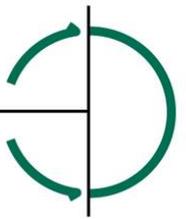


Proposed Strategic Housing Development at St. Joseph's House and Adjoining Properties

Client: Homeland Silverpines Limited

Traffic and Transport Assessment & Mobility Management Plan





TRAFFIC AND TRANSPORT ASSESSMENT & MOBILITY MANAGEMENT PLAN

Description:

Traffic and Transport Assessment & Mobility Management Plan

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24th September 2021

Distribution:

**Brock McClure Planning
O'Mahoney Pike Architects**



TRAFFIC AND TRANSPORT ASSESSMENT & MOBILITY MANAGEMENT PLAN

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1 INTRODUCTION

1.1 Background

1.1.1 ILTP Consulting were commissioned by Homeland Silverpines Ltd. to undertake a Traffic and Transport Assessment (TTA) and Mobility Management Plan (MMP) for the proposed Strategic Housing Development (SHD) at St. Joseph's House and Adjoining Properties at Brewery Road and Leopardstown Road, Dublin 18. This report has been prepared in accordance with best practice guidelines having regards to the proposed location of the proposed development and in accordance with the Design Standards for Urban Roads and Streets (DMURS) and to the Opinion of An Bord Pleanála in respect to car parking provision.

1.1.2 The proposed development consists of 463 no. apartments in 5 no. separate residential blocks and the converted St. Joseph's House building, to include for 9 number residential units and also a crèche and café, which are intended to primarily meet the need of the of the proposed development.

1.2 Purpose of Report

1.2.1 The primary purpose of this TTA is to assess the potential impact this development may have on the surrounding road network and to identify measures to mitigate these impacts and promote sustainable transport patterns.

1.2.2 This Traffic and Transport Assessment sets out to assess:

- Existing traffic conditions
- Integration with adjoining developments and surrounding area
- Public transport provisions
- Options for proposed access arrangements for the development, via Leopardstown Road and Brewery Road
- Proposed parking arrangements
- Effect on road network of increased traffic volumes from proposed development

1.2.3 The report also contains the Mobility Management Plan for the development and sets out the Construction Traffic and Transport Assessment.

1.3 Methodology

1.3.1 In order to assess the traffic impact of the proposed development it was first necessary to assess the current traffic situation in the area. Site visits were undertaken by ILTP in July, September, December 2018 and May 2019, and fully classified traffic counts in the environs of the proposed development were conducted in May 2019 to determine traffic flows. Further details of the traffic surveys and wider analysis are set out later in the report.

1.3.2 ILTP calculated the estimated trip rates from the proposed development based on their experience on similar development and with references to the TRICS database and added these figures to the base flows. PICADY and LINSIG Traffic Modelling analyses were also undertaken to assess the capacity of the proposed accesses to the development.

1.3.3 From these results a conclusion could be drawn as to the impact that the development will have on the overall traffic flows and wider road network.



- 1.3.4 A study of public transport provisions in the area was also carried out to determine the likely usage of public transport (PT) services by residents in the new development.
- 1.3.5 As part of this TTA ILTP have prepared a Mobility Management Plan for the proposed development, with the specific objectives of reducing in overall terms both the amount of trips generated by the development, and ensuring that greater numbers use the extensive public transport services in the immediate area.
- 1.3.6 ILTP also assessed the Construction Stage Impacts of the proposed development on the wider road network.
- 1.3.7 ILTP also met with the Transportation Department of DLRC to agree the scope of the study and consider the access options as part of the pre-planning process.

1.4 Report Structure

The proposed development and study area are described in **Chapter 2**.

Chapter 3 sets out the planning context for the proposed development.

Options for the Proposed Vehicular Access Arrangements to the development are presented in **Chapter 4**.

Chapter 5 includes the results of the Traffic Surveys conducted for the proposed development.

Trip Generation figures for the development are set out in **Chapter 6**.

Traffic Modelling Details and Results are presented in **Chapter 7**.

An assessment of car and cycle parking provision and arrangements is made in **Chapter 8**.

Chapter 9 presents the Proposed Vehicular Junction Access Layouts for the development.

Chapter 10 includes the Construction Traffic and Transport Assessment for the development.

The Mobility Management Plan is included in **Chapter 11**.

The Summary and Conclusions are outlined in **Chapter 12**.



2 OVERVIEW OF PROPOSED DEVELOPMENT AND STUDY AREA

2.1 Existing Site

- 2.1.1 The site of the proposed development is in Stillorgan, Co. Dublin. The planning application site is approximately 2.74 ha in area and located approximately 8km from Dublin City Centre. The area is largely residential with established schools, community and social facilities in the vicinity. The proposed development is also in close proximity to major employment centres, including Sandymount Industrial Estate.
- 2.1.2 The Silverpark GAA Grounds (which houses the Kilmacud Crokes pitches) are located directly across the road from the proposed development access on Leopardstown road. Leopardstown Race Course and Foxrock Golf Club are also in the vicinity of the site on Leopardstown Road.
- 2.1.3 The existing lands have a number of uses. St. Joseph's House is currently vacant and most recently in use as a residential care facility up to February 2021. It is accessed via the adjacent Silverpines residential development, which is accessed off Brewery Road by way of a signalised junction. There is also an access route off Leopardstown Road to St. Joseph's House, which is currently used as a pedestrian and cycle link.
- 2.1.4 The remainder of the site comprises of ten existing residential properties, one accessed off Silverpines and the others with individual accesses off Leopardstown Road.
- 2.1.5 The lands also have some mature trees and the adjacent Silverpines estate is an established residential development.

2.2 Development Proposals

- 2.2.1 The development will consist of residential development on lands at St. Joseph's House (Protected Structure RPS No. 1548). The development will consist of the demolition of 10 existing residential units, the construction of a new mixed-use scheme of 463 residential units and the refurbishment of St. Joseph's House a Protected Structure, to provide 9 no. residential units, a café and a crèche facility.
- 2.2.2 The proposed development layout is shown in Figure 2.1.



Figure 2.1: Proposed Development Layout (Source: O'Mahony Pike Architects)

2.2.3 The scheme includes a basement car parking facility to house 259 no. car parking spaces for the apartments, in addition to 968 no. cycle parking spaces, waste storage and plant facilities (see Figure 2.2).

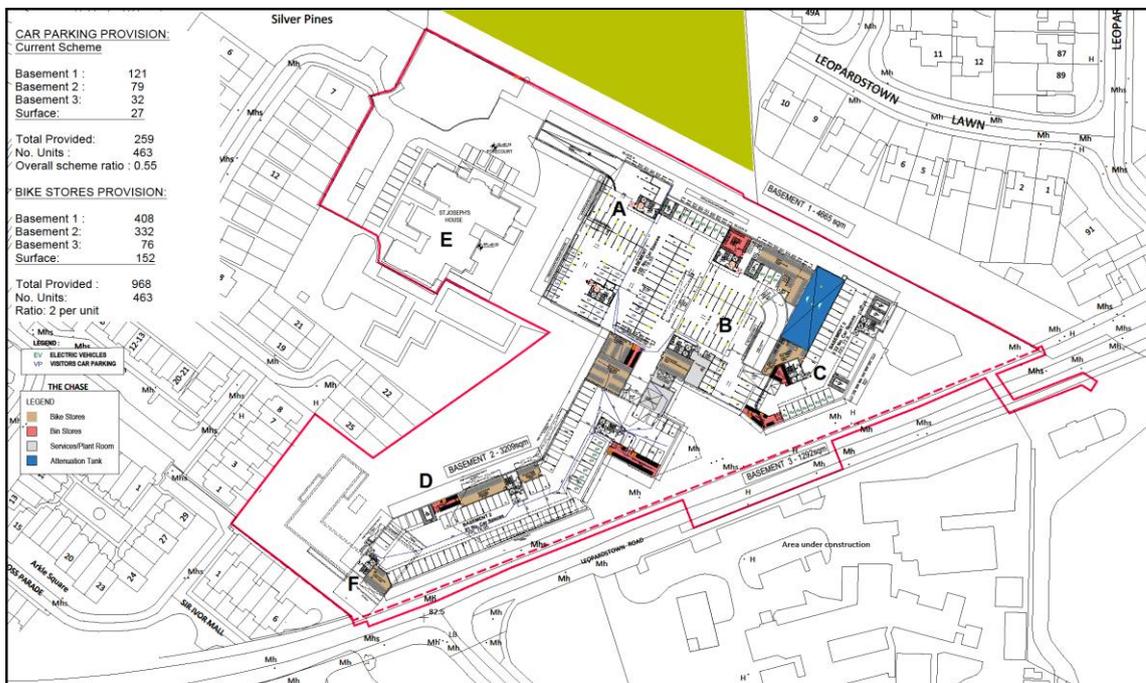


Figure 2.2: Proposed Basement Level Layout (Source: O'Mahony Pike Architects)



- 2.2.4 There is a desire where possible to increase permeability of the new development and, in as far as possible, to promote the use of sustainable travel modes over the private car which was incorporated into the overall design process.

2.3 Description of the Receiving Environment

- 2.3.1 The development site is strategically located between the M50 motorway and N11 Dual Carriageway. The site is adjoined to the west by the Silverpines residential estate and Anne Sullivan School for Deaf Blind People, and to the north and northeast by the Leopardstown Park / Court / Drive residential estates.
- 2.3.2 The southern boundary of the site consists of 9 no. existing detached residential properties along Leopardstown Road. In total there are 10 no. existing residential properties on the subject site.
- 2.3.3 The St. Joseph's House is located in the north west of the site. St Joseph's is accessed from the N31 Brewery Road and through the Silverpines residential estate.
- 2.3.4 Leopardstown Racecourse and Foxrock Golf Club are located on the opposite side of Leopardstown Road.
- 2.3.5 The proposed development is also located near to employment areas, particularly in Central Park and the Sandyford Industrial Estate.

2.4 Relevant Planning History in the Study Area

- 2.4.1 Planning permission was granted by an Bord Pleanála (Ref: PL06D.249248). The permitted development included for a twin access arrangement via Silverpines and Leopardstown Road. The Leopardstown Road access was restricted to a left in left out only movement only. The basement car parking included for two separate ramps, meaning that resident to the development could access or egress via Silverpines or Leopardstown Road depending on their desired destination. This helped reduce to overall traffic impact of the permitted development on the surrounding road network. Delivery vehicles to St. Joseph's Houses of the development was via Silverpines with the remainder of the development delivery requirement accessed via Leopardstown Road.
- 2.4.2 The permitted main construction access route was via Leopardstown Road also to minimise construction traffic impacts on Silverpines.
- 2.4.3 The permitted development is proposed to be served via the existing vehicular access point from Silverpines and from the permitted vehicular entrance to 'Annaghkeen' on the Leopardstown Road. Upgrade works are proposed to both vehicular access point to facilitate the proposed development and to provide for improved access and egress for the overall development as permitted under PL06D.249248.
- 2.4.4 ILTP took consideration of data and findings from these planning application and traffic data and trends as part of this Traffic and Transport Assessment.
- 2.4.5 The proposed SHD application is a separate standalone planning application to the Board and includes the proposed access arrangements to serve the entire development.

2.5 Existing Road Network

- 2.5.1 The development site is strategically located between the M50 motorway and N11 Dual Carriageway. The proposed development is also located between the R113 Leopardstown Road and N31 Brewery Road which connect the N11 and M50. The R113 Leopardstown Road is a Regional Road while the N31 is a National Primary Route.



2.5.2 The R113 Leopardstown Road / N31 Brewery Road junction is in close proximity to the proposed residential development. This junction was recently upgraded from roundabout to full signalised intersection, and incorporates cycle paths and pedestrian crossing facilities, including traffic signal pedestrian phases.

2.6 Existing Rail and Bus Services

2.6.1 The subject site is to the east of the Luas Green Line running from Cherrywood to the City Centre.

2.6.2 The subject site in the context of the existing Road and Luas networks is shown in Figure 2.3



Figure 2.3: Subject Site in the context of surrounding Road and Luas Networks

2.6.3 The N11, which is 900m to the northeast of the subject site, is also one of sixteen Quality Bus Corridors (QBCs) in Dublin, which are shown graphically in Figure 2.4.

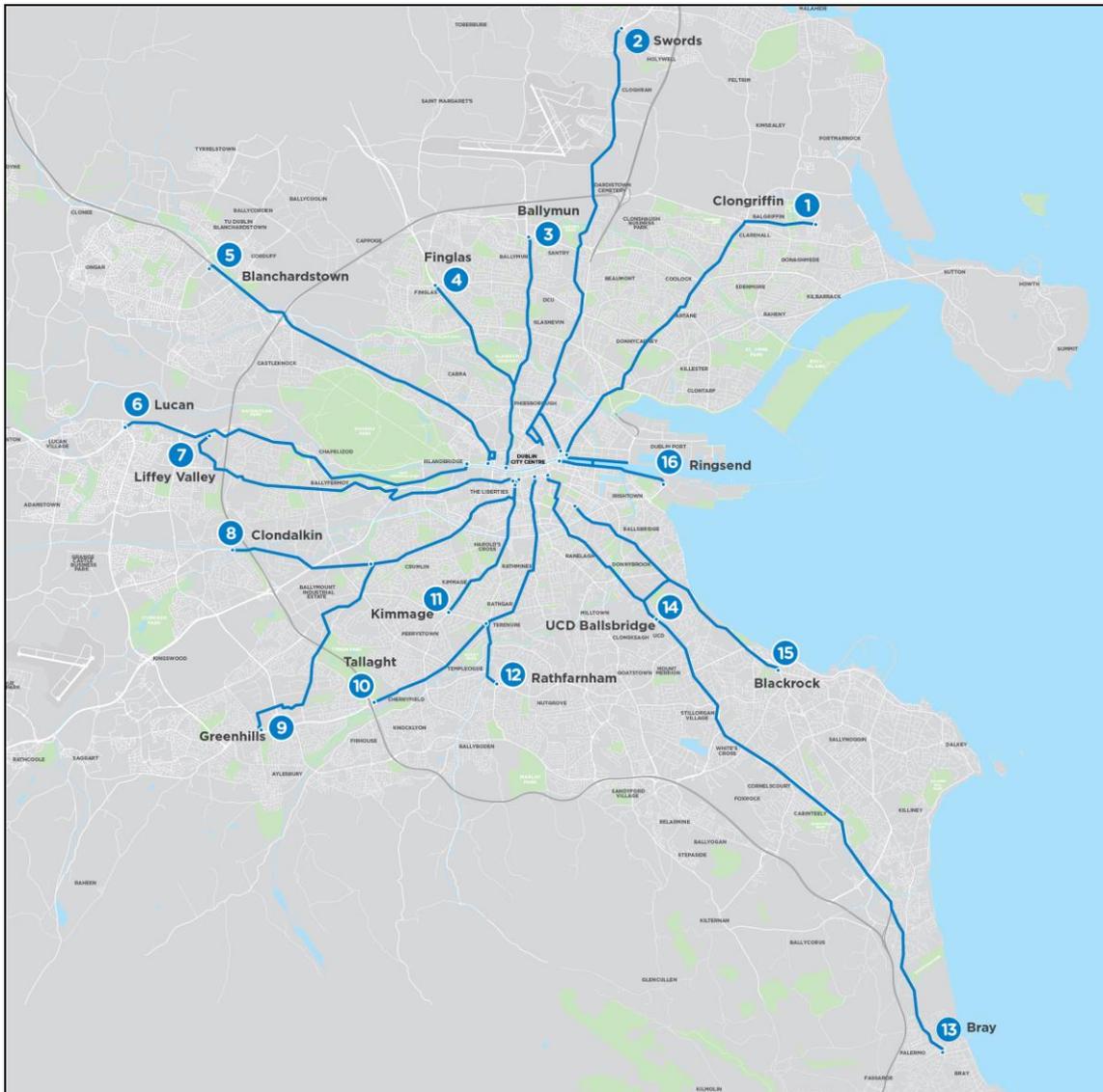
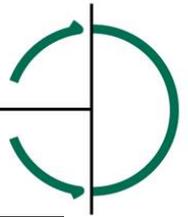


Figure 2.4: Core Bus Corridors in Dublin (Source: National Transport Authority, Bus Connects CBC Public Consultation)

- 2.6.4 There are regular bus services on the R113 Leopardstown Road, N31 Brewery Road and N11 Stillorgan Road. The N11 is a primary arterial route connecting the suburbs of south Dublin with the city centre.
- 2.6.5 The bus routes in the vicinity of the site are mapped out in Figure 2.4.

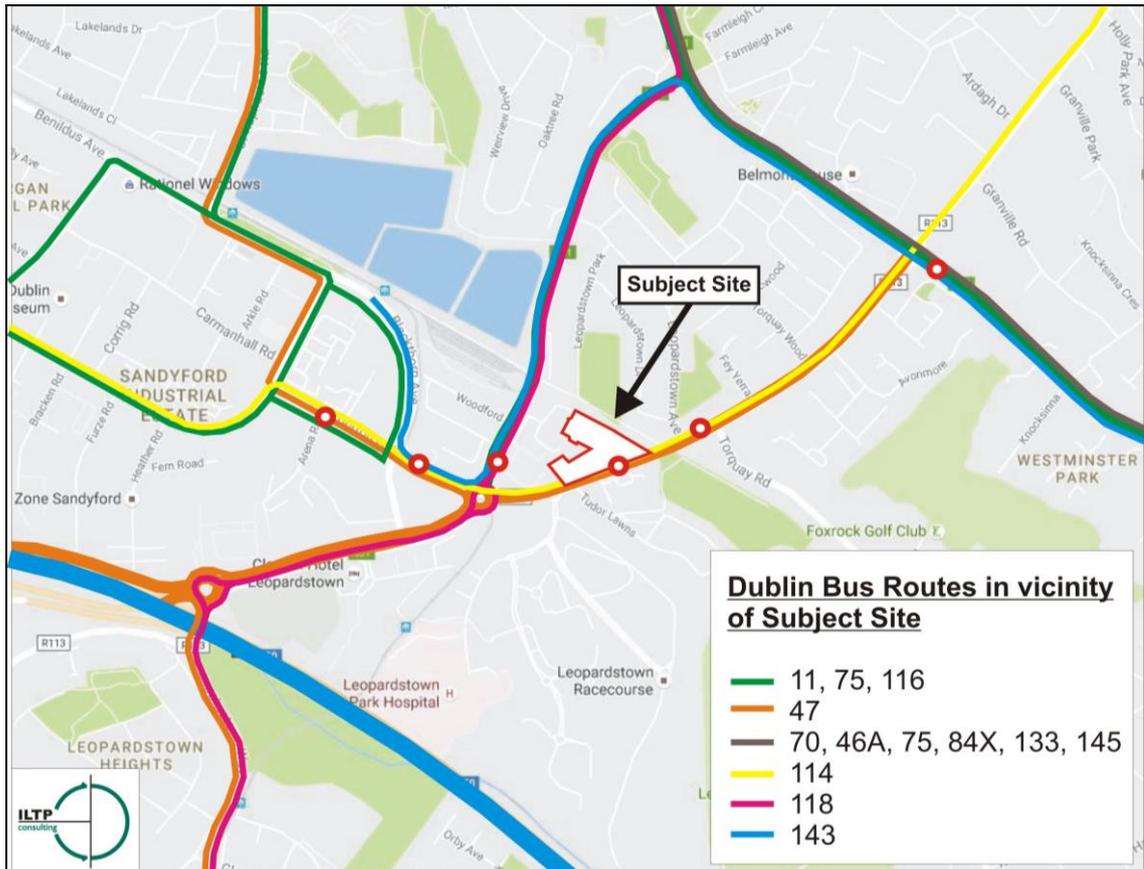


Figure 2.5: Bus Routes in vicinity of Proposed Development

2.6.6 The walking distances to the nearby Bus and Luas stops are shown in Figure 2.6 are all within a convenient walk distance to the proposed development.

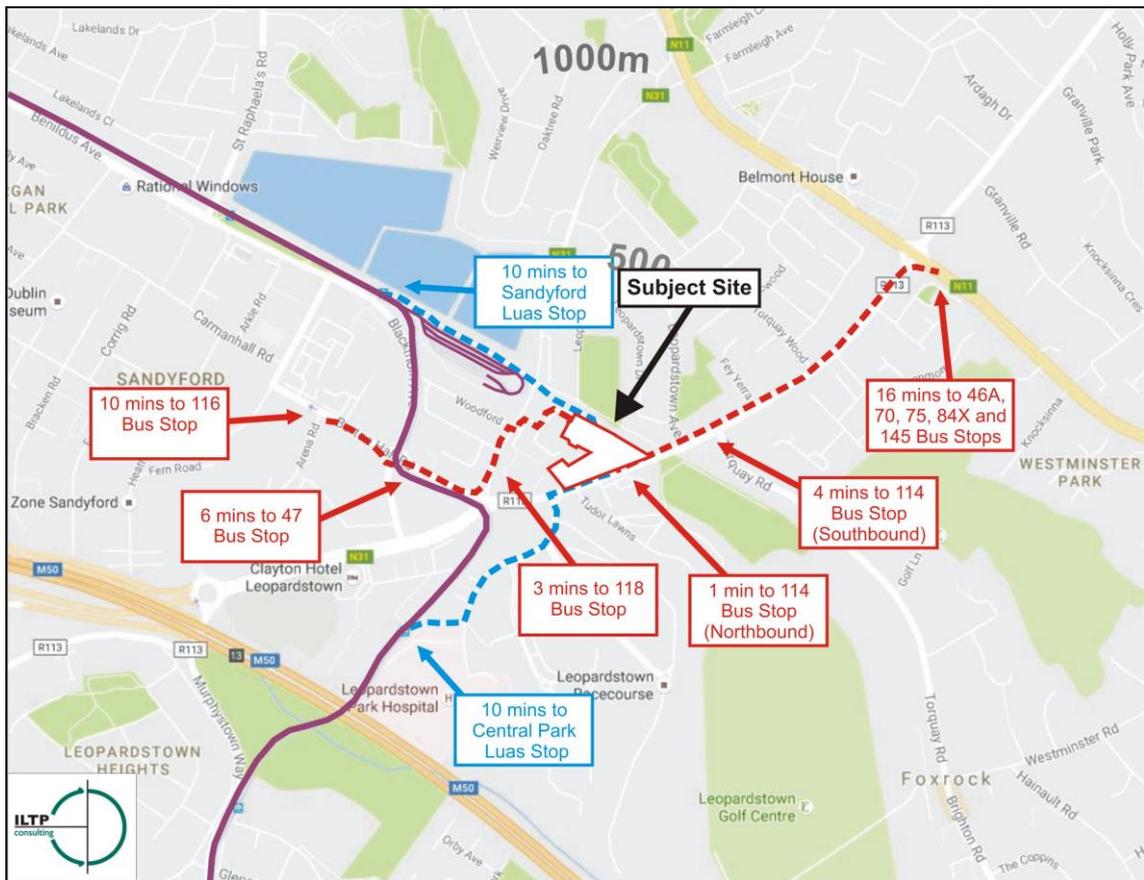


Figure 2.6: Walking Times to nearby Bus and Luas Stops

- 2.6.7 The closest bus stop is located on Leopardstown Road immediately adjacent to the proposed entrance to the development, which is on the 114 route connecting Ticknock and Blackrock Rail Station, as shown in Figure 2.7.
- 2.6.8 The bus stop to the immediate northwest of the site on Brewery Road, which is approximately 3 minutes walk, is served by the 118 bus route travelling between Kiltiernan and D'Olier St (also see Figure 2.5).
- 2.6.9 The closest bus stop on the N11 is approximately 16 minute walk away from the centre of the subject site, and is served by the 46A, 70, 75, 84X and 145 bus routes with services between the city centre at 10 minute intervals at peak periods.
- 2.6.10 Both the Sandyford (700m) and Central Park (600m) Luas Stops are located within approximately 10 minutes walking distance of the subject site. The Sandyford Luas stop can be accessed via the Greenway to the immediate northeast of the subject site.
- 2.6.11 Radial distances from both the subject site and Sandyford and Central Park Luas Stations are shown graphically in Figure 2.6. Public Transport services within 500m and 1000m of the site are also shown in Figure 2.7 and demonstrates the wider range of public transport service within a convenient walk distance from the proposed development.

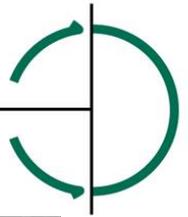


Figure 2.7: Radial Distance from Subject Site and Sandyford and Central Park Luas Stations

2.6.12 The Luas serving the Sandyford and Central Park stations are high capacity high frequency services connecting the subject site with the city centre and the wider public transport services. Services operate at approximately 3 – 6 minute intervals at peak times. Therefore the proposed SDH development is currently well served by existing public transport services.

2.7 Existing Pedestrian and Cycle Network

2.7.1 Pedestrian and cycle facilities are provided on the R113 and N31 adjacent to the proposed development. This includes recently completed facilities included in the Leopardstown Road / Brewery Road junction realignment works, as shown in Figure 2.8, 2.9 and 2.10.

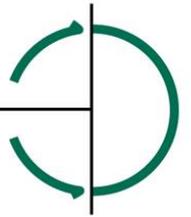


Figure 2.8: Recently completed Footpaths and Off-line Cycle Tracks on N31 Brewery Road



Figure 2.9: Recently completed Footpaths and Cycle Tracks on R313 Leopardstown Road

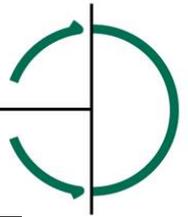


Figure 2.10: Existing Footpath and Off-line Cycle Track Facilities on R313 Leopardstown Road in the vicinity of proposed entrance

- 2.7.2 In addition to the pedestrian facilities adjacent to the existing road network there is an existing Greenway adjoining the subject site to the immediate northeast which can facilitate pedestrian access to the proposed development (see Figure 2.12). This Greenway also links to the Sandyford Luas Stop.



Figure 2.11: Existing Greenway adjoining Subject Site to the Northeast

2.8 Future Bicycle Network

- 2.8.1 There are significant improvements planned for the bicycle network in the vicinity of the subject lands. The planned improvements are set out in the NTA Greater Dublin Area Cycle Network Plan. The planned network in the vicinity of the subject site is shown in Figure 2.12.

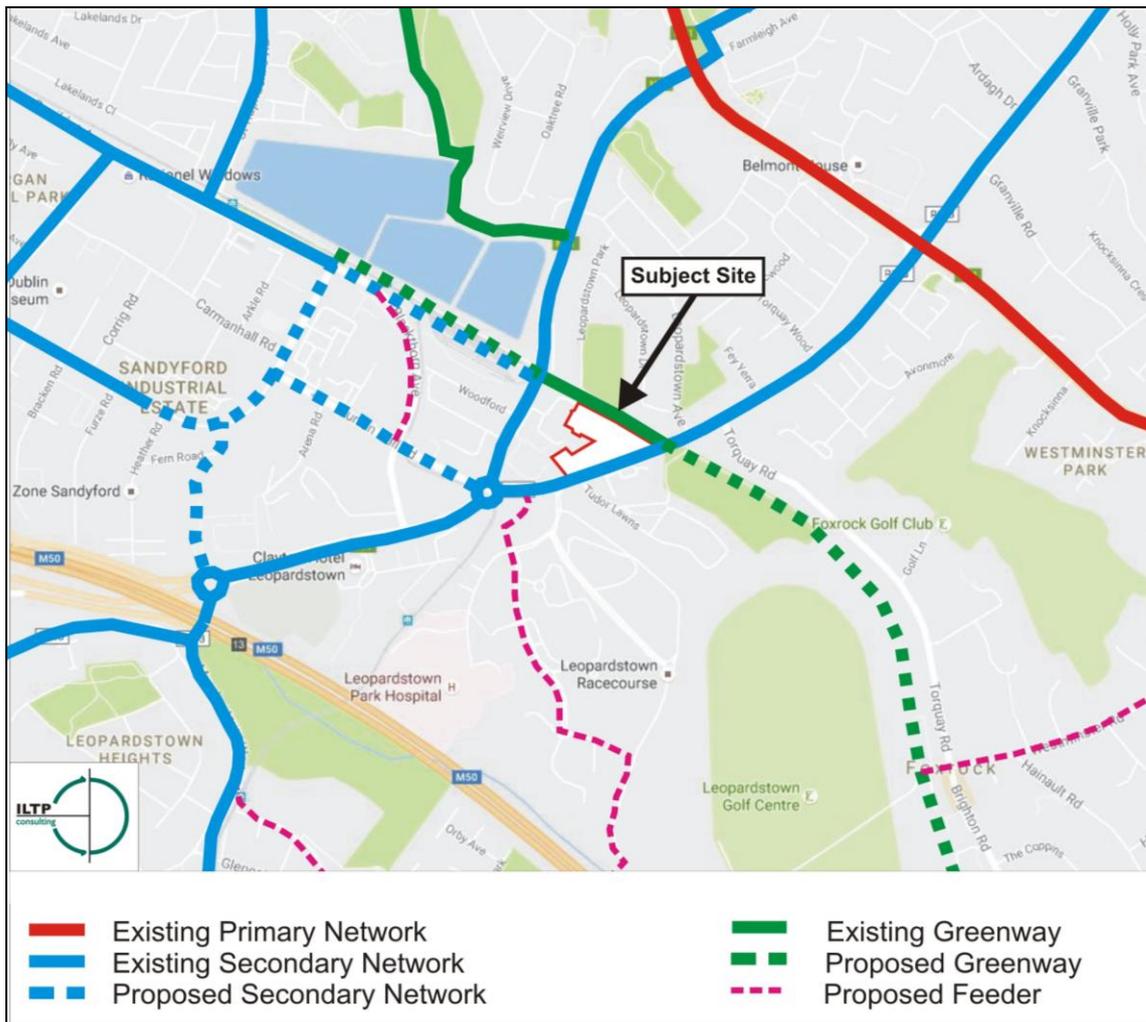


Figure 2.12: Existing and Planned Cycle Network (Source: NTA – GDA Cycle Network Plan)

2.8.2 It can be seen that a well-developed secondary cycle network is already in place on the adjoining Leopardstown Road and Brewery Road, with the Primary Network along the N11 in close proximity to the northeast.

2.8.3 The roll out of the cycle network by DLRCC has already resulted in large increases in cycling. The proposed development will also result in the removal a number of existing driveways that serve the properties proposed to be demolished along Leopardstown Road which will further improved the existing cycle facilities in the area.

2.9 Future Rail and Bus Services

2.9.1 The planned Bus Connects projects and Luas frequency improvements planned for the area by the NTA (National Transport Authority) will further reduce the reliance on the private car generally.



3 PLANNING CONTEXT

3.1 Overview

3.1.1 This study is being prepared having regard to key policy documents at national, regional and local levels, including:

- Smarter Travel A Sustainable Transport Future
- Dun Laoghaire Rathdown County Development Plan 2016 – 2022

3.2 Smarter Travel A Sustainable Transport Future 2009-2020

3.2.1 *Smarter Travel A Sustainable Transport Future 2009-2020*, recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a response to the fact that continued growth in demand for road transport is not sustainable from a number of angles as it will lead to further congestion, further local air pollution, contribute to global warming, and result in negative impacts to health through promoting increasingly sedentary lifestyles. The aim of the policy document is to;

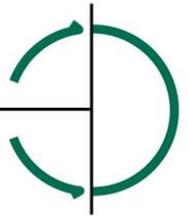
- Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport.
- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.
- Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- Reduce overall travel demand and commuting distances travelled by the private car
- Improve security of energy supply by reducing dependency on imported fossil fuels.

3.2.2 These are to be achieved by four main actions;

- Actions to reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment and the use of pricing mechanisms or fiscal measures to encourage behavioral change,
- Actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking,
- Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
- Actions aimed at strengthening institutional arrangements.

3.2.3 In order to ensure that the broad goals and detailed targets of the Smarter Travel document are met a series of policies and measures are recommended. These policies focus on co-ordinating land use and transport, the provision of high quality public transport and high quality routes for cycling and walking, aligning employment policy with transport planning, the implementation of mobility management plans and the use of fiscal measures to influence travel behaviour. These include:

- That 10% of all trips be made by bicycle by 2020; and



- Work related commuting by car will be reduced from a current modal share of 65% to 45%.

3.2.4 Intensification of development within established urban areas served by high capacity, high quality public transport services accords with good planning and promotes sustainable transport modes.

3.3 Dun Laoghaire Rathdown County Development Plan

3.3.1 The *Dun Laoghaire Rathdown County Development Plan 2016 – 2022* sets out the development context for the proposed development. The CDP zoning objectives for the area are shown in Figure 3.1

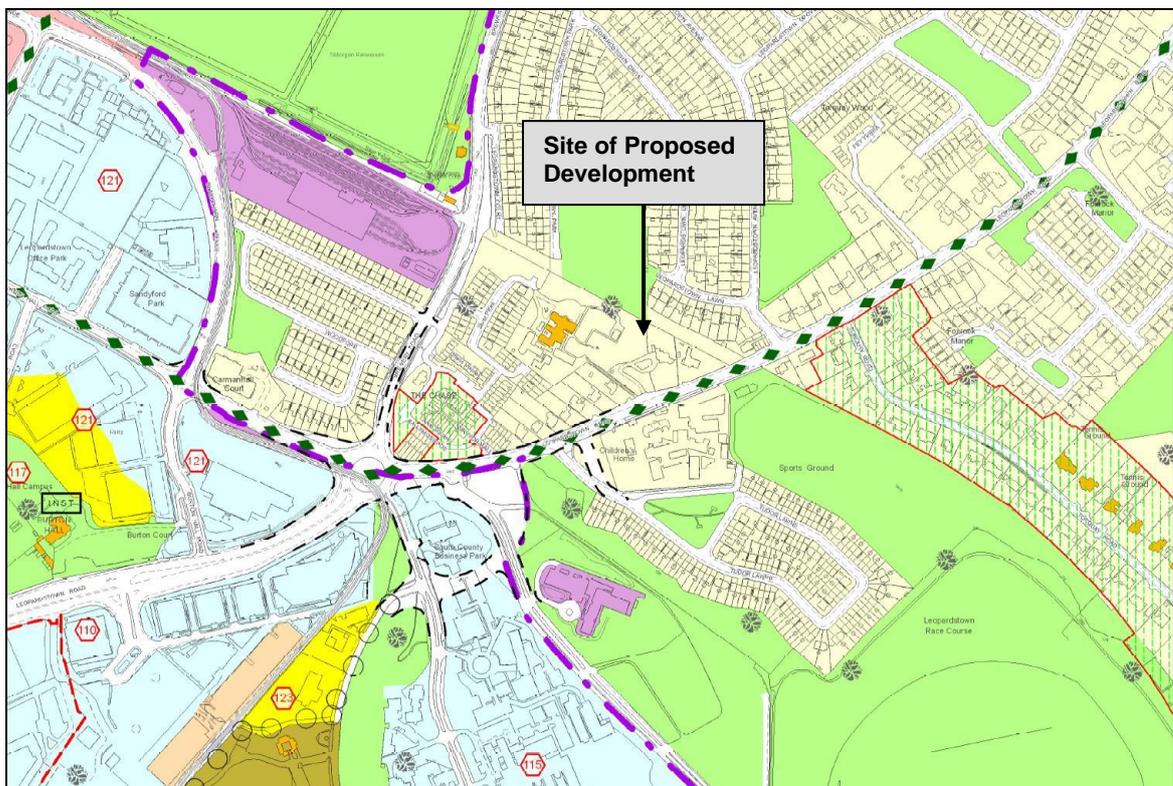


Figure 3.1 Proposed Development in context of DLRCC Development Plan (Source: *Dun Laoghaire Rathdown County Development Plan 2016 – 2022* Map 6)

3.3.2 The subject site is zoned Objective A “*To protect and-or improve residential amenity*”.



4 PROPOSED VEHICULAR ACCESS ARRANGEMENT

4.1 Overview

4.1.1 Traffic impact, while important, is just one element of the overall access strategy. The proposed development included the retention and redevelopment of St. Joseph's House, a protected structure. The lands include some mature trees and the adjacent Silverpines estate is an established residential development. There is also a desire where possible to increase permeability of new development and, in as far as possible, to promote the use of sustainable travel modes over the private car.

4.2 Proposed Vehicular Access Strategy

4.2.1 The design team considered very carefully the competing and complementary elements of the proposed development and developed the Proposed Access Strategy. The vehicular access that is proposed in this planning application is the same as that previously permitted by the Board as part of a previous planning application (Ref: PL06D.249248). This comprises of a Dual Access from both Brewery Road and Leopardstown Road with a double ramp to the proposed basement car park. The proposed arrangement provides two access points to the development, via a left in left out only movement off Leopardstown Road to replace existing residential entrances, and via the existing Silverpines Residential Estate off Brewery Road.



Figure 4.1 Proposed Vehicular Access Strategy - Dual Access from both Brewery Road and Leopardstown Road with double ramp to basement car park (Source: O'Mahony Pike Architects)



- 4.2.2 As shown in Figure 4.1 it is proposed that the basement car park can be accessed via two separate ramps A and B; one connecting to the Leopardstown Road access, the other to Brewery Road / Silverpines. With this arrangement the residents in Blocks A, B, C, D & F can access the car parking facilities in the basement using either access as all basement car parking spaces are accessible via both ramps.
- 4.2.3 The redeveloped St. Joseph's House (Block E) would be accessed off Silverpines/Brewery Road as occurs at present. Service and emergency vehicles for the new apartment would be accessed via Leopardstown Road only.
- 4.2.4 The provision of two accesses provides greater ease of access to the development, and minimises distances travelled on the surrounding roads and thus minimises the overall traffic impact on the wider road network.
- 4.2.5 For this arrangement no through road connection for vehicles is proposed at ground level within the development. This greatly increases the number of trees that are retained and also improves the setting of St. Joseph's House. Pedestrian and cycle through routes are provided and these also connect with the existing greenway. This means that through access for pedestrian and cyclists will be provided for both new and existing residents in the area, affording them better access to bus and LUAS facilities also.
- 4.2.6 It is proposed that service and emergency vehicles for the St. Joseph's House element of the development will access via Silverpines, as is currently the case. All service and emergency vehicles to the remainder of the development will use the Leopardstown Road access.



