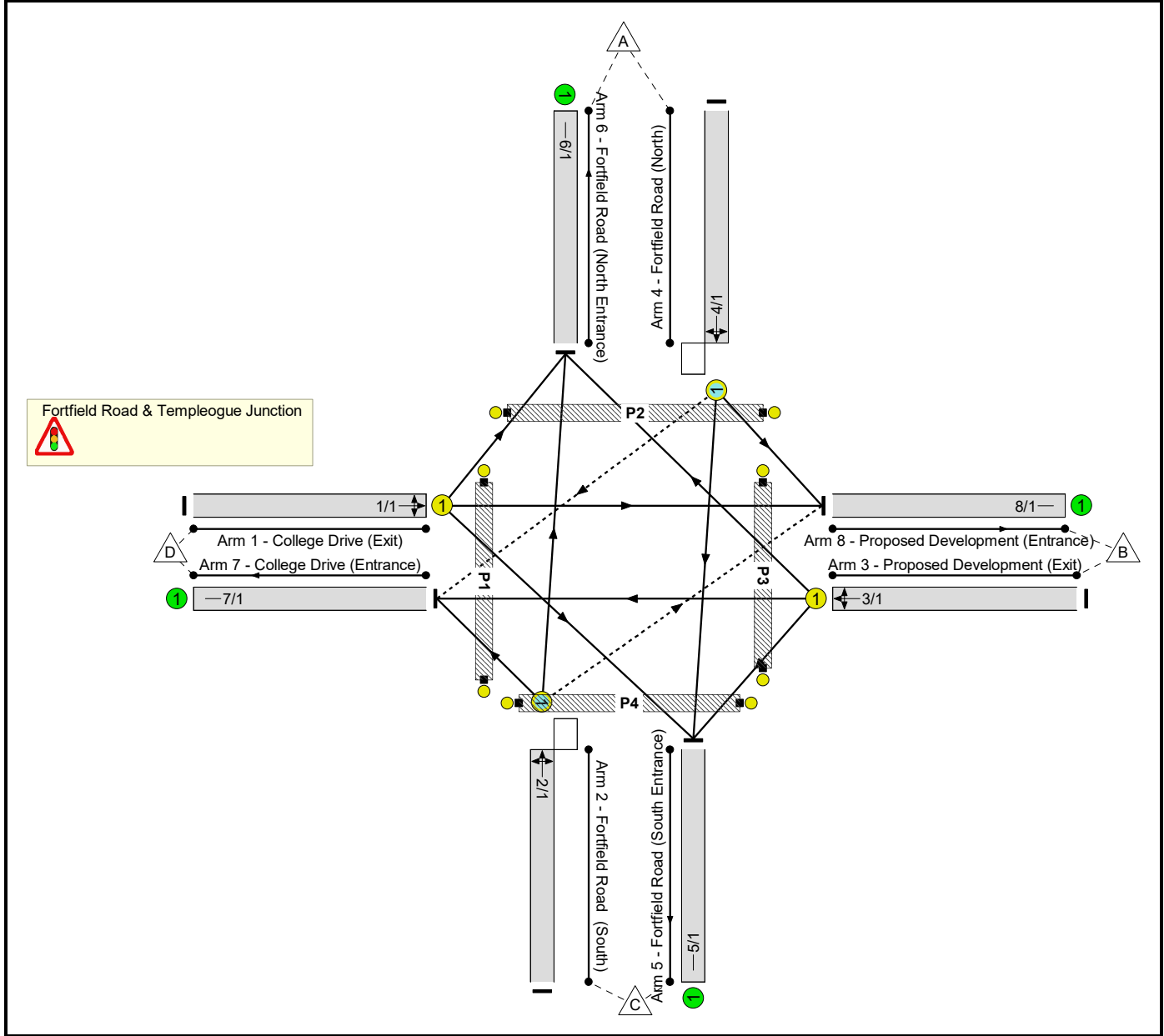
Full Input Data And Results

Full Input Data And Results

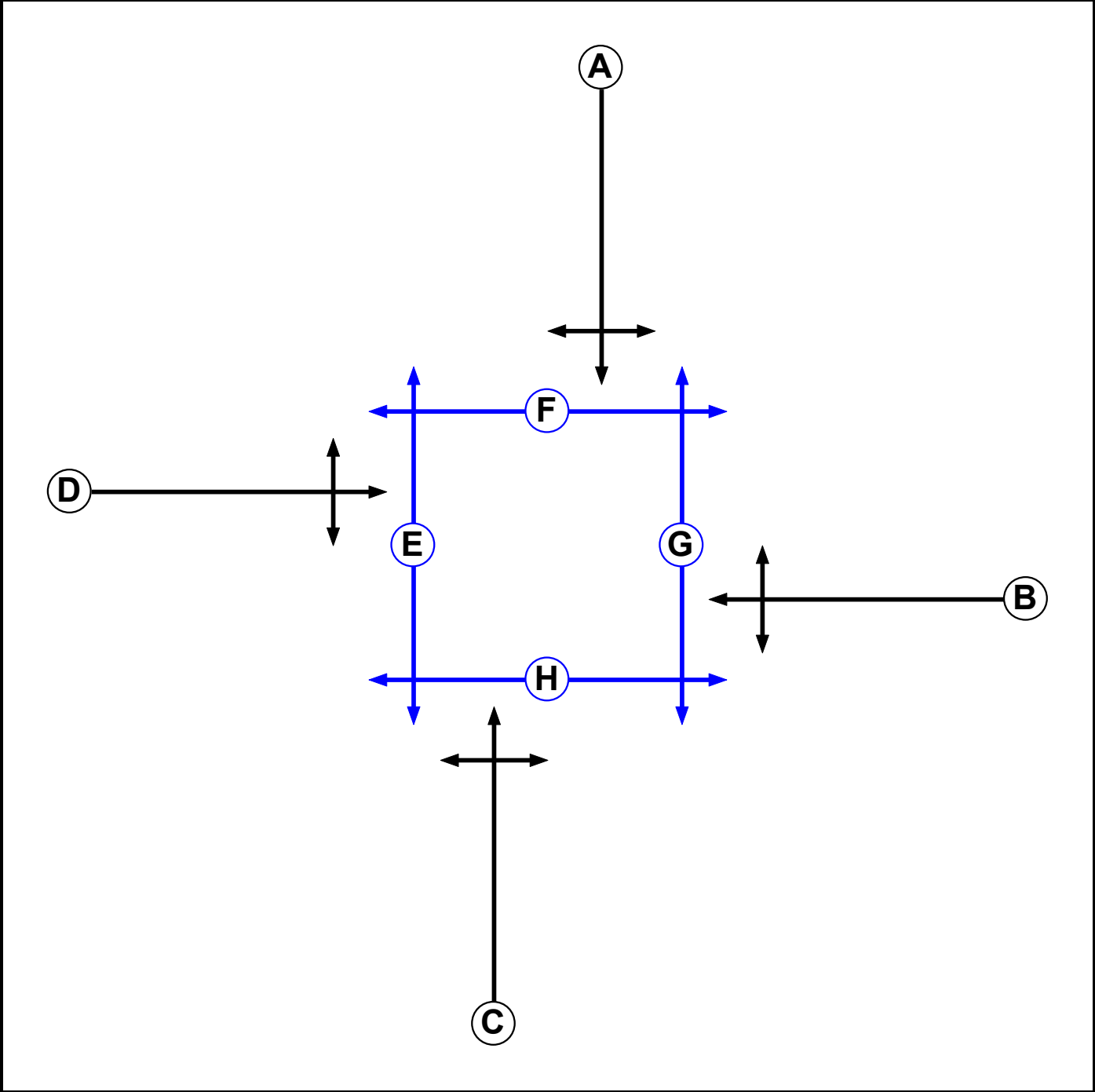
User and Project Details

Project:	222102 - Fortfield Road
Title:	Residential Development, Fortfield Road, Terenure
Location:	
Date Started:	April 2022
Checked By:	J Tiernan
Additional detail:	
File name:	222102 - J1_JPM_2024-08-13.lsg3x
Author:	SOC / JPM
Company:	PUNCH Consulting Engineers
Address:	Carnegie House, Library Road, Dun Laoghaire, Co Dublin, A96 C7W7, Ireland