5 TRAFFIC SURVEY RESULTS

5.1 Overview

- 5.1.1 In order to assess the traffic impact of the proposed development on the surrounding road network it was first necessary to assess the current traffic situation in the area, which included undertaking traffic count surveys.
- 5.1.2 To assess the capacity of the proposed access on Leopardstown Road a PICADY Traffic Modelling analysis was undertaken.
- 5.1.3 In addition, a LINSIG Traffic Modelling software analysis was conducted to assess the capacity of the existing signalised junction on Brewery Road.
- 5.1.4 For traffic modelling purposes TII / NRA Medium Growth Rates have been used for traffic volume projections. The proposed development is assumed commences construction in early 2022 with the first phase occupied by late 2023.

5.2 ILTP Traffic Count Surveys and Site Appraisal

- 5.2.1 Due to the Covid 19 pandemic traffic flows were significantly reduced and distorted generally. Traffic flows were not uniformly reduced across the network since Covid 19 movement restrictions were introduced. Traffic patterns also fluctuated as different lockdown measures were in place at different periods of time. In addition different sectors of the economy were impacted differently, which meant that office development were likely to have far greater reductions in traffic movement due to Work from Home requirement than say traffic for residential developments for example.
- 5.2.2 Therefore simply applying some form of universal growth to traffic data collected during Covid 19 restrictions would not provide as reliable baseline estimated as pre-Covid traffic data.
- 5.2.3 Fortunately ILTP had arrange to have traffic count surveys on Leopardstown Road at the location of the proposed access undertaken in 29th May 2019.
- 5.2.4 ILTP also conducted traffic count surveys on Brewery Road at the entrance to the Silverpines Residential Estate on 29th May 2019.
- 5.2.5 The purpose of the surveys was to measure traffic flows at the site and neighbouring junctions during the peak periods. This was of critical interest in gauging the effect the proposed development would have on existing traffic patterns and volumes in the area during peak flow periods. This provided a very robust basis for establishing the appropriate baseline traffic on which to assess the traffic impacts of the proposed development.
- 5.2.6 The site survey also allowed sight lines and speed limits to be observed, in addition to signal phasing at nearby junctions.
- 5.2.7 ILTP also observed pedestrian and cyclist patterns and behaviours in the vicinity of the proposed development.
- 5.2.8 The existing traffic conditions on the adjoining road network were as expected for Regional and local roads in an urban / suburban location. The most significant volumes of traffic were observed from through traffic on Leopardstown Road and Brewery Road.

5.3 Traffic Count Survey Results – Leopardstown Road

- 5.3.1 The traffic flows for the AM 08:00 – 09:00 peak hour at the location of the proposed access on Leopardstown Road is illustrated in Figure 5.1.

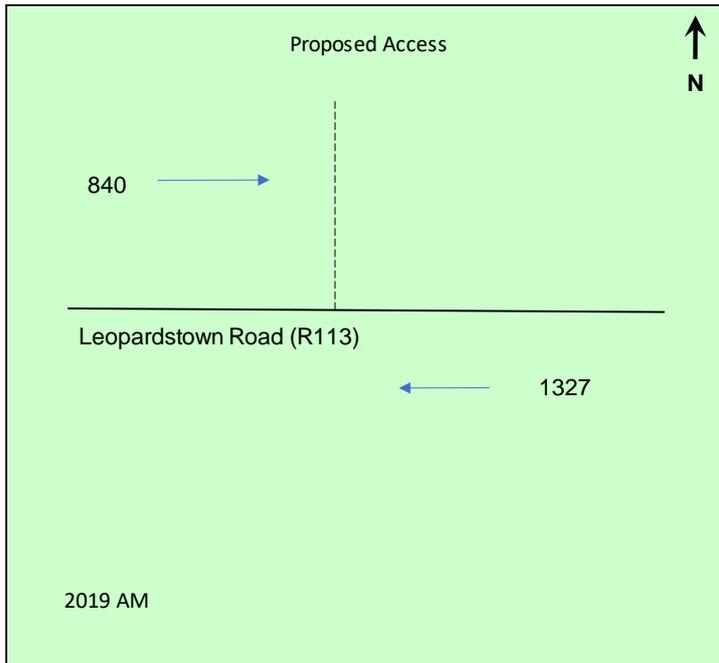
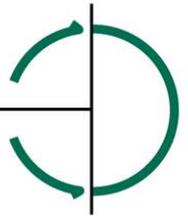


Figure 5.1: AM Peak Hour Traffic Flows on Leopardstown Road at location of Proposed Access

5.3.2 The corresponding traffic flows for the PM 17:00 – 18:00 peak hour is shown in Figure 5.2.

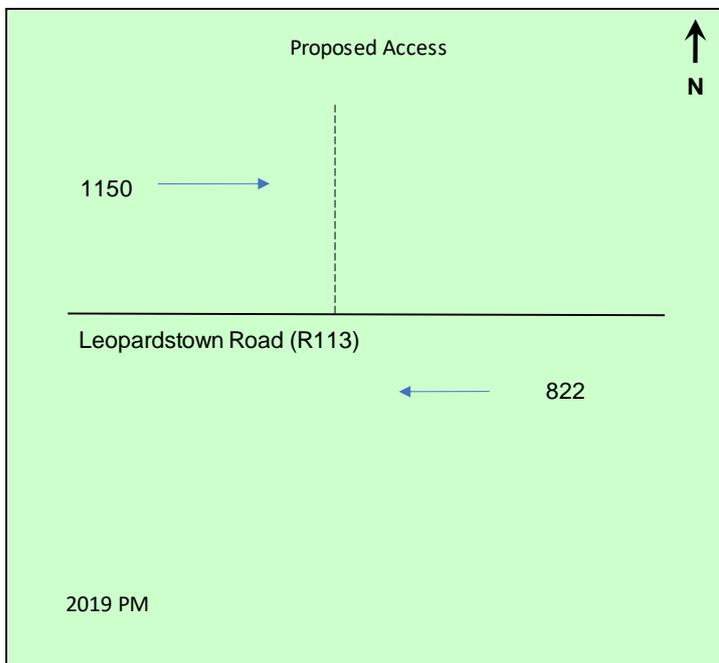
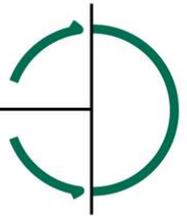


Figure 5.2: PM Peak Hour Traffic Flows on Leopardstown Road at Location of Proposed Access



5.3.3 The traffic flows recorded by ILTP show that there is a tidal movement of traffic during morning and evening peak hours, which would correspond with the journeys of city bound commuters. In the AM peak hour, a higher proportion of traffic travels east-west along the road. During the PM peak this tidal traffic flow movement is reversed.

5.3.4 These traffic flow figures were projected up to 2023, which is the expected opening year of the development, and are shown in Figures 6.3 and 6.4.

5.4 Traffic Count Survey Results – Brewery Road

5.4.1 Traffic survey counts for the junction of Brewery Road and the Silverpines Residential Development were conducted in May 2019.

5.4.2 The results of the Traffic Count surveys are shown below in Figures 5.5 and 5.6.

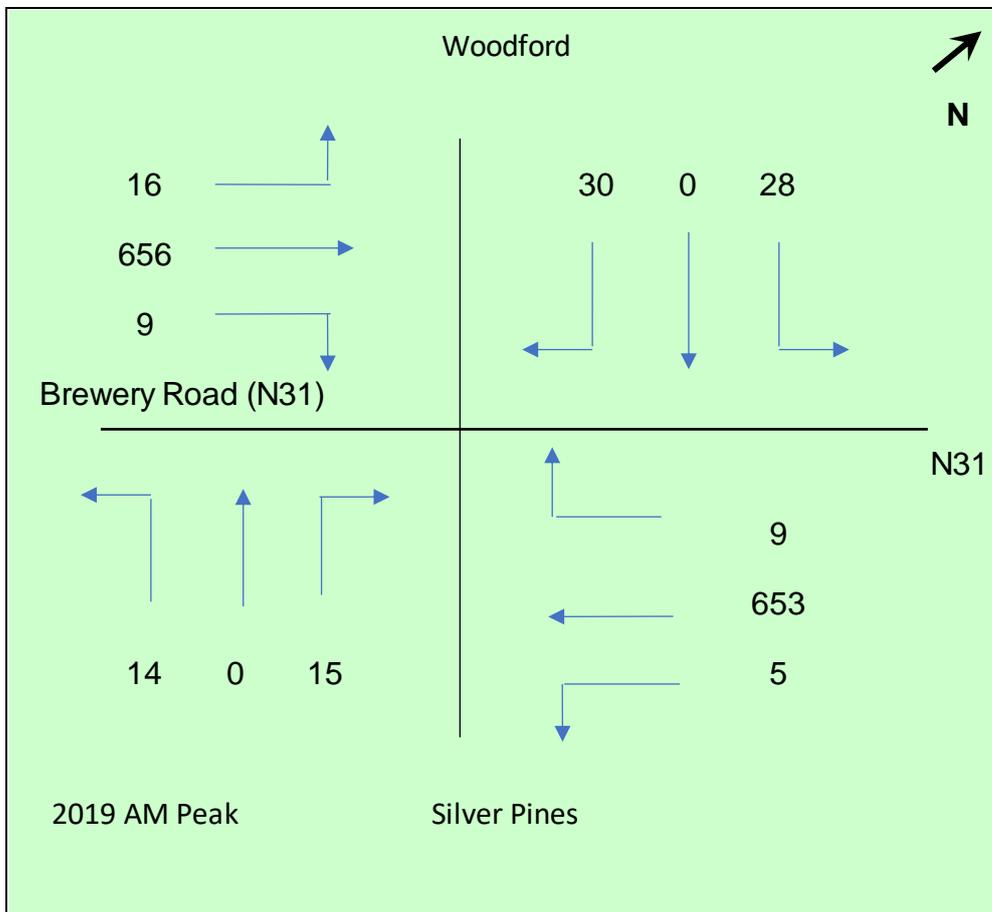


Figure 5.5: 2019 Base AM Peak Hour Traffic Flows at junction of Brewery Road / Silverpines / Woodford

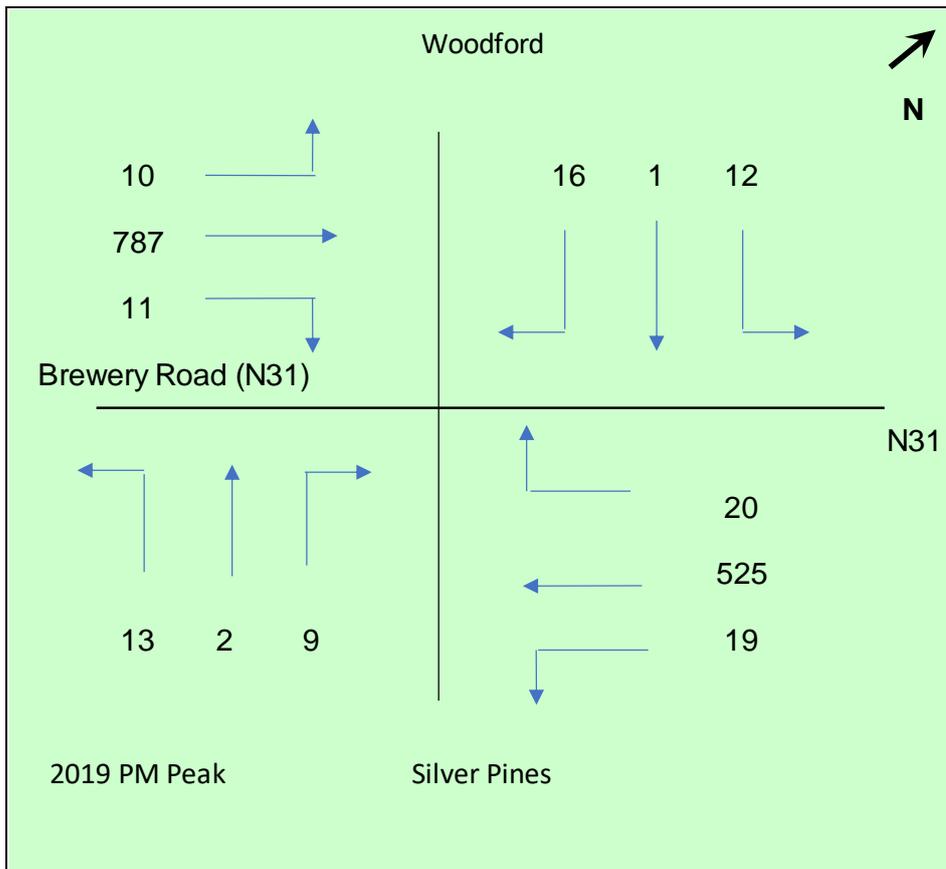
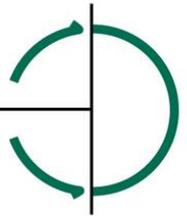


Figure 5.6: 2019 Base PM Peak Hour Traffic Flows at junction of Brewery Road / Silverpines / Woodford

5.5 Traffic Growth Trends Locally

5.5.1 There is a permanent traffic counter on the N31 Brewery Road, which allows for longer traffic growth trend to be assessed. The data from this permanent Transport Infrastructure Ireland (TII) counter is summarised in Table 5.1. This shows that over the past number of years traffic flows along Brewery Road have not grown in recent years and if anything, have shown a slight decline overall. This is in keeping with ongoing sustainable transport policies of promoting more sustainable modes of travel and in locating new residential development closer to employment centres.

Table 5.1: Traffic Growth Trends on N31

	2021*	2020*	2019	2018	2017	2016	2015	2014	2013
AADT	10,137	11,379	15,538	15,687	16,066	15,530	15,824	16,018	15,880
%HGV	2.1%	2.3%	2%	2.1%	1.7%	1.7%	1.7%	1.5%	1.4%
Coverage	40.1%	100%	99.7%	99.5%	99.7%	99.7%	99.7%	99.7%	83.6%

*Covid-19 Restrictions Impact on Recent Traffic Data



5.5.2 The proposed development at St. Joseph's House and Adjoining Properties strengthens this sustainable development pattern, by densifying existing residential development in an area with significant local employment and in an area well served by sustainable travel modes. The results demonstrate that even in an area where development has occurred in recent years there is no growth in overall traffic flows in recent years excluding the Covid 19 years.

5.5.3 The TII data also shows the large distortions in traffic patterns on the N31 as a result of Covid19 restrictions and these further confirm the use of the 2019 traffic data as a more robust and reliable baseline on which to assess the traffic impact of the proposed development.

5.1 Assessment of Future Traffic Conditions

5.1.1 Using the NTA / DCC Annual Cordon Counts (*Canal Cordon Report 2018 - Report on Trends in Mode Share of Vehicles and People Crossing the Canal Cordon 2006 to 2019, December 2020*) and other data sources ILTP undertook a review of recent trends in traffic volumes for Dublin City Centre and the wider environs. The Cordon Count Report shows that in overall terms there has been a significant decline since 2006 in the number of vehicles coming into Dublin during the Cordon Count period. Car numbers crossing the canal cordon have continued to decline in recent years, with a total reduction of 20.9% between 2006 and 2019, during a period which saw significant additional development taking place within the city centre.

5.1.2 This decline in private car usage is promoted and supported by Policy objectives at National and Local level. *Smarter Travel a Sustainable Transport Future* has as its goal a shift from car dependency to more sustainable modes of transport as such future planned development will have to have a high level of sustainability. This will in turn lead to a move away from car dependency particularly in locations served by rail and bus public transport such as the proposed development.

5.1.3 Furthermore the *Smarter Travel* document states that:

"The total kilometres travelled by the car fleet in 2020 will not increase significantly from current total car kilometres."

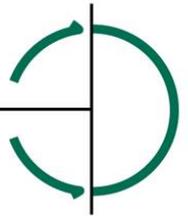
5.1.4 This will be particularly true in Town Centre locations and on radial routes into and out of Dublin City Centre that are well served by public transport.

5.1.5 On the basis that these mode shift targets are met the decline in private car usage recently recorded by the Canal Cordon surveys is set to continue.

5.1.6 In terms of future traffic growth rates, TII has traffic projections for the period 2016 – 2050. There are different growth rates given for different areas, but these are not a predictor of future growth on traffic in all areas. These general growth rates are typically used in the design of new road schemes or where poor public transport existing to account for future development and resultant traffic growth in such areas.

5.1.7 Due to the subject site also being in a long established urban area with a high degree of public transport provision, growth in traffic levels for the future year assessments are considered to be quite limited and undesirable. This is confirmed by the TII data for Brewery Road referenced earlier.

5.1.8 It is considered that background traffic at the subject site is not anticipated to grow beyond existing levels or if there is any growth it will be extremely low due to the established urban setting, the provision of bus and rail public transport and planned improvements in the cycling and pedestrian environment. This is in line with the policies and objectives set down in *Smarter Travel - A Sustainable Transport Future 2009 – 2020* and the current CDP.



5.1.9 Furthermore, current Government policies that seek a modal shift to sustainable forms of transport are likely to result in a drop in background traffic in the short to medium term. This is particularly so in areas where frequent and reliable public transport services are in operation, as is the case with the proposed development.

5.1.10 However, as a worse case scenario ILTP have assumed that background traffic would continue at the TII forecast rates to 2023 but would not grow further beyond this date in line with overall policy objectives and as evidenced by our assessment of traffic growth in the area over recent years.

5.2 Opening Year and Design Year Scenarios

5.2.1 For EIAR purposes the Opening Year of the proposed development is projected to be 2023, and the corresponding Design Year is taken to be 2038, which is 15 years after the Opening Year.

5.2.2 As set out above, for the 2038 Design Year, it is assumed that the 2023 Opening Year traffic volumes both without and with the proposed development would persist.



6 TRIP GENERATION FOR PROPOSED DEVELOPMENT

6.1 Overview

6.1.1 The proposed development will generate an increased level of traffic on the local road network and this this will be additional traffic. Evidence suggests that new development in location well served by public transport such as the subject site done not lead to increased traffic growth over time. Locating new development well located to existing public transport is demonstrated to over time reduce overall car use and dependency.

6.1.2 To calculate the likely increase in traffic volumes trip rates were established for each proposed land use type and quantum, using ILTP’s own experience of comparable developments of similar size and nature in Ireland. These were also found to be consistent with the TRICS database ranges of outputs for similar developments. It should be noted that the ILTP trip rates are based on a comparator development where 1:1 car parking ratio were in existence and therefore represent a robust assessment of likely trip generation rates.

6.2 Proposed Trip Generation Estimates

6.2.1 The Trip Generation figures are presented in Table 6.1. The proposed crèche will be located within St. Joseph’s House. The proposed crèche will cater for approximately 50 childcare spaces.

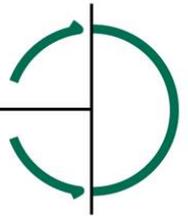
6.2.2 Therefore, the crèche will cater primarily for children from the development. The provision of a crèche within the development will generate some additional staff movement in the AM peak. These are likely to be generated outside of the traditional AM and PM peak periods. However, ILTP have made a robust assumption that the crèche could generate some additional external trips at the peak period and these have been included in Table 6.1.

Table 6.1: Revised Final Trip Generation for Proposed Development

Landuse	Type	Number of Units / GFA	AM Rate		PM Rate		AM Trips		PM Trips	
			Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Blocks A, B, C, D & F	Apartments	454	0.05	0.14	0.1	0.06	23	64	45	27
Redeveloped St. Joseph's House (Block E)	Apartments	9	0.05	0.14	0.1	0.06	0	1	1	1
Café	Café	49 sq.m	1	1	1	1	1	1	1	1
Creche	Creche	282 sq.m	2.30 per sq.m	1.95 per sq.m	2.75 per sq.m	2.90 per sq.m	3	2	3	3
							AM Trips		PM Trips	
							Arr	Dep	Arr	Dep
Total Projected Trips							27	67	50	32
via Leopardstown Road Access							8	14	14	6
via Brewery Road Access							19	54	36	26



- 6.2.3 This development includes 463 no. residential units, a 49m² Café and a 282m² crèche, with 259 no. car parking spaces to be provided.
- 6.2.4 The Trip Generation assessment yields an estimate of an additional 27 no. inward and 67 no. outward trips for the AM peak hour (08:00 – 09:00). An additional 50 no. inward trips and 32 no. outward trips were estimated for the PM peak hour (17:00 – 18:00).
- 6.2.5 As the AM and PM peaks are the times of the day with the highest level of traffic volumes it can be assumed that if the road network can perform effectively at these times, it will meet all demands placed upon it at other periods.
- 6.2.6 The proposed development would result in some reduction in traffic as some existing development on the subject lands is being removed. However to ensure a robust and worse-case scenario in terms of traffic movements no deductions were assumed to arise through the removal of the existing development on the subject lands.



7 TRAFFIC MODELLING DETAILS AND RESULTS

7.1 Assessment of Capacity of Proposed Vehicular Access Arrangement

7.1.1 To assess the feasibility of the Proposed Vehicular Access Strategy from a traffic perspective, traffic modelling was carried out for the proposed upgraded entrance onto Leopardstown Road and the existing junction onto Brewery Road. The proposed access arrangement is as per the previously permitted access for the subject lands.

7.2 Proposed Trip Distribution

7.2.1 The proposed Trip Distribution for the proposed Vehicular Access Strategy is shown in Figure 7.1.

7.2.2 The Preferred Vehicular Access Strategy trip distribution figures for Leopardstown Road and Brewery Road for the AM Peak Hour are shown in Figures 7.1 and 7.2.

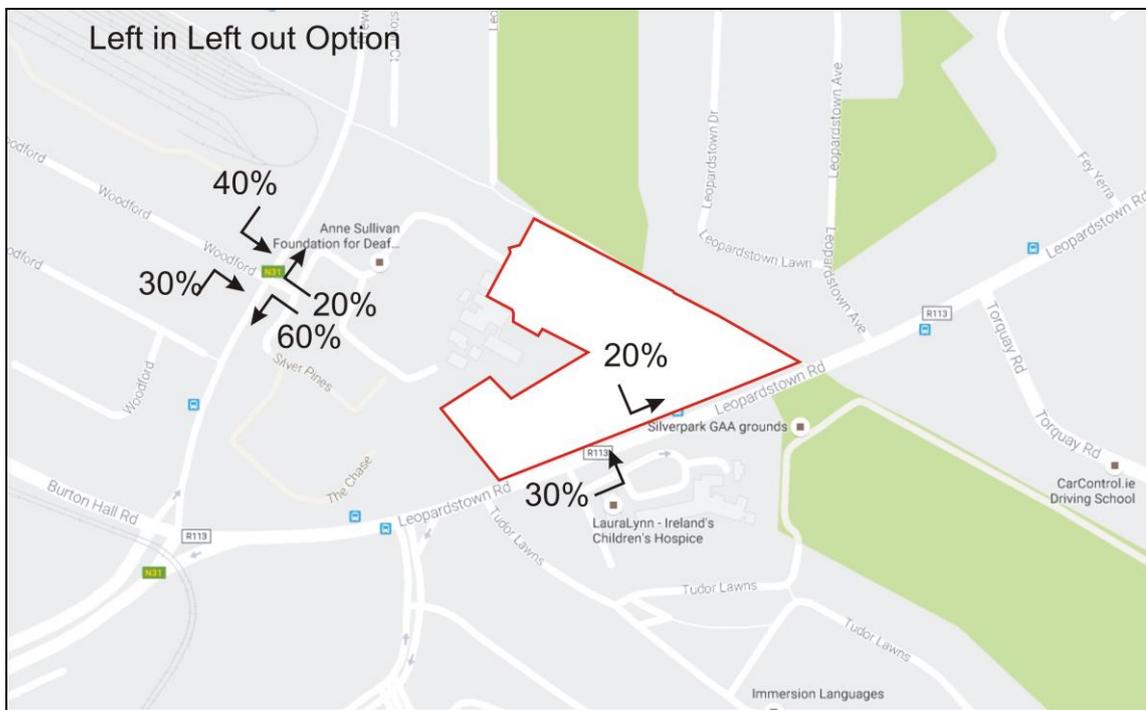
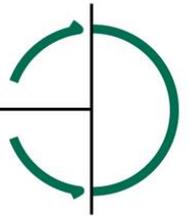


Figure 7.1: Proposed Trip Distribution

7.3 PICADY Priority Junction Analysis – Proposed Junction on Leopardstown Road

7.3.1 In order to test the performance of the proposed access junction on Leopardstown Road with the proposed development in place, a Picady analysis was conducted.

7.3.2 Picady is a computer programme designed to assess the ratio of flow to capacity for priority-controlled junctions. As recommended by the TII: *Project Appraisal Guidelines* (PAG), the Institution of Highways & Transportation, and the Transport Research Laboratory (TRL), the computer modelling program PICADY (Priority Intersection Capacity and Delay) has been used for the assessment of major/minor priority junctions on the local road network.



- 7.3.3 In general terms this program operates on the gap acceptance theory. The output of PICADY provides information for roads designers and planners with regards to capacity, queuing and delay.
- 7.3.4 The program is intended primarily as a means of assessing junction performance and can also be used as an aid in junction design. Generally a level of saturation of 85-90% corresponding to a Ratio of Flow to Capacity (RFC) of 0.85 – 0.9 is accepted at priority junctions in urban areas, however as with the other programs this figure should not be considered in isolation during the peak hour period and should be viewed together with queuing and delay information.
- 7.3.5 The traffic flows and turning movements for the proposed upgraded access junction on Leopardstown Road, as inputted into Picady, are shown in Figures 7.2 and 7.3. These include the AM and PM periods with the proposed development in place and fully occupied.

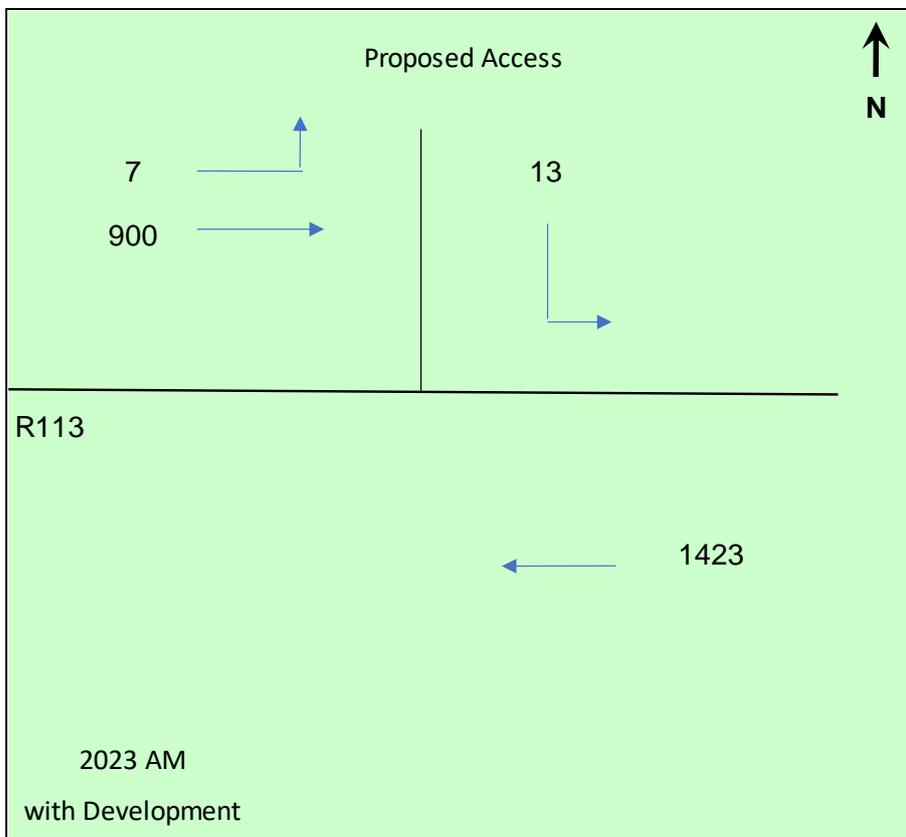


Figure 7.2: 2023 Traffic Flows for Leopardstown Road Access with Development in place - AM Peak Hour

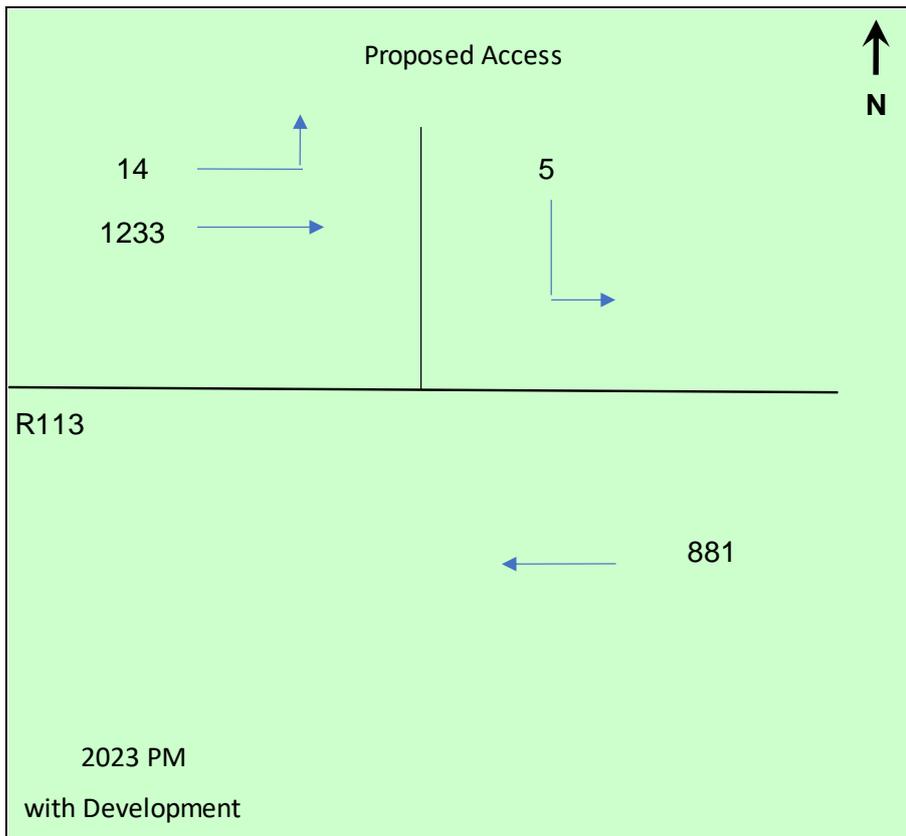


Figure 7.3: 2023 Traffic Flows for Leopardstown Road Access with Development in place - PM Peak Hour

- 7.3.6 A left in left out only priority junction off Leopardstown Road was included in the ILTP Picady model, with total width of 5.5m assumed for the development access road.
- 7.3.7 The results of the PICADY Assessment are shown in Tables 7.1 and 7.2.

Table 7.1: PICADY Analysis for Preferred Vehicular Access Arrangement on Leopardstown Road - AM Peak Hour

Segment	Stream	Demand	Capacity	RFC	Start Queue	End Queue	Delay	Mean Arriving Vehicle Delay (min)
08:00-09:00	B-AC	0.21	6.19	0.034	0.03	0.03	0.5	0.17
	C-AB	0	5.82	0	0	0	0	0
	C-A	23.71	-	-	-	-	-	-
	A-B	0.12	-	-	-	-	-	-
	A-C	14.99	-	-	-	-	-	-



Table 7.2: PICADY Analysis for Preferred Vehicular Access Arrangement on Leopardstown Road - PM Peak Hour

Segment	Stream	Demand	Capacity	RFC	Start Queue	End Queue	Delay	Mean Arriving Vehicle Delay (min)
17:00-18:00	B-AC	0.08	4.75	0.017	0.02	0.02	0.3	0.21
	C-AB	0	4.45	0	0	0	0	0
	C-A	14.67	-	-	-	-	-	-
	A-B	0.23	-	-	-	-	-	-
	A-C	20.55	-	-	-	-	-	-

7.3.8 The full PICADY model input and output records are included in **Appendix B**.

7.3.9 The PICADY results for the junction show that the proposed access junction on Leopardstown Road will operate well within capacity with the peak hour development traffic in place, with the maximum Ratio of Flow to Capacity equal to 0.036.

7.3.10 This confirms the proposed access has more than adequate capacity for the proposed development.

7.4 LINSIG Signalised Junction Analysis –Existing Signalised Junction on Brewery Road

7.4.1 A LINSIG Traffic Modelling software analysis was conducted to assess the capacity of the existing signalised junction on Brewery Road.

7.4.2 The LinSig Model is based on the 1-hour time periods for the morning and evening peak traffic hours, and presents an optimised solution for the network. The ILTP LinSig model for the Brewery Road / Silverpines / Woodford junction is shown in Figure 7.4.

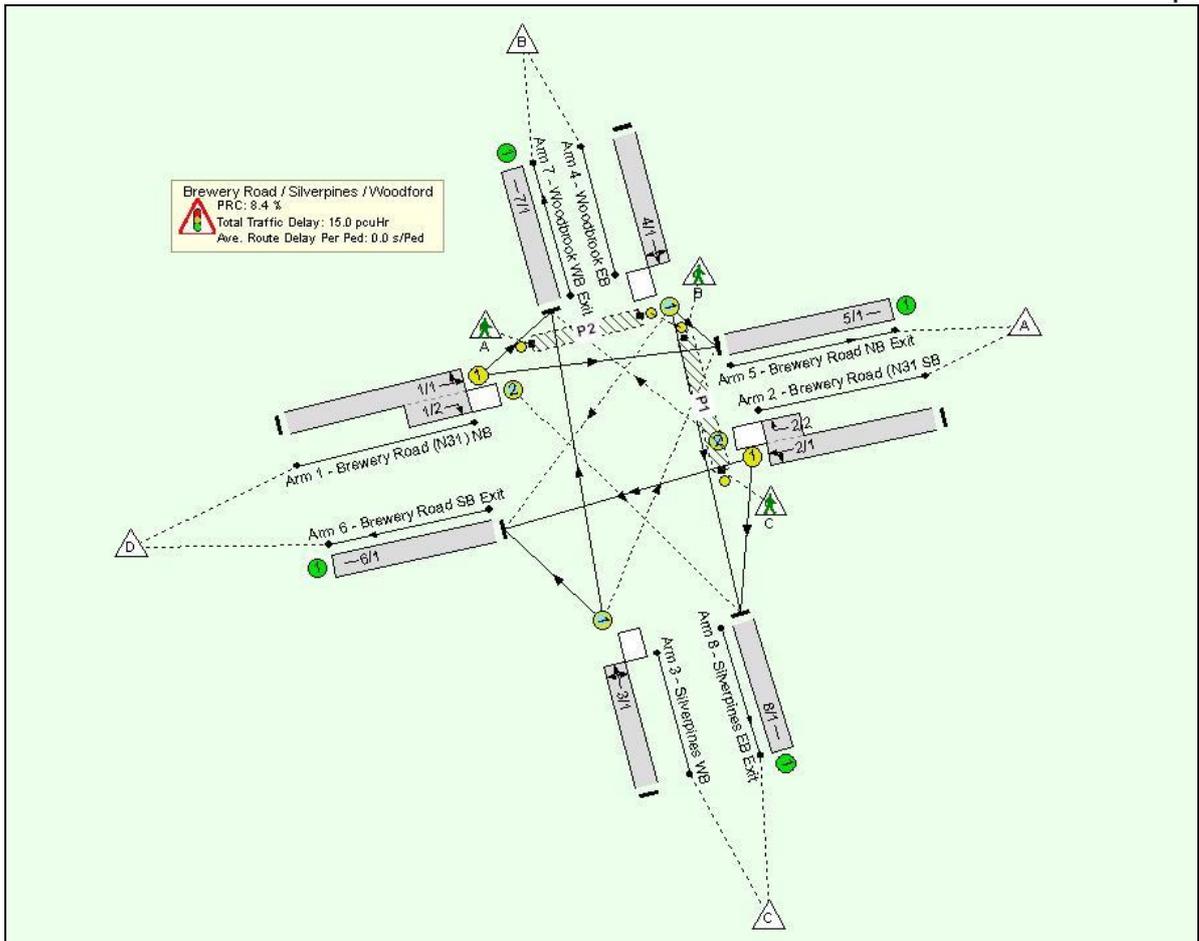
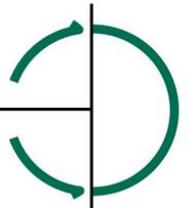


Figure 7.4: LinSig model of Brewery Road / Silverpines / Woodford junction

7.4.3 The Opening year traffic volume inputs into LinSig with the development in place are shown in Figures 7.5 and to 7.6 for both the Preferred Vehicular Access Strategy and Alternative Access Option 2. These include the AM and PM periods with the proposed development in place and fully occupied.