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7

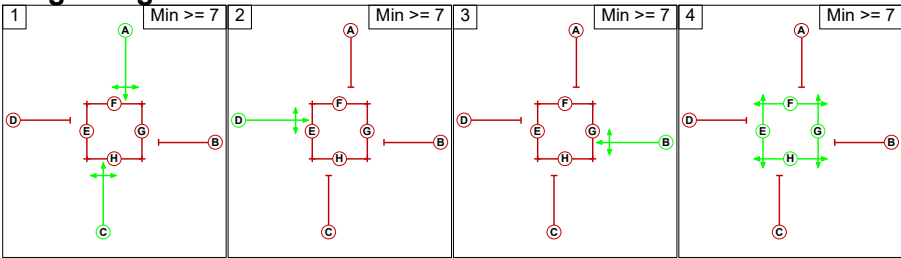
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		5	-	5	7	5	6	7
	B	5 <th></th> <td>5</td> <td>5</td> <td>7</td> <td>7</td> <td>5</td> <td>6</td>		5	5	7	7	5	6
	C	-	5 <th></th> <td>5</td> <td>6</td> <td>7</td> <td>7</td> <td>5</td>		5	6	7	7	5
	D	5	6	5 <th></th> <td>5</td> <td>7</td> <td>7</td> <td>7</td>		5	7	7	7
	E	8	8	8	8		-	-	-
	F	11	11	11	11	- <th></th> <td>-</td> <td>-</td>		-	-
	G	8	8	8	8	-	- <th></th> <td>-</td>		-
	H	11	11	11	11	-	-	- <th></th>	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	D
3	B
4	E F G H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage				
From Stage		1	2	3	4
	1		5	5	7
	2	5		6	7
	3	5	5		7
	4	11	11	11	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Fortfield Road && Templeogue Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Fortfield Road (South))	8/1 (Right)	1439	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
4/1 (Fortfield Road (North))	7/1 (Right)	1439	0	2/1	1.09	All	2.00	2.00	0.50	2	2.00

Lane Input Data

Junction: Fortfield Road & Templeogue Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (College Drive (Exit))	U	D	2	3	60.0	Geom	-	3.05	0.00	Y	Arm 5 Right	11.80
											Arm 6 Left	7.70
											Arm 8 Ahead	Inf
											Arm 6 Ahead	Inf
2/1 (Fortfield Road (South))	O	C	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 7 Left	5.80
											Arm 8 Right	10.00
3/1 (Proposed Development (Exit))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	6.00
											Arm 6 Right	9.60
											Arm 7 Ahead	Inf
4/1 (Fortfield Road (North))	O	A	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Right	8.10
											Arm 8 Left	5.90
5/1 (Fortfield Road (South Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Fortfield Road (North Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (College Drive (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Proposed Development (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Opening Year 2028 AM'	08:00	09:00	01:00	
2: 'Opening Year 2028 PM'	17:30	18:30	01:00	
3: 'Design Year 2033 AM'	08:00	09:00	01:00	
4: 'Design Year 2033 PM'	17:30	18:30	01:00	
5: 'Design Year 2043 AM'	08:00	09:00	01:00	
6: 'Design Year 2043 PM'	17:30	18:30	01:00	

Traffic Flows, Desired

Scenario 1: 'Opening Year 2028AM' (FG1: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	4	352	91	447
	B	23	0	21	8	52
	C	304	3	0	57	364
	D	140	2	61	0	203
	Tot.	467	9	434	156	1066

Scenario 2: 'Opening Year 2028 PM' (FG2: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	17	243	77	337
	B	7	0	7	3	17
	C	235	15	0	45	295
	D	61	5	35	0	101
	Tot.	303	37	285	125	750

Scenario 3: 'Design Year 2033 AM' (FG3: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	4	369	96	469
	B	23	0	21	8	52
	C	319	3	0	59	381
	D	147	2	64	0	213
	Tot.	489	9	454	163	1115

Full Input Data And Results

Scenario 4: 'Design Year 2033 PM' (FG4: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	17	255	81	353
	B	7	0	7	3	17
	C	246	15	0	47	308
	D	64	5	36	0	105
	Tot.	317	37	298	131	783

Scenario 5: 'Design Year 2043 AM' (FG5: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	4	388	100	492
	B	23	0	21	8	52
	C	334	3	0	62	399
	D	155	2	67	0	224
	Tot.	512	9	476	170	1167

Scenario 6: 'Design Year 2043 PM' (FG6: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	17	267	85	369
	B	7	0	7	3	17
	C	258	15	0	49	322
	D	67	5	38	0	110
	Tot.	332	37	312	137	818

Full Input Data And Results

Network Results**Scenario 1: 'Opening Year 2028AM'** (FG1: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	59.1%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	59.1%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	22	-	203	1637	359	56.6%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	40	-	364	2030	793	45.9%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	52	1637	125	41.7%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	40	-	447	2034	757	59.1%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	94	0	0	8.3	2.1	0.2	10.6	-	-	-	-
Fortfield Road && Templeogue Junction	-	-	94	0	0	8.3	2.1	0.2	10.6	-	-	-	-
1/1	203	203	-	-	-	2.1	0.6	-	2.7	48.0	5.2	0.6	5.9
2/1	364	364	3	0	0	2.4	0.4	0.0	2.8	28.0	7.8	0.4	8.2
3/1	52	52	-	-	-	0.7	0.4	-	1.0	70.8	1.4	0.4	1.8
4/1	447	447	91	0	0	3.1	0.7	0.2	4.0	32.3	10.4	0.7	11.1
5/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 52.4 Total Delay for Signalled Lanes (pcuHr): 10.58 Cycle Time (s): 105 PRC Over All Lanes (%): 52.4 Total Delay Over All Lanes(pcuHr): 10.58													

Full Input Data And Results

Scenario 2: 'Opening Year 2028 PM' (FG2: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	38.5%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	38.5%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	16	-	101	1653	268	37.7%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	46	-	295	2020	904	32.6%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	17	1641	125	13.6%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	46	-	337	2004	875	38.5%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	125	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 3: 'Design Year 2033 AM' (FG3: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	62.1%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	62.1%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	21	-	213	1637	343	62.1%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	41	-	381	2031	812	46.9%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	52	1637	125	41.7%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	41	-	469	2034	776	60.5%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	163	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 4: 'Design Year 2033 PM' (FG4: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	40.3%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	40.3%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	16	-	105	1652	267	39.3%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	46	-	308	2021	905	34.0%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	17	1641	125	13.6%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	46	-	353	2005	875	40.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 5: 'Design Year 2043 AM' (FG5: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	65.3%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	65.3%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	21	-	224	1637	343	65.3%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	41	-	399	2031	812	49.1%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	52	1637	125	41.7%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	41	-	492	2034	768	64.1%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	170	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	103	0	0	9.1	2.6	0.2	12.0	-	-	-	-
Fortfield Road && Templeogue Junction	-	-	103	0	0	9.1	2.6	0.2	12.0	-	-	-	-
1/1	224	224	-	-	-	2.4	0.9	-	3.3	52.9	6.0	0.9	6.9
2/1	399	399	3	0	0	2.6	0.5	0.0	3.1	27.9	8.6	0.5	9.1
3/1	52	52	-	-	-	0.7	0.4	-	1.0	70.8	1.4	0.4	1.8
4/1	492	492	100	0	0	3.5	0.9	0.2	4.6	33.3	11.8	0.9	12.6
5/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 37.8 Total Delay for Signalled Lanes (pcuHr): 11.97 Cycle Time (s): 105 PRC Over All Lanes (%): 37.8 Total Delay Over All Lanes(pcuHr): 11.97													

Full Input Data And Results

Scenario 6: 'Design Year 2043 PM' (FG6: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	42.4%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	42.4%
1/1	College Drive (Exit) Right Left Ahead	U	N/A	N/A	D		1	16	-	110	1652	267	41.1%
2/1	Fortfield Road (South) Ahead Left Right	O	N/A	N/A	C		1	46	-	322	2021	905	35.6%
3/1	Proposed Development (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	17	1641	125	13.6%
4/1	Fortfield Road (North) Ahead Right Left	O	N/A	N/A	A		1	46	-	369	2006	870	42.4%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
6/1	Fortfield Road (North Entrance)	U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
7/1	College Drive (Entrance)	U	N/A	N/A	-		-	-	-	137	Inf	Inf	0.0%
8/1	Proposed Development (Entrance)	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

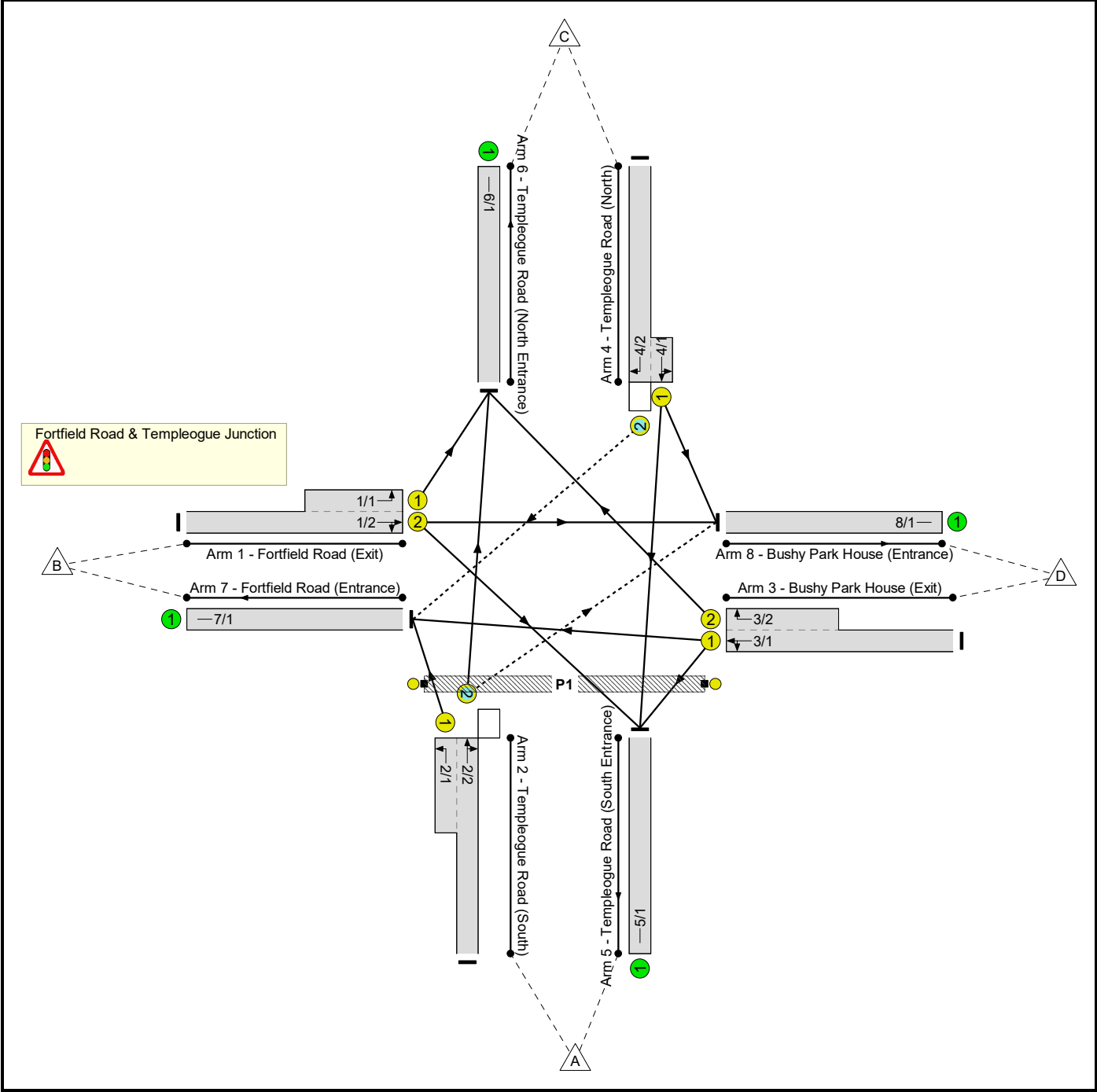
Appendix D Fortfield Road / Templeogue / Bushy Park House LinSig Results

Full Input Data And Results

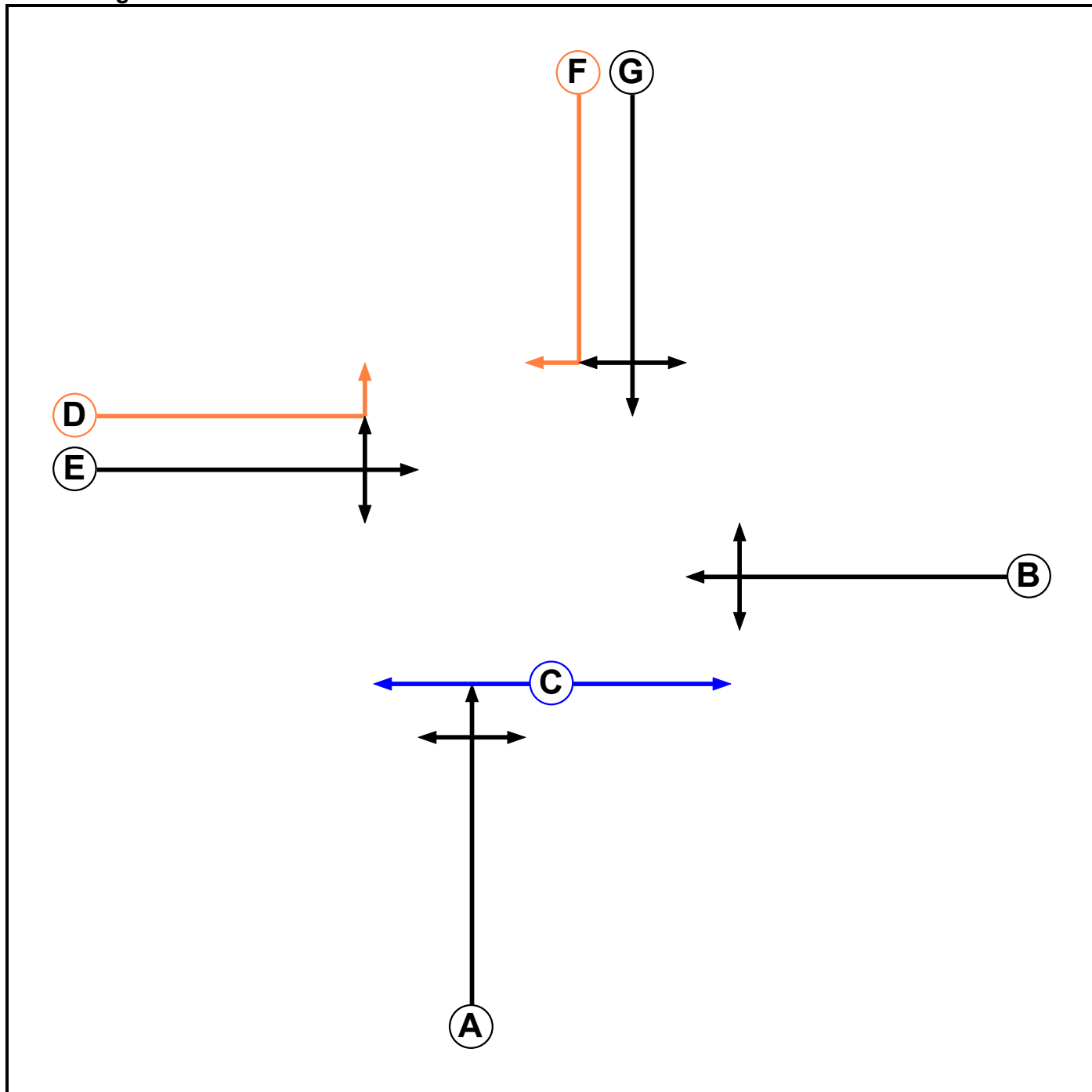
User and Project Details

Project:	222102 - Fortfield Road
Title:	Residential Development, Fortfield Road, Terenure
Location:	
Date Started:	April 2022
Checked By:	J Tiernan
Additional detail:	
File name:	222102 - J2_JPM_24-08-13.lsg3x
Author:	JPM / SOC
Company:	PUNCH Consulting Engineers
Address:	Carnegie House, Library Road, Dun Laoghaire, Co Dublin, A96 C7W7, Ireland

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Pedestrian		7	7
D	Filter with Closing Amber (Not UK)		4	4
E	Traffic		7	7
F	Filter with Closing Amber (Not UK)		4	4
G	Traffic		7	7

Full Input Data And Results

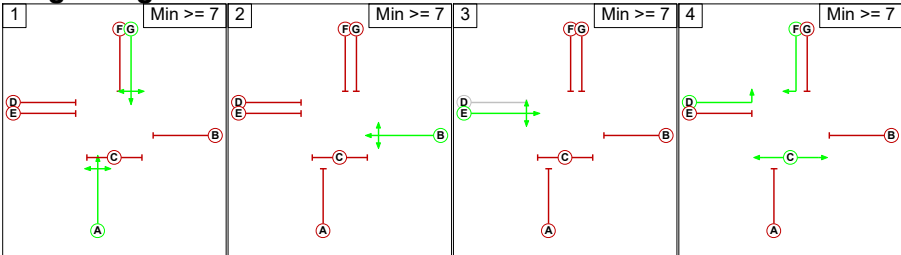
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		6	5	7	7	6	-
	B	5		6	6	6	5	5
	C	14	14		-	14	-	14
	D	5	5	-		-	-	-
	E	5	7	9	-		5	6
	F	5	7	-	-	5		-
	G	-	7	9	-	5	-	