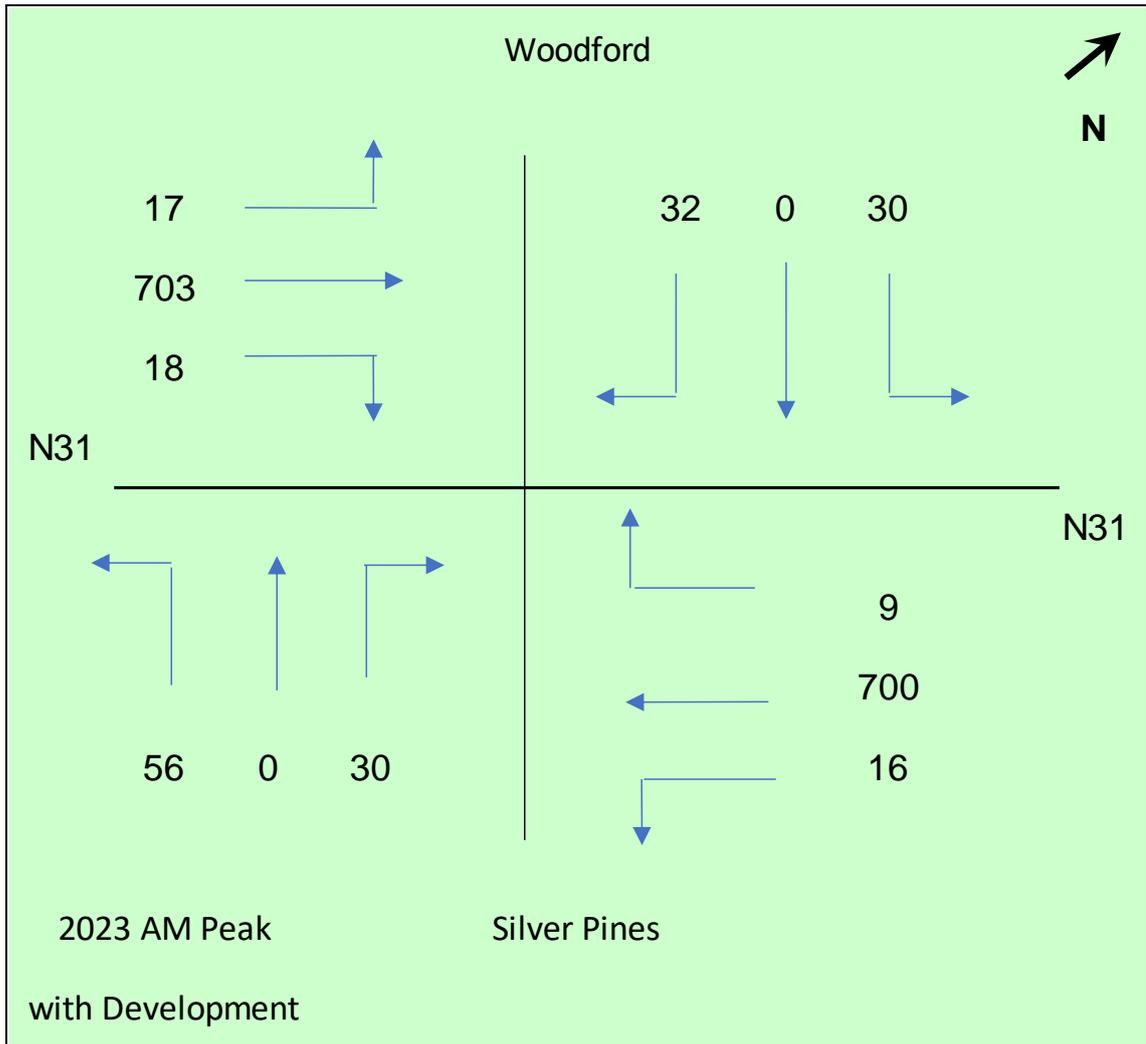
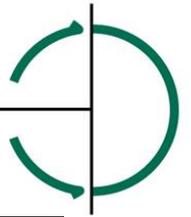


Figure 7.5: 2023 Traffic Flows for Brewery Road Access Junction with Development in place - AM Peak Hour

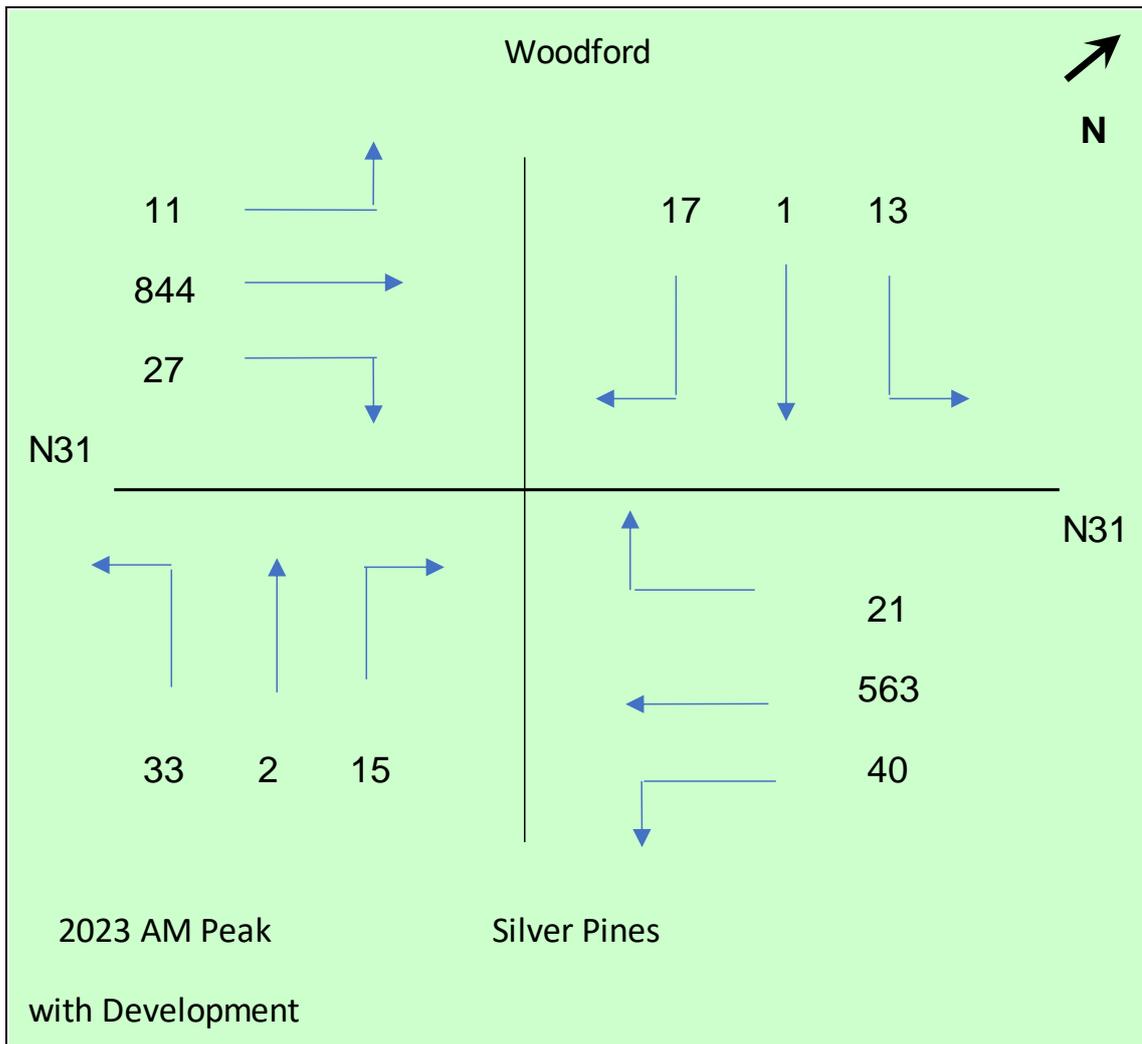


Figure 7.6: 2023 Traffic Flows for Brewery Road Access Junction with Development in place - PM Peak Hour

- 7.4.4 The results of the various scenarios modelled in LinSig are presented in Table 7.3 in terms of Degree of Saturation, which for an urban signalised junction should be below 90%. Values over 90% are typically regarded as experiencing occasional traffic congestion, with queues of vehicles beginning to form. It should be noted that at many urban junctions the Degree of Saturation exceeds 100% for a portion of the peak period.
- 7.4.5 The extent and duration of the queues which form as a result are managed, to minimise interference spreading through the network. To this end the control of multiple signalised junctions by specialist controller software such as SCATS is used. The existing Brewery Road / Silverpines junction modelled is operated by Dublin City Council (DCC), on behalf of DLRCC, using this SCATS system setting. Traffic signals are often set in favour of main roads, with side roads given minimum green time, which is in effect in the current junction arrangement.

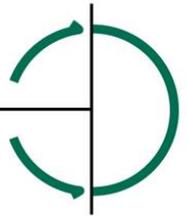


Table 7.3: LinSig Traffic Model Output Results for Existing Brewery Road Junction

Scenario		Degree of Saturation per Arm (%)			
		Brewery Road Northbound	Brewery Road Southbound	Silverpines	Woodford
Base Year 2019	AM	56.0	57.4	17.1	35.2
	PM	66.4	48.6	14.2	17.8
Opening Year 2023, no Development	AM	60.0	61.5	18.3	38.3
	PM	71.2	52.0	14.7	19.1
Opening Year 2023 for Preferred Vehicular Access Strategy	AM	60.6	62.5	51.4	44.3
	PM	72.3	53.9	29.9	19.1

- 7.4.6 The LINSIG results show that the existing Brewery Road junction will operate well within capacity with the peak hour development traffic in place. This confirms the existing junction on Brewery Road has more than adequate capacity for the proposed development. The largest increase in degree of saturation was shown to occur in Silverpines arm of the junction if no changes were made to the existing traffic signal phasing. However, the overall junction performs to operates well within its overall capacity with the proposed development in place.
- 7.4.7 A sensitivity test was also undertaken that allowed for additional green time allocation to Silverpines arm of the signalised junction and the results illustrated in Table 7.4. This show that if desired additional green time could be allocated to Silverpines. The results also show that even with this reallocation of green time the overall junction continues to perform well within capacity.



Table 7.4: LinSig Traffic Model Output Results Sensitivity Test

Scenario		Degree of Saturation per Arm (%)			
		Brewery Road Northbound	Brewery Road Southbound	Silverpines	Woodford
Base Year 2019	AM	59.2	60.8	12.4	25.6
	PM	70.2	51.4	10.3	13.0
Opening Year 2023, no Development	AM	63.5	65.1	13.3	27.9
	PM	75.3	55.0	10.7	13.9
Opening Year 2023 for Preferred Vehicular Access Strategy	AM	64.1	66.2	36.6	30.8
	PM	76.5	57.1	21.3	13.9

7.5 Summary Findings

- 7.5.1 This traffic modelling assessment verifies that both the proposed access off Leopardstown Road and existing signalised junction on Brewery Road have sufficient spare capacity to cater for the proposed development.
- 7.5.2 This robust assessment assumes conservative trip generation figures for the proposed development and confirms that the adjoining road network can readily accommodate the projected development traffic at both the 2023 proposed opening year and at the 2038 design year. It is further noted that if current Government mode share targets are met then reductions in background traffic can be expected in the medium term in line with a greater shift to more sustainable modes of transport.
- 7.5.3 This traffic modelling assessment verifies that both the proposed access off Leopardstown Road and existing signalised junction on Brewery Road have sufficient spare capacity to cater for the additional trips projected for the proposed development.



8 CAR AND CYCLE PARKING ASSESSMENT

8.1 Introduction and Background.

8.1.1 The car parking provision for the proposed development will be guided by relevant car parking and policy documents, which include in particular:

- *Dun Laoghaire Rathdown County Council Development Plan 2016 - 2022*
- *The Sustainable Urban Housing: Design Standards for New Apartments Guidelines,*
- *Wider transport and sustainability policies for the GDA (Greater Dublin Area)*

8.1.2 In addition, the proposed car parking provision depends on various key factors, which are addressed elsewhere in this document.

8.1.3 In the Board's Opinion (Case Ref: ABP-307355-20) issued post the SHD tri-partite pre-planning consultation meeting the issue of the justification of car parking proposals was raised under specific information request number 1, which states:

1. *"A Traffic and Transport Assessment including, inter alia, a rationale for the proposed car parking provision should be prepared, to include details of car parking management, car share scheme and a mobility management plan."*

8.1.4 The following sets out the car parking rationale for the proposed development, car share scheme and the management of same are set out below. The MMP (Mobility Management Plans) is included as a separate chapter in this report.

8.2 Review of DLRCC Car Parking Standards

8.2.1 The current DLRCC Development Plan includes the parking standards for the currently proposed development. From the outset it should be noted that these are maximum possible standards.

8.2.2 For apartments, Table 8.2.3 of the CDP Parking Standards includes a maximum provision of 1 no. car parking space per 1-bed apartment, 1.5 no. car parking spaces per 2-bed apartment and 2 no. car parking spaces per 3-bed+ apartment.

8.2.3 For houses, Table 8.2.3 of the CDP includes a maximum of 1 no. car parking space per 1-bed house and per 2-bed house, and a maximum of 2 no. car parking spaces per 3-bed+ house.

8.2.4 The relevant extract of Table 8.2.3 of the CDP relating to Residential land-use is shown in Figure 5.1 below. The CDP standards shown below include for both resident and visitor use.



Table 8.2.3: Residential Land Use - Car Parking Standards	
Land use	Standards
Residential Dwelling	1 space per 1-bed unit and per 2-bed unit 2 spaces per 3-bed unit+ (depending on design and location).
Apartments, Flats, Sheltered housing	1 space per 1-bed unit 1.5 spaces per 2-bed unit 2 spaces per 3-bed unit+ (depending on design and location)

Figure 8.1: Maximum Car Parking Standard for Residential Land-Use (Source: *Dun Laoghaire Rathdown County Development Plan 2016 - 2022*)

8.3 Review of 2020 Apartment Guidelines

8.3.1 The *Sustainable Urban Housing: Design Standards for New Apartments* guidelines, published in 2018 and update in 2020, includes recommendations for provision of car and cycle parking for apartments depending on the urban location of the proposed development. These guidelines were issued post the CDP publication to support the delivery of sustainable residential development. Proposed residential developments in urban locations are defined and described in the guidelines as follows:

1) “Central and/or Accessible Urban Locations

Such locations are generally suitable for small- to large-scale (will vary subject to location) and higher density development (will also vary), that may wholly comprise apartments, including:

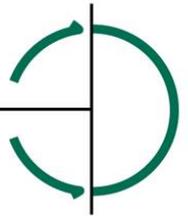
- *Sites within walking distance (i.e. up to 15 minutes or 1,000-1,500m), of principal city centres, or significant employment locations, that may include hospitals and third-level institutions;*
- *Sites within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m) to/from high capacity urban public transport stops (such as DART or Luas); and*
- *Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) to/from high frequency (i.e. min 10 minute peak hour frequency) urban bus services.*

The range of locations outlined above is not exhaustive and will require local assessment that further considers these and other relevant planning factors.

2) Intermediate Urban Locations

Such locations are generally suitable for smaller-scale (will vary subject to location), higher density development that may wholly comprise apartments, or alternatively, medium-high density residential development of any scale that includes apartments to some extent (will also vary, but broadly >45 dwellings per hectare net) including:

- *Sites within or close to i.e. within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m), of principal town or suburban centres or employment locations, that may include hospitals and third level institutions;*



- Sites within walking distance (i.e. between 10-15 minutes or 1,000-1,500m) of high capacity urban public transport stops (such as DART, commuter rail or Luas) or within reasonable walking distance (i.e. between 5-10 minutes or up to 1,000m) of high frequency (i.e. min 10 minute peak hour frequency) urban bus services or where such services can be provided;
- Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) of reasonably frequent (min 15 minute peak hour frequency) urban bus services.

The range of locations is not exhaustive and will require local assessment that further considers these and other relevant planning factors.

3) Peripheral and/or Less Accessible Urban Locations

Such locations are generally suitable for limited, very small-scale (will vary subject to location), higher density development that may wholly comprise apartments, or residential development of any scale that will include a minority of apartments at low-medium densities (will also vary, but broadly <45 dwellings per hectare net), including:

- Sites in suburban development areas that do not meet proximity or accessibility criteria;
- Sites in small towns or villages.

The range of locations outlined above is not exhaustive and will require local assessment that further considers these and other relevant planning factors.”

8.3.2 For these classifications, the Apartment Guidelines recommend the following approach to car parking provision:

“Central and/or Accessible Urban Locations:

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

Intermediate Urban Locations:

In suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard.

Peripheral and/or Less Accessible Urban Locations:

As a benchmark guideline for apartments in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments, should generally be required.”



8.3.3 The proposed development at St. Joseph's House and Adjoining Properties is located in close proximity to the following public transport services:

- Less than a 10-minute walk from Luas Green Line Sandyford and Central Park Stops: Services at 4-minute intervals during peak hour periods
- Less than a 10-minute walk from a number of Dublin Bus Routes on Leopardstown Road and Brewery Road.

8.3.4 Given the location of the proposed development to the south of Dublin City centre, the services and facilities in the area, and the short walking distance to frequent Luas services and reasonably frequent bus services it is considered that the subject site lies within an Intermediate Urban Location.

8.3.5 Based on the proposed development's Accessible Urban location the Apartment Guidelines recommends the following relating to the proposed development at St. Joseph's House and Adjoining Properties:

"Planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard."

8.3.6 A reduced car parking standard for the proposed development below DLRCC development maximum standards which also meets the needs of the development is therefore considered both desirable and necessary at this location.

8.4 Other Factors Influencing Proposed Car Parking Provision

8.4.1 In addition to the relevant policy documents, the proposed car parking provision depends on various other factors, which include:

- Range of residential types to be included –
- Other management initiatives and controls that reduces the need to travel
- Walk and Cycle permeability and connectivity to and from key local attractors
- Access to Public Transport
- Control of overspill parking to adjacent residential areas

8.5 Data from Comparable Completed Apartment Development

8.5.1 ILTP also examined areas where low car ownership existing in 2016 using the CSO data along the LUAS line in DLR.

8.5.2 ILTP have examined relevant Small Areas (SAs) within the area of the development to help determine the appropriate car parking for the residential element of the proposed development.

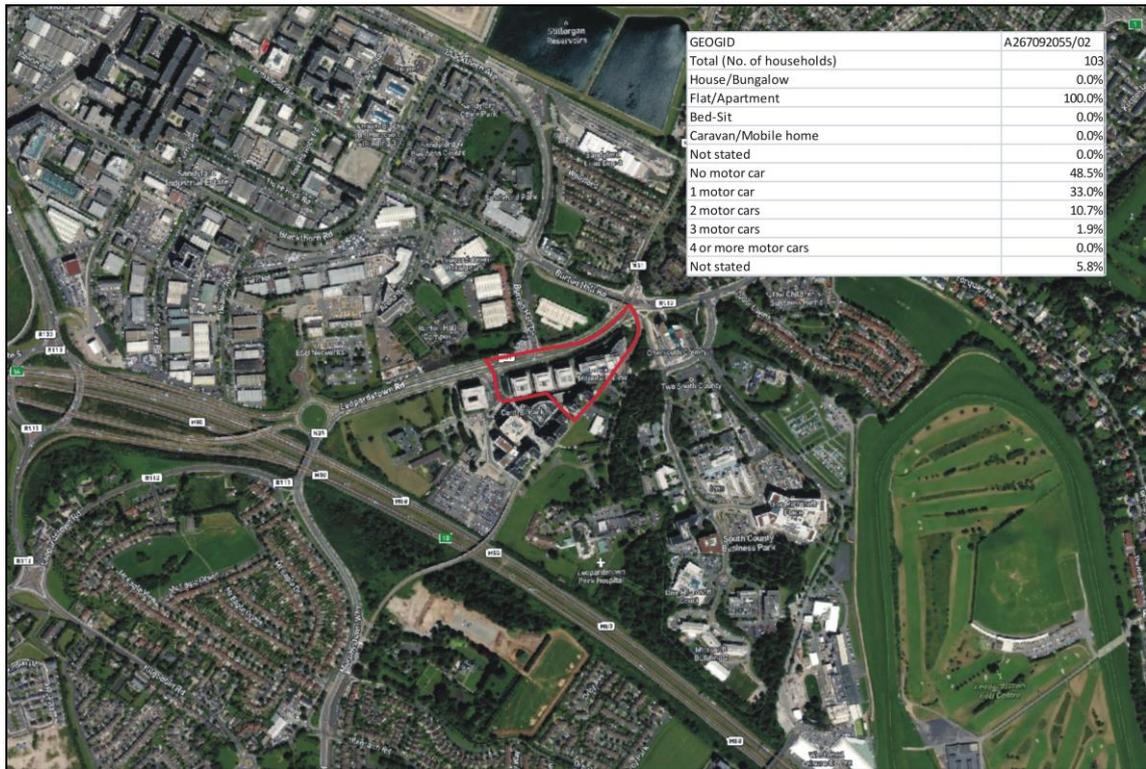


Figure 8.1: Small Area Data from Central Park

- 8.5.3 The nearby Central Park CSO data shows that in 2016, 48% of household did not have a car, which is in close proximity to the proposed development.
- 8.5.4 The results show that high levels of non-car available households can be achieved and furthermore this target could be possibly increased and delivered at other locations well served by public transport. In addition the Apartment Guideline 2020 and wider transport policies since the CSO census would strongly indicate that a level of car parking provision of below this figure is both desirable and achievable in the location of the proposed development.

8.6 Proposed Car Parking Allocation

- 8.6.1 Based on the Apartment Guidelines 2020 and our assessment of a comparator development in the area, Table 8.1 shows a breakdown of the proposed car parking provision for each specific land use.

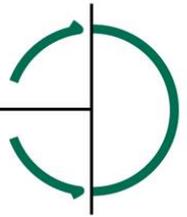


Table 8.1 Development – Proposed Car Parking Provision for each Land Use

PROPOSED CAR PARKING PROVISION		
Land Use	Level	Spaces Provided
Residential		
St Joseph's House	Surface	5
Blocks A/B/C/D/F	Basement	206
Visitor Spaces	Basement	26
Car Sharing Club	Surface	10
Residential Total		247
Creche		
St Joseph's House Creche Staff	Surface	6
St Joseph's House Creche visitor	Surface	3
Creche Total		9
Retail		
Commercial Unit	Surface	3
Overall Total Car Parking		259

PROPOSED CYCLE PARKING PROVISION		
Land Use	Level	Spaces Provided
Residential		
Blocks A/B/C/D/F	Basement	816
Blocks A/B/C/D/F/E Short Stay	Surface	138
Residential Total		954
Creche		
St Joseph's House Creche Staff (6no) Surface 6	Surface	6
St Joseph's House Creche visitor (38kids) Surface 8	Surface	8
Creche Total		14
Overall Total Cycle Parking		968

8.6.2 A ratio of approximately 0.56 car parking spaces to every residential unit is recommended for this development. This equates to a total car parking provision of 259 no. car parking spaces, of which 232 no. spaces will be at basement level and 27 no. spaces will be at ground level.



- 8.6.3 Of the car parking spaces assigned to the proposed development:
- 211 dedicated car parking spaces are allocated to the residents, which equates to a ratio of 0.46 per apartment.
 - 26 no. spaces will be reserved for visitor car parking.
 - 6 no. spaces will be assigned for Crèche Staff parking
 - 3 no. spaces will be provided for Crèche drop off.
 - 3 no. spaces will be provided for staff of the café.
 - 10 no. car parking spaces will be allocated as spaces for car sharing clubs (4% of overall provision).
 - 4% of the overall car parking provision will be reserved as dedicated mobility impaired spaces.
 - A minimum 10% of spaces will have electric vehicle charging points assigned as per DLRCC requirements.
 - Motorcycle parking will also be provided within the development.
- 8.6.4 Given the location of the proposed development, adjacent to high intensity employment and the excellent public transport and cycle route serving the development coupled with the Government's Apartment Guidelines a car to apartment ratio of 0.46 is considered appropriate. In addition, visitor car parking, GoCar and disabled car parking will be provided. It is also proposed to provide at surface level 6 no. car parking spaces for staff working in the crèche plus an additional 3 no. drop off spaces. The 6 no. staff spaces meet the CDP car parking standards. However, given the location of the development and its proximity to public transport services this is more than adequate to meet the staff needs of the development.
- 8.6.5 Given that the crèche is proposed to mainly facilitate residents of the proposed development most will be dropped off at the crèche on foot. Therefore the 3 no. drop off spaces proposed should be more than adequate to accommodate any external drop off demand.
- 8.6.6 The proposed café element is intended to serve local needs only and those who walk or cycle through the proposed development. Two spaces are proposed for the café staff, which will be located in the basement.
- 8.6.7 A minimum of 3% of the total parking allocation can be allocated for disabled access parking and this will be allocated by the Management Company on an 'as-needs' basis to ensure that the needs for specialised car parking will be adequately provided for.
- 8.6.8 The Development can include provision for an appropriate level of electric car charge points at basement level to enable those residents who own electric cars to charge them overnight. However, it is also intended to allow for the future upgrading of all car parking to be Electric Vehicle (EV) powered to accommodate the growing numbers of EVs over time.
- 8.6.9 In addition, a Car Club or 'Go Car' type facility is also included in order to reduce the need for car ownership whilst making cars available for residents to meet periodic car needs. The Car Share Club facility, exclusively for residential use would be operated and controlled by the Management Company.
- 8.6.10 It is considered that given the specified uses within the proposed development this is appropriate car parking provision and is consistent with current housing policy and standards.

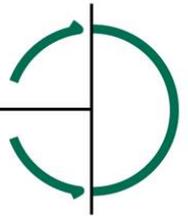


8.7 Outline Car Parking Management Plan

- 8.7.1 A car parking management strategy will be prepared and agreed with the planning authority in advance of the occupation of the proposed development and will be operated by the Management Company to ensure that those most in need of a car parking space will be prioritised. The disabled space will be allocated on a needs basis to ensure that those with disability and need the use of a car will be prioritised. The car parking for the non-residential elements is set out in Table 8.1.
- 8.7.2 For the residential element the following general car parking ratios are proposed per unit, but can be refined in the car park management strategy to reflect the optimal requirement of residents at occupation stage:
- It is proposed to allocate 0.2 space per studio apartment.
 - It is proposed to allocate a ratio of 0.5 for 1 or 2 bed apartments.
 - It is proposed to allocate 1 space per 3 bed apartment.
- 8.7.3 In addition, 2 no. public car share facility (such as GoCars) spaces will be provided at the surface, which will also be available to the wider community.
- 8.7.4 In addition, the Management Company will operate its own Car Share Club for residents of the proposed development. This will provide for a range of vehicle types (all electric powered), for occasional use by residents of the proposed development. It is anticipated that up to 8 vehicle types would be provided by the Management Company, which would be leased on an at-cost basis to those residents who had an occasional need to use a car and wished to participate in the scheme.
- 8.7.5 The Car Parking Management Plan will be agreed with the planning authority in advance of the occupation of the development and be subject to periodic reviews.

8.8 Cycle Parking Allocation

- 8.8.1 The required cycle parking provision was also determined with regard to current DLR Development Plan Standards and more specifically to the Apartment Guidelines that recommend 1 space per bedroom be provided. It is proposed to provide 968 no. cycle parking spaces (816 no. at basement level) and 152 no. at ground level). 100 no. of these cycle parking spaces are proposed to be dedicated short stay spaces for visitors to the development.
- 8.8.2 The proposed cycle car parking exceeds the DLR requirement and are in accordance with the Apartment Guideline 2020 requirement. The layout and location of the proposed cycle parking within the proposed development and the access arrangement are described in more detail later in the report.



9 PROPOSED ACCESS TO DEVELOPMENT

9.1 Introduction

9.1.1 The proposed access to the development is the same as that permitted by the Board for planning application (reg. ref PL06D.249248). Access will be via Silver Pines and via the existing vehicular entrance to "Annaghkeen" on the Leopardstown Road. However, the access arrangements are also included as part of this SHD application to the Board.

9.2 Access off Leopardstown Road

9.2.1 The access off Leopardstown Road has been developed following consultation with DLR. This will require the relocation of the existing bus stop, as is shown in Figure 9.1.

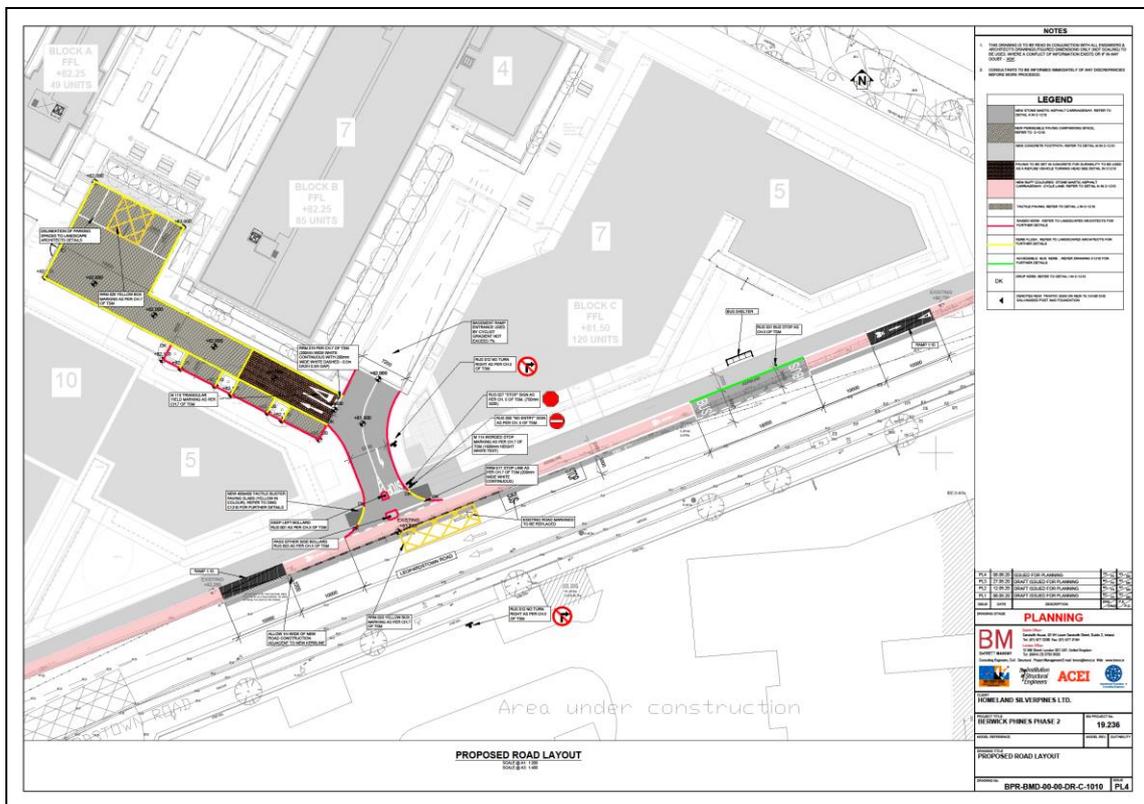


Figure 9.1: Leopardstown Road Access with Bus Stop Relocated

9.2.2 The proposed access layout shows a left in left out movement off Leopardstown Road, which also includes for the possible provision of bus shelter on Leopardstown Road. The proposed bus shelter can be included by way of a planning condition if required by the planning authority or alternatively excluded from the proposed scheme. If the proposed bus shelter is included then same will need to be Taken – In – Charge by the planning authority.

9.3 Proposed Access Layout on Brewery Road

9.3.1 In addition, to an upgraded access on Leopardstown Road, it is proposed that the site also has vehicular access from Brewery Road via the existing Silverpines Residential Estate.



9.3.2 The existing access road through the Silverpines residential estate currently accommodates trips to and from St. Joseph's House, which are predominantly car trips and also delivery vans and minibuses.

9.3.3 The additional trips from the proposed development, would be readily accommodated along the access road from the Brewery Road junction and through the Silverpines residential estate.

9.4 Additional Pedestrian / Cyclist Accesses

9.4.1 The proposed residential development adjoins a greenway, which will be beneficial in enhancing permeability. A link between the proposed development and greenway are proposed as well as a number of other links to the wider area as shown in Figure 9.2. These links will allow direct access for residents to the greenway, which would further increase the use of the greenway and would also reduce walk and cycle distance to the LUAS station.

9.4.2 The internal layout is also permeable for pedestrian and cyclists and integrated into the landscape plans. This will also allow for non-residents to travel through the proposed development further increasing overall permeability and increasing passive surveillance. Pedestrian and cycle access points are shown in Figure 9.2.

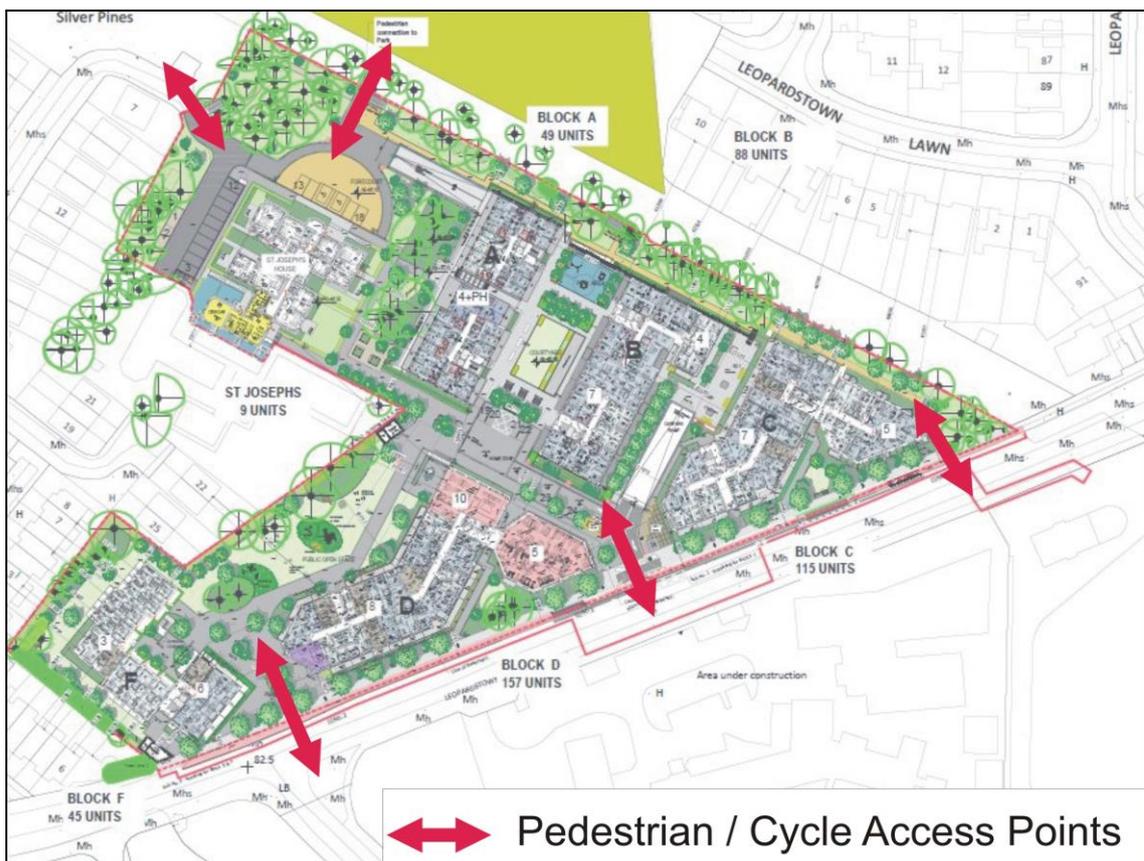


Figure 9.2: Pedestrian and Cycle Access Points



9.5 Cycle parking Layout, Distribution and Access

9.5.1 The overall cycle parking proposed exceeds the DLR requirement and is in accordance with the Apartment Guidelines 2020. In respect to the design, location and access to the cycle parking facilities the following strategy was deployed to ensure that the designs conform with best practice.

- The proposed development links the cycle provision to the Greenway and cycle route along Leopardstown Road, giving excellent connectivity to the LUAS stops and major employment areas.
- There are four main external access points for cyclists to the proposed development to further encourage cycle use.
- Internally the site is designed to allow permeability for walkers and cyclists, meaning that these modes of travel can directly access to the wider cycle and pedestrian networks in the area in the desired direction of travel.
- Access to the basement cycle provision is designed to provide a number of access points that will also cater for all ranges of cycle users and abilities. These are summarised as follows:
 1. *Both the basement and surface cycle parking is appropriately distributed throughout the development to allow for easy access to cycle parking and storage*
 2. *A dedicated cycle lift is provided in the vicinity of Blocks D & F which provides segregated cycle access to the basement cycle facilities.*
 3. *The shallow access ramps provide to the basement can also facilitate cycle access, which will be shared with a very low level of slow-moving traffic.*
 4. *The main lift cores to the development can also provide cycle access for smaller (child) or foldable bikes.*
- Details of the location of basement parking provision is shown on architect's drawings.

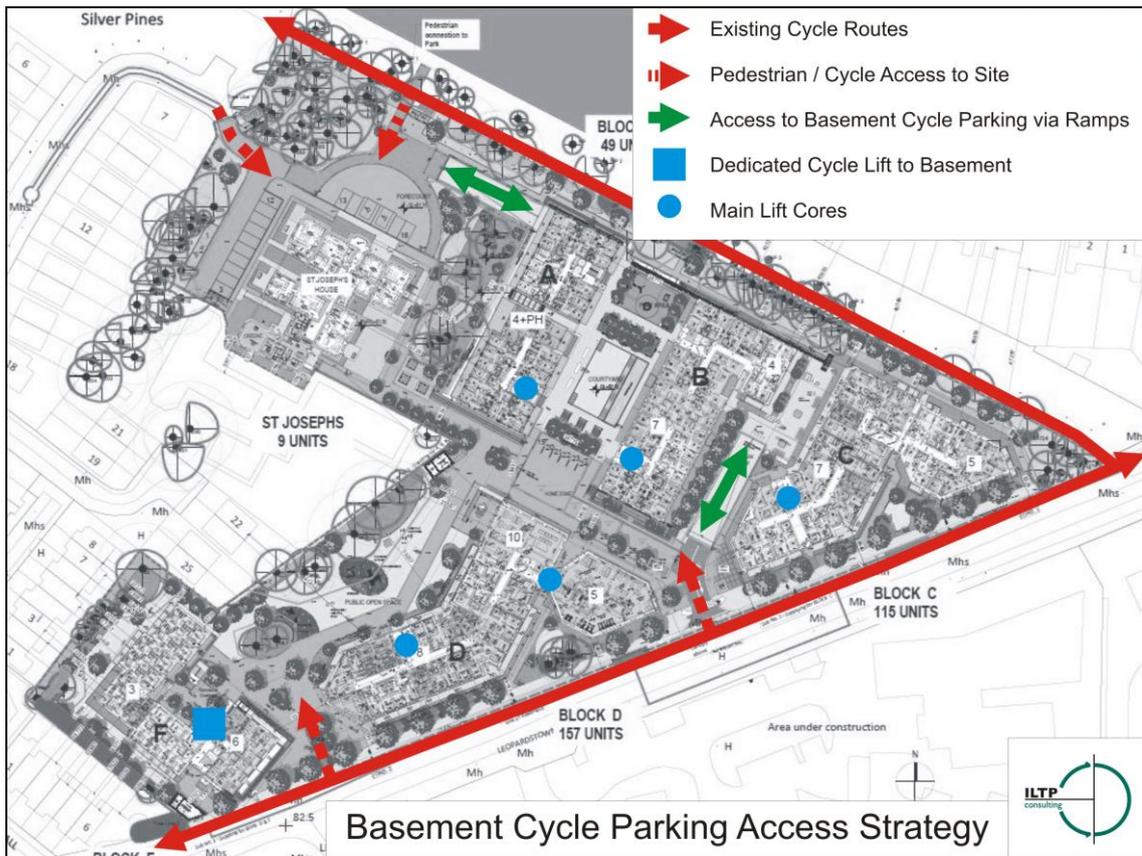


Figure 9.3: Pedestrian and Cycle Access Strategy

9.5.2 Overall the cycle and access provisions as illustrated in Figure 9.3 have been very carefully designed to include excellent cycle parking provision, a range of access options to the basement cycle parking along with internal cycle permeability and accesses to the wider cycle network. In addition the cycle parking, both at surface and in the basement area, is distributed throughout the proposed development to ensure that residents and visitors to the proposed development can find an appropriate and convenient cycle parking location within the development. The cycle parking provision layout and access arrangements thus maximise the promotion of cycle as a desirable and convenient mode of travel.



10 CONSTRUCTION TRAFFIC AND TRANSPORT ASSESSMENT

10.1 Construction Activity

10.1.1 The impacts associated with the construction phase of the proposed development have been assessed in this section.

10.1.2 It is anticipated that, subject to grant of planning permission, construction will start in 2022, and the development will be fully completed by end of 2023.

10.1.3 The works will be phased in such a way as to allow the road network to remain open with existing capacity maintained at all times.

10.1.4 Construction traffic will access the site from Leopardstown Road with no construction traffic allowed to use the Silverpines Residential Estate. Based on the quantities of excavation and fill to be moved to or from the site, construction waste removal, and general site deliveries for the intended construction works, HGV traffic is estimated to be a maximum of 10 movements per hour based on the information as set out in the Construction Environmental Management Plan (CEMP).

10.1.5 It is projected that the works will result in approximately 40 to 60 construction workers on site during typical construction period, with a maximum of 150 construction personnel on site concurrently during short period of peak activity. Given typical construction working hours the majority of these personnel are expected to arrive to site in advance of the 08:00 – 09:00 morning peak hour and after the 17:00 - 18:00 evening peak hour periods.

10.1.6 Some construction workers will arrive by public transport. In addition, many construction workers come to site in groups by car or van. Vehicular movements carrying construction personnel can be broken down as follows:

- 150 peak staff working on site (Max)
- 50% arrive during AM Peak 75
- 30% arrive via public transport -22.5
- Total via car/van 52.5
- Average Car Occupancy = 2.2 (including driver) 2.2
- Maximum additional movements AM Peak (150 staff) **24 cars/vans**
- With 50 staff normally on site
- Normal additional movements AM Peak (50 staff) **8 cars/vans**

10.1.7 This volume of construction traffic during peak traffic hours is lower than the peak volumes projected for the operational phase of the development and therefore construction related traffic will have no material impact on existing levels of traffic on the surrounding road network.

10.2 Construction Traffic Mitigation Measures

10.2.1 Tracked excavators will be moved to and from the site on low-loaders and will not be permitted to drive onto the adjacent roadway.

10.2.2 Dust and dirt will be controlled on adjacent roads by road sweeping when necessary and use of a drive-through for HGVs.

10.2.3 The applicant is committed to implementing sustainable construction practices and as such will be seeking to reduce the quantities of waste material being carried off the site to a minimum.



10.2.4 A site liaison officer will be identified as a single contact point for the planning authority and local community to deal with any issues that may arise in a prompt and efficient manner.

10.2.5 Construction personnel will be provided with parking within the limits of the construction site.

10.3 Proposed Haul Route for Construction Traffic

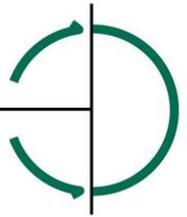
10.3.1 A detailed Construction Traffic Management Plan will be prepared and submitted to the planning authority prior to commencement of construction of the regeneration.

10.3.2 Various route proposals were assessed for accessing the site, however, it was decided that the route with the least impact on the adjoining road network would be the most prudent, as it would reduce conflict with other vehicles. In particular the avoidance of use of the local road network was prioritised.

10.3.3 The proposed route for HGVs movements during the construction period is the R113 Leopardstown Road. The primary R113 Leopardstown Road route will be used for most HGV movements to facilitate construction traffic movement to and from the M50 and Port Tunnel. Therefore, no construction traffic will access the site through Silverpines. The proposed haul route is shown in Figure 10.1.



Figure 10.1: Proposed Haul Route

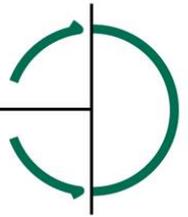


10.4 Traffic Management Plan

- 10.4.1 As part of the construction works the appointed contractor shall prepare a Construction Traffic Management Plan which will outline their approach to the project and detail potential impacts for the public road system. This may include provision of transport facilities and the encouragement of car sharing by construction personnel. It will also include measures to mitigate any potential noise and air quality impacts resulting from construction activities, namely from traffic movements in and out of the site.
- 10.4.2 A more detailed Traffic Management Plan will be prepared and agreed with the Transportation Department of Dun Laoghaire-Rathdown County Council in advance of the commencement of development to provide for mitigation of the impact of construction traffic associated with the proposed development. The Traffic Management Plan will provide for the following additional matters where required:
1. The applicant shall be responsible for and make good any damages to existing roads or footpaths caused by his own contractors or suppliers transporting to and from the site.
 2. The applicant shall at all times keep all public and private roads and footpaths entirely free of excavated materials, debris and rubbish, undertake road sweeping and thoroughly clean all wheels and arches of all vehicles as they leave the site.
 3. The contractor shall confine his activities to the area of the site occupied by the works and the builders' compound, as far as practicably possible, during any particular phase of the works.
 4. Properly designed and designated access and egress points to the construction site will be used to minimise impact on external traffic.
 5. Banksman and/or traffic lights will be used to control the exit of construction vehicles from the site onto the public road, if required.
 6. Establishment and maintenance of a HGV holding area within the site.

10.5 Summary of Construction Traffic and Transport Assessment

- 10.5.1 The overall level of traffic generated by the construction works will be low. A construction traffic management plan will be implemented to ensure the existing road network continues to operate throughout the construction process.
- 10.5.2 The construction traffic will not have a negative impact on the local road network and will be directed via designated construction traffic routes with access off Leopardstown Road only for construction traffic. The proposed construction phasing and traffic management plan will help minimise impact on local residents in Silverpines and ensure that Leopardstown Road and the adjoining road network remain operational at all times.



11 MOBILITY MANAGEMENT

11.1 Introduction

11.1.1 A Mobility Management Plan (MMP) is a wide range of policies, programmes, services and products that influence how, why, when & where people travel to make travel behaviour more sustainable.

11.1.2 Figure 11.1 represent graphically the interlinking approaches and strategies utilised in the preparation of Mobility Management Plan. Within this MMP we have sought to consider transportation demand, transportation supply and land use.

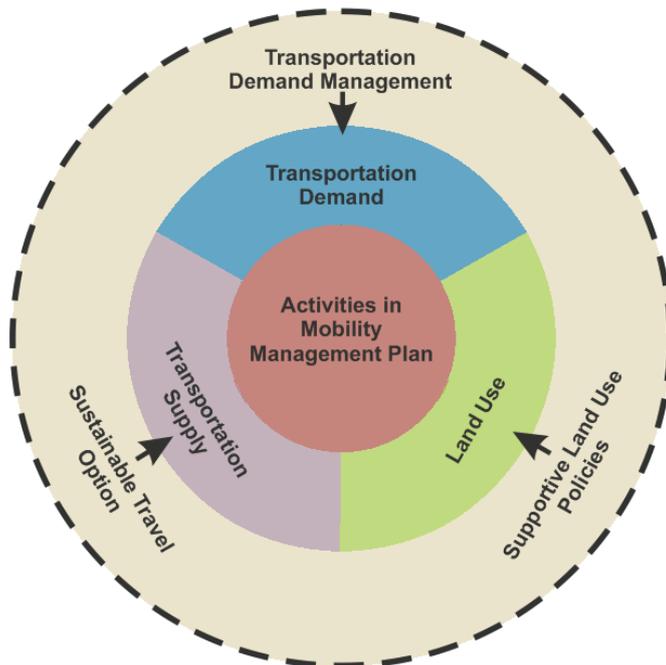


Figure 11.1: Mobility Management Plan Strategies

11.1.3 Mobility Management can be described, as a transport demand management mechanism that seeks to provide for the transportation needs of people and goods. It can be applied as a strategic demand management tool or as a site-specific tool measure. The aim is to reduce the demand for and use of cars by increasing the attractiveness and practicality of other modes of transport. Mobility Management encourages individuals, companies or institutions to satisfy their transport needs by the efficient and integrated use of available transport facilities.

11.1.4 The UK Dept of Transport has produced a document entitled '*Making residential travel plans work – guidelines for new development*.' This document has guided the preparation and drafting of this MMP strategy. In addition the DTO guideline document "*Route to Sustainable Commuting: an Employer's guide to travel plans*" and "*A Sustainable Transport Future*" produced by the Department of Transport have influenced the preparation of this MMP.

11.1.5 The use of MMP is an important element in meeting targets set down in the *Smarter Travel A Sustainable Transport Future*.



11.1.6 The Department of Transport published the policy document *Smarter Travel A Sustainable Transport Future – A New Transport Policy Document for Ireland 2009 –2020* in early 2009. This document sets down the policies and measures required to reduce travel demand and ensure that a far greater proportion of travel is done using sustainable modes of transport.

11.2 Objectives of Mobility Management Plan

11.2.1 A Mobility Management Plan would have the effect of reducing in overall terms both the amount of trips generated by a particular development, and would ensure that greater numbers use public transport. A mobility management strategy would therefore act as a form of mitigation by reducing the overall level of traffic that would be on the surrounding roads in the future.

11.2.2 This Mobility Management Plan includes provision for the appointment of a Mobility Manager, details of access to the appointed Mobility Manager by the residents in the development and a report submitted on an annual basis on the achievement of the actual travel behaviour relative to the objectives of the Mobility Management Plan

11.3 Mobility Management Plan Study

11.3.1 ILTP have undertaken a comprehensive study of the proposed future traffic management within the study area involved consideration of the following:

- Public Transport Network Upgrades
- Non-Motorist Transport Upgrades
- Car and Bicycle Parking

11.4 Public Transport Network Upgrades

11.4.1 The Government published *Infrastructure and Capital Investment 2016 –2021* document includes Luas Cross City expansion and further upgrades to the bus network. This will further enhance public transport in the area.

11.5 Non-Motorised Transport Network Upgrades

11.5.1 There are significant improvements planned for the bicycle network in the vicinity of the subject lands. The planned improvements are set out in the NTA *Greater Dublin Area Cycle Network Plan*. This includes a primary cycle network planned on the R113 adjacent to the subject site.

11.5.2 A minimum of 5% of the total parking allocation can be allocated for disabled access parking on an 'as-needs' basis.

11.5.3 The apartment visitor parking spaces can be provided at surface level adjacent to St. Joseph's House and in the basement.

11.5.4 The Development can include provision for an appropriate level of electric car charge points at basement level to enable those residents who own electric cars to charge them overnight. In addition, a Car Club or 'Go Car' type facility could also be considered for the Development in order to reduce the need for car ownership whilst making cars available for residents to meet periodic car needs. The Car Club facility would exclusively be for residential uses and would be operated and managed by the Management Company.

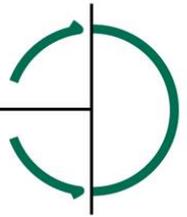


11.6 Mobility Management Plan

- 11.6.1 **Mobility Manager** - Most fundamental to the success of such a venture is the appointment of a Mobility Manager for the residential units, which will ultimately come under the remit of the Management Company. This individual will be responsible for the delivery of the programme and will act as an interface between the various stakeholder groups.
- 11.6.2 The Mobility Manager will also be involved in monitoring of the mode of travel from the residential development. This ideally will be done on an annual basis. Monitoring of travel patterns will facilitate the provision of sustainable transport modes and ensure that once modal targets are met that there is no slippage and instead efforts made to further improve the situation.
- 11.6.3 A Mobility Manager for the proposed residential development will be appointed after the completion and occupation of the first residential block. The Mobility Manager will have a role in promoting and monitoring the provisions of travel plans within the residential development.
- 11.6.4 The Mobility Manager will at the outset of the occupation of the first block of residential units implement a number of key measures. These will include
- Providing new residents with a Travel Welcome Pack giving full details of transport options, cycle/walking maps and information on local services
 - Induction sessions for new households and follow up visits
 - Instigate and regularly update a travel notice board in each of the blocks providing travel information. This may also be provided online subject to demand.

11.7 Personalised Travel Planning

- 11.7.1 Alongside the roll-out of these standardised measures a travel plan will be implemented with the objective of developing a sustainable transportation and access policy for residents of the proposed development both during and after the construction.
- 11.7.2 The travel plan aims to create:
- Healthier, stress free and cheaper commutes to work and school for residents
 - Manage travel options that provide realistic alternatives to single occupant car commutes
 - More informed travel choices for residents
 - Integration with other relevant initiatives such as the Green Schools Travel Programme and work based mobility management plans
- 11.7.3 Central to the plan is the creation and communication of travel options available to all those accessing the proposed and planned developments.
- 11.7.4 The Personalised Travel Planning Process (PTP) is a three-stage process:
- An initial benchmark travel survey is conducted;
 - An Individual Marketing Campaign (IMC) is carried out;
 - Finally, ongoing travel surveys to ensure performances are put in place.



11.8 Application of Personalised Travel Planning

11.8.1 In order to maximise its effectiveness it should be implemented from the outset of the scheme in order to establish sustainable travel patterns at an early stage. A detailed PTP will need to be established and agreed between the developers of the scheme, the Council and any other relevant bodies, all of whom will have a stake in the initiative. Broadly it will include the following elements:

Personalised Travel Marketing Programme - A marketing programme that will assess the targets of the programme, the most appropriate means of delivering those targets and a system of ongoing monitoring, feedback and improvement;

Information tailoring and provision - The success of the scheme is based on the provision of tailored and relevant information to each user.

Incentivisation - As part of a marketing strategy, incentives can be organised to promote increased use of public transport.

Monitoring - In order to measure the success of the entire scheme as well as individual initiatives within the scheme, regular monitoring and evaluation against key performance indicators should be undertaken. This will be done on an annual basis.

Formulation of individual initiatives - The overall programme will be a composite of several sub-initiatives, as deemed appropriate to the local area. These may include, among others, all or some of the following: -

- Car-sharing (GoCars) / Car Club initiatives;
- Cycle/ Walk to work initiatives;
- Walk to School initiatives;
- Public Transport Incentivisation schemes
- Tele-working initiatives
- Cycle training
- Community Travel Forum

11.9 Evaluation and Reporting

11.9.1 The functioning of the Mobility Management Plan will be overseen on an ongoing basis. This will ensure that travel notice boards are kept up to date and that new residents are provided with travel packs and a full induction session.

11.9.2 More formal measurements of the travel behaviour will be undertaken on an annual basis. This will determine if the objectives of the Mobility Management Plan are being met. Input from the Local Authority and the Management Company will be sought.

11.9.3 Following on from this analysis measures required to remedy any deficiencies will be identified and implemented.



12 SUMMARY AND CONCLUSIONS

12.1 Background

12.1.1 ILTP Consulting were commissioned by Homeland Silverpines Ltd. to undertake and revise the Traffic and Transport Assessment (TTA) and Mobility Management Plan (MMP) for the proposed Strategic Housing Development at St. Joseph's and Adjoining Properties at Brewery Road and Leopardstown Road, Dublin 18.

12.1.2 The existing lands have a number of uses. St. Joseph's House is currently vacant and was most recently in use as a residential care facility up to February 2021 and is accessed via the adjacent Silverpines residential development, which is accessed off Brewery Road by way of a signalised junction. There is also an access route off Leopardstown Road to St. Joseph's House, which is currently used as a pedestrian and cycle link.

12.1.3 The remainder of the site comprises of ten existing residential properties, one accessed off Silverpines and the others with individual accesses off Leopardstown Road. Permission has previously been granted by An Bord Pleanála for a residential development on part of the site and the access to that permitted development is the same as that proposed in this application.

12.2 Development Proposals

12.2.1 The proposed development comprises a total of 463 no. apartments in 5 no. separate residential blocks and the converted St. Joseph's House building, to include for 9 no. residential units and a crèche, which is intended to primarily meet the need of the of the proposed development.

12.2.2 The scheme includes a basement car parking facility to house the car parking spaces for the apartments, in addition to cycle parking spaces, waste storage and plant facilities.

12.2.3 In preparing this Traffic and Transport Assessment ILTP collected traffic count data on the adjoining road network. ILTP also met with the Transportation Department of DLRCC to agree the scope of the study and consider the access options as part of the pre-planning process.

12.2.4 The development site is located between Leopardstown Road and Brewery Road and has excellent access to cycle routes, bus routes and the LUAS networks. The proposed development is also located near to high employment areas, which means that once completed the new residents will have access to significant local employment opportunities.

12.2.5 In addition to the pedestrian facilities adjacent to the existing road network there is an existing Greenway adjoining the subject site to the immediate northeast, which can facilitate pedestrian and cycle access to the proposed development. Therefore, the proposed development will link with the existing pedestrian and cycle networks in the area and will also allow for the movement of pedestrians and cyclists through the site and therefore promote greater permeability for non-car modes of travel.

12.2.6 The development site is strategically located between the M50 motorway and N11 Dual Carriageway. The proposed development is also located between the R113 Leopardstown Road and N31 Brewery Road which connect the N11 and M50. The R113 Leopardstown Road is a Regional Road while the N31 is a National Primary Route.

12.3 Access Strategy

12.3.1 A dual access arrangement is proposed for the proposed development at St. Joseph's House and Adjoining Properties off Leopardstown Road and Brewery Road, as follows:



- **Leopardstown Road** - Proposed consolidation of the existing 9 no entrances to the development site off Leopardstown Road into a single upgraded access.
- **Brewery Road** - Proposed second access via existing Silverpines residential estate onto Brewery Road.

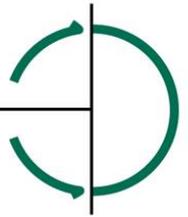
- 12.3.2 It is proposed that the basement car park can be accessed via two separate ramps; one connecting to the Leopardstown Road access, the other to Brewery Road / Silverpines. With this arrangement the residents in the residential blocks can access the car parking facilities in the basement using either access.
- 12.3.3 It is further proposed that the residents of the redeveloped St. Joseph's House can only gain vehicular access via Silverpines / Brewery Road.
- 12.3.4 The Proposed Access Arrangement, as part of this planning application, involves a splitting of basement car park traffic between both accesses. This would generate less overall traffic on the adjacent road network than if the basement car park traffic used just one access.
- 12.3.5 The access on to Leopardstown Road is proposed as a left in left out only junction, which will replace the existing accesses off Leopardstown Road, which serve the existing houses. It is also proposed to utilise the Silverpines / Brewery Road signalised junction to provide access on to Brewery Road.
- 12.3.6 To assess the capacity of the proposed priority access on Leopardstown Road a PICADY Traffic Modelling analysis was undertaken assuming all the traffic generated by the proposed development used this access. The results demonstrated sufficient spare capacity for the proposed access junction off Leopardstown Road.
- 12.3.7 A LINSIG Traffic Modelling software analysis was also conducted to assess the capacity of the existing signalised junction at Silverpines/Brewery Road. Again, this analysis confirmed that there is more than sufficient capacity to accommodate the proposed development.
- 12.3.8 The robust assessment undertaken assumes conservative trip generation figures for the proposed development and the TTA analysis confirms that the adjoining road network can readily accommodate the projected development traffic. It is further noted that if current Government mode share targets are met then significant reductions in background traffic can be expected in the short to medium term in line with a greater shift to more sustainable modes of transport.
- 12.3.9 The proposed development consists of the retention and redevelopment of St. Joseph's House, a protected structure. The lands also have some mature trees and the adjacent Silverpines estate is an established residential development. There is also a desire where possible to increase permeability of new development and, in as far as possible, to promote the use of sustainable travel modes over the private car.
- 12.3.10 The design team considered very carefully the competing and complementary elements of the proposed development and developed the Proposed Access Strategy. This comprises of a Dual Access from both Brewery Road and Leopardstown Road with a double ramp to the proposed basement car park. The proposed arrangement provides two access points to the development, via a new junction on Leopardstown Road to replace existing residential entrances, and via the existing Silverpines Residential Estate off Brewery Road.
- 12.3.11 This will allow vehicles to enter and egress the underground car park from either Leopardstown Road (left in – left out only) or Brewery Road. The redeveloped St. Joseph's House would be accessed off Silverpines / Brewery Road as occurs at present. Service and emergency vehicles for the new apartments would access via Leopardstown Road only.



- 12.3.12 The provision of two accesses provides greater ease of access to the development, and minimises distances travelled on the surrounding roads and thus minimises the overall traffic impact on the wider road network.
- 12.3.13 For this arrangement, no through road connection for vehicles is proposed at ground level within the development. This greatly increases the number of trees that are retained and also improves the setting of St. Joseph's House. Pedestrian and cycle through routes are provided and these also connect with the existing greenway. This means that through access for pedestrian and cyclists will be provided for both new and existing residents in the area, affording them better access to bus and LUAS facilities also.
- 12.3.14 It is considered that the level of car parking proposed, an overall allocation of over 0.4:1 per apartment, is appropriate given the location of the proposed development and is also in accordance with the Apartment Guidelines. In addition, visitor, disabled and GoCar facilities are provided as well as motorcycle parking. Electric Vehicle (EV) charge points will be installed on a minimum of 10% of all spaces at the outset. However, to provide for full EV penetration over the coming years it is proposed to make provision for allowing all car spaces to be EV upgradable in the future. Generous cycle parking for residents and visitors will be provided throughout the site also. The cycle parking proposed exceed the DLR requirement and is in accordance with the Apartment Guidelines 2020.
- 12.3.15 The removal of up to 8 entrances on Leopardstown Road will improve overall road safety in the area and will aid the free flow of traffic along Leopardstown Road. This will allow for the provision of continuous cycle route along the proposed development frontage, which will link with the existing Greenway. In addition, shared cycle/pedestrian route through the proposed development is also provided.
- 12.3.16 The cycle and access provisions have been very carefully designed to include excellent cycle parking provision, a range of access options to the basement cycle parking along with internal cycle permeability and accesses to the wider cycle network. In addition the cycle parking, both at surface and in the basement area, is distributed throughout the proposed development to ensure that residents and visitors to the proposed development can find an appropriate and convenient cycle parking location within the development.
- 12.3.17 The removal of the existing high boundary wall coupled with the new landscape proposals along Leopardstown Road will make the route far more attractive for existing cyclists and walkers in the area.
- 12.3.18 A response to traffic and transportation issues raised in An Bord Pleanála's pre-application opinion document dated 16th October 2020 are included as **Appendix A**.

12.4 Conclusions

- 12.4.1 The proposed development at St. Joseph's House and Adjoining Properties has regards to the policies as set down in the *Dun Laoghaire Rathdown County Development Plan 2016 – 2022* and with the National Apartment Guideline 2020. The proposed development is fully supported by National, Regional and Local Plan policies and has evolved in a manner so that it fully supports the principles for sustainable transport as set out in Smarter Travel.
- 12.4.2 The rationale for the proposed car parking provision is also detailed in the report having regard to the Apartment Guideline 2020. The level of car parking proposed is set at a level that both meet the needs of the overall development and to foster and promote sustainable travel modes in accordance with the sustainable planning and development of the area.



- 12.4.3 While the TTA assumes very robust, worse case scenario assumptions in respect to traffic flows and growth and traffic generations, it demonstrates that with the access and egress arrangement proposed the net overall traffic impact would be readily accommodated by the surrounding road network.
- 12.4.4 The proposed residential development will promote sustainable travel patterns due to its location, layout, design and proximity to the public transport and cycle networks. These will be complimented with a MMP and the appointment of a Mobility Manager to promote sustainable travel patterns by residents. In addition, the proposed residential development is located and accessed in a manner that will minimise the traffic impact on the existing road network and ensure high levels of permeability and accessibility to other sustainable travel modes. The cycle parking provision layout and access arrangements also maximise the promotion of cycling as a desirable and convenient mode of travel.

**A APPENDIX A - RESPONSE TO AN BORD PLEANÁLA PRE-APPLICATION OPINION****A.1 Introduction**

- A.1.1 This section is a response to the traffic and transportation related issues raised in An Bord Pleanála Opinion following the pre application process for Strategic Housing Development planning application on the subject site. ABP Ore-Application Reference ABP-307355-20.
- A.1.2 2 no. items in the ABP opinion dated 16th October 2020 relate to traffic and transportation. This chapter offers a response to item no. 1 and item no. 8 of the ABP opinion document.

A.2 ABP Opinion Item no. 1

- A.2.1 ABP Opinion Item no. 1 states:

“A traffic and Transport Assessment including, inter alia, a rationale for the proposed car parking provision should be prepared, to include details of car parking management, car share schemes and a mobility management plan.”

Response:

The rationale for the proposed car parking provision including details of car parking management is set out in Chapter 8 of the TTA report. The car parking has been provided having regards to the Apartment Guideline 2020 and the location of the proposed development which will well serve by public transport and walking and cycle routes. A mobility management plan is included as Chapter 11 of the TTA report to further support and promote the further use of sustainable travel modes.

A.3 ABP Opinion Item no. 8

- A.3.1 ABP Opinion Item no. 8 states:

“Response to issues raised in Appendix C of Planning Authority Report, received 14th August 2020, which includes the internal reports of the Transportation planning department relating to the design of the vehicular access from the Leopardstown Road, the report of the Drainage Department relating, inter alia, surface water design and the Park Department relating, inter alia, landscaping and protection of trees.”

Response:

This section of the report responds to the part of ABP Opinion Item no. 8 which references the planning authority Transportation Department Report. Response to the Drainage Department and Park Department reports will be issued in a separate report.

The DLRCC Transportation Department Report recommended 15 no. items for consideration. These items and ILTP's response to each item are listed below.

DLRCC Item no 1:

“The Applicant is requested to submit full dimensioned details of the proposed works to be carried out at the Applicant's expense at the Leopardstown Road frontage of the development and boundary treatment delineation between public and private including co-ordinates identifying the proposed back of public footpath for written agreement of the Planning Authority. Works to include:



- a) *left in left out only vehicular access at Leopardstown Road of self-enforcing design compliant with NCM and DMURS*
- b) *2m minimum width footpath on both sides of vehicular entrance to proposed development with level pedestrian priority across entrance*
- c) *Relocated Bus Stop with Kassel kerbs and provision of Bus Shelter for Bus Service users*
- d) *Close off other existing access points at Leopardstown Road Development frontage*
- e) *Landscaped verge, footway and 2m wide continuous NCM compliant cycle track/lane prioritizing protection/segregation of cyclists from vehicular traffic*
- f) *Bollards, road marking, signage, public lighting”*

Response to DLRCC Item no. 1:

The details of the proposed access, bus stops, cycle and pedestrian facilities and bus stop replication proposals are show on the updated layout drawings accompanying the application.

DLRCC Item no 2:

“The Applicant is requested to submit details showing STOP line road marking at the back of the footpath at the vehicular entrance onto Leopardstown Road in accordance with the Traffic Signs Manual. The Applicant is also requested to demonstrate how with detailed plan, elevation and section drawings including gradients and levels that a ramped entry treatment for pedestrian priority can be provided across the proposed development vehicular access in accordance with DMURS and compliant with the NCM n addition to demonstrating a design that ensures a self-enforcing Left in Left out vehicular access at Leopardstown Road. Cyclists”

Response to DLRCC Item no. 2:

These are detailed in the planning application drawings. The final design details of the proposed access will be agreed with the planning authority in advance of the commencement of any permitted development.

DLRCC Item no 3:

“The Applicant is requested to submit a detailed Quality Audit (which shall include a Road Safety Audit, Access Audit, Cycle Audit and a Walking Audit) to demonstrate that appropriate consideration has been giving to all relevant aspects of the proposed residential development in accordance with the Design Manual for Urban Roads & Streets (DMURS). The independent Audit Team shall be approved by the Planning Authority (Transportation Planning Section) and all measures recommended by the Auditor shall be undertaken unless the Planning Authority approves any departure in writing. A feedback report should also be submitted providing a response to each of the items.”

Response to DLRCC Item no. 3:

A Quality Audit (QA) has been undertaken and is included as a separate Report. The completed Feedback Form is also included in this report. A Stage 2 QA, including a Stage 2 Road Safety Audit (RSA), will also be undertaken at the detailed design stage and a Stage 3 QA will also be undertaken prior to the occupation of the proposed development.

**DLRCC Item no 4:**

“The Applicant is requested to consider potential for facilitating a pedestrian permeability connection from vicinity of proposed Block F at the western most corner of proposed development to adjoining street at The Chase (Sir Ivor Mall) in accordance with CDP Policy ST5 to maximise permeability and connectivity.”

Response to DLRCC Item no. 4:

This was considered but deemed to be not required given the excellent connectivity and permeability provided in the overall scheme.

DLRCC Item no 5:

“The Applicant is requested to demonstrate adequate provision of space for vehicles to minimise conflict with pedestrian routes for all access arrangements and vehicle manoeuvres required for car parking, refuse collection, emergency vehicles and deliveries, etc. within, to and from the proposed development. The Applicant shall show the above on a detailed layout drawing by using a Computer Aided Design (CAD) software such as Autoturn or similar computerised design software.”

Response to DLRCC Item no. 5:

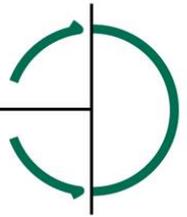
The scheme engineers undertook the detailed design and Autoturn assessments and they are included elsewhere in the planning documentation.

DLRCC Item no 6:

“The Applicant is requested to indicate on detailed drawings the provision of adequate space for correctly designed cycle parking facilities for residential and visitor cycle parking spaces to requirements of Section 8.2.4.7 of the 2016-2022 Dun Laoghaire-Rathdown County Development Plan and in accordance with the Dun Laoghaire Rathdown County Council – Standards for Cycle Parking and associated Cycling Facilities for New Developments (January 2018) http://www.dlrcoco.ie/sites/default/files/atoms/files/dlr_cycle_parking_standards_0.pdf. Dimensioned clearly indicated details of all proposed cycle access routes and access to and from cycle parking are recommended. ‘Sheffield’ cycle stands at a minimum 1m centres are recommended (Section 3). In accordance with DLRCC Cycle Standards Section 2 General Principles ‘Cycle Parking provided must be capable of being used by all members of the community at all life stages and abilities.’ The Applicant is requested to show on a drawing the area allowed for Cargo Bikes or similar.”

Response to DLRCC Item no. 6:

The details and location of the cycle parking provision is included on the overall scheme drawings accompanying the application. A range on cycle parking facilities are distributed throughout the site, as shown on the Architect’s drawings. Chapter 9 of the TTA & MMP report also provides details of how these cycle facilities are proposed to be accessed. DLRCC is currently has a pilot cargo bike scheme in place. If required, cargo bike facilities can be accommodated within the site in the future.

**DLRCC Item no 7:**

“The Applicant is requested to show how increased provision for car parking/car storage spaces can be provided within the proposed development site. A total closer to 488 No. parking spaces to serve the 488 No. apartment units and Crèche would be deemed acceptable. The Applicant is requested to submit a detailed drawing showing which car parking spaces within the proposed residential development are to be designated for the relevant apartment units and Crèche and for visitor/disable/car share parking.”

Response to DLRCC Item no. 7:

The car parking proposals have been provided in accordance with the Apartment Guidelines 2020 having regard to the location of the proposed development and access to alternative travel modes, this is addressed in detail in the TTA.

DLRCC Item no 8:

“The Applicant is requested to ensure that the proposed basement car park (under Block A, B and D, F) and accesses are in accordance with Section 8.2.4.10 of DLRCC Development Plan 2016-2022 and complies with requirements of the Institution of Structural Engineers booklet entitled ‘Design Recommendations for Multi Storey and Underground Car Park Fourth Edition’.”

Response to DLRCC Item no. 8:

The basement car park has been designed to accordance with “Design Recommendations for Multi Storey and Underground Car Parks” Fourth Edition.

DLRCC Item no 9:

“The Applicant is requested to provide details of the proposed operation and management of all the development car parking and cycle parking facilities. Allocation for designated visitor/drop off/collection, loading/unloading parking spaces, disabled parking spaces, Creche parent and child car parking spaces, car club/car share parking spaces and provision for bike share facilities are recommended.”

Response to DLRCC Item no. 9:

Details are included in the TTA.

DLRCC Item no 10:

“The Applicant shall ensure provision of at least 4% of parking spaces within the proposed development are reserved for use by disabled persons in accordance with Section 8.2.4.5 of the Dun Laoghaire-Rathdown County Development Plan, (2016-2022). Parking bay widths suitable for disabled parking bays shall be a minimum of 2.4m wide - with a 1.2m buffer on both sides – and 6m in depth.”

Response to DLRCC Item no. 10:

The disabled parking is provided to accordance with the DLRCC requirements.

**DLRCC Item no 11:**

“The Applicant shall ensure provision of at least 2 Crèche drop off parking spaces with Parent and Child dimensions in accordance with Section 8.2.4.6 of CDP 2016-2022. A width of 3.3m with the required buffer zone widths of 0.9m each on either side of each parent and child space is required. Note that the buffer zone between proposed parent and child parking spaces can be shared.”

Response to DLRCC Item no. 11:

The drop off Crèche parking is included in the overall design layouts.

DLRCC Item no 12:

“The Applicant is requested to ensure provision of motorcycle parking spaces at a minimum of 4 spaces per 100 car parking spaces for the development in accordance with section 8.2.4.8 of DLRCC Development Plan 2016-2022. The type of motor cycle stand and typical parking layout should be in accordance with the Council’s Cycling Policy Guidelines and Standards with a spacing of 1m to allow the parking of one motor cycle per stand.”

Response to DLRCC Item no. 12:

Motorcycle parking is provided in accordance with DLRCC requirements.

DLRCC Item no 13:

“The Applicant is requested in accordance with Section 8.2.4.12 of the current County Development Plan (2016-2022) to show that the proposed development car parking spaces are constructed so as to be capable of accommodating future electric charging points for electrically operated vehicles. A minimum of one car parking space per ten residential units shall have a functional Electric Vehicle Charging Point. The following weblink is recommended <http://www.esb.ie/electric-cars/index.jsp>.”

Response to DLRCC Item no. 13:

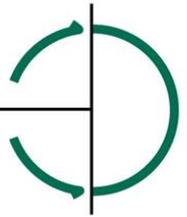
The 10% Electric Vehicle minimum will be provided. In addition, provision for future expansion of EV provision will also be provided for.

DLRCC Item no 14:

“In accordance with the County Development Plan Policy EI20: Traffic Noise ‘the effect of traffic noise on new development must be considered and appropriate measures undertaken to mitigate same.’ The Applicant is requested to provide a detailed noise assessment by a competent expert in respect of the nearby road and rail transport corridors. The Applicant shall show what mitigation measures they intend to provide in order to keep noise within the development to acceptable levels i.e. boundary treatment, and double/triple glazing etc.”

Response to DLRCC Item no. 14:

The traffic forecasts associated with the proposed development were prepared by ILTP and taken into consideration in the noise and air assessments and are included in the planning application documentation.

**DLRCC Item no 15:**

“The Applicant shall submit a detailed Construction Management Plan to the Planning Authority (Transportation Planning Section) indicating measures dealing with:

- a) Traffic management plan including Construction vehicular access to site in particular to avoid conflict between construction activities and traffic on Leopardstown Road and Brewery Road.*
- b) How it will be intended to avoid conflict between construction activities and pedestrian and cyclist movements on Leopardstown Road and Brewery Road during construction works.*
- c) Where it is intended to provide for site staff car parking during construction in that is not acceptable to have long term parking in the nearby residential areas.*
- d) Proposed measures to minimise /eliminate nuisance caused by noise and dust, proposed working hours and measures to minimise/prevent transfer of dirt to the public road with associated measures to clean the public roads / gully's etc in the vicinity of the site and continuing replacement of roads line*
- e) markings resulting therefrom.”*

Response to DLRCC Item no. 15:

The Construction Traffic Management Plan (CTMP) is outlined in the TTA. The final CTMP will be submitted and agreed with DLR in advance of the commencement of construction.