Phases in Stage

Stage No.	Phases in Stage
1	A G
2	B
3	E
4	C D F

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		7	7	9
	2	5		6	6
	3	6	7		9
	4	14	14	14	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Fortfield Road && Templeogue Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (Templeogue Road (South))	8/1 (Right)	1439	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
4/2 (Templeogue Road (North))	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00
				2/2	1.09	To 6/1 (Ahead)					

Lane Input Data

Junction: Fortfield Road && Templeogue Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Fortfield Road (Exit))	U	E D	2	3	6.8	Geom	-	2.75	0.00	Y	Arm 6 Left	6.40
1/2 (Fortfield Road (Exit))	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	13.00
											Arm 8 Ahead	Inf
2/1 (Templeogue Road (South))	U	A	2	3	6.6	Geom	-	2.75	0.00	Y	Arm 7 Left	11.13
2/2 (Templeogue Road (South))	O	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 6 Ahead	Inf
3/1 (Bushy Park House (Exit))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	8.90
											Arm 5 Left	6.30
3/2 (Bushy Park House (Exit))	U	B	2	3	7.8	Geom	-	4.00	0.00	Y	Arm 7 Ahead	Inf
4/1 (Templeogue Road (North))	U	G	2	3	3.1	Geom	-	3.75	0.00	Y	Arm 6 Right	15.00
4/2 (Templeogue Road (North))	O	G F	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	10.00
5/1 (Templeogue Road (South Entrance))	U		2	3	60.0	Inf	-	-	-	-	Arm 7 Right	15.50
6/1 (Templeogue Road (North Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Fortfield Road (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Bushy Park House (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Survey Year 2024 AM'	08:00	09:00	01:00	
2: 'Survey Year 2024 PM'	17:45	18:45	01:00	
3: 'Do Nothing 2028 AM'	08:00	09:00	01:00	
4: 'Do Nothing 2028 PM'	17:45	18:45	01:00	
5: 'Do Nothing 2033 AM'	08:00	09:00	01:00	
6: 'Do Nothing 2033 PM'	17:45	18:45	01:00	
7: 'Do Nothing 2043 AM'	08:00	09:00	01:00	
8: 'Do Nothing 2043 PM'	17:45	18:45	01:00	
9: 'Opening Year 2028 AM'	08:00	09:00	01:00	
10: 'Opening Year 2028 PM'	17:45	18:45	01:00	
11: 'Design Year 2033 AM'	08:00	09:00	01:00	
12: 'Design Year 2033 PM'	17:45	18:45	01:00	
13: 'Design Year 2043 AM'	08:00	09:00	01:00	
14: 'Design Year 2043 PM'	17:45	18:45	01:00	

Traffic Flows, Desired

Scenario 1: 'Survey Year 2024 AM' (FG1: 'Survey Year 2024 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	121	451	58	630
	B	169	0	192	90	451
	C	329	62	0	14	405
	D	75	64	39	0	178
	Tot.	573	247	682	162	1664

Full Input Data And Results

Scenario 2: 'Survey Year 2024 PM' (FG2: 'Survey Year 2024 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	95	503	38	636
	B	171	0	119	22	312
	C	445	120	0	15	580
	D	20	21	10	0	51
	Tot.	636	236	632	75	1579

Scenario 3: 'Do Nothing 2028 AM' (FG3: 'Do Nothing 2028 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	129	481	62	672
	B	180	0	205	96	481
	C	351	66	0	15	432
	D	80	68	42	0	190
	Tot.	611	263	728	173	1775

Scenario 4: 'Do Nothing 2028 PM' (FG4: 'Do Nothing 2028 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	101	536	41	678
	B	183	0	126	24	333
	C	474	128	0	16	618
	D	21	22	11	0	54
	Tot.	678	251	673	81	1683

Scenario 5: 'Do Nothing 2033 AM' (FG5: 'Do Nothing 2033 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	135	504	65	704
	B	189	0	215	100	504
	C	368	69	0	16	453
	D	84	72	44	0	200
	Tot.	641	276	763	181	1861

Full Input Data And Results

Scenario 6: 'Do Nothing 2033 PM' (FG6: 'Do Nothing 2033 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	106	562	43	711
	B	191	0	133	25	349
	C	497	134	0	17	648
	D	22	23	11	0	56
	Tot.	710	263	706	85	1764

Scenario 7: 'Do Nothing 2043 AM' (FG7: 'Do Nothing 2043 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	142	529	68	739
	B	198	0	225	105	528
	C	386	72	0	17	475
	D	88	75	46	0	209
	Tot.	672	289	800	190	1951

Scenario 8: 'Do Nothing 2043 PM' (FG8: 'Do Nothing 2043 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	111	590	45	746
	B	201	0	139	26	366
	C	522	140	0	18	680
	D	23	25	12	0	60
	Tot.	746	276	741	89	1852

Scenario 9: 'Opening Year 2028 AM' (FG9: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	131	481	62	674
	B	188	0	214	100	502
	C	351	67	0	15	433
	D	80	69	42	0	191
	Tot.	619	267	737	177	1800

Full Input Data And Results

Scenario 10: 'Opening Year 2028 PM' (FG10: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	107	536	41	684
	B	186	0	129	24	339
	C	474	135	0	16	625
	D	21	24	11	0	56
	Tot.	681	266	676	81	1704

Scenario 11: 'Design Year 2033 AM' (FG11: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	137	504	65	706
	B	197	0	224	104	525
	C	368	70	0	16	454
	D	84	72	44	0	200
	Tot.	649	279	772	185	1885

Scenario 12: 'Design Year 2033 PM' (FG12: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	112	562	43	717
	B	195	0	135	25	355
	C	497	141	0	17	655
	D	22	25	11	0	58
	Tot.	714	278	708	85	1785

Scenario 13: 'Design Year 2043 AM' (FG13: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	144	529	68	741
	B	206	0	234	109	549
	C	386	73	0	17	476
	D	88	76	46	0	210
	Tot.	680	293	809	194	1976

Full Input Data And Results

Scenario 14: 'Design Year 2044 PM' (FG14: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')
Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	117	590	45	752
	B	205	0	142	27	374
	C	522	148	0	18	688
	D	23	26	12	0	61
	Tot.	750	291	744	90	1875

Full Input Data And Results

Network Results

Scenario 1: 'Survey Year 2024 AM' (FG1: 'Survey Year 2024 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	24:38	14	451	1781:1531	302+224	85.7 : 85.7%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	42	-	630	1918:1666	593+141	85.9 : 85.9%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	178	1697:1832	170+48	81.9 : 81.9%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	53:42	11	405	1814:1978	109+604	56.8 : 56.8%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	247	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 2: 'Survey Year 2024 PM' (FG2: 'Survey Year 2024 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	73.2%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	73.2%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	312	1737:1531	266+164	72.5 : 72.5%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	636	1932:1666	739+130	73.2 : 73.2%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	51	1716:1832	114+28	35.8 : 35.8%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	580	1814:1980	181+696	66.1 : 66.1%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	636	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	632	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 3: 'Do Nothing 2028 AM' (FG3: 'Do Nothing 2028 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	91.6%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	91.6%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	24:38	14	481	1781:1531	302+224	91.4 : 91.4%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	42	-	672	1918:1666	593+141	91.6 : 91.6%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	190	1697:1832	170+48	87.2 : 87.2%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	53:42	11	432	1814:1978	107+593	61.7 : 61.7%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	263	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 4: 'Do Nothing 2028 PM' (FG4: 'Do Nothing 2028 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	78.0%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.0%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	333	1738:1531	266+162	77.7 : 77.7%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	678	1932:1666	739+129	78.0 : 78.0%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	54	1716:1832	114+29	37.6 : 37.6%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	618	1814:1980	182+695	70.5 : 70.5%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	81	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 5: 'Do Nothing 2033 AM' (FG5: 'Do Nothing 2033 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	96.0%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	96.0%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	24:38	14	504	1781:1531	302+225	95.7 : 95.7%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	42	-	704	1918:1666	593+141	96.0 : 96.0%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	200	1697:1832	170+48	91.9 : 91.9%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	53:42	11	453	1814:1978	108+602	63.8 : 63.8%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	641	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	763	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 6: 'Do Nothing 2033 PM' (FG6: 'Do Nothing 2033 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	349	1738:1531	266+164	81.1 : 81.1%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	711	1932:1666	739+130	81.8 : 81.8%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	56	1715:1832	114+28	39.4 : 39.4%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	648	1814:1980	181+696	73.9 : 73.9%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	706	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	263	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 7: 'Do Nothing 2043 AM' (FG7: 'Do Nothing 2043 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	100.7%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	100.7%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	24:38	14	528	1781:1531	302+224	100.3 : 100.3%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	42	-	739	1918:1666	593+141	100.7 : 100.7%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	209	1697:1832	170+48	96.1 : 96.1%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	53:42	11	475	1814:1977	110+616	65.4 : 65.4%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 8: 'Do Nothing 2043 PM' (FG8: 'Do Nothing 2043 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	366	1737:1531	266+163	85.2 : 85.2%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	746	1932:1666	739+129	85.9 : 85.9%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	60	1719:1832	115+29	41.9 : 41.9%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	680	1814:1980	181+696	77.5 : 77.5%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	746	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	114	25	46	16.6	7.6	0.8	25.0	-	-	-	-
Fortfield Road && Templeogue Junction	-	-	114	25	46	16.6	7.6	0.8	25.0	-	-	-	-
1/2+1/1	366	366	-	-	-	4.3	2.7	-	6.9	68.2	7.5	2.7	10.2
2/2+2/1	746	746	45	0	0	6.1	2.9	0.2	9.2	44.4	21.0	2.9	23.9
3/1+3/2	60	60	-	-	-	0.9	0.4	-	1.3	75.0	1.5	0.4	1.9
4/2+4/1	680	680	69	25	46	5.3	1.7	0.6	7.6	40.3	18.3	1.7	20.0
5/1	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 4.8 Total Delay for Signalled Lanes (pcuHr): 24.99 Cycle Time (s): 120 PRC Over All Lanes (%): 4.8 Total Delay Over All Lanes(pcuHr): 24.99													