B APPENDIX B

B.1 PICADY and LinSig Analyses

PICADY		
GUI Version: 5.1 AE Analysis Program Release: 5.0 (MAY 2010)		
© Copyright TRL Limited, 2010 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO		
For sales and distribution information, program advice and maintenance, contact:		
TRL Limited Crowthorne House Nine Mile Ride Wokingham, Berks. RG40 3GA, UK		Tel: +44 (0)1344 770758 Fax: +44 (0)1344 770864 E-mail: software@trl.co.uk Web: www.trlsoftware.co.uk
The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution		

Run Analysis

Parameter	Values
File Run	I:\..\2021 PICADY\Berwick Pines Access Junction - Leopardstown Road.vpi
Date Run	10 June 2021
Time Run	11:58:24
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	Arm A	100
Arm B	Arm B	100
Arm C	Arm C	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Proposed Berwick Pines Development
Location	Leopardstown Road
Date	09 June 2021
Enumerator	Ben Waite
Job Number	Berwick Pines
Status	TIA
Client	Homeland Silverpines Ltd.
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

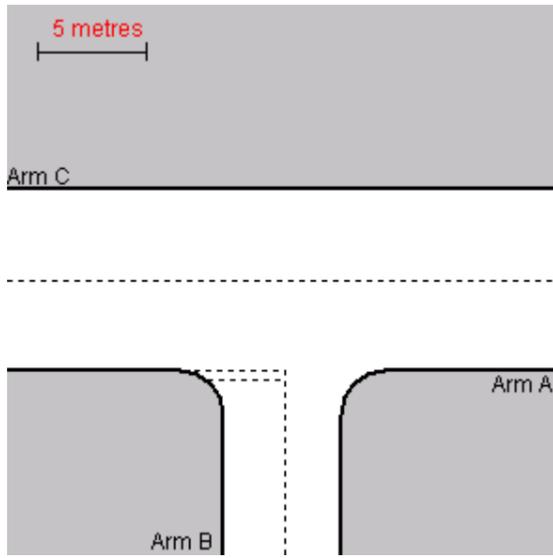
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.00
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	2.20
Minor Road First Lane Width (m)	2.75
Minor Road Visibility To Right (m)	90
Minor Road Visibility To Left (m)	90
Major Road Right Turn Visibility (m)	90
Major Road Right Turn Blocks Traffic	Yes (if over 0 veh)

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	538.354	0.098	0.248	0.156	0.354
B-C	663.560	0.102	0.257	-	-
C-B	626.083	0.243	0.243	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:00	60	15
Second Modelling Period	17:00-18:00	60	15

Direct Entry Flows**Demand Set:** Proposed Access Arrangement AM**Modelling Period:** 08:00-09:00**Segment:** 08:00-08:15

Arm	Flow (veh/min)
Arm A	15.11
Arm B	0.21
Arm C	23.71

Segment: 08:15-08:30

Arm	Flow (veh/min)
Arm A	15.11
Arm B	0.21
Arm C	23.71

Segment: 08:30-08:45

Arm	Flow (veh/min)
Arm A	15.11
Arm B	0.21
Arm C	23.71

Segment: 08:45-09:00

Arm	Flow (veh/min)
Arm A	15.11
Arm B	0.21
Arm C	23.71

Demand Set: Proposed Access Arrangement PM**Modelling Period:** 17:00-18:00**Segment:** 17:00-17:15

Arm	Flow (veh/min)
Arm A	20.78
Arm B	0.08
Arm C	14.67

Segment: 17:15-17:30

Arm	Flow (veh/min)
Arm A	20.78
Arm B	0.08
Arm C	14.67

Segment: 17:30-17:45

Arm	Flow (veh/min)
Arm A	20.78
Arm B	0.08
Arm C	14.67

Segment: 17:45-18:00

Arm	Flow (veh/min)
Arm A	20.78
Arm B	0.08
Arm C	14.67

Turning Counts

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	7	900
Arm B	0	-	13
Arm C	1423	0	-

Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	14	1233
Arm B	0	-	5
Arm C	881	0	-

Turning proportions are calculated from turning count data

Turning Proportions

Demand Set: Proposed Access Arrangement AM

Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.008	0.992
Arm B	0.000	0.000	1.000
Arm C	1.000	0.000	0.000

Demand Set: Proposed Access Arrangement PM

Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.011	0.989
Arm B	0.000	0.000	1.000
Arm C	1.000	0.000	0.000

Heavy Vehicles Percentages

Demand Set: Proposed Access Arrangement AM

Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: Proposed Access Arrangement PM

Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

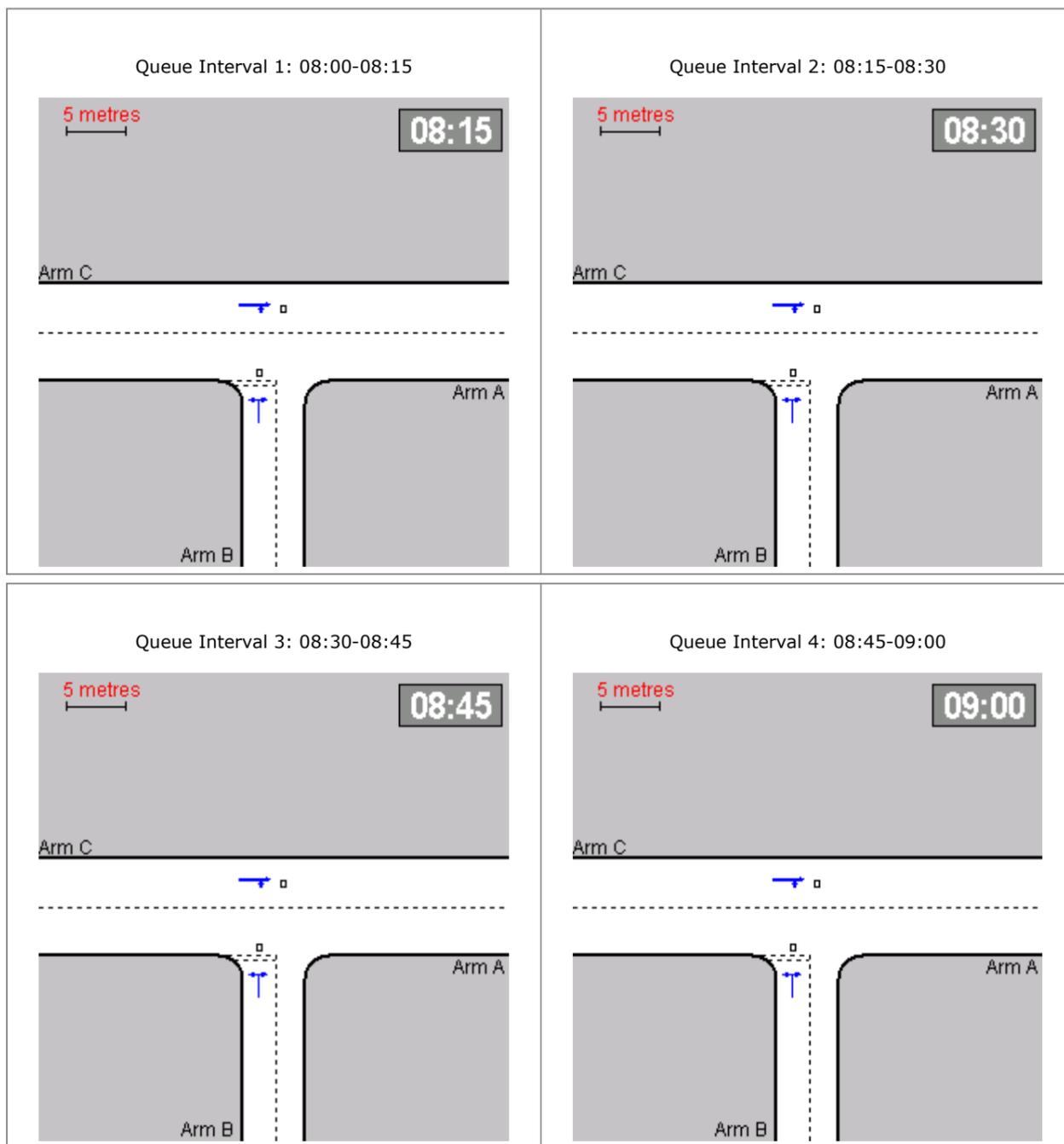
Default proportions of heavy vehicles are used

Queue Diagrams

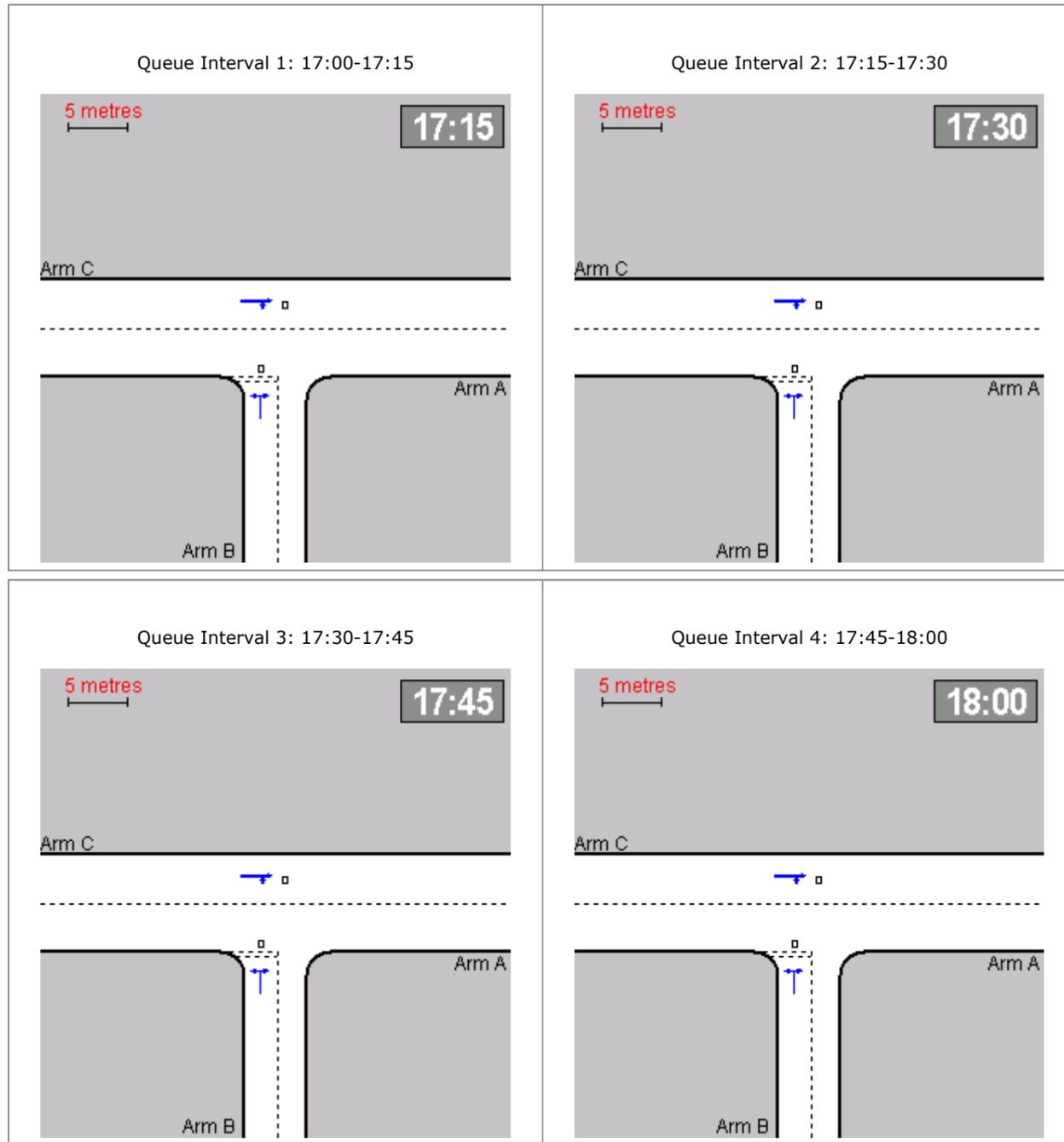
Demand Set: Proposed Access Arrangement AM

Modelling Period: 08:00-09:00

View Extent: 40m

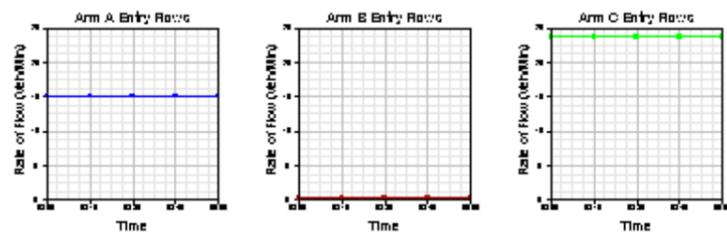


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00
View Extent: 40m

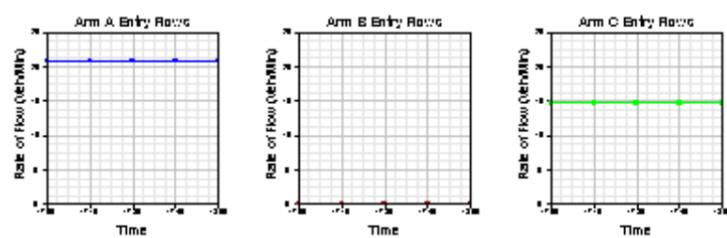


Demand Data Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

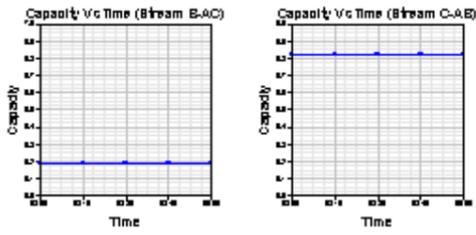


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

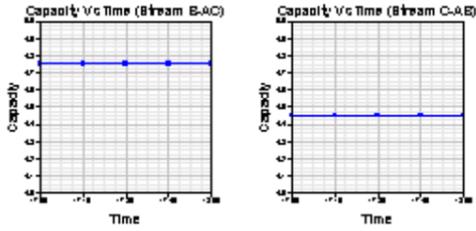


Capacity Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

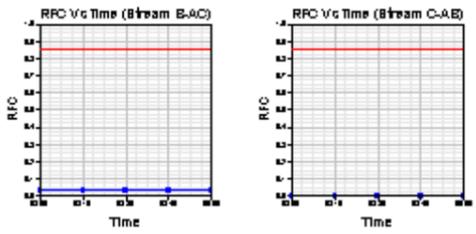


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

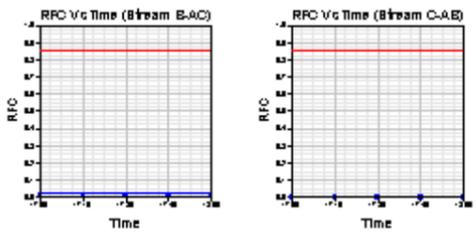


RFC Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

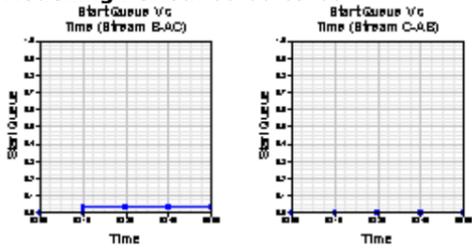


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

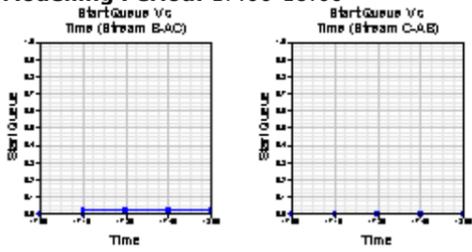


Start Queue Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

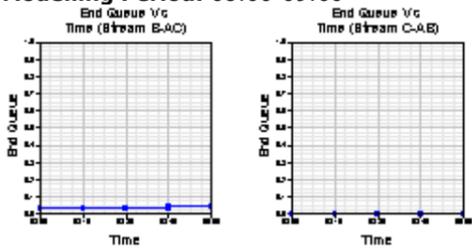


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

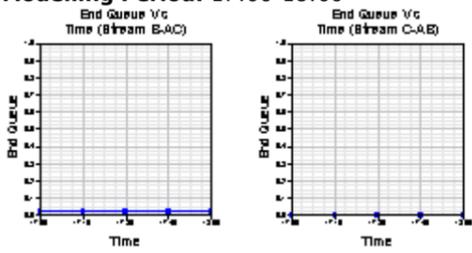


End Queue Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

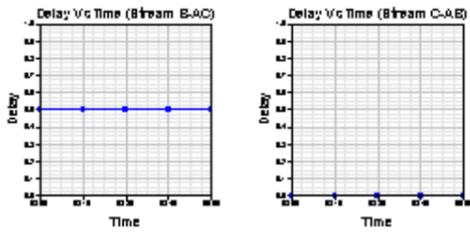


Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

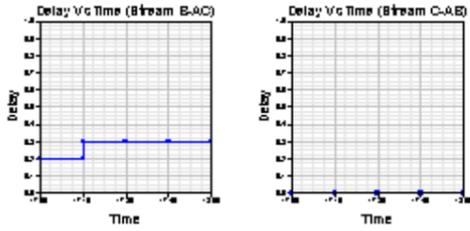


Delay Graph

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00



Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00



Queues & Delays

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.21	6.19	0.034	-	0.00	0.03	-	0.5	0.17
	C-AB	0.00	5.82	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	23.71	-	-	-	-	-	-	-	-
	A-B	0.12	-	-	-	-	-	-	-	-
	A-C	14.99	-	-	-	-	-	-	-	-
Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.21	6.19	0.034	-	0.03	0.03	-	0.5	0.17
	C-AB	0.00	5.82	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	23.71	-	-	-	-	-	-	-	-
	A-B	0.12	-	-	-	-	-	-	-	-
	A-C	14.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.21	6.19	0.034	-	0.03	0.03	-	0.5	0.17
	C-AB	0.00	5.82	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	23.71	-	-	-	-	-	-	-	-
	A-B	0.12	-	-	-	-	-	-	-	-
	A-C	14.99	-	-	-	-	-	-	-	-
Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.21	6.19	0.034	-	0.03	0.04	-	0.5	0.17
	C-AB	0.00	5.82	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	23.71	-	-	-	-	-	-	-	-
	A-B	0.12	-	-	-	-	-	-	-	-
	A-C	14.99	-	-	-	-	-	-	-	-

Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	0.08	4.75	0.017	-	0.00	0.02	-	0.2	0.21
	C-AB	0.00	4.45	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	14.67	-	-	-	-	-	-	-	-
	A-B	0.23	-	-	-	-	-	-	-	-
	A-C	20.55	-	-	-	-	-	-	-	-
Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	0.08	4.75	0.017	-	0.02	0.02	-	0.3	0.21
	C-AB	0.00	4.45	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	14.67	-	-	-	-	-	-	-	-
	A-B	0.23	-	-	-	-	-	-	-	-
	A-C	20.55	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	0.08	4.75	0.017	-	0.02	0.02	-	0.3	0.21
	C-AB	0.00	4.45	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	14.67	-	-	-	-	-	-	-	-
	A-B	0.23	-	-	-	-	-	-	-	-
	A-C	20.55	-	-	-	-	-	-	-	-
Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	0.08	4.75	0.017	-	0.02	0.02	-	0.3	0.21
	C-AB	0.00	4.45	0.000	-	0.00	0.00	-	0.0	0.00
	C-A	14.67	-	-	-	-	-	-	-	-
	A-B	0.23	-	-	-	-	-	-	-	-
	A-C	20.55	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
 In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
 Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: Proposed Access Arrangement AM
Modelling Period: 08:00-09:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	12.6	12.6	2.1	0.2	2.1	0.2
C-AB	0.0	0.0	0.0	0.0	0.0	0.0
C-A	1422.6	1422.6	-	-	-	-
A-B	7.0	7.0	-	-	-	-
A-C	899.6	899.6	-	-	-	-
All	2341.8	2341.8	2.1	0.0	2.1	0.0

Demand Set: Proposed Access Arrangement PM
Modelling Period: 17:00-18:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	4.8	4.8	1.0	0.2	1.0	0.2
C-AB	0.0	0.0	0.0	0.0	0.0	0.0
C-A	880.2	880.2	-	-	-	-
A-B	14.0	14.0	-	-	-	-
A-C	1232.8	1232.8	-	-	-	-
All	2131.8	2131.8	1.0	0.0	1.0	0.0

Delay is that occurring only within the time period.
 Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
 These will only be significantly different if there is a large queue remaining at the end of the time period.

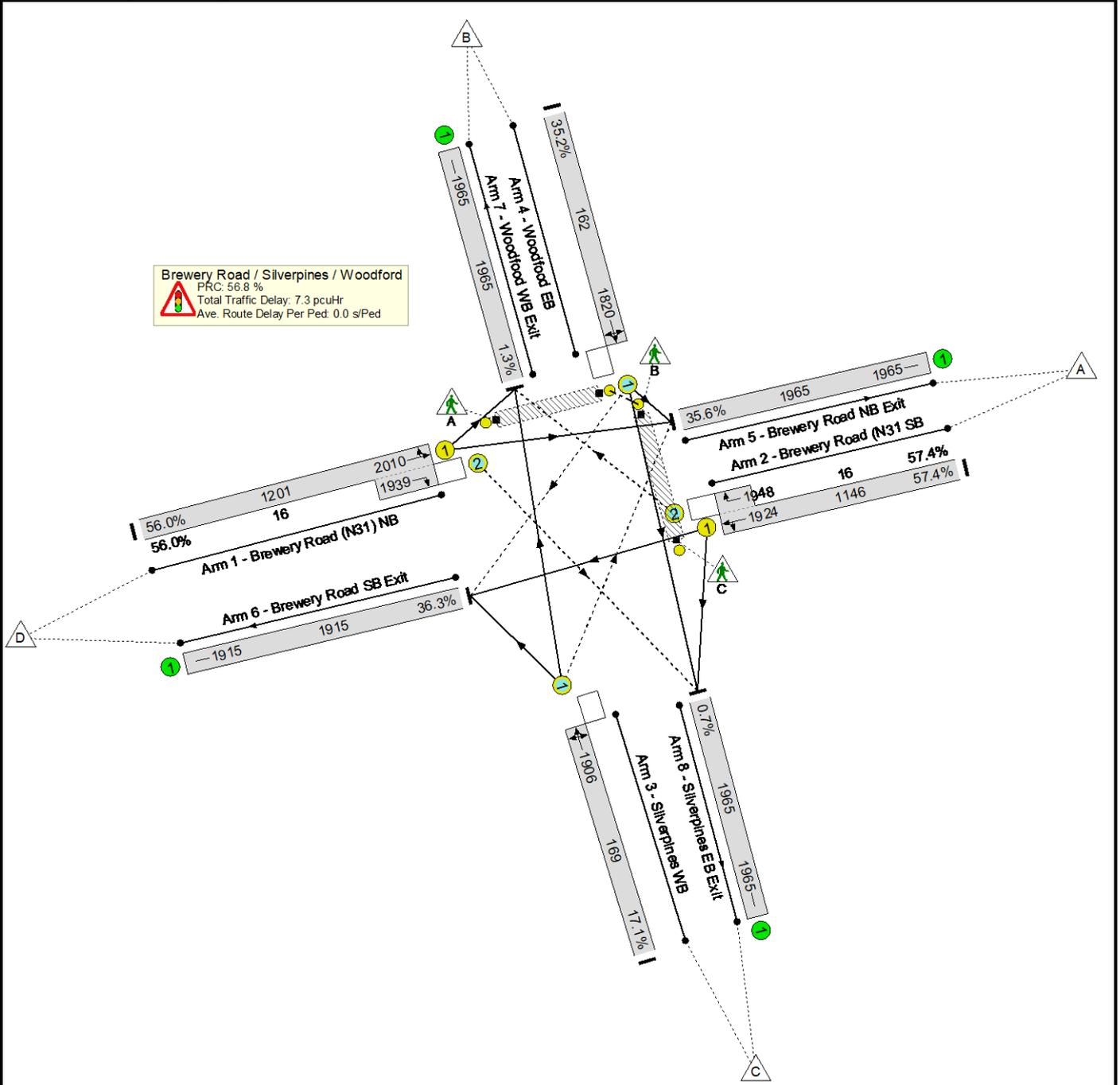
PICADY 5 Run Successful

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	210610 Silver Pines - Brewery Road
Author:	
Company:	
Address:	

Scenario 1: 'A1 - Base AM' (FG1: 'A1 - AM Peak - Base', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Stages					
1	Min >= 6		2	Min >= 7	
1	2	3	4	5	6
D	B E	F A	D	B E C	F A

Basic Results Summary

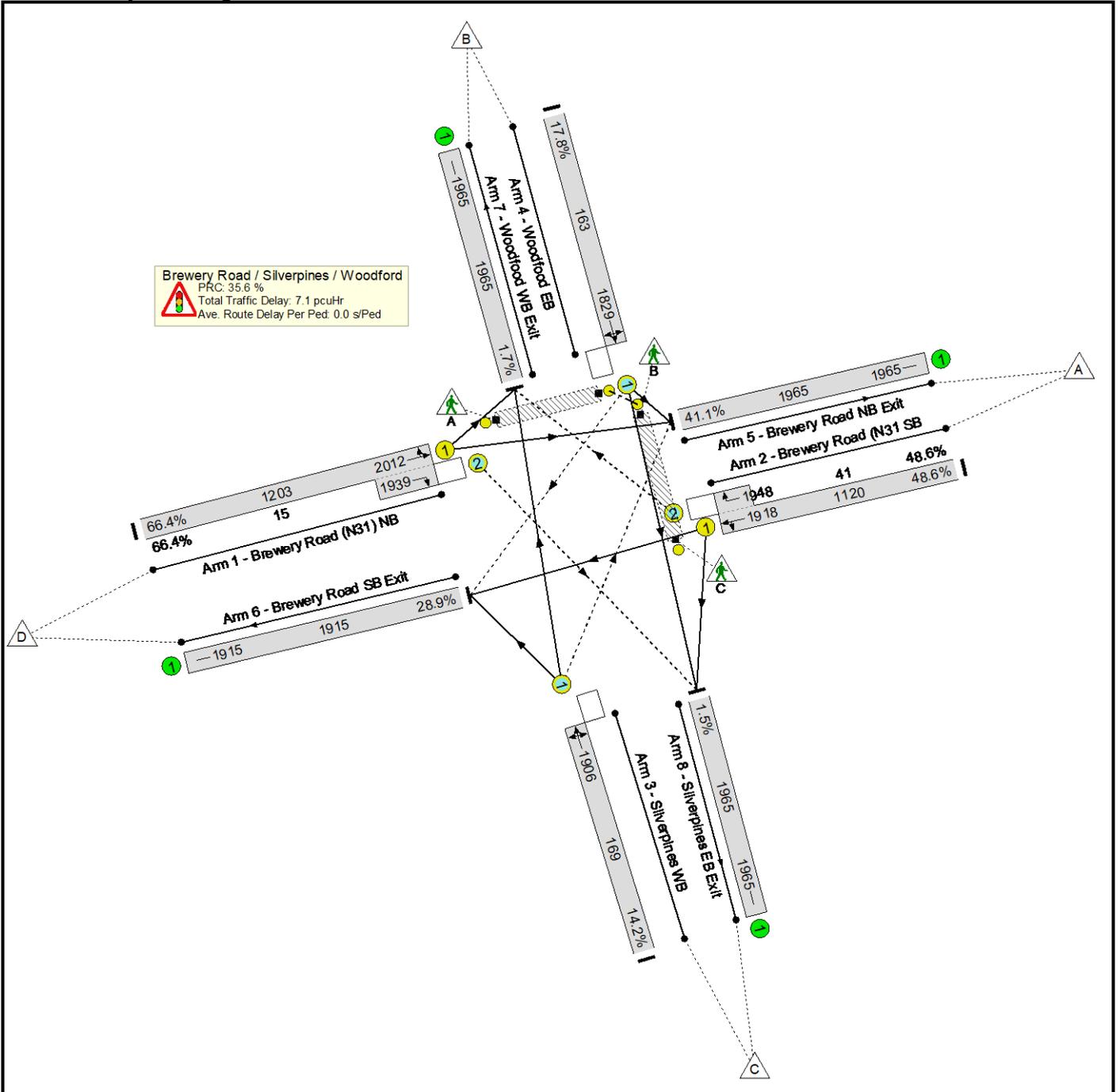
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	57.4%	62	0	0	7.3	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	57.4%	62	0	0	7.3	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	681	2010:1939	1201+16	56.0 : 56.0%	9	0	0	2.7	14.3	10.7
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	667	1924:1948	1146+16	57.4 : 57.4%	9	0	0	2.7	14.6	10.6
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	29	1906	169	17.1%	15	0	0	0.4	51.1	0.8
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	57	1820	162	35.2%	29	0	0	0.9	55.8	1.6
5/1	Brewery Road NB Exit	U	-		-	-	-	699	1965	1965	35.6%	-	-	-	0.3	1.4	0.3
6/1	Brewery Road SB Exit	U	-		-	-	-	696	1915	1915	36.3%	-	-	-	0.3	1.5	0.3
7/1	Woodford WB Exit	U	-		-	-	-	25	1965	1965	1.3%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	14	1965	1965	0.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		56.8		56.8		Total Delay for Signalled Lanes (pcuHr):		6.71		Cycle Time (s):		90		
			PRC Over All Lanes (%):		56.8				Total Delay Over All Lanes(pcuHr):		7.28						

Basic Results Summary

Scenario 2: 'A2 - Base PM' (FG2: 'A2 - PM peak - Base', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6

Basic Results Summary

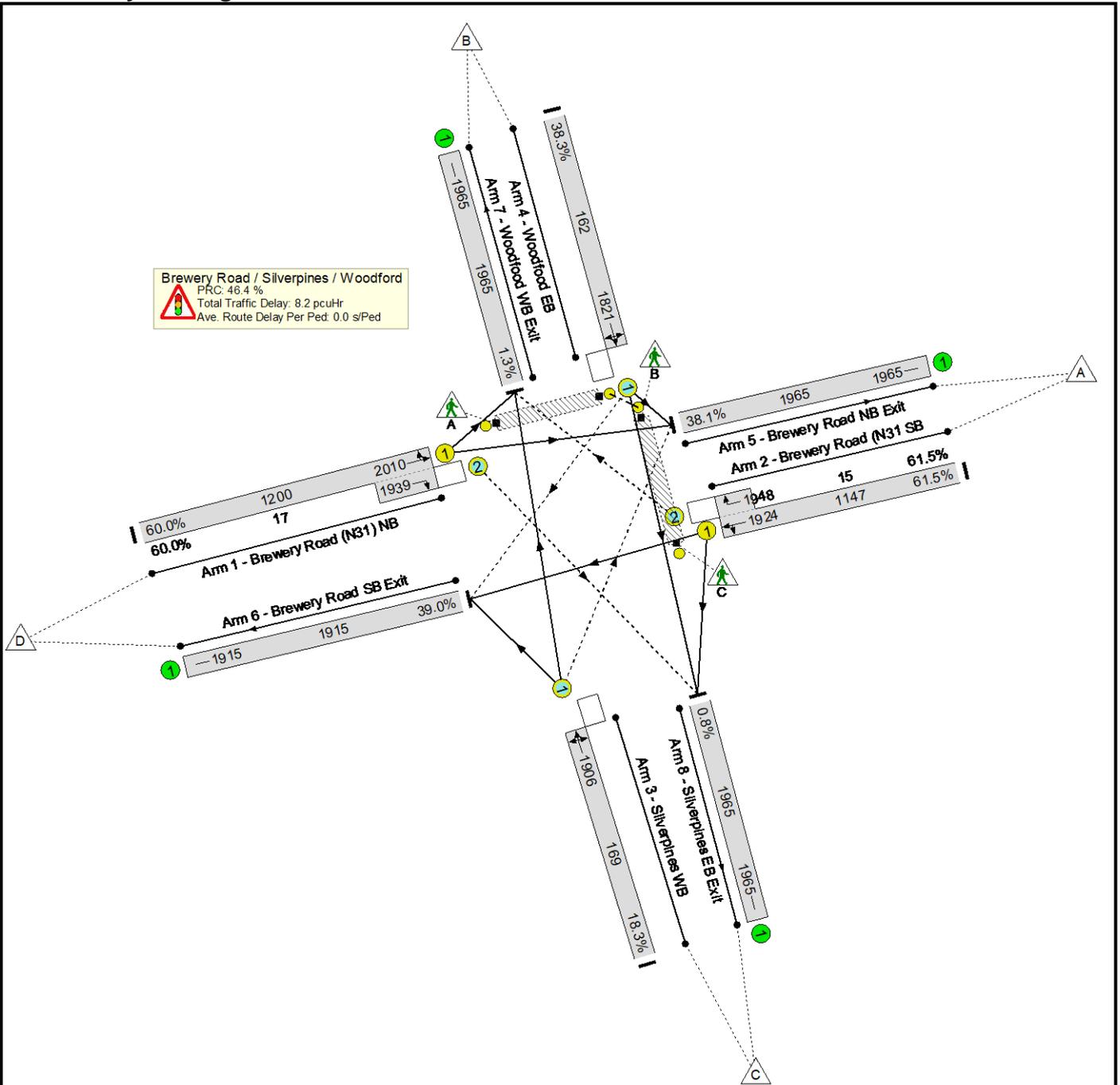
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	66.4%	55	0	0	7.1	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	66.4%	55	0	0	7.1	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	808	2012:1939	1203+15	66.4 : 66.4%	10	0	0	3.7	16.3	14.2
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	564	1918:1948	1120+41	48.6 : 48.6%	20	0	0	2.1	13.4	8.2
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	24	1906	169	14.2%	9	0	0	0.3	50.3	0.6
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	29	1829	163	17.8%	16	0	0	0.4	51.8	0.8
5/1	Brewery Road NB Exit	U	-		-	-	-	808	1965	1965	41.1%	-	-	-	0.4	1.6	9.1
6/1	Brewery Road SB Exit	U	-		-	-	-	554	1915	1915	28.9%	-	-	-	0.2	1.3	0.2
7/1	Woodford WB Exit	U	-		-	-	-	33	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	30	1965	1965	1.5%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		35.6		Total Delay for Signalled Lanes (pcuHr):		6.53		Cycle Time (s):		90			
				PRC Over All Lanes (%):		35.6		Total Delay Over All Lanes(pcuHr):		7.10							

Basic Results Summary

Scenario 3: 'B1 - Opening Year no Development AM' (FG3: 'B1 - Opening Year No Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Stages			
1	Min >= 6	2	Min >= 7

Basic Results Summary

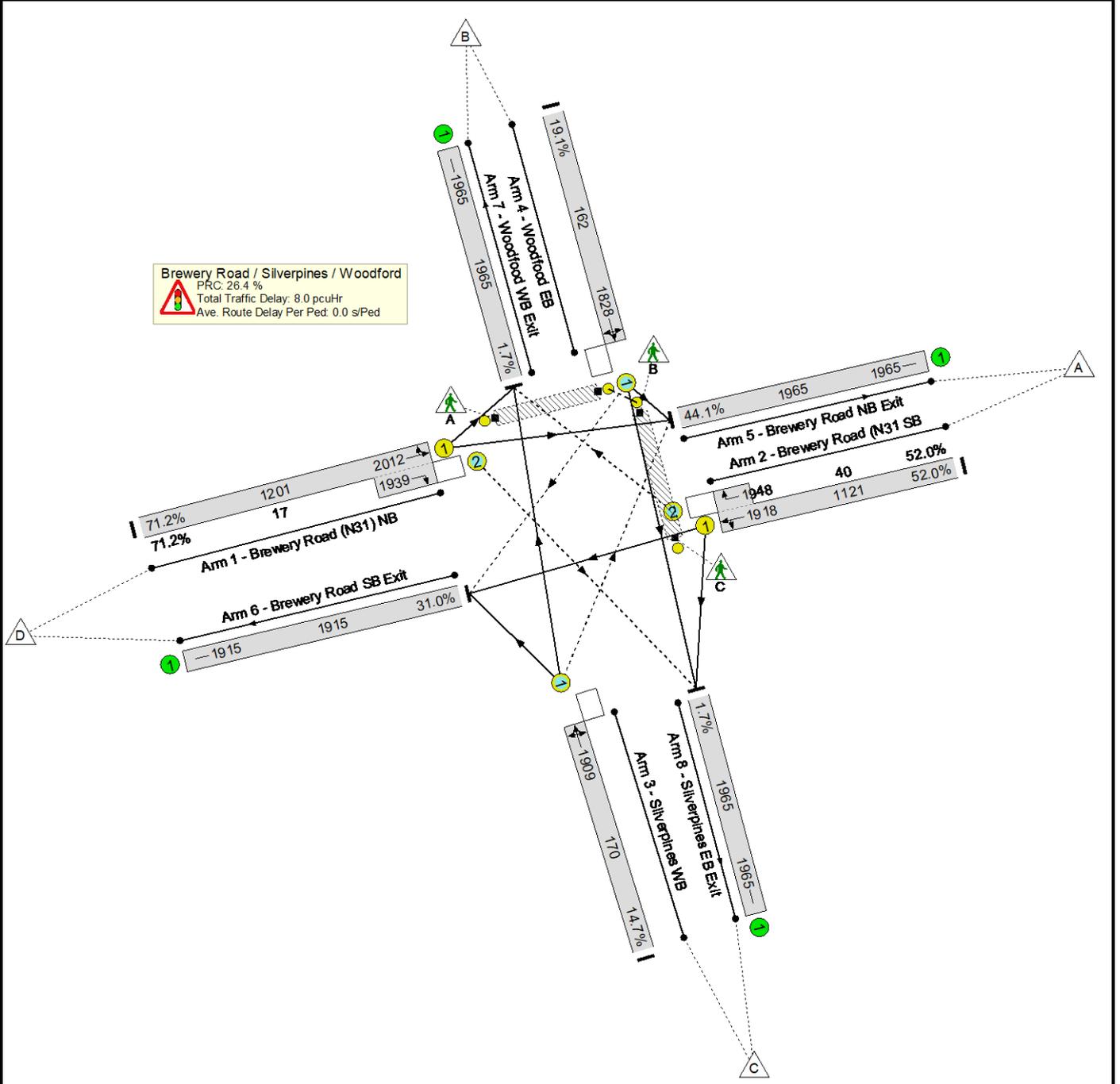
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	61.5%	67	0	0	8.2	-	-	
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	61.5%	67	0	0	8.2	-	-	
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	730	2010:1939	1200+17	60.0 : 60.0%	10	0	0	3.0	15.0	11.9	
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	714	1924:1948	1147+15	61.5 : 61.5%	9	0	0	3.1	15.5	11.9	
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	31	1906	169	18.3%	16	0	0	0.4	51.5	0.8	
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	62	1821	162	38.3%	32	0	0	1.0	56.8	1.8	
5/1	Brewery Road NB Exit	U	-		-	-	-	749	1965	1965	38.1%	-	-	-	0.3	1.5	0.3	
6/1	Brewery Road SB Exit	U	-		-	-	-	747	1915	1915	39.0%	-	-	-	0.3	1.5	0.3	
7/1	Woodford WB Exit	U	-		-	-	-	26	1965	1965	1.3%	-	-	-	0.0	0.9	0.0	
8/1	Silverpines EB Exit	U	-		-	-	-	15	1965	1965	0.8%	-	-	-	0.0	0.9	0.0	
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0	
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0	
		C1	PRC for Signalled Lanes (%):		46.4		46.4		Total Delay for Signalled Lanes (pcuHr):		7.53		Cycle Time (s):		90			
			PRC Over All Lanes (%):		46.4				Total Delay Over All Lanes(pcuHr):		8.17							

Basic Results Summary

Scenario 4: 'B2 - Opening Year no Development PM' (FG4: 'B2 - Opening Year No Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Stages			
1	Min >= 6	2	Min >= 7

Basic Results Summary

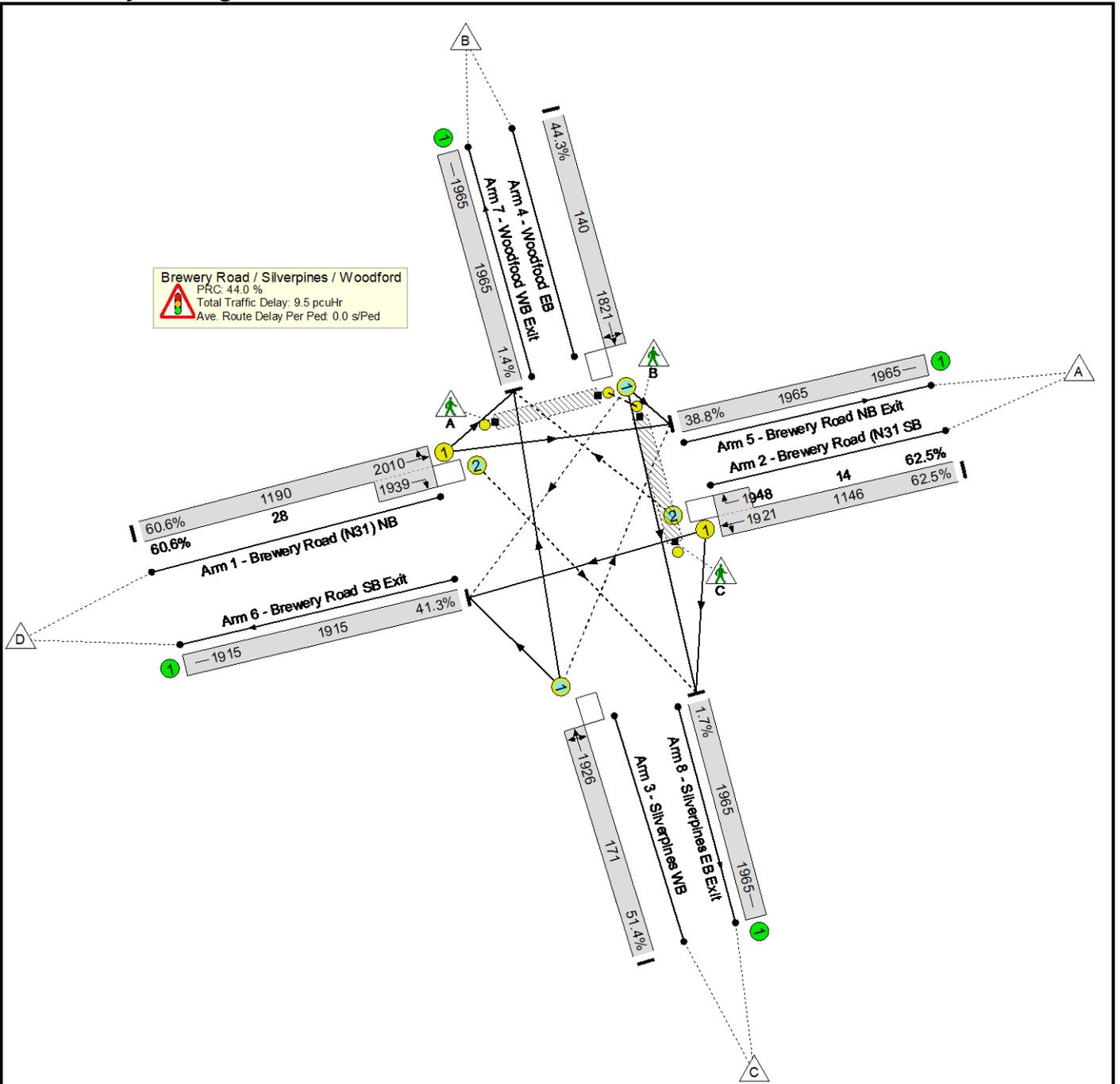
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	71.2%	59	0	0	8.0	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	71.2%	59	0	0	8.0	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	867	2012:1939	1201+17	71.2 : 71.2%	12	0	0	4.3	17.7	16.1
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	604	1918:1948	1121+40	52.0 : 52.0%	21	0	0	2.4	14.0	9.0
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	25	1909	170	14.7%	9	0	0	0.3	50.4	0.7
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	31	1828	162	19.1%	17	0	0	0.4	52.1	0.8
5/1	Brewery Road NB Exit	U	-		-	-	-	866	1965	1965	44.1%	-	-	-	0.4	1.7	10.8
6/1	Brewery Road SB Exit	U	-		-	-	-	594	1915	1915	31.0%	-	-	-	0.2	1.4	0.2
7/1	Woodford WB Exit	U	-		-	-	-	34	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	33	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		26.4		Total Delay for Signalled Lanes (pcuHr):			7.40		Cycle Time (s):		90		
				PRC Over All Lanes (%):		26.4		Total Delay Over All Lanes(pcuHr):			8.05						

Basic Results Summary

Scenario 5: 'C1 - Opening Year with Development Preferred AM' (FG5: 'C1 - Opening Year With Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Stages			
1	Min >= 6	2	Min >= 7
Min >= 6		Min >= 7	
Min >= 6		Min >= 7	

Basic Results Summary

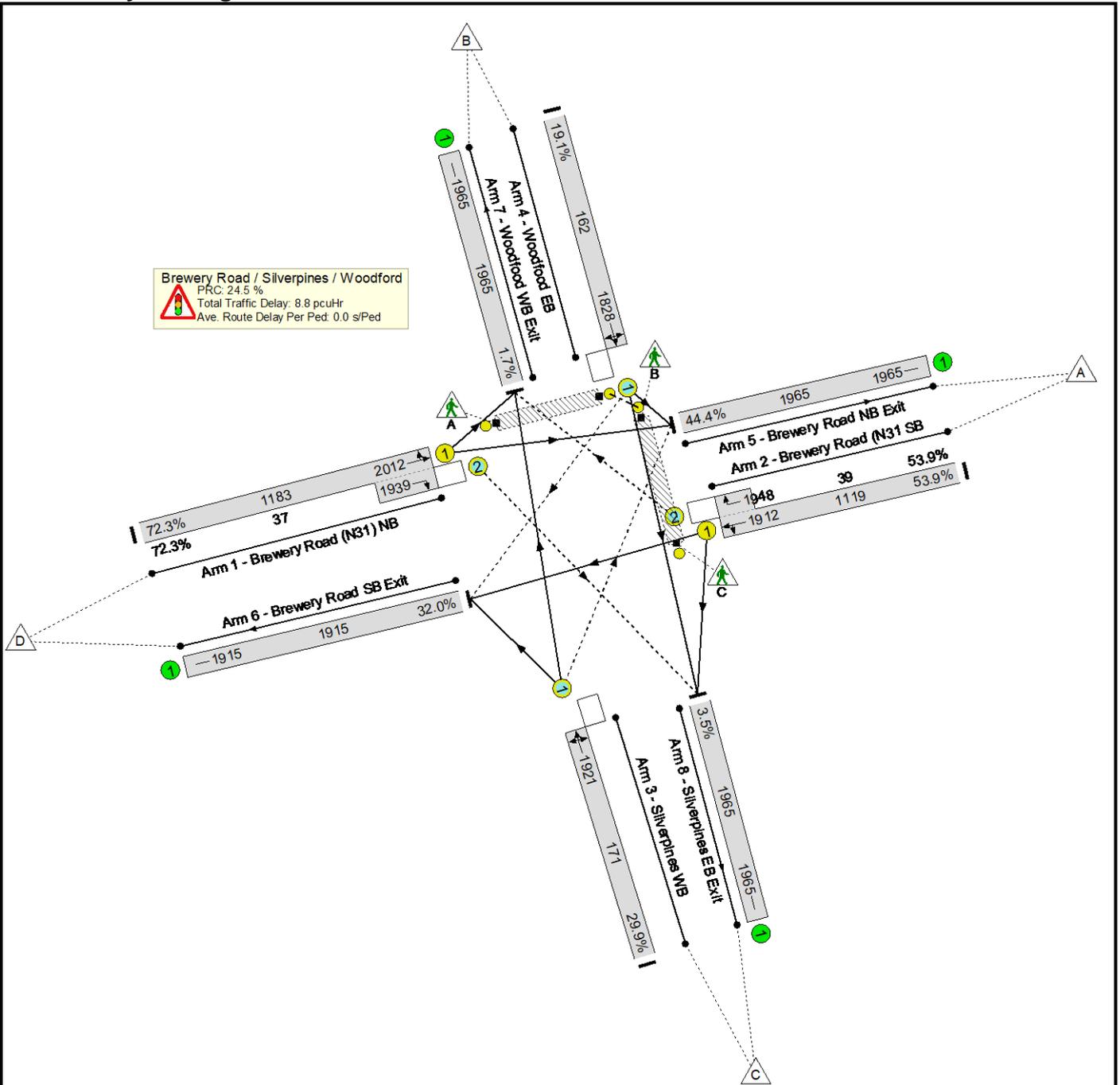
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	62.5%	88	0	0	9.5	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	62.5%	88	0	0	9.5	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	738	2010:1939	1190+28	60.6 : 60.6%	17	0	0	3.1	15.1	12.0
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	725	1921:1948	1146+14	62.5 : 62.5%	9	0	0	3.2	15.7	12.3
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	88	1926	171	51.4%	30	0	0	1.5	60.6	2.6
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	62	1821	140	44.3%	32	0	0	1.1	63.7	1.8
5/1	Brewery Road NB Exit	U	-		-	-	-	763	1965	1965	38.8%	-	-	-	0.3	1.5	0.3
6/1	Brewery Road SB Exit	U	-		-	-	-	790	1915	1915	41.3%	-	-	-	0.4	1.6	0.4
7/1	Woodford WB Exit	U	-		-	-	-	27	1965	1965	1.4%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	33	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		44.0		Total Delay for Signalled Lanes (pcuHr):		8.84		Cycle Time (s):		90			
				PRC Over All Lanes (%):		44.0		Total Delay Over All Lanes(pcuHr):		9.53							

Basic Results Summary

Scenario 6: 'C2 - Opening Year with Development Preferred PM' (FG6: 'C2 - Opening Year With Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Stages			
1	Min >= 6	2	Min >= 7
Min >= 6	3	Min >= 6	3

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	72.3%	81	0	0	8.8	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	72.3%	81	0	0	8.8	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	53	-	882	2012:1939	1183+37	72.3 : 72.3%	27	0	0	4.4	17.9	16.3
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	53	-	624	1912:1948	1119+39	53.9 : 53.9%	21	0	0	2.5	14.3	9.5
3/1	Silverpines WB Right Left Ahead	O	C		1	7	-	51	1921	171	29.9%	16	0	0	0.8	53.4	1.4
4/1	Woodford EB Left Right Ahead	O	B		1	7	-	31	1828	162	19.1%	17	0	0	0.5	53.1	0.8
5/1	Brewery Road NB Exit	U	-		-	-	-	873	1965	1965	44.4%	-	-	-	0.4	1.7	10.8
6/1	Brewery Road SB Exit	U	-		-	-	-	613	1915	1915	32.0%	-	-	-	0.2	1.4	0.2
7/1	Woodford WB Exit	U	-		-	-	-	34	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	68	1965	1965	3.5%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		24.5		Total Delay for Signalled Lanes (pcuHr):		8.09		Cycle Time (s):		90			
				PRC Over All Lanes (%):		24.5		Total Delay Over All Lanes(pcuHr):		8.76							

Basic Results Summary
Basic Results Summary

User and Project Details

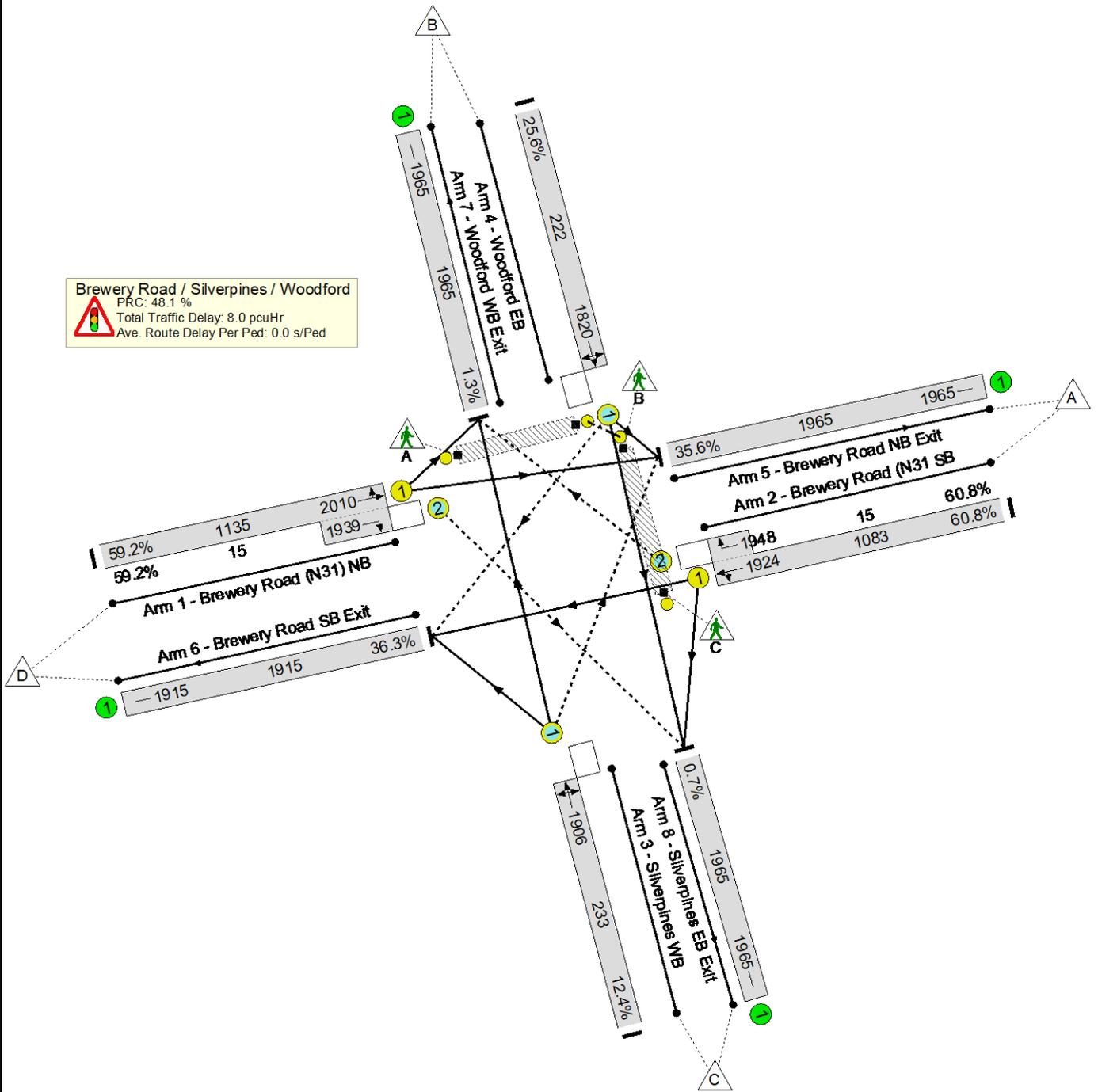
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Company:	
Address:	

Basic Results Summary

Scenario 1: 'A1 - Base AM' (FG1: 'A1 - AM Peak - Base', Plan 1: 'Network Control Plan 1')
Network Layout Diagram

Basic Results Summary

Brewery Road / Silverpines / Woodford
 PRC: 48.1 %
 Total Traffic Delay: 8.0 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6
<p>Stage 1: Node D has a green arrow pointing right. Node B has a red arrow pointing down. Node E has a red arrow pointing left. Node F has a red arrow pointing right. Node A has a green arrow pointing left. Node C has a red arrow pointing down.</p> <p>Stage 2: Node D has a red arrow pointing left. Node B has a green arrow pointing down. Node E has a red arrow pointing left. Node F has a red arrow pointing right. Node A has a red arrow pointing right. Node C has a green arrow pointing up.</p> <p>Stage 3: Node D has a red arrow pointing left. Node B has a red arrow pointing down. Node E has a green arrow pointing left. Node F has a green arrow pointing down. Node A has a red arrow pointing right. Node C has a red arrow pointing down.</p>					

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	60.8%	62	0	0	8.0	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	60.8%	62	0	0	8.0	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	681	2010:1939	1135+15	59.2 : 59.2%	9	0	0	3.1	16.6	11.6
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	667	1924:1948	1083+15	60.8 : 60.8%	9	0	0	3.2	17.1	11.7
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	29	1906	233	12.4%	15	0	0	0.4	44.4	0.7
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	57	1820	222	25.6%	29	0	0	0.7	46.8	1.5
5/1	Brewery Road NB Exit	U	-		-	-	-	699	1965	1965	35.6%	-	-	-	0.3	1.4	0.3
6/1	Brewery Road SB Exit	U	-		-	-	-	696	1915	1915	36.3%	-	-	-	0.3	1.5	0.3
7/1	Woodford WB Exit	U	-		-	-	-	25	1965	1965	1.3%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	14	1965	1965	0.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		48.1		Total Delay for Signalled Lanes (pcuHr):		7.41		Cycle Time (s):		90			
				PRC Over All Lanes (%):		48.1		Total Delay Over All Lanes(pcuHr):		7.98							

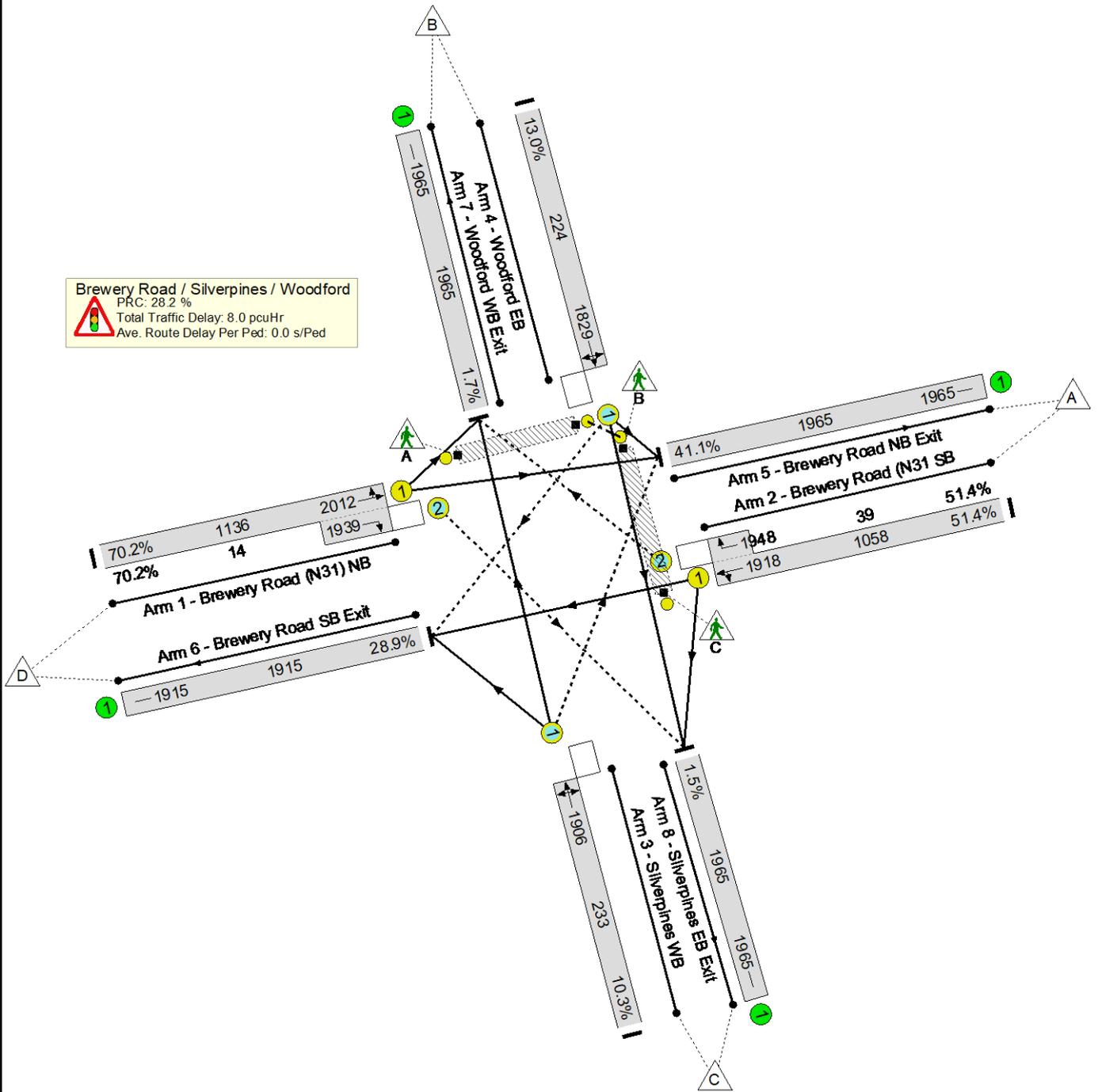
Basic Results Summary

Scenario 2: 'A2 - Base PM' (FG2: 'A2 - PM peak - Base', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

Basic Results Summary

Brewery Road / Silverpines / Woodford
 PRC: 28.2 %
 Total Traffic Delay: 8.0 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	70.2%	55	0	0	8.0	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	70.2%	55	0	0	8.0	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	808	2012:1939	1136+14	70.2 : 70.2%	10	0	0	4.3	19.3	15.5
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	564	1918:1948	1058+39	51.4 : 51.4%	20	0	0	2.4	15.6	8.9
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	24	1906	233	10.3%	9	0	0	0.3	43.8	0.6
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	29	1829	224	13.0%	16	0	0	0.4	44.9	0.7
5/1	Brewery Road NB Exit	U	-		-	-	-	808	1965	1965	41.1%	-	-	-	0.4	1.6	10.2
6/1	Brewery Road SB Exit	U	-		-	-	-	554	1915	1915	28.9%	-	-	-	0.2	1.3	0.2
7/1	Woodford WB Exit	U	-		-	-	-	33	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	30	1965	1965	1.5%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		28.2		Total Delay for Signalled Lanes (pcuHr):		7.43		Cycle Time (s):		90			
				PRC Over All Lanes (%):		28.2		Total Delay Over All Lanes(pcuHr):		8.00							

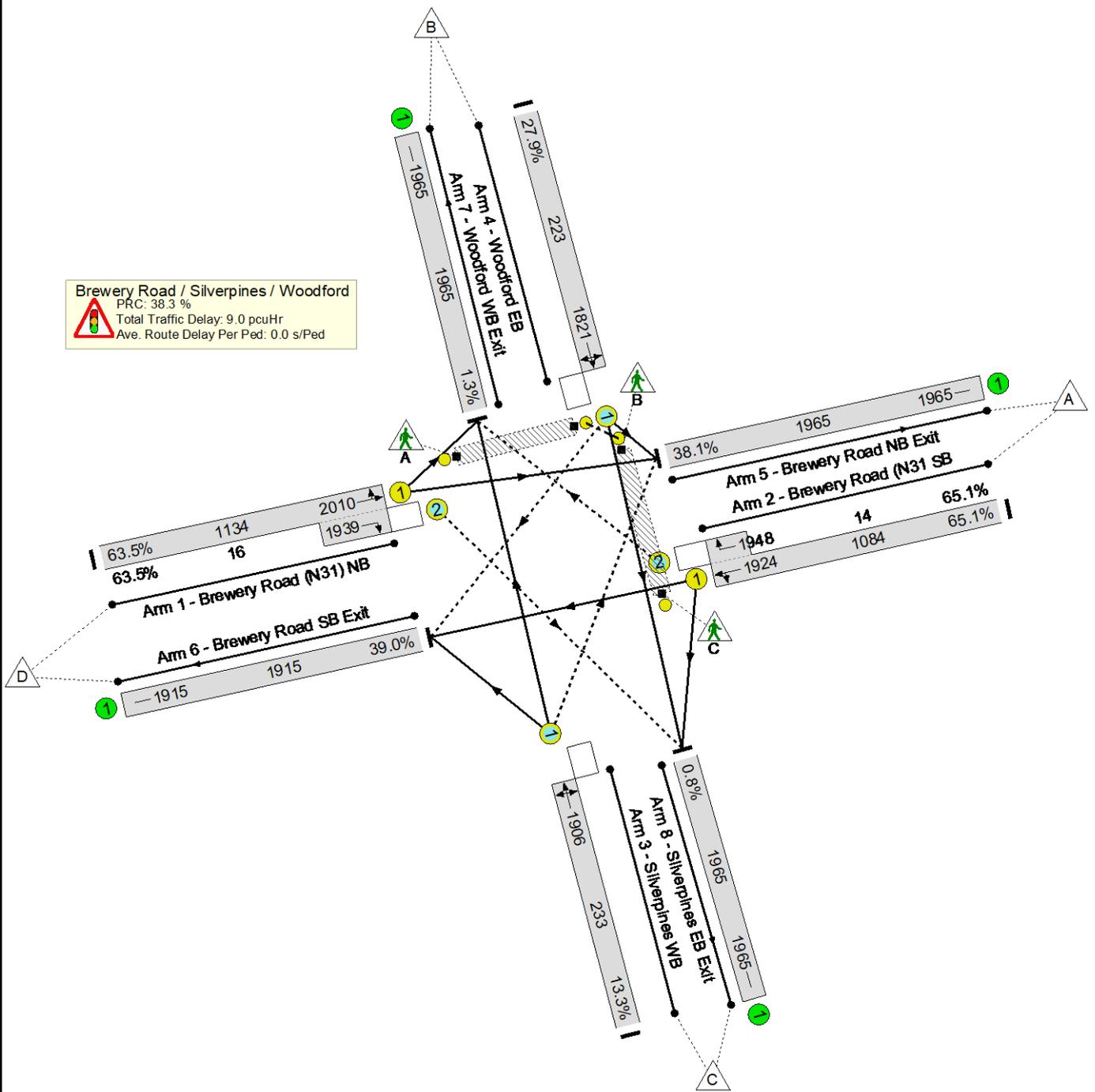
Basic Results Summary

Scenario 3: 'B1 - Opening Year no Development AM' (FG3: 'B1 - Opening Year No Development AM', Plan 1:
'Network Control Plan 1')

Network Layout Diagram

Basic Results Summary

Brewery Road / Silverpines / Woodford
 PRC: 38.3 %
 Total Traffic Delay: 9.0 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6
<p>Stage 1: Pedestrian paths from D to E, E to F, and F to A. Vehicle paths from B to E, E to F, and F to A. Pedestrian path from C to E.</p> <p>Stage 2: Pedestrian paths from D to E, E to F, and F to A. Vehicle paths from B to E, E to F, and F to A. Pedestrian path from C to E.</p> <p>Stage 3: Pedestrian paths from D to E, E to F, and F to A. Vehicle paths from B to E, E to F, and F to A. Pedestrian path from C to E.</p>					

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	65.1%	67	0	0	9.0	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	65.1%	67	0	0	9.0	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	730	2010:1939	1134+16	63.5 : 63.5%	10	0	0	3.6	17.6	13.0
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	714	1924:1948	1084+14	65.1 : 65.1%	9	0	0	3.6	18.1	13.0
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	31	1906	233	13.3%	16	0	0	0.4	44.6	0.8
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	62	1821	223	27.9%	32	0	0	0.8	47.3	1.6
5/1	Brewery Road NB Exit	U	-		-	-	-	749	1965	1965	38.1%	-	-	-	0.3	1.5	0.3
6/1	Brewery Road SB Exit	U	-		-	-	-	747	1915	1915	39.0%	-	-	-	0.3	1.5	0.3
7/1	Woodford WB Exit	U	-		-	-	-	26	1965	1965	1.3%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	15	1965	1965	0.8%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		38.3		38.3		Total Delay for Signalled Lanes (pcuHr):		8.35		Cycle Time (s):		90		
			PRC Over All Lanes (%):		38.3				Total Delay Over All Lanes(pcuHr):		8.99						

Basic Results Summary

Scenario 4: 'B2 - Opening Year no Development PM' (FG4: 'B2 - Opening Year No Development PM', Plan 1:
'Network Control Plan 1')

Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	75.3%	59	0	0	9.1	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	75.3%	59	0	0	9.1	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	867	2012:1939	1135+16	75.3 : 75.3%	12	0	0	5.1	21.0	17.6
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	604	1918:1948	1059+38	55.0 : 55.0%	21	0	0	2.7	16.3	9.9
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	25	1909	233	10.7%	9	0	0	0.3	43.9	0.6
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	31	1828	223	13.9%	17	0	0	0.4	45.0	0.8
5/1	Brewery Road NB Exit	U	-		-	-	-	866	1965	1965	44.1%	-	-	-	0.4	1.7	11.9
6/1	Brewery Road SB Exit	U	-		-	-	-	594	1915	1915	31.0%	-	-	-	0.2	1.4	0.2
7/1	Woodford WB Exit	U	-		-	-	-	34	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	33	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		19.5		Total Delay for Signalled Lanes (pcuHr):		8.49		Cycle Time (s):		90			
				PRC Over All Lanes (%):		19.5		Total Delay Over All Lanes(pcuHr):		9.14							

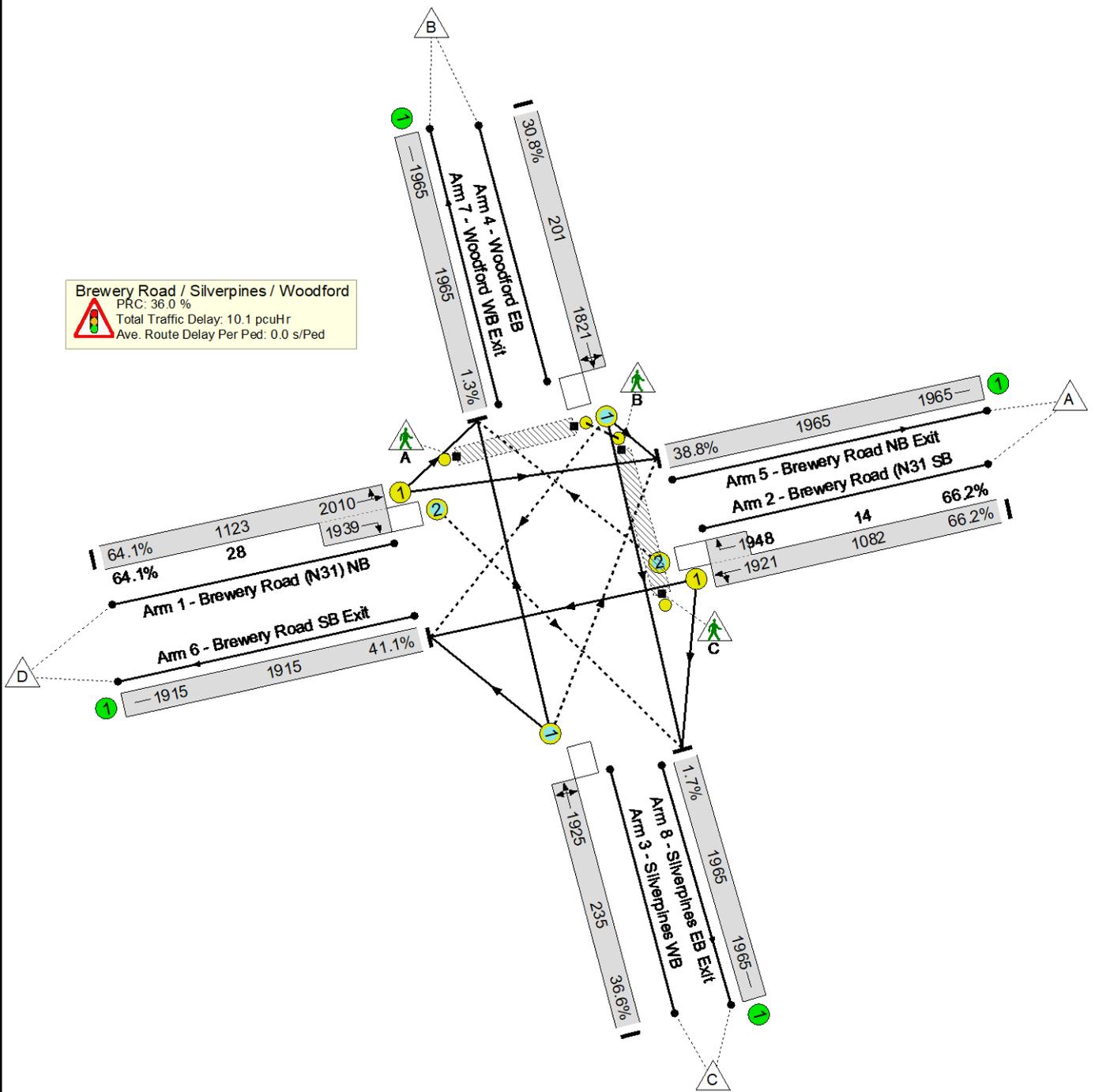
Basic Results Summary

Scenario 5: 'C1 - Opening Year with Development Preferred AM' (FG5: 'C1 - Opening Year With Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

Basic Results Summary

Brewery Road / Silverpines / Woodford
 PRC: 36.0 %
 Total Traffic Delay: 10.1 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	66.2%	89	0	0	10.1	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	66.2%	89	0	0	10.1	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	738	2010:1939	1123+28	64.1 : 64.1%	18	0	0	3.6	17.7	13.1
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	725	1921:1948	1082+14	66.2 : 66.2%	9	0	0	3.7	18.4	13.4
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	86	1925	235	36.6%	30	0	0	1.2	48.5	2.2
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	62	1821	201	30.8%	32	0	0	0.9	50.8	1.6
5/1	Brewery Road NB Exit	U	-		-	-	-	763	1965	1965	38.8%	-	-	-	0.3	1.5	0.3
6/1	Brewery Road SB Exit	U	-		-	-	-	788	1915	1915	41.1%	-	-	-	0.3	1.6	0.3
7/1	Woodford WB Exit	U	-		-	-	-	26	1965	1965	1.3%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	34	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1	PRC for Signalled Lanes (%):		36.0		Total Delay for Signalled Lanes (pcuHr):		9.37		Cycle Time (s):		90				
			PRC Over All Lanes (%):		36.0		Total Delay Over All Lanes(pcuHr):		10.05								

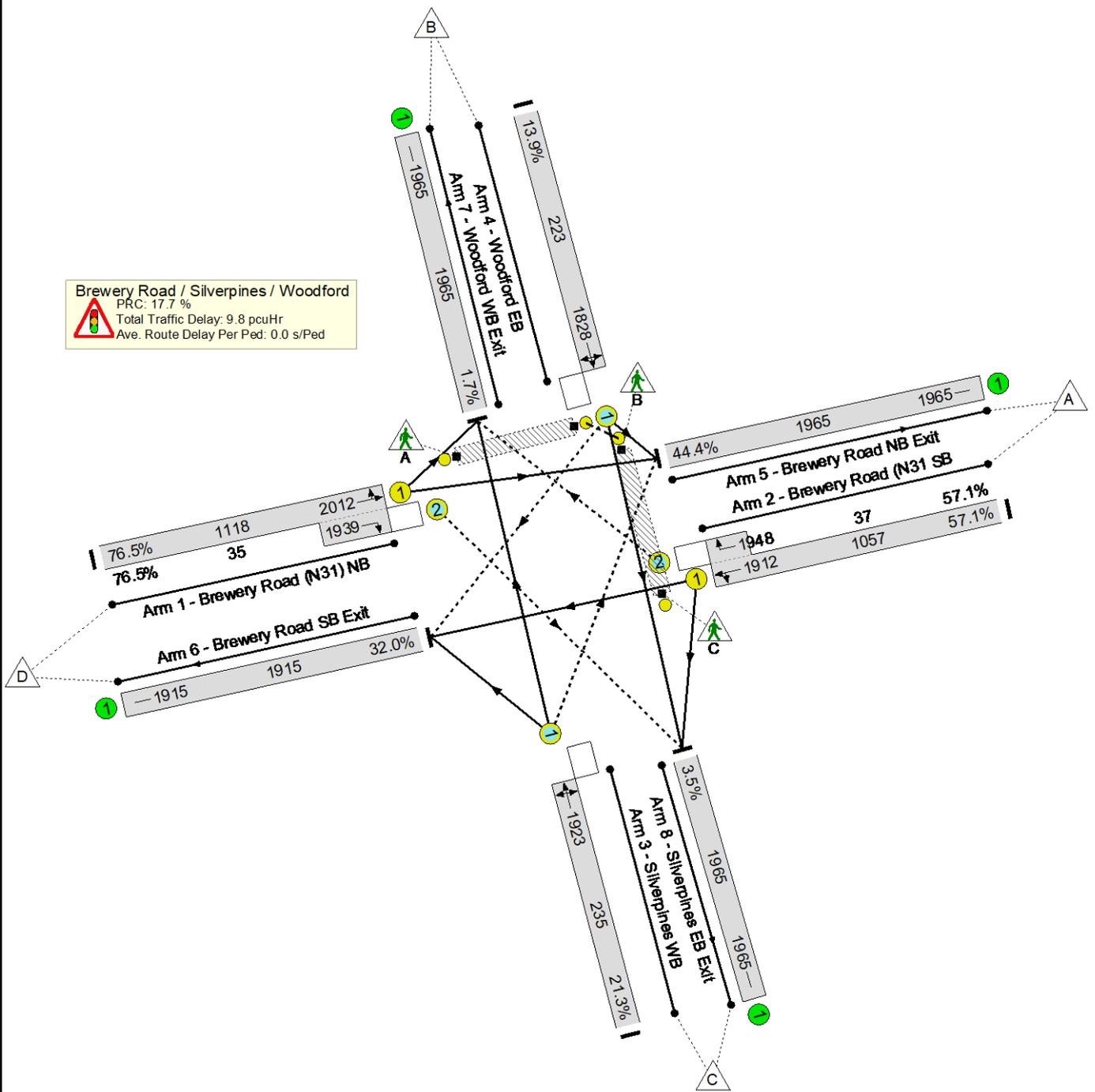
Basic Results Summary

Scenario 6: 'C2 - Opening Year with Development Preferred PM' (FG6: 'C2 - Opening Year With Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