Full Input Data And Results

Scenario 9: 'Opening Year 2028 AM' (FG9: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	93.8%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	93.8%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	25:39	14	502	1781:1531	310+230	92.9 : 92.9%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	41	-	674	1918:1666	579+140	93.8 : 93.8%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	191	1698:1832	170+48	87.8 : 87.8%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	52:41	11	433	1814:1978	105+575	63.6 : 63.6%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 10: 'Opening Year 2028 PM' (FG10: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	339	1737:1531	266+164	78.9 : 78.9%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	684	1932:1666	734+136	78.6 : 78.6%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	56	1724:1832	115+28	39.2 : 39.2%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	625	1814:1980	190+688	71.2 : 71.2%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	266	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	81	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 11: 'Design Year 2033 AM' (FG11: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	98.2%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	98.2%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	25:39	14	525	1781:1531	310+231	97.1 : 97.1%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	41	-	706	1918:1666	579+139	98.2 : 98.2%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	200	1697:1832	170+48	91.9 : 91.9%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	52:41	11	454	1814:1978	109+601	63.9 : 63.9%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	649	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 12: 'Design Year 2033 PM' (FG12: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	82.6%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.6%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	355	1737:1531	266+163	82.6 : 82.6%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	717	1932:1666	734+136	82.4 : 82.4%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	58	1723:1832	115+27	40.9 : 40.9%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	655	1814:1980	189+689	74.6 : 74.6%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 13: 'Design Year 2043 AM' (FG13: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	103.1%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	103.1%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	25:39	14	549	1781:1531	310+230	101.6 : 101.6%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	41	-	741	1918:1666	579+140	103.1 : 103.1%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	11	-	210	1698:1832	170+48	96.6 : 96.6%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	52:41	11	476	1814:1977	109+601	67.1 : 67.1%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	680	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	809	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	66	17	56	22.6	41.0	0.6	64.2	-	-	-	-
Fortfield Road && Templeogue Junction	-	-	66	17	56	22.6	41.0	0.6	64.2	-	-	-	-
1/2+1/1	549	544	-	-	-	6.3	14.1	-	20.4	133.5	13.7	14.1	27.8
2/2+2/1	741	719	66	0	0	9.1	20.3	0.2	29.5	143.5	24.7	20.3	45.0
3/1+3/2	210	210	-	-	-	3.1	5.6	-	8.7	149.3	5.4	5.6	11.0
4/2+4/1	476	476	0	17	56	4.2	1.0	0.4	5.6	42.1	12.7	1.0	13.7
5/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	793	793	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): -14.6 Total Delay for Signalled Lanes (pcuHr): 64.16 Cycle Time (s): 120 PRC Over All Lanes (%): -14.6 Total Delay Over All Lanes(pcuHr): 64.16													

Full Input Data And Results

Scenario 14: 'Design Year 2044 PM' (FG14: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	87.1%
Fortfield Road && Templeogue Junction	-	-	N/A	-	-		-	-	-	-	-	-	87.1%
1/2+1/1	Fortfield Road (Exit) Right Left Ahead	U	N/A	N/A	E	D	1:2	19:33	14	374	1738:1531	266+163	87.1 : 87.1%
2/2+2/1	Templeogue Road (South) Ahead Left Right	O+U	N/A	N/A	A		1	51	-	752	1932:1666	735+135	86.4 : 86.4%
3/1+3/2	Bushy Park House (Exit) Left Right Ahead	U	N/A	N/A	B		1	7	-	61	1722:1832	115+28	42.7 : 42.7%
4/2+4/1	Templeogue Road (North) Ahead Right Left	O+U	N/A	N/A	G	F	2:1	62:51	11	688	1814:1980	189+689	78.4 : 78.4%
5/1	Templeogue Road (South Entrance)	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
6/1	Templeogue Road (North Entrance)	U	N/A	N/A	-		-	-	-	744	Inf	Inf	0.0%
7/1	Fortfield Road (Entrance)	U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
8/1	Bushy Park House (Entrance)	U	N/A	N/A	-		-	-	-	90	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

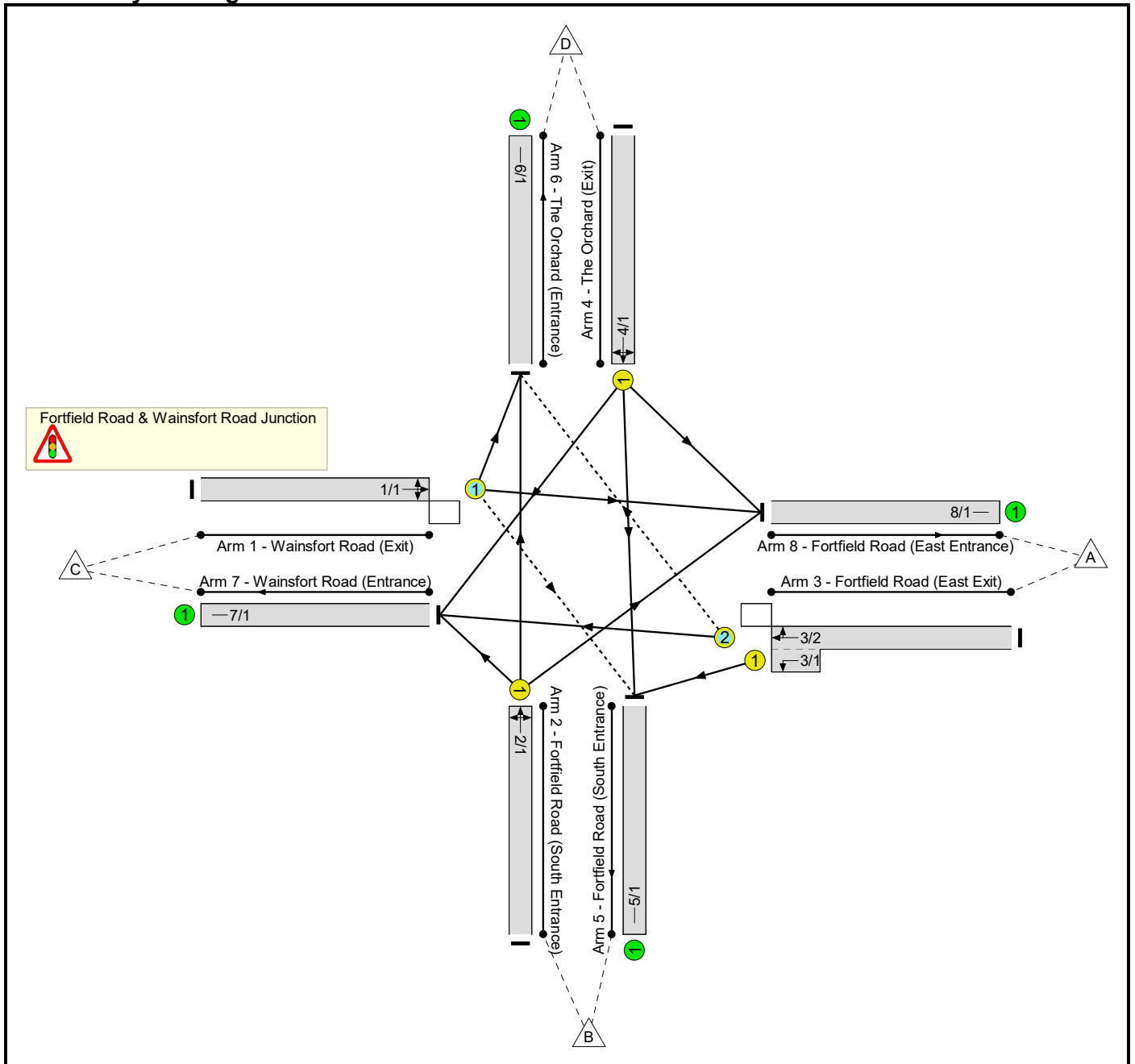
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	109	35	49	17.0	8.2	0.8	26.0	-	-	-	-
Fortfield Road && Templeogue Junction	-	-	109	35	49	17.0	8.2	0.8	26.0	-	-	-	-
1/2+1/1	374	374	-	-	-	4.4	3.0	-	7.4	71.5	7.7	3.0	10.7
2/2+2/1	752	752	45	0	0	6.2	3.0	0.2	9.4	45.0	21.1	3.0	24.2
3/1+3/2	61	61	-	-	-	0.9	0.4	-	1.3	75.4	1.6	0.4	1.9
4/2+4/1	688	688	64	35	49	5.5	1.8	0.6	7.9	41.5	18.5	1.8	20.2
5/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	744	744	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	90	90	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
C1 PRC for Signalled Lanes (%): 3.3 Total Delay for Signalled Lanes (pcuHr): 26.03 Cycle Time (s): 120 PRC Over All Lanes (%): 3.3 Total Delay Over All Lanes(pcuHr): 26.03													