Basic Results Summary

Brewery Road / Silverpines / Woodford
 PRC: 17.7 %
 Total Traffic Delay: 9.8 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Stages					
1	Min >= 6	2	Min >= 7	3	Min >= 6

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	76.5%	80	0	0	9.8	-	-
Brewery Road / Silverpines / Woodford	-	-	-		-	-	-	-	-	-	76.5%	80	0	0	9.8	-	-
1/1+1/2	Brewery Road (N31) NB Ahead Left Right	U+O	D		1	50	-	882	2012:1939	1118+35	76.5 : 76.5%	27	0	0	5.3	21.4	18.1
2/1+2/2	Brewery Road (N31) SB Ahead Right Left	U+O	A		1	50	-	625	1912:1948	1057+37	57.1 : 57.1%	21	0	0	2.9	16.7	10.5
3/1	Silverpines WB Right Left Ahead	O	C		1	10	-	50	1923	235	21.3%	15	0	0	0.6	45.3	1.3
4/1	Woodford EB Left Right Ahead	O	B		1	10	-	31	1828	223	13.9%	17	0	0	0.4	45.8	0.8
5/1	Brewery Road NB Exit	U	-		-	-	-	872	1965	1965	44.4%	-	-	-	0.4	1.7	10.8
6/1	Brewery Road SB Exit	U	-		-	-	-	613	1915	1915	32.0%	-	-	-	0.2	1.4	0.2
7/1	Woodford WB Exit	U	-		-	-	-	34	1965	1965	1.7%	-	-	-	0.0	0.9	0.0
8/1	Silverpines EB Exit	U	-		-	-	-	69	1965	1965	3.5%	-	-	-	0.0	0.9	0.0
Ped Link: P1	Unnamed Ped Link	-	F		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	4800	0.0%	-	-	-	0.0	0.0	0.0
		C1		PRC for Signalled Lanes (%):		17.7		Total Delay for Signalled Lanes (pcuHr):		9.17		Cycle Time (s):		90			
				PRC Over All Lanes (%):		17.7		Total Delay Over All Lanes(pcuHr):		9.84							



C APPENDIX C

C.1 Traffic Survey Results

IDASO
Innovative Data Solutions



Idaso Ltd
National Science Park,
Dublin Road, Mullingar,
Co Westmeath, Ireland

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Email: info@idaso.ie

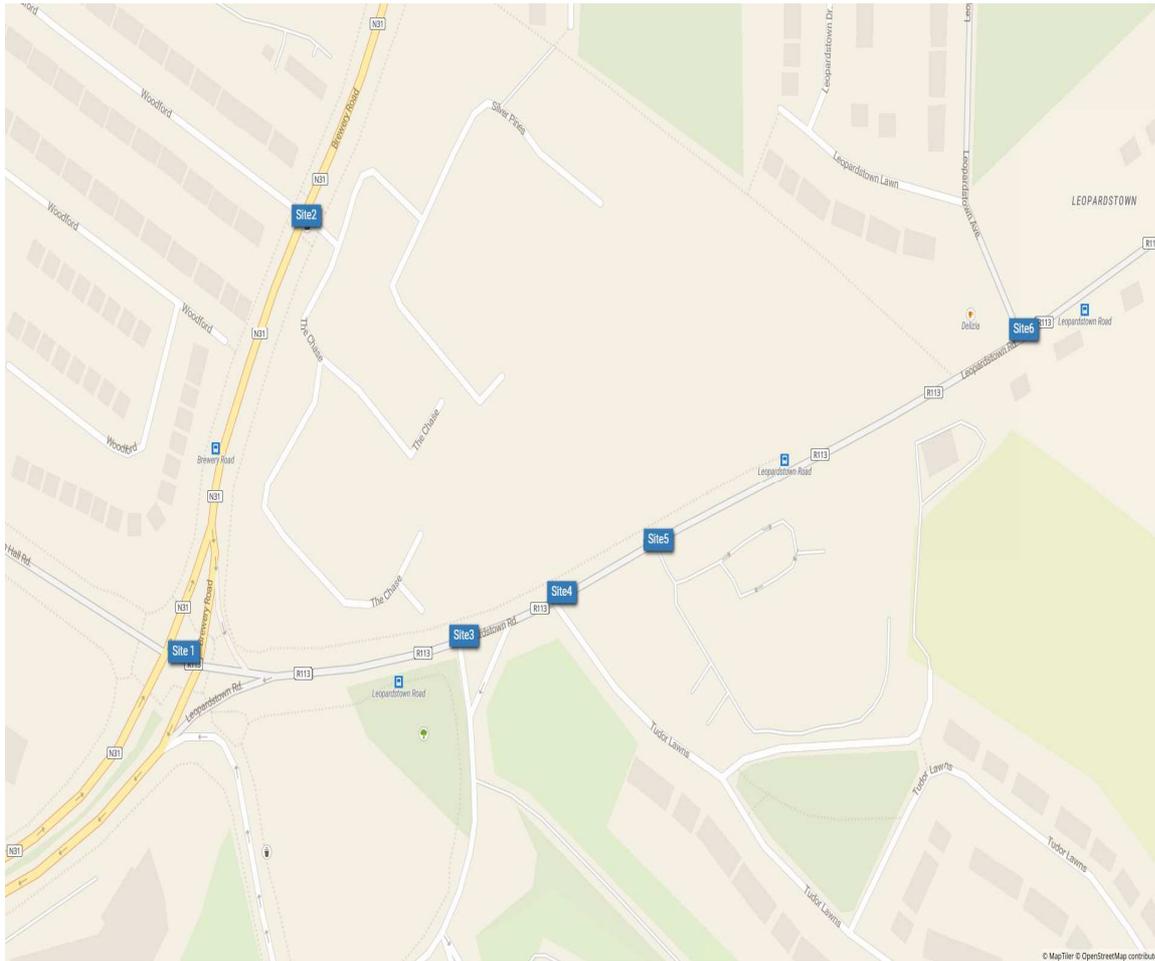
www.idaso.ie

Data Analysis Services
Traffic-Transportation- Commercial-Innovation

133 19172 Leopardstown

with compliments

Survey Name: 133 19172 Leopardstown
Date: 29 May 2019





IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	A => A									A => B									TOT	PCU
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV		
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	1.2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	0	11	11
07:30	0	0	0	0	0	0	0	0	0	0	1	1	10	0	1	0	0	1	14	13.6
07:45	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	0	17	17
H/TOT	0	2	1	36	1	3	0	0	1	44	42.8									
08:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
08:15	0	0	0	0	0	0	0	0	0	0	0	1	15	1	0	0	0	0	17	16.4
08:30	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11
08:45	0	0	0	0	0	0	0	0	0	0	0	0	13	3	0	2	0	0	18	19
H/TOT	0	1	44	4	0	2	0	0	51	51.4										
09:00	0	0	0	0	0	0	0	0	0	0	0	1	26	0	0	0	0	0	27	26.4
09:15	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	0	0	0	19	18.4
09:30	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5
09:45	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	11	11
H/TOT	0	2	57	3	0	0	0	0	62	60.8										
10:00	0	0	0	0	0	0	0	0	0	0	0	0	8	3	1	0	0	0	12	12
10:15	0	0	0	0	0	0	0	0	0	0	0	1	12	0	0	0	0	0	13	12.4
10:30	0	0	0	0	0	0	0	0	0	0	0	1	10	0	0	0	0	0	11	10.4
10:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7
H/TOT	0	2	36	3	2	0	0	0	43	41.8										
11:00	0	0	0	0	0	0	0	0	0	0	0	1	8	1	0	0	0	0	10	9.4
11:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
11:30	0	0	0	0	0	0	0	0	0	0	0	1	8	1	1	0	0	0	11	10.4
11:45	0	0	0	0	0	0	0	0	0	0	0	0	8	1	2	0	0	0	11	11
H/TOT	0	2	29	3	3	0	0	0	37	35.8										
12:00	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8
12:15	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9
12:30	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	10	10
12:45	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10
H/TOT	0	35	1	1	0	0	0	37	37											
13:00	0	0	0	0	0	0	0	0	0	0	0	0	15	0	2	0	0	0	17	17
13:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0	0	8	8
13:30	0	0	0	0	0	0	0	0	0	0	0	0	9	1	2	0	0	0	12	12
13:45	0	0	0	0	0	0	0	0	0	0	0	0	13	1	3	0	0	0	17	17
H/TOT	0	43	2	5	0	0	0	54	54											
14:00	0	0	0	0	0	0	0	0	0	0	0	0	16	0	2	0	0	0	18	18
14:15	0	0	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	0	14	14
14:30	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	1	0	0	13	13.5
14:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9
H/TOT	0	47	2	4	1	0	0	54	54.5											
15:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9
15:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
15:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	7	7
15:45	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11
H/TOT	0	30	0	4	0	0	0	34	34											
16:00	0	0	0	0	0	0	0	0	0	0	0	0	6	1	2	0	0	0	9	9
16:15	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	0	8	8
16:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
16:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9
H/TOT	0	24	2	4	0	0	0	30	30											
17:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8
17:15	0	0	0	0	0	0	0	0	0	0	1	0	9	0	0	0	0	0	10	9.2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9
17:45	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	0	13	13
H/TOT	0	1	0	36	0	3	0	0	0	40	39.2									
18:00	0	0	0	0	0	0	0	0	0	0	1	1	6	0	1	0	0	0	9	7.6
18:15	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	8	8
18:30	0	0	0	0	0	0	0	0	0	0	0	0	10	0	2	0	0	0	12	12
18:45	0	0	0	0	0	0	0	0	0	0	0	1	10	1	0	0	0	0	12	11.4
H/TOT	0	1	2	32	3	3	0	0	0	41	39									
12 TOT	0	4	10	449	24	36	3	0	1	527	520.3									



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	A => C									A => 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
07:00	0	0	0	0	0	0	0	0	0	0	0	0	45	1	5	0	0	2	53	55
07:15	0	0	0	0	0	0	0	0	0	0	3	1	96	1	3	2	3	2	111	114.9
07:30	0	0	0	0	0	0	0	0	0	0	1	2	94	1	7	1	0	2	108	108.5
07:45	0	0	0	0	0	0	0	0	0	0	1	0	119	4	5	0	1	1	131	132.5
H/TOT	0	5	3	354	7	20	3	4	7	403	410.9									
08:00	0	0	0	0	0	0	0	0	0	0	2	0	115	1	3	1	1	1	124	125.2
08:15	0	0	0	0	0	0	0	0	0	0	6	1	104	4	6	4	4	0	129	130.8
08:30	0	0	0	0	0	0	0	0	0	0	3	0	97	4	3	0	1	2	110	110.9
08:45	0	0	0	0	0	0	0	0	0	0	3	3	102	4	2	1	0	2	117	115.3
H/TOT	0	14	4	418	13	14	6	6	5	480	482.2									
09:00	0	0	0	0	0	0	0	0	0	0	3	2	76	4	6	1	3	0	95	95.8
09:15	0	0	0	0	0	0	0	0	0	0	2	4	90	5	4	5	1	1	112	112.8
09:30	0	0	0	0	0	0	0	0	0	0	1	0	55	5	4	1	3	0	69	72.6
09:45	0	0	0	0	0	0	0	0	0	0	2	1	62	2	2	5	0	1	75	76.3
H/TOT	0	8	7	283	16	16	12	7	2	351	357.5									
10:00	0	0	0	0	0	0	0	0	0	0	1	1	69	3	8	0	1	2	85	86.9
10:15	0	0	0	0	0	0	0	0	0	0	0	0	60	4	6	3	3	0	76	81.4
10:30	0	0	0	0	0	0	0	0	0	0	0	1	61	2	13	4	1	1	83	86.7
10:45	0	0	0	0	0	0	0	0	0	0	0	0	48	3	10	1	2	0	64	67.1
H/TOT	0	1	2	238	12	37	8	7	3	308	322.1									
11:00	0	0	0	0	0	0	0	0	0	0	0	1	59	3	13	3	0	1	80	81.9
11:15	0	0	0	0	0	0	0	0	0	0	1	0	65	5	10	2	3	0	86	90.1
11:30	0	0	0	0	0	0	0	0	0	0	1	6	67	2	9	7	1	0	93	93.4
11:45	0	0	0	0	0	0	0	0	0	0	0	1	69	2	11	5	2	1	91	96.5
H/TOT	0	2	8	260	12	43	17	6	2	350	361.9									
12:00	0	0	0	0	0	0	0	0	0	0	0	0	78	1	6	1	1	0	87	88.8
12:15	0	0	0	0	0	0	0	0	0	0	0	1	71	4	11	8	2	2	99	107
12:30	0	0	0	0	0	0	0	0	0	0	1	1	68	4	10	1	3	0	88	91
12:45	0	0	0	0	0	0	0	0	0	0	0	0	90	6	11	3	1	0	111	113.8
H/TOT	0	1	2	307	15	38	13	7	2	385	400.6									
13:00	0	0	0	0	0	0	0	0	0	0	0	0	92	1	11	4	2	1	111	116.6
13:15	0	0	0	0	0	0	0	0	0	0	0	0	87	2	13	1	0	0	103	103.5
13:30	0	0	0	0	0	0	0	0	0	0	0	1	90	6	11	3	0	1	112	113.9
13:45	0	0	0	0	0	0	0	0	0	0	1	0	81	4	16	2	4	3	111	119.4
H/TOT	0	1	1	350	13	51	10	6	5	437	453.4									
14:00	0	0	0	0	0	0	0	0	0	0	1	1	83	4	11	4	1	0	105	106.9
14:15	0	0	0	0	0	0	0	0	0	0	0	1	79	3	14	2	2	1	102	106
14:30	0	0	0	0	0	0	0	0	0	0	0	1	97	7	11	2	1	0	119	120.7
14:45	0	0	0	0	0	0	0	0	0	0	0	0	82	5	16	4	3	0	110	115.9
H/TOT	0	1	3	341	19	52	12	7	1	436	449.5									
15:00	0	0	0	0	0	0	0	0	0	0	0	0	84	3	12	7	1	0	107	111.8
15:15	0	0	0	0	0	0	0	0	0	0	0	0	100	0	18	3	5	1	127	136
15:30	0	0	0	0	0	0	0	0	0	0	1	1	88	1	23	2	3	3	122	128.5
15:45	0	0	0	0	0	0	0	0	0	0	0	0	96	0	17	4	2	0	119	123.6
16:00	0	0	0	0	0	0	0	0	0	0	1	0	116	1	19	2	2	0	141	143.8
16:15	0	0	0	0	0	0	0	0	0	0	0	0	95	2	21	2	0	0	120	121
16:30	0	0	0	0	0	0	0	0	0	0	0	1	90	1	19	3	3	0	117	121.8
16:45	0	0	0	0	0	0	0	0	0	0	0	1	109	0	18	2	1	2	133	136.7
H/TOT	0	1	2	410	4	77	9	6	2	511	523.3									
17:00	0	0	0	0	0	0	0	0	0	0	1	1	105	1	9	2	0	1	120	120.6
17:15	0	0	0	0	0	0	0	0	0	0	3	2	101	2	5	1	2	1	117	117.5
17:30	0	0	0	0	0	0	0	0	0	0	4	2	86	1	12	0	2	1	108	107.2
17:45	0	0	0	0	0	0	0	0	0	0	4	1	88	1	8	2	0	1	105	103.2
H/TOT	0	12	6	380	5	34	5	4	4	450	448.5									
18:00	0	0	0	0	0	0	0	0	0	0	3	4	123	1	10	0	1	1	143	140.5
18:15	0	0	0	0	0	0	0	0	0	0	0	1	80	5	9	2	0	1	98	99.4
18:30	0	0	0	0	0	0	0	0	0	0	2	1	117	3	4	1	0	1	129	128.3
18:45	0	0	0	0	0	0	0	0	0	0	1	5	102	3	4	4	0	0	119	117.2
H/TOT	0	6	11	422	12	27	7	1	3	489	485.4									
12 TOT	0	53	50	4131	132	479	118	72	40	5075	5195									



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	B => D								B => E								TOT	PCU		
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1			OGV2	PSV
07:00	2	0	126	0	13	4	1	0	146	147.7	3	0	50	2	9	1	0	1	66	65.1
07:15	0	1	138	0	9	3	0	0	151	151.9	2	1	59	1	3	0	0	2	68	67.8
07:30	1	2	159	2	13	1	0	0	178	176.5	1	0	99	0	5	0	0	4	109	112.2
07:45	4	3	145	2	9	2	1	0	166	163.3	1	1	139	2	12	5	0	1	161	163.1
H/TOT	7	6	568	4	44	10	2	0	641	639.4	7	2	347	5	29	6	0	8	404	408.2
08:00	2	0	165	6	5	1	2	1	182	184.5	8	2	129	2	7	0	0	3	151	146.4
08:15	4	1	126	2	8	1	0	0	142	138.7	3	2	160	3	15	2	0	3	188	188.4
08:30	5	2	164	2	11	1	0	0	185	180.3	5	0	167	1	2	4	1	2	182	183.3
08:45	4	1	122	3	7	1	1	2	141	141	3	6	174	4	7	5	0	2	201	199.5
H/TOT	15	4	577	13	31	4	3	3	650	644.5	19	10	630	10	31	11	1	10	722	717.6
09:00	9	1	146	3	15	3	3	1	181	179.6	2	1	127	3	8	3	0	5	149	153.3
09:15	0	0	131	4	12	4	0	2	153	157	4	1	112	0	8	1	1	2	129	129
09:30	3	1	79	5	15	3	2	1	109	111.1	0	0	89	2	13	2	0	4	110	115
09:45	1	0	78	0	8	6	4	0	97	104.4	1	1	80	2	10	4	0	2	100	102.6
H/TOT	13	2	434	12	50	16	9	4	540	552.1	7	3	408	7	39	10	1	13	488	499.9
10:00	0	0	74	3	11	0	2	0	90	92.6	2	1	93	6	13	3	0	2	120	121.3
10:15	0	0	77	3	4	4	4	0	92	99.2	1	1	84	6	9	5	0	0	106	107.1
10:30	0	0	72	2	7	7	1	0	89	93.8	0	0	67	5	10	1	0	0	83	83.5
10:45	0	1	81	1	16	13	2	1	115	124.5	0	0	83	3	10	3	0	0	99	100.5
H/TOT	0	1	304	9	38	24	9	1	386	410.1	3	2	327	20	42	12	0	2	408	412.4
11:00	0	0	74	0	21	2	1	1	99	102.3	1	1	74	2	14	4	0	1	97	98.6
11:15	0	0	81	1	18	7	2	2	111	119.1	0	0	70	0	14	1	0	0	85	85.5
11:30	0	0	74	4	19	4	4	1	106	114.2	1	0	72	4	13	4	0	0	94	95.2
11:45	1	1	95	3	14	5	1	0	120	122.4	1	0	65	4	6	4	1	0	81	83.5
H/TOT	1	1	324	8	72	18	8	4	436	458	3	1	281	10	47	13	1	1	357	362.8
12:00	0	0	70	7	24	11	5	0	117	129	1	2	71	4	9	0	0	1	88	87
12:15	0	0	86	3	22	10	2	0	123	130.6	0	0	77	1	9	6	0	0	93	96
12:30	0	0	100	4	19	4	0	0	127	129	0	3	107	2	17	1	0	0	130	128.7
12:45	0	2	121	4	27	11	1	1	167	173.6	1	0	82	2	6	1	0	0	92	91.7
H/TOT	0	2	377	18	92	36	8	1	534	562.2	2	5	337	9	41	8	0	1	403	403.4
13:00	0	1	109	2	16	5	2	1	136	141.5	0	1	94	1	15	1	0	0	112	111.9
13:15	3	1	122	1	14	4	1	1	147	148.3	0	0	83	3	9	5	0	0	100	102.5
13:30	0	1	110	2	21	9	2	2	147	155.5	0	0	74	0	13	3	0	0	90	91.5
13:45	1	0	93	5	3	0	0	0	102	101.2	0	0	83	3	11	0	0	0	97	97
H/TOT	4	3	434	10	54	18	5	4	532	546.5	0	1	334	7	48	9	0	0	399	402.9
14:00	0	0	97	6	17	4	0	0	124	126	1	0	83	4	10	3	0	3	104	107.7
14:15	1	1	102	2	16	5	6	2	135	145.9	3	3	83	0	15	1	0	0	105	101.3
14:30	2	1	124	2	21	7	2	2	161	166.9	1	2	78	2	14	3	0	1	101	101.5
14:45	0	0	121	1	33	4	3	0	162	167.9	2	0	75	4	6	4	0	0	91	91.4
H/TOT	3	2	444	11	87	20	11	4	582	606.7	7	5	319	10	45	11	0	4	401	401.9
15:00	1	1	117	7	34	12	2	1	175	183.2	0	1	68	2	12	1	0	1	85	85.9
15:15	0	0	132	3	40	7	0	0	182	185.5	1	3	77	1	10	1	1	0	94	93.2
15:30	0	1	137	2	35	3	2	1	181	185.5	2	0	56	2	6	0	0	0	66	64.4
15:45	0	0	165	6	44	12	1	0	228	235.3	2	1	59	0	11	2	0	1	76	75.8
H/TOT	1	2	551	18	153	34	5	2	766	789.5	5	5	260	5	39	4	1	2	321	319.3
16:00	0	0	189	1	51	6	1	0	248	252.3	1	1	70	0	13	1	1	3	90	93.4
16:15	1	1	175	7	41	3	1	0	229	230.4	0	1	82	7	7	4	0	4	105	110.4
16:30	1	1	151	3	32	6	1	0	195	197.9	3	1	67	1	1	1	0	2	76	75.5
16:45	2	2	131	4	18	7	2	2	168	173.3	2	4	91	3	5	0	0	4	109	109
H/TOT	4	4	646	15	142	22	5	2	840	853.9	6	7	310	11	26	6	1	13	380	388.3
17:00	1	0	174	3	24	2	2	2	208	212.8	2	0	78	1	2	0	0	3	86	87.4
17:15	0	1	175	2	21	1	0	0	200	199.9	3	0	72	2	4	1	0	1	83	82.1
17:30	2	2	147	0	13	3	0	1	168	167.7	1	3	68	1	0	0	0	0	73	70.4
17:45	1	2	152	3	10	3	0	2	173	174.5	1	0	66	2	3	0	0	3	75	77.2
H/TOT	4	5	648	8	68	9	2	5	749	754.9	7	3	284	6	9	1	0	7	317	317.1
18:00	0	2	140	1	17	2	0	0	162	161.8	1	0	65	1	3	0	0	3	73	75.2
18:15	0	1	124	0	16	1	0	1	143	143.9	2	0	73	5	1	0	0	1	82	81.4
18:30	1	3	128	2	7	0	3	0	144	145.3	2	0	69	0	2	0	0	4	77	79.4
18:45	1	0	111	3	13	0	0	1	129	129.2	0	0	66	1	2	1	0	1	71	72.5
H/TOT	2	6	503	6	53	3	3	2	578	580.2	5	0	273	7	8	1	0	9	303	308.5
12 TOT	54	38	5810	132	984	214	70	32	7234	7398	71	44	4110	107	404	92	5	70	4903	4942



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	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
07:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5
07:30	0	0	0	0	0	0	0	0	0	0	0	0	14	0	3	1	0	1	19	20.5
07:45	0	0	0	0	0	0	0	0	0	0	0	0	14	0	1	0	0	0	15	15
H/TOT	0	34	0	5	1	0	1	41	42.5											
08:00	0	0	0	0	0	0	0	0	0	0	0	0	24	0	4	0	0	0	28	28
08:15	0	0	0	0	0	0	0	0	0	0	0	0	32	0	1	0	0	0	33	33
08:30	0	0	0	0	0	0	0	0	0	0	0	0	22	0	3	0	0	0	25	25
08:45	0	0	0	0	0	0	0	0	0	0	0	1	16	1	1	0	1	0	20	20.7
H/TOT	0	1	94	1	9	0	1	0	106	106.7										
09:00	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	2	0	0	16	17
09:15	0	0	0	0	0	0	0	0	0	0	0	0	8	1	2	0	0	1	12	13
09:30	0	0	0	0	0	0	0	0	0	0	0	0	16	2	3	0	0	0	21	21
09:45	0	0	0	0	0	0	0	0	0	0	0	0	14	3	2	0	0	1	20	21
H/TOT	0	52	6	7	2	0	2	69	72											
10:00	0	0	0	0	0	0	0	0	0	0	0	0	10	1	2	1	1	1	16	18.8
10:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	4	2	0	0	11	12
10:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	2	0	0	10	11
10:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	4	0	0	0	12	12
H/TOT	0	27	1	14	5	1	1	49	53.8											
11:00	0	0	0	0	0	0	0	0	0	0	0	0	5	1	2	0	0	0	8	8
11:15	0	0	0	0	0	0	0	0	0	0	0	0	11	1	2	0	0	0	14	14
11:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	4	1	0	0	12	12.5
11:45	0	0	0	0	0	0	0	0	0	0	0	1	11	0	4	1	0	0	17	16.9
H/TOT	0	1	34	2	12	2	0	0	51	51.4										
12:00	0	0	0	0	0	0	0	0	0	0	1	0	15	0	2	1	0	0	19	18.7
12:15	0	0	0	0	0	0	0	0	0	0	0	0	19	0	2	1	0	0	22	22.5
12:30	0	0	0	0	0	0	0	0	0	0	0	0	17	0	6	1	0	0	24	24.5
12:45	0	0	0	0	0	0	0	0	0	0	0	0	17	1	5	0	0	0	23	23
H/TOT	0	1	0	68	1	15	3	0	0	88	88.7									
13:00	0	0	0	0	0	0	0	0	0	0	0	0	23	3	6	1	0	0	33	33.5
13:15	0	0	0	0	0	0	0	0	0	0	0	0	17	2	2	1	0	0	22	22.5
13:30	0	0	0	0	0	0	0	0	0	0	0	0	19	1	2	0	0	0	22	22
13:45	0	0	0	0	0	0	0	0	0	0	0	0	20	1	6	0	0	0	27	27
H/TOT	0	79	7	16	2	0	0	104	105											
14:00	0	0	0	0	0	0	0	0	0	0	0	0	21	1	6	0	0	0	28	28
14:15	0	0	0	0	0	0	0	0	0	0	0	0	25	0	5	0	0	0	30	30
14:30	0	0	0	0	0	0	0	0	0	0	0	0	15	1	4	1	2	0	23	26.1
14:45	0	0	0	0	0	0	0	0	0	0	0	0	15	1	6	4	0	0	26	28
H/TOT	0	76	3	21	5	2	0	107	112.1											
15:00	0	0	0	0	0	0	0	0	0	0	0	0	30	2	5	0	0	0	37	37
15:15	0	0	0	0	0	0	0	0	0	0	0	0	28	1	5	0	0	0	34	34
15:30	0	0	0	0	0	0	0	0	0	0	0	1	39	3	5	0	0	0	48	47.4
15:45	0	0	0	0	0	0	0	0	0	0	1	1	35	1	3	0	0	0	41	39.6
H/TOT	0	1	2	132	7	18	0	0	0	160	158									
16:00	0	0	0	0	0	0	0	0	0	0	0	0	30	1	2	2	0	0	35	36
16:15	0	0	0	0	0	0	0	0	0	0	0	1	41	1	7	0	0	0	50	49.4
16:30	0	0	0	0	0	0	0	0	0	0	0	0	40	1	3	0	0	0	44	44
16:45	0	0	0	0	0	0	0	0	0	0	0	1	44	0	1	0	0	0	46	45.4
H/TOT	0	2	155	3	13	2	0	0	175	174.8										
17:00	0	0	0	0	0	0	0	0	0	0	0	0	38	2	1	1	0	0	42	42.5
17:15	0	0	0	0	0	0	0	0	0	0	2	0	35	1	4	0	1	0	43	42.7
17:30	0	0	0	0	0	0	0	0	0	0	0	4	41	1	5	0	0	0	51	48.6
17:45	0	0	0	0	0	0	0	0	0	0	0	1	47	1	0	1	0	0	50	49.9
H/TOT	0	2	5	161	5	10	2	1	0	186	183.7									
18:00	0	0	0	0	0	0	0	0	0	0	2	0	37	1	3	0	0	0	43	41.4
18:15	0	0	0	0	0	0	0	0	0	0	1	0	43	1	4	0	0	0	49	48.2
18:30	0	0	0	0	0	0	0	0	0	0	0	3	34	0	6	0	0	1	44	43.2
18:45	0	0	0	0	0	0	0	0	0	0	0	0	31	0	1	0	0	0	32	32
H/TOT	0	3	3	145	2	14	0	0	1	168	164.8									
12 TOT	0	7	14	1057	38	154	24	5	5	1304	1314									



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	C => E									D => A									TOT	PCU
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV		
07:00	0	0	0	0	0	0	0	0	0	0	0	1	118	3	29	2	2	0	155	158
07:15	0	0	0	0	0	0	0	0	0	0	0	2	120	2	25	2	1	2	154	157.1
07:30	0	0	0	0	0	0	0	0	0	0	3	2	133	2	22	3	3	2	170	173.8
07:45	0	0	0	0	0	0	0	0	0	0	4	4	112	1	24	4	3	2	154	156.3
H/TOT	0	7	9	483	8	100	11	9	6	633	645.2									
08:00	0	0	0	0	0	0	0	0	0	0	6	2	134	1	17	1	2	3	166	166.1
08:15	0	0	0	0	0	0	0	0	0	0	4	3	148	5	8	2	3	0	173	172.9
08:30	0	0	0	0	0	0	0	0	0	0	4	1	137	2	21	3	3	0	171	172.6
08:45	0	0	0	0	0	0	0	0	0	0	1	2	75	2	18	3	2	1	104	107.1
H/TOT	0	15	8	494	10	64	9	10	4	614	618.7									
09:00	0	0	0	0	0	0	0	0	0	0	3	0	112	2	11	6	1	1	136	138.9
09:15	0	0	0	0	0	0	0	0	0	0	2	2	120	9	16	2	5	0	156	160.7
09:30	0	0	0	0	0	0	0	0	0	0	0	1	119	7	19	3	4	0	153	159.1
09:45	0	0	0	0	0	0	0	0	0	0	0	2	107	3	18	4	1	0	135	137.1
H/TOT	0	5	5	458	21	64	15	11	1	580	595.8									
10:00	0	0	0	0	0	0	0	0	0	0	0	0	112	4	14	0	1	0	131	132.3
10:15	0	0	0	0	0	0	0	0	0	0	0	0	82	5	20	3	2	1	113	118.1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	88	6	21	7	1	1	124	129.8
10:45	0	0	0	0	0	0	0	0	0	0	0	0	99	4	15	4	0	3	125	130
H/TOT	0	0	381	19	70	14	4	5	493	510.2										
11:00	0	0	0	0	0	0	0	0	0	0	0	1	62	7	13	3	2	0	88	91.5
11:15	0	0	0	0	0	0	0	0	0	0	0	0	80	2	18	2	2	0	104	107.6
11:30	0	0	0	0	0	0	0	0	0	0	0	1	68	6	11	5	3	0	94	99.8
11:45	0	0	0	0	0	0	0	0	0	0	0	0	92	5	19	4	4	1	125	133.2
H/TOT	0	2	302	20	61	14	11	1	411	432.1										
12:00	0	0	0	0	0	0	0	0	0	0	1	0	88	3	10	5	1	0	108	111
12:15	0	0	0	0	0	0	0	0	0	0	0	0	72	2	13	1	0	0	88	88.5
12:30	0	0	0	0	0	0	0	0	0	0	0	1	85	5	9	0	0	0	100	99.4
12:45	0	0	0	0	0	0	0	0	0	0	0	0	97	2	11	1	2	0	113	116.1
H/TOT	0	1	1	342	12	43	7	3	0	409	415									
13:00	0	0	0	0	0	0	0	0	0	0	2	0	88	3	14	4	5	0	116	122.9
13:15	0	0	0	0	0	0	0	0	0	0	3	0	99	2	10	4	2	0	120	122.2
13:30	0	0	0	0	0	0	0	0	0	0	1	0	101	3	12	3	0	0	120	120.7
13:45	0	0	0	0	0	0	0	0	0	0	0	0	79	7	13	3	1	1	104	107.8
H/TOT	0	6	0	367	15	49	14	8	1	460	473.6									
14:00	0	0	0	0	0	0	0	0	0	0	0	2	99	3	12	6	1	1	124	128.1
14:15	0	0	0	0	0	0	0	0	0	0	1	0	113	4	10	3	0	0	131	131.7
14:30	0	0	0	0	0	0	0	0	0	0	0	0	96	4	9	3	6	1	119	129.3
14:45	0	0	0	0	0	0	0	0	0	0	0	1	104	2	14	1	3	1	126	130.8
H/TOT	0	1	3	412	13	45	13	10	3	500	519.9									
15:00	0	0	0	0	0	0	0	0	0	0	0	0	100	4	6	2	2	0	114	117.6
15:15	0	0	0	0	0	0	0	0	0	0	0	1	79	3	13	2	3	0	101	105.3
15:30	0	0	0	0	0	0	0	0	0	0	0	1	74	3	9	4	1	0	92	94.7
15:45	0	0	0	0	0	0	0	0	0	0	0	1	90	1	11	2	1	1	107	109.7
H/TOT	0	3	343	11	39	10	7	1	414	427.3										
16:00	0	0	0	0	0	0	0	0	0	0	1	0	108	4	12	2	1	0	128	129.5
16:15	0	0	0	0	0	0	0	0	0	0	0	0	99	2	3	0	0	2	106	108
16:30	0	0	0	0	0	0	0	0	0	0	4	1	127	2	8	0	0	2	144	142.2
16:45	0	0	0	0	0	0	0	0	0	0	2	1	100	3	4	0	0	1	111	109.8
H/TOT	0	7	2	434	11	27	2	1	5	489	489.5									
17:00	0	0	0	0	0	0	0	0	0	0	4	2	153	3	11	3	0	1	177	175.1
17:15	0	0	0	0	0	0	0	0	0	0	6	1	139	7	12	0	0	2	167	163.6
17:30	0	0	0	0	0	0	0	0	0	0	6	3	184	3	6	0	0	1	203	197.4
17:45	0	0	0	0	0	0	0	0	0	0	5	4	154	1	4	1	0	1	170	165.1
H/TOT	0	21	10	630	14	33	4	0	5	717	701.2									
18:00	0	0	0	0	0	0	0	0	0	0	3	2	168	3	5	0	0	2	183	181.4
18:15	0	0	0	0	0	0	0	0	0	0	4	1	158	3	7	0	1	0	174	171.5
18:30	0	0	0	0	0	0	0	0	0	0	5	1	151	4	7	1	0	1	170	166.9
18:45	0	0	0	0	0	0	0	0	0	0	1	1	158	2	5	0	0	0	167	165.6
H/TOT	0	13	5	635	12	24	1	1	3	694	685.4									
12 TOT	0	76	48	5281	166	619	114	75	35	6414	6514									



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	D => D									D => E											
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	1	5	6	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	6	8	
07:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	1	6	7	
H/TOT	0	11	0	2	0	0	6	19	25												
08:00	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	1	14	15	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	1	14	15	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	3	22	25	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	24	0	1	0	0	1	26	27	
H/TOT	0	63	1	6	0	0	6	76	82												
09:00	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	3	15	18	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	1	7	8	
09:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	7	8	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	1	0	0	8	8.5	
H/TOT	0	29	0	2	1	0	5	37	42.5												
10:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	6	6	
10:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	5	8.6	
10:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	4	
10:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	5	
H/TOT	0	10	0	3	0	2	3	18	23.6												
11:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	1	6	7	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	1	6	7	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	5	7	
11:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	1	8	9	
H/TOT	0	17	0	3	0	0	5	25	30												
12:00	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	8	9	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	5	6	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	1	7	8	
12:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4	6	
H/TOT	0	16	0	3	0	0	5	24	29												
13:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	1	9	10	
13:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	1	1	9	11.3	
13:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	6	7	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	1	5	6.5	
H/TOT	0	21	0	2	1	1	4	29	34.8												
14:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	5	6	
14:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3	5	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	5	6	
14:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	10	0	0	0	0	4	14	18												
15:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	4	5.5	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4	6	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	1	1	6	8.3	
15:45	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	1	5	5.4	
H/TOT	0	1	0	1	1	1	5	19	25.2												
16:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	5	
16:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	1	1	6	8.3	
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	3	4	
16:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	5	6	
H/TOT	0	11	0	2	0	1	4	18	23.3												
17:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	5	
17:15	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	4	5.4	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	5	6	
17:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	3	
H/TOT	0	1	9	0	0	0	5	15	19.4												
18:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	5	
18:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	5	7	
18:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	6	7	
18:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	4	6	
H/TOT	0	13	0	0	0	0	6	19	25												
12 TOT	0	2	229	1	24	3	5	58	313	377.8											



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site 1
Location: Leopardstown Rd
Date: 29-May-2019