Appendix E Fortfield Road / Wainsfort Road / The Orchard LinSig Results

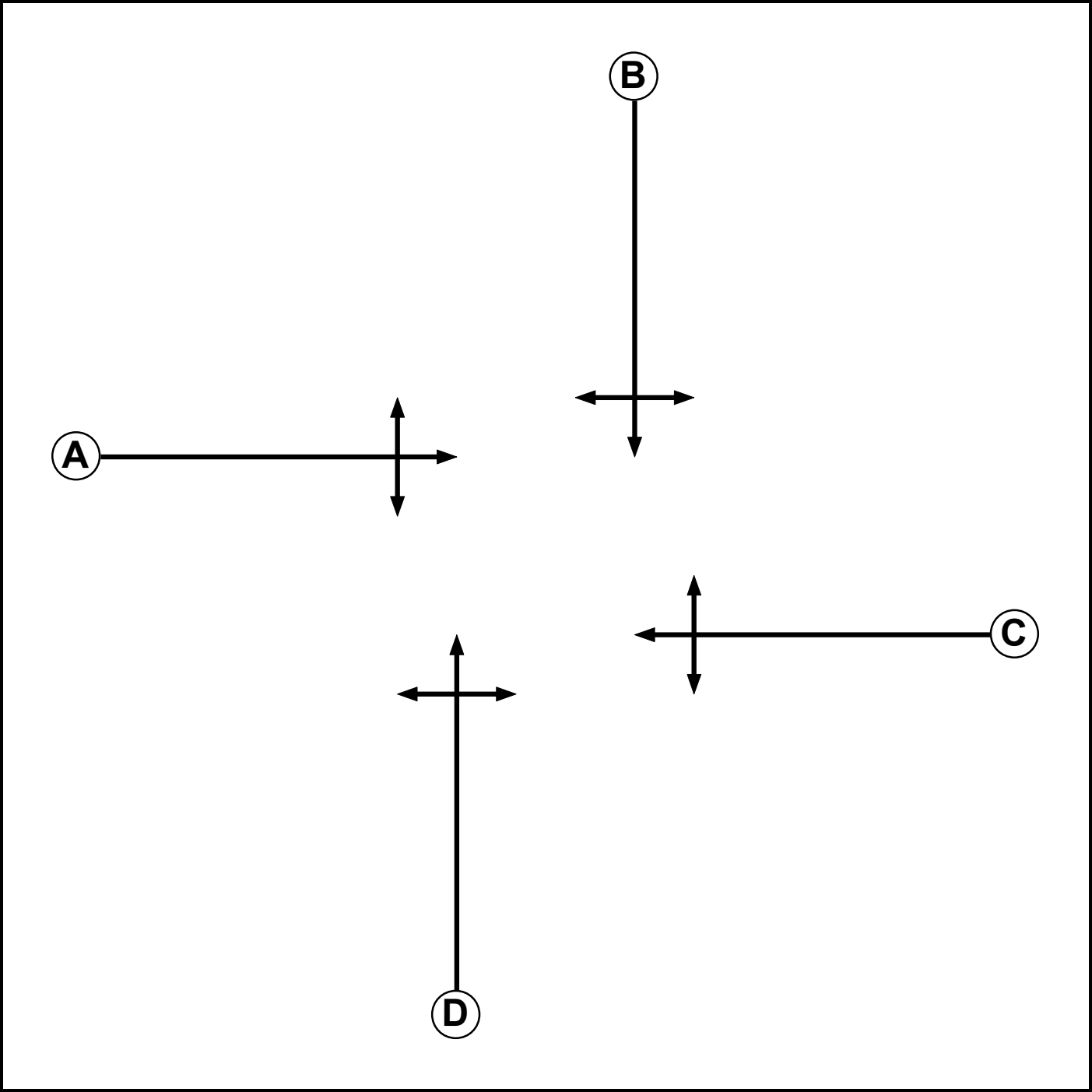
Full Input Data And Results**User and Project Details**

Project:	222102 - Fortfield Road
Title:	Residential Development, Fortfield Road, Terenure
Location:	
Date Started:	April 2022
Checked By:	J Tiernan
Additional detail:	
File name:	222102_J3_JPM_24-08-13.lsg3x
Author:	JPM / SOC
Company:	PUNCH Consulting Engineers
Address:	Carnegie House, Library Road, Dun Laoghaire, Co Dublin, A96 C7W7, Ireland

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Full Input Data And Results

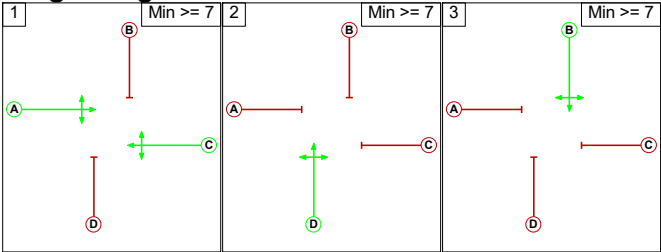
Phase Intergreens Matrix

Terminating Phase	Starting Phase				
		A	B	C	D
	A		5	-	6
	B	6		7	6
	C	-	5		6
	D	5	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	D
3	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		6	5
	2	5		5
	3	7	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Fortfield Road && Wainsfort Road Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Wainsfort Road (Exit))	5/1 (Right)	1439	0	3/2	1.09	To 7/1 (Ahead)	2.00	2.00	0.50	2	2.00
				3/1	1.09	All					
3/2 (Fortfield Road (East Exit))	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 8/1 (Ahead)	2.00	2.00	0.50	2	2.00

Lane Input Data

Junction: Fortfield Road & Wainsfort Road Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Wainsfort Road (Exit))	O	A	2	3	60.0	Geom	-	2.50	0.00	Y	Arm 5 Right	10.50
											Arm 6 Left	7.20
											Arm 8 Ahead	Inf
2/1 (Fortfield Road (South Entrance))	U	D	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	9.50
											Arm 8 Right	14.11
3/1 (Fortfield Road (East Exit))	U	C	2	3	3.2	Geom	-	3.40	0.00	Y	Arm 5 Left	Inf
3/2 (Fortfield Road (East Exit))	O	C	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 6 Right	10.30
											Arm 7 Ahead	Inf
											Arm 5 Ahead	Inf
4/1 (The Orchard (Exit))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	8.40
											Arm 8 Left	8.00
5/1 (Fortfield Road (South Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (The Orchard (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Wainsfort Road (Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Fortfield Road (East Entrance))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Survey Year 2024 AM'	08:15	09:15	01:00	
2: 'Survey Year 2024 PM'	16:45	17:45	01:00	
3: 'Do Nothing 2028 AM'	08:15	09:15	01:00	
4: 'Do Nothing 2028 PM'	16:45	17:45	01:00	
5: 'Do Nothing 2033 AM'	08:15	09:15	01:00	
6: 'Do Nothing 2033 PM'	16:45	17:45	01:00	
7: 'Do Nothing 2043 AM'	08:15	09:15	01:00	
8: 'Do Nothing 2043 PM'	16:45	17:45	01:00	
9: 'Opening Year 2028 AM'	08:15	09:15	01:00	
10: 'Opening Year 2028 PM'	16:45	17:45	01:00	
11: 'Design Year 2033 AM'	08:15	09:15	01:00	
12: 'Design Year 2033 PM'	16:45	17:45	01:00	
13: 'Design Year 2043 AM'	08:15	09:15	01:00	
14: 'Design Year 2043 PM'	16:45	17:45	01:00	

Traffic Flows, Desired

Scenario 1: 'Survey Year 2024 AM' (FG1: 'Survey Year 2024 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	253	358	0	611
	B	115	0	16	2	133
	C	428	19	0	0	447
	D	2	0	2	0	4
	Tot.	545	272	376	2	1195

Full Input Data And Results

Scenario 2: 'Survey Year 2024 PM' (FG2: 'Survey Year 2024 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	149	609	5	763
	B	90	0	14	3	107
	C	361	17	0	1	379
	D	1	1	0	0	2
	Tot.	452	167	623	9	1251

Scenario 3: 'Do Nothing 2028 AM' (FG3: 'Do Nothing 2028 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	270	382	0	652
	B	123	0	17	2	142
	C	457	20	0	0	477
	D	2	0	2	0	4
	Tot.	582	290	401	2	1275

Scenario 4: 'Do Nothing 2028 PM' (FG4: 'Do Nothing 2028 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	159	649	5	813
	B	96	0	15	3	114
	C	385	18	0	1	404
	D	1	1	0	0	2
	Tot.	482	178	664	9	1333

Scenario 5: 'Do Nothing 2033 AM' (FG5: 'Do Nothing 2033 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	283	401	0	684
	B	129	0	18	2	149
	C	479	21	0	0	500
	D	2	0	2	0	4
	Tot.	610	304	421	2	1337

Full Input Data And Results

Scenario 6: 'Do Nothing 2033 PM' (FG6: 'Do Nothing 2033 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	166	681	6	853
	B	101	0	16	3	120
	C	404	18	0	1	423
	D	1	1	0	0	2
	Tot.	506	185	697	10	1398

Scenario 7: 'Do Nothing 2043 AM' (FG7: 'Do Nothing 2043 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	297	421	0	718
	B	135	0	19	2	156
	C	503	22	0	0	525
	D	2	0	2	0	4
	Tot.	640	319	442	2	1403

Scenario 8: 'Do Nothing 2043 PM' (FG8: 'Do Nothing 2043 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	175	715	6	896
	B	106	0	16	4	126
	C	424	19	0	1	444
	D	1	1	0	0	2
	Tot.	531	195	731	11	1468

Scenario 9: 'Opening Year 2028 AM' (FG9: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	274	382	0	656
	B	142	0	20	2	164
	C	457	20	0	0	477
	D	2	0	2	0	4
	Tot.	601	294	404	2	1301

Full Input Data And Results

Scenario 10: 'Opening Year 2028 PM' (FG10: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	174	649	5	828
	B	102	0	16	3	121
	C	385	19	0	1	405
	D	1	1	0	0	2
	Tot.	488	194	665	9	1356

Scenario 11: 'Design Year 2033 aM' (FG11: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	287	401	0	688
	B	148	0	21	3	172
	C	479	21	0	0	500
	D	2	0	2	0	4
	Tot.	629	308	424	3	1364

Scenario 12: 'Design Year 2033 PM' (FG12: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	182	681	6	869
	B	107	0	17	4	128
	C	404	20	0	1	425
	D	1	1	0	0	2
	Tot.	512	203	698	11	1424

Scenario 13: 'Design Year 2044 AM' (FG13: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	301	421	0	722
	B	154	0	22	3	179
	C	503	22	0	0	525
	D	2	0	2	0	4
	Tot.	659	323	445	3	1430

Full Input Data And Results

Scenario 14: 'Design Year 2044 PM' (FG14: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')
Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	190	715	6	911
	B	112	0	17	4	133
	C	424	21	0	1	446
	D	1	1	0	0	2
	Tot.	537	212	732	11	1492

Full Input Data And Results

Network Results

Scenario 1: 'Survey Year 2024 AM' (FG1: 'Survey Year 2024 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	49.5%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	49.5%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	54	-	447	1854	1133	39.5%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	12	-	133	1859	269	49.5%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	53	-	611	1925:1955	732+517	48.9 : 48.9%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	19	0	0	4.0	1.3	0.0	5.3	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	19	0	0	4.0	1.3	0.0	5.3	-	-	-	-
1/1	447	447	19	0	0	1.1	0.3	0.0	1.5	11.7	5.7	0.3	6.0
2/1	133	133	-	-	-	1.3	0.5	-	1.8	48.7	3.0	0.5	3.5
3/2+3/1	611	611	0	0	0	1.5	0.5	0.0	2.0	11.7	5.5	0.5	6.0
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 81.7 Total Delay for Signalled Lanes (pcuHr): 5.29 Cycle Time (s): 90 PRC Over All Lanes (%): 81.7 Total Delay Over All Lanes(pcuHr): 5.29													

Full Input Data And Results

Scenario 2: 'Survey Year 2024 PM' (FG2: 'Survey Year 2024 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	60.1%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	60.1%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	379	1852	1214	31.2%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	107	1860	186	57.5%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	763	1923:1955	1022+248	60.1 : 60.1%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	22	0	0	3.7	1.6	0.0	5.4	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	22	0	0	3.7	1.6	0.0	5.4	-	-	-	-
1/1	379	379	17	0	0	0.7	0.2	0.0	1.0	9.2	4.0	0.2	4.2
2/1	107	107	-	-	-	1.1	0.7	-	1.8	61.1	2.5	0.7	3.2
3/2+3/1	763	763	5	0	0	1.8	0.8	0.0	2.6	12.3	9.8	0.8	10.6
4/1	2	2	-	-	-	0.0	0.0	-	0.0	49.5	0.0	0.0	0.1
5/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 49.8 Total Delay for Signalled Lanes (pcuHr): 5.41 Cycle Time (s): 90 PRC Over All Lanes (%): 49.8 Total Delay Over All Lanes(pcuHr): 5.41													

Full Input Data And Results

Scenario 3: 'Do Nothing 2028 AM' (FG3: 'Do Nothing 2028 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	52.9%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	52.9%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	54	-	477	1854	1133	42.1%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	12	-	142	1859	269	52.9%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	53	-	652	1925:1955	732+517	52.2 : 52.2%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	290	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	401	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	582	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	20	0	0	4.3	1.5	0.0	5.8	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	20	0	0	4.3	1.5	0.0	5.8	-	-	-	-
1/1	477	477	20	0	0	1.2	0.4	0.0	1.6	12.1	6.2	0.4	6.6
2/1	142	142	-	-	-	1.4	0.6	-	2.0	49.8	3.3	0.6	3.8
3/2+3/1	652	652	0	0	0	1.6	0.5	0.0	2.2	12.1	6.4	0.5	7.0
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	290	290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	401	401	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	582	582	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 70.2 Total Delay for Signalled Lanes (pcuHr): 5.81 Cycle Time (s): 90 PRC Over All Lanes (%): 70.2 Total Delay Over All Lanes(pcuHr): 5.81													

Full Input Data And Results

Scenario 4: 'Do Nothing 2028 PM' (FG4: 'Do Nothing 2028 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	64.0%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	64.0%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	404	1852	1214	33.3%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	114	1860	186	61.3%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	813	1923:1955	1022+248	64.0 : 64.0%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	23	0	0	4.1	1.9	0.0	6.0	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	23	0	0	4.1	1.9	0.0	6.0	-	-	-	-
1/1	404	404	18	0	0	0.8	0.2	0.0	1.1	9.5	4.4	0.2	4.6
2/1	114	114	-	-	-	1.2	0.8	-	2.0	63.3	2.7	0.8	3.5
3/2+3/1	813	813	5	0	0	2.1	0.9	0.0	2.9	13.0	11.2	0.9	12.1
4/1	2	2	-	-	-	0.0	0.0	-	0.0	49.5	0.0	0.0	0.1
5/1	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 40.6 Total Delay for Signalled Lanes (pcuHr): 6.04 Cycle Time (s): 90 PRC Over All Lanes (%): 40.6 Total Delay Over All Lanes(pcuHr): 6.04													

Full Input Data And Results

Scenario 5: 'Do Nothing 2033 AM' (FG5: 'Do Nothing 2033 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	55.5%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	55.5%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	54	-	500	1854	1133	44.1%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	12	-	149	1858	268	55.5%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	53	-	684	1925:1955	732+517	54.8 : 54.8%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	21	0	0	4.6	1.6	0.0	6.2	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	21	0	0	4.6	1.6	0.0	6.2	-	-	-	-
1/1	500	500	21	0	0	1.3	0.4	0.0	1.7	12.4	6.5	0.4	6.9
2/1	149	149	-	-	-	1.5	0.6	-	2.1	50.7	3.4	0.6	4.1
3/2+3/1	684	684	0	0	0	1.8	0.6	0.0	2.4	12.5	7.1	0.6	7.7
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 62.1 Total Delay for Signalled Lanes (pcuHr): 6.24 Cycle Time (s): 90 PRC Over All Lanes (%): 62.1 Total Delay Over All Lanes(pcuHr): 6.24													

Full Input Data And Results

Scenario 6: 'Do Nothing 2033 PM' (FG6: 'Do Nothing 2033 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	67.2%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	67.2%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	423	1853	1215	34.8%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	120	1859	186	64.6%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	853	1923:1955	1023+247	67.2 : 67.2%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	24	0	0	4.4	2.2	0.1	6.6	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	24	0	0	4.4	2.2	0.1	6.6	-	-	-	-
1/1	423	423	18	0	0	0.8	0.3	0.1	1.1	9.6	4.7	0.3	5.0
2/1	120	120	-	-	-	1.3	0.9	-	2.2	65.6	2.9	0.9	3.8
3/2+3/1	853	853	6	0	0	2.2	1.0	0.0	3.3	13.7	12.3	1.0	13.3
4/1	2	2	-	-	-	0.0	0.0	-	0.0	49.5	0.0	0.0	0.1
5/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 34.0 Total Delay for Signalled Lanes (pcuHr): 6.60 Cycle Time (s): 90 PRC Over All Lanes (%): 34.0 Total Delay Over All Lanes(pcuHr): 6.60													

Full Input Data And Results

Scenario 7: 'Do Nothing 2043 AM' (FG7: 'Do Nothing 2043 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	58.1%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	58.1%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	54	-	525	1854	1133	46.3%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	12	-	156	1858	268	58.1%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	53	-	718	1925:1955	732+517	57.5 : 57.5%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	22	0	0	4.9	1.8	0.0	6.7	-	-	-	-
Fortfield Road & Wainsfort Road Junction	-	-	22	0	0	4.9	1.8	0.0	6.7	-	-	-	-
1/1	525	525	22	0	0	1.4	0.4	0.0	1.8	12.7	7.0	0.4	7.4
2/1	156	156	-	-	-	1.6	0.7	-	2.2	51.8	3.6	0.7	4.3
3/2+3/1	718	718	0	0	0	1.9	0.7	0.0	2.6	12.9	7.7	0.7	8.4
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 54.8 Total Delay for Signalled Lanes (pcuHr): 6.72 Cycle Time (s): 90 PRC Over All Lanes (%): 54.8 Total Delay Over All Lanes(pcuHr): 6.72													

Full Input Data And Results

Scenario 8: 'Do Nothing 2043 PM' (FG8: 'Do Nothing 2043 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	444	1853	1215	36.6%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	126	1861	186	67.7%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	896	1923:1955	1022+248	70.5 : 70.5%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	195	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	11	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	731	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%

Full Input Data And Results

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Full Input Data And Results

Scenario 9: 'Opening Year 2028 AM' (FG9: 'Opening Year 2028 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	54.3%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	54.3%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	52	-	477	1854	1092	43.7%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	14	-	164	1858	310	53.0%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	51	-	656	1925:1955	703+504	54.3 : 54.3%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	601	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	20	0	0	4.8	1.6	0.0	6.4	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	20	0	0	4.8	1.6	0.0	6.4	-	-	-	-
1/1	477	477	20	0	0	1.4	0.4	0.0	1.8	13.4	6.5	0.4	6.9
2/1	164	164	-	-	-	1.6	0.6	-	2.1	46.5	3.7	0.6	4.3
3/2+3/1	656	656	0	0	0	1.9	0.6	0.0	2.5	13.5	7.0	0.6	7.6
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 65.6 Total Delay for Signalled Lanes (pcuHr): 6.40 Cycle Time (s): 90 PRC Over All Lanes (%): 65.6 Total Delay Over All Lanes(pcuHr): 6.40													

Full Input Data And Results

Scenario 10: 'Opening Year 2028 PM' (FG10: 'Opening Year 2028 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	65.1%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	65.1%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	405	1852	1214	33.4%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	121	1860	186	65.1%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	828	1923:1955	1006+268	65.0 : 65.0%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	488	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 11: 'Design Year 2033 aM' (FG11: 'Design Year 2033 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	57.0%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	57.0%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	52	-	500	1854	1092	45.8%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	14	-	172	1859	310	55.5%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	51	-	688	1925:1955	704+504	57.0 : 57.0%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 12: 'Design Year 2033 PM' (FG12: 'Design Year 2033 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	68.8%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	68.8%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	425	1852	1214	35.0%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	128	1861	186	68.8%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	869	1923:1955	1007+267	68.3 : 68.3%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	11	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	26	0	0	4.5	2.4	0.1	7.0	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	26	0	0	4.5	2.4	0.1	7.0	-	-	-	-
1/1	425	425	20	0	0	0.8	0.3	0.1	1.2	9.7	4.7	0.3	5.0
2/1	128	128	-	-	-	1.4	1.1	-	2.5	69.0	3.1	1.1	4.1
3/2+3/1	869	869	6	0	0	2.3	1.1	0.0	3.4	13.9	12.4	1.1	13.5
4/1	2	2	-	-	-	0.0	0.0	-	0.0	49.5	0.0	0.0	0.1
5/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	11	11	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 30.9 Total Delay for Signalled Lanes (pcuHr): 7.00 Cycle Time (s): 90 PRC Over All Lanes (%): 30.9 Total Delay Over All Lanes(pcuHr): 7.00													

Full Input Data And Results

Scenario 13: 'Design Year 2044 AM' (FG13: 'Design Year 2043 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	59.8%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	59.8%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	52	-	525	1854	1092	48.1%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	14	-	179	1859	310	57.8%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	51	-	722	1925:1955	704+503	59.8 : 59.8%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	4	1619	144	2.8%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	445	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Residential Development, Fortfield Road, Terenure	-	-	22	0	0	5.5	1.9	0.0	7.4	-	-	-	-
Fortfield Road && Wainsfort Road Junction	-	-	22	0	0	5.5	1.9	0.0	7.4	-	-	-	-
1/1	525	525	22	0	0	1.5	0.5	0.0	2.0	14.0	7.4	0.5	7.9
2/1	179	179	-	-	-	1.7	0.7	-	2.4	48.2	4.1	0.7	4.8
3/2+3/1	722	722	0	0	0	2.1	0.7	0.0	2.9	14.4	8.5	0.7	9.3
4/1	4	4	-	-	-	0.0	0.0	-	0.1	50.7	0.1	0.0	0.1
5/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 50.5 Total Delay for Signalled Lanes (pcuHr): 7.39 Cycle Time (s): 90 PRC Over All Lanes (%): 50.5 Total Delay Over All Lanes(pcuHr): 7.39													

Full Input Data And Results

Scenario 14: 'Design Year 2044 PM' (FG14: 'Design Year 2043 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Residential Development, Fortfield Road, Terenure	-	-	N/A	-	-		-	-	-	-	-	-	71.6%
Fortfield Road && Wainsfort Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	71.6%
1/1	Wainsfort Road (Exit) Right Left Ahead	O	N/A	N/A	A		1	58	-	446	1852	1214	36.7%
2/1	Fortfield Road (South Entrance) Ahead Left Right	U	N/A	N/A	D		1	8	-	133	1861	186	71.5%
3/2+3/1	Fortfield Road (East Exit) Left Right Ahead	O+U	N/A	N/A	C		1	57	-	911	1923:1955	1008+266	71.6 : 71.6%
4/1	The Orchard (Exit) Ahead Right Left	U	N/A	N/A	B		1	7	-	2	1751	156	1.3%
5/1	Fortfield Road (South Entrance)	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
6/1	The Orchard (Entrance)	U	N/A	N/A	-		-	-	-	11	Inf	Inf	0.0%
7/1	Wainsfort Road (Entrance)	U	N/A	N/A	-		-	-	-	732	Inf	Inf	0.0%
8/1	Fortfield Road (East Entrance)	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%

Full Input Data And Results

[illegible]