TIME	E => A									E => B										
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	8	0	2	0	0	0	10	10	1	0	29	2	3	0	0	3	38	40.2
07:15	1	0	2	1	3	0	0	0	7	6.2	3	0	38	0	4	0	0	4	49	50.6
07:30	0	0	7	0	2	0	0	1	10	11	0	0	56	4	10	5	0	2	77	81.5
07:45	0	0	9	0	2	0	0	0	11	11	2	1	77	1	6	2	0	2	91	91.8
H/TOT	1	0	26	1	9	0	0	1	38	38.2	6	1	200	7	23	7	0	11	255	264.1
08:00	0	0	7	0	1	0	0	0	8	8	2	0	93	1	7	2	0	2	107	108.4
08:15	0	0	15	1	4	0	0	0	20	20	5	0	92	1	7	6	0	2	113	114
08:30	1	0	12	0	0	1	0	0	14	13.7	5	1	84	4	6	4	0	4	108	109.4
08:45	0	0	13	0	5	0	0	0	18	18	3	0	105	1	8	0	0	3	120	120.6
H/TOT	1	0	47	1	10	1	0	0	60	59.7	15	1	374	7	28	12	0	11	448	452.4
09:00	0	1	12	3	8	0	0	0	24	23.4	2	1	102	3	8	1	0	3	120	121.3
09:15	0	0	6	3	4	3	0	1	17	19.5	3	0	57	5	7	2	0	2	76	76.6
09:30	0	0	18	1	4	2	0	0	25	26	0	2	76	2	9	4	0	4	97	101.8
09:45	0	0	17	1	4	0	0	0	22	22	0	0	52	5	8	5	0	2	72	76.5
H/TOT	0	1	53	8	20	5	0	1	88	90.9	5	3	287	15	32	12	0	11	365	376.2
10:00	0	0	13	3	1	0	0	0	17	17	1	1	51	4	9	1	0	0	67	66.1
10:15	0	0	18	4	5	2	0	0	29	30	0	2	64	2	15	4	0	0	87	87.8
10:30	0	0	22	4	0	2	0	0	28	29	1	2	55	5	12	4	0	1	80	81
10:45	0	0	11	0	4	1	0	0	16	16.5	0	0	79	3	13	6	0	0	101	104
H/TOT	0	0	64	11	10	5	0	0	90	92.5	2	5	249	14	49	15	0	1	335	338.9
11:00	0	1	24	2	7	2	0	0	36	36.4	0	1	69	5	8	4	0	0	87	88.4
11:15	0	0	14	2	5	2	0	0	23	24	0	0	58	0	13	3	0	0	74	75.5
11:30	0	0	15	3	4	2	0	0	24	25	0	0	71	1	11	2	0	1	86	88
11:45	0	1	20	0	2	0	0	0	23	22.4	0	1	70	2	16	2	0	0	91	91.4
H/TOT	0	2	73	7	18	6	0	0	106	107.8	0	2	268	8	48	11	0	1	338	343.3
12:00	3	0	29	2	3	2	0	0	39	37.6	0	0	55	6	15	2	0	0	78	79
12:15	0	1	18	2	5	0	0	0	26	25.4	0	0	86	2	11	1	0	0	100	100.5
12:30	1	0	30	0	2	2	0	0	35	35.2	0	0	87	2	9	3	0	2	103	106.5
12:45	0	1	27	2	5	0	0	0	35	34.4	1	0	77	4	9	2	0	1	94	95.2
H/TOT	4	2	104	6	15	4	0	0	135	132.6	1	0	305	14	44	8	0	3	375	381.2
13:00	0	1	31	1	4	0	0	0	37	36.4	1	0	78	5	16	1	0	0	101	100.7
13:15	0	1	30	1	1	1	0	0	34	33.9	0	0	83	3	11	3	1	0	101	103.8
13:30	0	0	20	0	3	0	0	0	23	23	0	0	70	6	16	1	1	0	94	95.8
13:45	0	0	23	4	3	2	0	0	32	33	1	0	96	2	10	3	0	1	113	114.7
H/TOT	0	2	104	6	11	3	0	0	126	126.3	2	0	327	16	53	8	2	1	409	415
14:00	0	0	22	4	3	0	0	0	29	29	2	0	70	1	8	3	0	0	84	83.9
14:15	0	0	22	0	2	0	0	0	24	24	1	1	82	2	10	3	3	0	102	106
14:30	0	1	20	2	3	2	0	0	28	28.4	1	0	79	3	6	1	0	1	91	91.7
14:45	0	0	27	4	1	1	0	0	33	33.5	2	2	63	0	12	3	0	0	82	80.7
H/TOT	0	1	91	10	9	3	0	0	114	114.9	6	3	294	6	36	10	3	1	359	362.3
15:00	0	1	21	3	1	2	0	0	28	28.4	1	0	88	4	8	4	0	0	105	106.2
15:15	0	0	14	0	3	0	0	0	17	17	0	1	83	3	12	0	0	0	99	98.4
15:30	0	0	19	0	2	0	0	0	21	21	0	2	75	7	12	0	0	1	97	96.8
15:45	0	0	30	3	3	0	0	0	36	36	2	1	59	3	8	2	0	2	77	77.8
H/TOT	0	1	84	6	9	2	0	0	102	102.4	3	4	305	17	40	6	0	3	378	379.2
16:00	0	0	26	1	1	1	0	0	29	29.5	2	1	86	0	9	0	1	1	100	100.1
16:15	0	1	15	0	1	0	0	1	18	18.4	0	1	89	1	9	3	0	3	106	109.9
16:30	0	0	34	0	0	0	0	0	34	34	4	0	93	2	4	0	0	5	108	109.8
16:45	0	0	30	1	2	0	0	0	33	33	5	1	99	4	6	0	0	3	118	116.4
H/TOT	0	1	105	2	4	1	0	1	114	114.9	11	3	367	7	28	3	1	12	432	436.2
17:00	0	1	16	1	0	0	0	0	18	17.4	3	1	77	1	4	0	0	1	87	85
17:15	0	0	31	0	1	0	0	1	33	34	1	1	94	0	4	0	0	1	101	100.6
17:30	0	0	22	1	0	1	0	0	24	24.5	7	2	64	1	2	0	0	2	78	73.2
17:45	2	0	23	0	1	0	0	0	26	24.4	7	1	70	0	3	0	0	1	82	76.8
H/TOT	2	1	92	2	2	1	0	1	101	100.3	18	5	305	2	13	0	0	5	348	335.6
18:00	1	1	16	0	1	1	0	0	20	19.1	1	1	75	1	4	1	0	3	86	88.1
18:15	2	0	15	2	0	0	0	1	20	19.4	2	0	82	2	0	0	0	0	86	84.4
18:30	0	0	25	1	1	0	0	0	27	27	3	1	98	1	2	0	0	1	106	104
18:45	0	0	24	1	1	0	0	1	27	28	4	1	91	1	4	0	0	2	103	101.2
H/TOT	3	1	80	4	3	1	0	2	94	93.5	10	3	346	5	10	1	0	6	381	377.7
12 TOT	11	12	923	64	120	32	0	6	1168	1174	79	30	3627	118	404	93	6	65	4423	4462



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site 1
 Location: Leopardstown Rd
 Date: 29-May-2019

TIME	E => C									E => 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	
07:00	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2	
H/TOT	0	2	0	2	0.4																
08:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.4	
08:15	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0.6	
08:30	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0.6	
08:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.4	
H/TOT	0	10	0	10	2																
09:00	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	1.4	
09:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.4	
09:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.4	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	11	0	11	2.2																
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.4	
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	2	0	2	0.4																
11:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	0	1	0.2																
12:00	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0											
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	0	1	0.2																
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0											
15:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	0	1	0.2																
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0											
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0											
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0											
12 TOT	0	28	0	28	5.6																



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site2
 Location: Brewery Rd / Silver Pines / Woodford
 Date: 29-May-2019

TIME	A => A										A => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
07:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3	3
07:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	1	0	0	5	4.7
H/TOT	0	1	0	8	1	2	1	0	0	13	12.7									
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	5	0	0	0	0	0	5	5											
09:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	3.5
09:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
09:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
H/TOT	0	7	0	2	1	0	0	10	10.5											
10:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	6	0	1	0	0	0	7	7											
11:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
H/TOT	0	9	0	1	0	0	0	10	10											
12:00	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
12:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	3
H/TOT	0	0	1	0	0	0	0	1	1	0	0	6	0	1	0	0	0	6	8	
13:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
13:30	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9
13:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
H/TOT	0	16	0	1	0	0	0	17	17											
14:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
14:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
14:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	5	6
14:45	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4	3.4
H/TOT	0	1	0	11	0	0	0	0	1	13	13.4									
15:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
15:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7
15:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
H/TOT	0	18	0	1	0	0	0	19	19											
16:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
16:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	11	1	0	0	0	0	12	12											
17:00	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4
17:15	0	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	7	6.2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
17:45	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	4	3.2
H/TOT	0	2	0	16	1	0	0	0	0	0	19	17.4								
18:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
18:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
18:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
18:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	10	1	0	0	0	0	11	11											
12 TOT	0	0	1	0	0	0	0	0	1	1	3	1	123	4	9	2	0	2	144	144



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site2
 Location: Brewery Rd / Silver Pines / Woodford
 Date: 29-May-2019

TIME	A => C								TOT	PCU	A => D								TOT	PCU
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV		
07:00	2	0	65	1	4	0	1	2	75	76.7	0	0	1	0	0	0	0	1	1	
07:15	2	1	110	0	4	2	2	2	123	126.4	0	0	3	0	0	0	0	3	3	
07:30	5	2	134	1	10	2	0	3	157	155.8	0	0	1	0	0	0	0	1	1	
07:45	2	1	157	5	8	0	1	1	175	175.1	0	0	1	0	0	0	0	1	1	
H/TOT	11	4	466	7	26	4	4	8	530	534	0	0	6	0	0	0	0	6	6	
08:00	4	1	115	4	5	1	2	1	133	133.3	0	0	2	0	0	0	0	2	2	
08:15	8	2	144	7	7	3	3	0	174	171.8	0	0	2	0	0	0	0	2	2	
08:30	7	2	148	4	4	0	1	3	169	166.5	0	0	3	0	0	0	0	3	3	
08:45	7	3	149	8	4	4	0	2	177	173.6	0	0	2	0	0	0	0	2	2	
H/TOT	26	8	556	23	20	8	6	6	653	645.2	0	0	9	0	0	0	0	9	9	
09:00	7	5	128	7	5	3	3	0	158	154.8	0	0	2	0	0	0	0	2	2	
09:15	1	5	120	5	7	4	1	1	144	144.5	0	0	4	0	0	0	0	4	4	
09:30	4	0	69	6	6	3	3	0	91	93.2	0	0	0	0	0	0	0	0	0	
09:45	4	1	88	6	4	4	0	1	108	107.2	0	0	1	0	1	0	0	2	2	
H/TOT	16	11	405	24	22	14	7	2	501	499.7	0	0	7	0	1	0	0	8	8	
10:00	1	1	91	9	16	0	1	2	121	122.9	0	0	3	0	2	0	0	5	5	
10:15	1	2	80	5	7	7	3	0	105	110.4	0	0	0	0	0	0	0	0	0	
10:30	2	2	85	3	25	5	1	1	124	126	0	0	0	0	0	0	0	0	0	
10:45	1	2	77	3	11	2	2	0	98	99.6	0	0	4	0	2	0	0	6	6	
H/TOT	5	7	333	20	59	14	7	3	448	458.9	0	0	7	0	4	0	0	11	11	
11:00	0	0	83	7	16	3	1	2	112	116.8	0	0	2	0	0	0	0	2	2	
11:15	2	0	91	5	16	4	2	0	120	123	0	0	2	0	0	0	0	2	2	
11:30	1	7	98	5	18	9	1	0	139	139.8	0	0	1	0	0	0	0	1	1	
11:45	0	1	83	3	14	5	2	1	109	114.5	0	0	1	0	0	0	0	1	1	
H/TOT	3	8	355	20	64	21	6	3	480	494.1	0	0	6	0	0	0	0	6	6	
12:00	0	0	94	1	10	1	1	0	107	108.8	0	0	1	0	1	0	0	2	2	
12:15	0	2	98	6	17	9	3	2	137	146.2	0	0	3	0	0	0	0	3	3	
12:30	1	0	88	7	11	4	2	0	113	116.8	0	0	5	0	0	0	0	5	5	
12:45	0	0	120	8	17	3	2	1	151	156.1	0	0	2	0	0	0	0	2	2	
H/TOT	1	2	400	22	55	17	8	3	508	527.9	0	0	11	0	1	0	0	12	12	
13:00	0	0	111	2	13	4	1	0	131	134.3	0	0	1	0	0	0	0	1	1	
13:15	0	0	124	4	21	1	0	0	150	150.5	0	0	2	0	1	0	0	3	3	
13:30	0	1	126	8	23	5	0	2	165	168.9	0	0	2	1	0	0	0	3	3	
13:45	2	0	119	6	22	4	4	2	159	166.6	0	0	2	0	1	0	0	3	3	
H/TOT	2	1	480	20	79	14	5	4	605	620.3	0	0	7	1	2	0	0	10	10	
14:00	1	1	108	7	15	6	2	0	140	144.2	0	0	4	0	0	0	0	4	4	
14:15	0	1	97	3	17	3	1	1	123	126.2	0	0	4	0	0	0	0	4	4	
14:30	0	1	127	10	20	4	1	0	163	165.7	0	0	6	0	0	0	0	6	6	
14:45	0	1	119	7	12	4	3	0	146	151.3	0	0	4	0	0	0	0	4	4	
H/TOT	1	4	451	27	64	17	7	1	572	571.5	0	0	11	0	1	0	0	12	12	
15:00	2	0	118	5	19	8	2	0	154	159	0	0	1	1	0	0	0	2	2	
15:15	0	0	113	1	21	4	6	2	147	158.8	0	0	0	0	0	0	0	0	0	
15:30	1	2	97	1	28	4	2	2	137	141.6	0	0	3	0	0	0	0	3	3	
15:45	1	1	116	1	21	5	1	0	146	148.4	0	0	2	0	0	0	0	2	2	
H/TOT	4	3	444	8	89	21	11	4	584	607.8	0	0	6	1	0	0	0	7	7	
16:00	1	0	121	5	25	3	2	0	157	160.3	0	0	3	0	0	0	0	3	3	
16:15	0	0	109	2	26	2	0	0	139	140	0	0	2	0	0	0	0	2	2	
16:30	1	1	99	3	16	3	3	0	126	130	0	0	3	0	0	0	0	3	3	
16:45	0	1	109	2	22	1	1	2	138	141.2	0	0	3	0	1	0	0	4	4	
H/TOT	2	2	438	12	89	9	6	2	560	571.5	0	0	11	0	1	0	0	12	12	
17:00	3	1	112	4	9	2	0	2	133	133	0	0	3	0	0	0	0	3	3	
17:15	4	3	105	2	7	1	2	1	125	124.1	0	0	4	0	0	0	0	4	4	
17:30	5	2	106	2	14	0	2	1	132	130.4	0	0	5	0	0	0	0	5	5	
17:45	6	2	112	2	11	1	0	1	135	130.5	0	0	8	0	0	0	0	8	8	
H/TOT	18	8	435	10	41	4	4	5	525	518	0	0	20	0	0	0	0	20	20	
18:00	4	4	120	1	11	0	1	1	142	138.7	0	0	4	0	0	0	0	4	4	
18:15	1	1	122	7	6	3	0	1	141	142.1	0	0	1	0	1	0	0	2	2	
18:30	4	1	125	5	5	0	0	1	141	138.2	1	0	2	0	0	0	0	3	2.2	
18:45	0	6	119	5	7	3	0	1	141	139.9	0	0	2	0	0	0	0	2	2	
H/TOT	9	12	486	18	29	6	1	4	565	558.9	1	0	9	0	1	0	0	11	10.2	
12 TOT	98	70	5249	211	637	149	72	45	6531	6624	1	0	117	2	10	0	0	130	129.2	



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site2
 Location: Brewery Rd / Silver Pines / Woodford
 Date: 29-May-2019

TIME	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
07:00	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
07:15	0	0	2	1	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
07:30	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
07:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	1	3	0	0	0	12	12	0									
08:00	0	0	5	0	0	2	0	0	7	8	0	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
08:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
08:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	12	0	0	2	0	0	14	15	0									
09:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
09:15	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
09:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
09:45	0	0	2	0	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	1	0	0	8	8.5	0	0	1	0	0	0	0	1	1	1
10:00	0	0	3	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0
10:15	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
10:30	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
10:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	12	0	1	0	0	1	14	15	0									
11:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
11:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	0	1	0	0	0	6	6	0									
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
12:30	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	9	0	1	0	0	0	10	10	0									
13:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
13:15	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
13:30	0	0	5	0	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0	0
13:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	13	0	1	0	0	1	15	16	0									
14:00	0	1	3	0	1	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0	0
14:15	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
14:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
14:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	10	0	1	0	0	0	12	11.4	0									
15:00	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
15:15	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
15:30	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
15:45	0	0	7	1	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	22	1	2	0	0	0	25	25	0									
16:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
16:15	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
16:30	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
16:45	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	10	1	1	0	0	0	12	12	0									
17:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
17:15	0	0	3	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	1
17:30	0	0	4	0	0	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1
17:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	13	0	0	0	0	0	13	13	0	0	2	0	0	0	0	2	2	2
18:00	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
18:15	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
18:30	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
18:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	14	1	0	0	0	0	15	15	0									
12 TOT	0	1	135	4	11	3	0	2	156	158.9	0	0	3	0	0	0	0	3	3	3



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site2
 Location: Brewery Rd / Silver Pines / Woodford
 Date: 29-May-2019

TIME	C => A								C => B											
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	1	126	3	29	2	2	0	163	166	0	0	2	0	1	0	0	0	3	3
07:15	0	2	121	4	28	2	1	2	160	163.1	0	0	2	0	0	0	0	0	2	2
07:30	2	3	130	2	17	4	2	3	163	167.2	0	0	2	0	0	0	0	0	2	2
07:45	4	4	115	3	28	4	3	2	163	165.3	1	0	8	0	0	1	0	0	10	9.7
H/TOT	6	10	492	12	102	12	8	7	649	661.6	1	0	14	0	1	1	0	0	17	16.7
08:00	8	1	119	2	16	1	2	3	152	151.1	0	0	3	0	0	0	0	0	3	3
08:15	3	4	166	5	13	2	3	0	196	196.1	0	0	5	0	0	0	0	0	5	5
08:30	7	1	128	7	14	5	3	0	165	165.2	0	0	1	0	0	0	0	0	1	1
08:45	2	2	104	4	24	3	2	2	143	146.3	0	0	0	0	0	0	0	0	0	0
H/TOT	20	8	517	18	67	11	10	5	656	658.7	0	0	9	0	0	0	0	0	9	9
09:00	4	1	119	5	17	6	1	1	154	155.5	0	0	3	0	0	0	0	0	3	3
09:15	3	2	118	18	21	5	5	1	173	179.4	0	0	1	0	0	0	0	0	1	1
09:30	0	1	128	9	26	5	4	0	173	180.1	0	0	5	0	0	0	0	0	5	5
09:45	0	2	112	6	21	4	1	0	146	148.1	0	0	3	0	0	0	0	0	3	3
H/TOT	7	6	477	38	85	20	11	2	646	663.1	0	0	12	0	0	0	0	0	12	12
10:00	0	0	124	6	17	0	1	0	148	149.3	0	0	0	0	0	0	0	0	0	0
10:15	1	0	103	8	27	5	2	1	147	152.3	0	0	0	0	0	0	0	0	0	0
10:30	1	0	103	10	21	9	1	1	146	152	0	0	3	0	0	0	0	0	3	3
10:45	0	0	106	4	18	5	0	3	136	141.5	0	0	3	0	0	0	0	0	3	3
H/TOT	2	0	436	28	83	19	4	5	577	595.1	0	0	6	0	0	0	0	0	6	6
11:00	0	2	79	7	19	5	2	0	114	117.9	0	0	1	0	0	0	0	0	1	1
11:15	0	0	96	2	24	4	2	0	128	132.6	0	0	2	0	0	0	0	0	2	2
11:30	0	0	86	7	15	7	3	0	118	125.4	0	0	0	0	0	0	0	0	0	0
11:45	0	1	106	3	17	5	3	1	136	142.8	0	0	1	0	0	0	0	0	1	1
H/TOT	0	3	367	19	75	21	10	1	496	518.7	0	0	4	0	0	0	0	0	4	4
12:00	2	0	114	5	14	7	1	0	143	146.2	0	0	3	0	0	0	0	0	3	3
12:15	0	1	86	2	16	1	0	0	106	105.9	0	0	2	0	0	0	0	0	2	2
12:30	1	1	110	7	10	2	0	1	132	132.6	0	0	4	0	0	0	0	0	4	4
12:45	1	1	121	5	13	1	2	0	144	145.7	0	0	2	0	0	0	0	0	2	2
H/TOT	4	3	431	19	53	11	3	1	525	530.4	0	0	11	0	0	0	0	0	11	11
13:00	2	1	119	4	18	4	5	0	153	159.3	0	0	1	0	0	0	0	0	1	1
13:15	2	1	117	3	12	5	2	0	142	144.9	0	0	4	0	0	0	0	0	4	4
13:30	1	0	113	4	14	3	0	0	135	135.7	0	0	2	0	0	0	0	0	2	2
13:45	0	0	105	10	19	5	1	0	140	143.8	0	0	2	0	0	0	0	0	2	2
H/TOT	5	2	454	21	63	17	8	0	570	583.7	0	0	9	0	0	0	0	0	9	9
14:00	0	2	117	8	15	6	1	1	150	154.1	0	0	0	0	1	0	0	0	1	1
14:15	0	0	121	9	12	3	0	0	145	146.5	0	0	3	0	0	0	0	0	3	3
14:30	0	1	104	8	15	5	6	1	140	150.7	0	0	2	0	0	0	0	0	2	2
14:45	0	1	119	7	13	2	3	1	146	151.3	0	0	3	0	1	0	0	0	4	4
H/TOT	0	4	461	32	55	16	10	3	581	602.6	0	0	8	0	2	0	0	0	10	10
15:00	0	1	117	8	8	4	2	0	140	144	0	0	1	0	1	0	0	0	2	2
15:15	0	1	92	3	14	2	3	0	115	119.3	0	0	3	0	0	0	0	0	3	3
15:30	0	1	86	2	10	4	1	0	104	106.7	0	0	2	0	0	0	0	0	2	2
15:45	0	1	105	5	17	2	1	1	132	134.7	0	0	6	1	0	0	0	0	7	7
H/TOT	0	4	400	18	49	12	7	1	491	504.7	0	0	12	1	1	0	0	0	14	14
16:00	1	0	129	5	10	3	1	0	149	151	0	0	2	0	0	0	0	0	2	2
16:15	0	1	112	2	7	0	0	3	125	127.4	0	0	2	0	0	0	0	0	2	2
16:30	5	1	137	2	7	0	0	2	154	151.4	0	0	3	0	0	0	0	0	3	3
16:45	3	1	126	4	7	0	0	1	142	140	0	0	2	0	0	0	0	0	2	2
H/TOT	9	3	504	13	31	3	1	6	570	569.8	0	0	9	0	0	0	0	0	9	9
17:00	3	3	154	5	12	3	0	1	181	179.3	0	0	3	0	0	0	0	0	3	3
17:15	6	1	175	7	13	0	0	3	205	202.6	0	0	1	0	0	0	0	0	1	1
17:30	9	3	193	4	5	0	0	1	215	207	0	0	4	0	0	0	0	0	4	4
17:45	7	4	167	1	5	1	0	1	186	179.5	0	0	3	0	0	0	0	0	3	3
H/TOT	25	11	689	17	35	4	0	6	787	768.4	0	0	11	0	0	0	0	0	11	11
18:00	4	3	161	3	6	1	0	2	180	177.5	0	0	2	0	0	0	0	0	2	2
18:15	8	1	179	6	5	0	1	1	201	196.3	0	0	2	0	0	0	0	0	2	2
18:30	4	1	172	6	7	1	0	1	192	189.7	0	0	6	0	0	0	0	0	6	6
18:45	4	1	186	2	7	0	0	1	201	198.2	0	0	2	0	0	0	0	0	2	2
H/TOT	20	6	698	17	25	2	1	5	774	761.7	0	0	12	0	0	0	0	0	12	12
12 TOT	98	60	5926	252	723	148	73	42	7322	7419	1	0	117	1	4	1	0	0	124	123.7



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site2
Location: Brewery Rd / Silver Pines / Woodford
Date: 29-May-2019

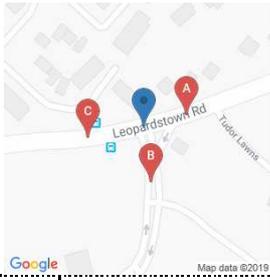
TIME	C => C										C => D									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3
07:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6
08:00	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	14	1	1	0	0	16	16	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
09:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	
10:15	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2	
10:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	
H/TOT	0	0	1	0	0	0	0	1	1	0	0	9	0	1	0	0	0	10	10	
11:00	0	0	0	1	0	0	0	1	1	0	0	4	0	0	0	0	0	4	4	
11:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	0	0	1	0	0	0	1	1	0	0	9	0	0	0	0	0	9	9	
12:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	
12:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
12:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	
13:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
13:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
13:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
13:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	11	11	
14:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
14:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	
14:30	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2	
14:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	12	0	0	0	0	13	12.2	
15:00	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
15:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
15:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	15	15	
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
16:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	
16:45	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	24	24	
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	
17:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
17:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	3.5	
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	1	1	0	0	10	10.5	
18:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	
18:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
18:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	
12 TOT	0	0	1	1	0	0	0	2	2	1	0	137	3	5	1	0	0	147	146.7	



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site2
Location: Brewery Rd / Silver Pines / Woodford
Date: 29-May-2019

TIME	D => A										D => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
07:15	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
07:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
07:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	11	0	0	0	0	0	11	11	0									
08:00	2	0	9	0	0	0	0	0	11	9.4	0	0	0	0	0	0	0	0	0	0
08:15	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
08:30	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
08:45	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	24	1	1	0	0	0	28	26.4	0									
09:00	1	0	2	0	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
09:30	1	0	1	0	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0
09:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	5	0	1	0	0	0	8	6.4	0	0	1	0	0	0	0	0	1	1
10:00	1	0	2	0	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0	0
10:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
10:45	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	11	0	1	0	0	0	14	12.4	0									
11:00	0	0	2	0	1	0	0	0	3	3	0	0	0	0	1	0	0	0	1	1
11:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
11:45	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	2	0	0	0	8	8	0	0	0	0	1	0	0	0	1	1
12:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
12:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	0	0	0	0	6	6	0									
13:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
13:15	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
13:30	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
13:45	0	0	3	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	1	0	0	0	0	8	8	0									
14:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
14:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
14:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
14:45	0	0	4	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	11	1	0	0	0	0	12	12	0									
15:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
15:15	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
15:30	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
15:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	10	0	1	0	0	0	11	11	0									
16:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
16:15	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0.2
16:30	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
16:45	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	0	0	0	7	7	1	0	1	0.2						
17:00	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
17:15	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
17:30	0	0	4	0	0	0	0	0	4	4	0	0	1	0	0	0	0	0	1	1
17:45	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	12	0	0	0	0	0	12	12	0	0	1	0	0	0	0	0	1	1
18:00	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
18:15	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
18:30	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
18:45	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	0	0	0	0	0	8	8	0									
12 TOT	6	0	118	3	6	0	0	0	133	128.2	1	0	2	0	1	0	0	0	4	3.2



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site3
Location: Leopardstown Rd / Foxrock Racecourse
Date: 29-May-2019

TIME	A => A										A => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	1	10	1	1	0	0	13	12.4	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	20	1	4	0	0	26	27	
07:30	0	0	0	0	0	0	0	0	0	0	3	0	30	0	2	0	0	38	38.6	
07:45	0	0	0	0	0	0	0	0	0	0	0	1	43	0	2	0	0	48	49.4	
H/TOT	0	3	2	103	2	9	0	0	125	127.4										
08:00	0	0	0	0	0	0	0	0	0	0	3	1	48	0	1	0	0	53	50	
08:15	0	0	0	0	0	0	0	0	0	0	4	1	47	2	1	1	0	58	56.7	
08:30	0	0	0	0	0	0	0	0	0	0	3	1	55	1	2	1	0	63	60.5	
08:45	0	0	0	0	0	0	0	0	0	0	8	0	57	0	1	0	0	67	61.6	
H/TOT	0	18	3	207	3	5	2	0	241	228.8										
09:00	0	0	0	0	0	0	0	0	0	0	3	1	35	0	1	0	0	41	39	
09:15	0	0	0	0	0	0	0	0	0	0	3	1	49	1	5	1	0	61	59.5	
09:30	0	0	0	0	0	0	0	0	0	0	1	0	31	0	1	1	0	35	35.7	
09:45	0	0	0	0	0	0	0	0	0	0	1	0	25	3	2	0	0	32	32.2	
H/TOT	0	8	2	140	4	9	2	0	169	166.4										
10:00	0	0	0	0	0	0	0	0	0	0	1	0	18	1	0	0	0	20	19.2	
10:15	0	0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	34	34	
10:30	0	0	0	0	0	0	0	0	0	0	1	0	13	1	2	0	0	17	16.2	
10:45	0	0	0	0	0	0	0	0	0	0	1	0	9	2	1	0	0	13	12.2	
H/TOT	0	3	0	71	7	3	0	0	84	81.6										
11:00	0	0	0	0	0	0	0	0	0	0	1	0	12	0	2	0	0	15	14.2	
11:15	0	0	0	0	0	0	0	0	0	0	1	0	19	1	0	1	0	22	21.7	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	16	3	1	0	0	20	20	
11:45	0	0	0	0	0	0	0	0	0	0	1	0	14	1	4	1	0	21	20.7	
H/TOT	0	3	0	61	5	7	2	0	78	76.6										
12:00	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	12	12	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	18	0	1	0	0	19	19	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16	
12:45	0	0	0	0	0	0	0	0	0	0	1	0	13	2	2	0	0	18	17.2	
H/TOT	0	1	0	57	3	4	0	0	65	64.2										
13:00	0	0	0	0	0	0	0	0	0	0	0	0	19	1	1	0	0	21	21	
13:15	0	0	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	19	19	
13:30	0	0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	0	22	22	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	20	0	2	0	0	22	22	
H/TOT	0	0	78	3	3	0	0	84	84											
14:00	0	0	0	0	0	0	0	0	0	0	1	1	16	3	1	1	0	23	22.1	
14:15	0	0	0	0	0	0	0	0	0	0	1	0	30	1	1	2	0	35	35.2	
14:30	0	0	0	0	0	0	0	0	0	0	1	0	10	3	1	0	0	15	14.2	
14:45	0	0	0	0	0	0	0	0	0	0	0	0	17	2	1	0	0	20	20	
H/TOT	0	3	1	73	9	4	3	0	93	91.5										
15:00	0	0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	0	12	11.4	
15:15	0	0	0	0	0	0	0	0	0	0	1	0	18	1	1	1	0	22	21.7	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	16	2	0	1	0	20	21.5	
15:45	0	0	0	0	0	0	0	0	0	0	0	0	15	1	2	0	0	18	18	
H/TOT	0	1	1	60	4	3	2	0	72	72.6										
16:00	0	0	0	0	0	0	0	0	0	0	1	0	15	1	0	1	0	18	17.7	
16:15	0	0	0	0	0	0	0	0	0	0	0	0	13	0	3	0	1	18	20.3	
16:30	0	0	0	0	0	0	0	0	0	0	2	0	17	1	1	0	0	22	21.4	
16:45	0	0	0	0	0	0	0	0	0	0	0	1	7	0	1	0	0	9	8.4	
H/TOT	0	3	1	52	2	5	1	1	67	67.8										
17:00	0	0	0	0	0	0	0	0	0	0	0	0	15	1	1	0	0	17	17	
17:15	0	0	0	0	0	0	0	0	0	0	1	0	12	0	0	0	0	14	14.2	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	14	0	2	0	0	16	16	
17:45	0	0	0	0	0	0	0	0	0	0	0	0	17	2	2	0	0	21	21	
H/TOT	0	1	0	58	3	5	0	0	68	68.2										
18:00	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	13	16	
18:15	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	11	12	
18:30	0	0	0	0	0	0	0	0	0	0	2	0	10	0	2	0	0	14	12.4	
18:45	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12	
H/TOT	0	2	0	41	1	2	0	0	50	52.4										
12 TOT	0	46	10	1001	46	59	12	1	1196	1182										



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site3
Location: Leopardstown Rd / Foxrock Racecourse
Date: 29-May-2019

TIME	A => C								B => A								TOT	PCU		
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2			PSV	
07:00	5	0	159	2	20	4	1	0	191	190.3	0	0	4	1	1	0	0	7	7.5	
07:15	3	1	198	2	11	3	0	1	219	218.5	1	0	12	0	3	2	0	1	19	20.2
07:30	1	2	208	0	9	2	0	0	222	221	0	1	18	1	2	0	0	3	25	27.4
07:45	9	4	254	4	17	6	1	0	295	289.7	1	0	23	3	0	0	0	7	26.2	
H/TOT	18	7	819	8	57	15	2	1	927	919.5	2	1	57	5	6	3	0	4	78	81.3
08:00	9	1	227	7	9	2	2	2	259	256.8	1	1	22	1	0	0	0	1	26	25.6
08:15	6	3	257	3	19	3	0	0	291	285.9	0	0	27	1	0	1	0	1	30	31.5
08:30	9	2	247	3	11	4	0	0	276	269.6	0	1	20	3	1	0	0	1	26	26.4
08:45	7	6	240	8	17	6	2	2	288	286.4	1	0	25	4	3	3	0	0	36	36.7
H/TOT	31	12	971	21	56	15	4	4	1114	1099	2	2	94	9	4	4	0	3	118	120.2
09:00	12	2	199	5	20	4	2	2	246	241.8	0	0	19	3	0	2	0	1	25	27
09:15	4	1	229	8	20	3	1	1	267	267	0	0	17	4	1	1	0	0	23	23.5
09:30	5	1	138	5	23	5	2	3	182	185.5	0	0	15	3	3	0	0	1	22	23
09:45	1	1	142	6	20	7	4	0	181	188.3	0	0	15	4	1	0	0	1	21	22
H/TOT	22	5	708	24	83	19	9	6	876	882.6	0	0	66	14	5	3	0	3	91	95.5
10:00	2	1	150	9	20	3	2	3	190	194.9	0	0	19	3	3	2	0	0	27	28
10:15	1	1	140	8	10	7	3	0	170	176	0	1	8	1	4	0	0	0	14	13.4
10:30	0	0	116	7	19	6	1	0	149	153.3	0	0	23	3	4	0	0	0	30	30
10:45	0	0	128	7	22	15	2	2	176	188.1	2	0	19	3	3	0	1	0	28	27.7
H/TOT	3	2	534	31	71	31	8	5	685	712.3	2	1	69	10	14	2	1	0	99	99.1
11:00	1	1	122	2	27	5	1	2	161	165.4	0	0	27	1	1	0	0	0	29	29
11:15	0	0	138	3	31	7	2	2	183	191.1	1	1	10	1	1	0	0	0	14	12.6
11:30	1	0	126	3	28	7	2	1	168	174.3	0	1	20	0	1	2	0	0	24	24.4
11:45	2	1	143	4	21	10	2	0	183	188.4	0	0	17	0	3	0	0	0	20	20
H/TOT	4	2	529	12	107	29	7	5	695	719.2	1	2	74	2	6	2	0	0	87	86
12:00	0	2	133	5	30	11	4	1	186	196.5	3	0	29	2	0	0	0	0	34	31.6
12:15	1	0	129	7	29	15	2	0	183	192.3	0	0	27	0	2	0	0	0	29	29
12:30	0	3	163	8	32	5	0	0	211	211.7	1	2	44	0	3	0	0	0	50	48
12:45	1	2	170	6	29	12	1	1	222	228.3	0	0	31	1	2	0	0	0	34	34
H/TOT	2	7	595	26	120	43	7	2	802	828.8	4	2	131	3	7	0	0	0	147	142.6
13:00	0	2	161	3	33	5	1	2	207	211.6	0	0	43	2	0	0	0	0	45	45
13:15	2	1	183	5	24	10	0	1	226	229.8	0	0	26	3	1	0	0	0	30	30
13:30	0	1	169	2	32	11	2	2	219	228.5	0	0	24	0	1	1	0	0	26	26.5
13:45	2	0	151	5	29	9	0	0	196	198.9	1	0	36	1	1	0	0	0	39	38.2
H/TOT	4	4	664	15	118	35	3	5	848	868.8	1	0	129	6	3	1	0	0	140	139.7
14:00	2	0	153	7	28	5	1	1	197	200.2	1	1	26	5	1	0	1	0	35	34.9
14:15	4	3	175	4	31	5	5	2	229	235	1	0	22	4	0	1	0	0	28	27.7
14:30	2	2	171	5	29	9	1	3	222	228	0	0	24	1	1	0	0	0	26	26
14:45	2	0	185	5	37	8	4	0	241	248.6	1	0	16	3	1	0	0	0	21	20.2
H/TOT	10	5	684	21	125	27	11	6	889	911.8	3	1	88	13	3	1	1	0	110	108.8
15:00	1	3	155	8	43	10	2	2	224	231	0	1	24	2	4	0	0	0	31	30.4
15:15	1	2	187	7	47	7	1	0	252	254.8	0	0	15	1	4	0	0	0	20	20
15:30	2	1	161	5	43	2	1	1	216	217.1	0	1	33	1	2	0	1	0	38	38.7
15:45	3	1	175	0	48	13	2	0	242	248.1	0	0	28	2	0	0	0	1	31	32
H/TOT	7	7	678	20	181	32	6	3	934	951	0	2	100	6	10	0	1	1	120	121.1
16:00	1	0	184	2	57	8	1	1	254	259.5	3	1	32	1	1	0	0	1	39	37
16:15	1	2	165	8	39	4	1	1	221	223.3	4	0	29	2	1	0	0	1	37	34.8
16:30	4	1	157	5	35	6	1	0	209	209.5	2	1	44	2	2	0	0	0	51	48.8
16:45	4	5	135	5	18	6	1	3	177	178.1	5	1	51	1	4	0	0	0	62	57.4
H/TOT	10	8	641	20	149	24	4	5	861	870.4	14	3	156	6	8	0	0	2	189	178
17:00	3	0	184	4	26	2	2	2	223	226.2	2	1	60	1	1	0	0	3	68	68.8
17:15	5	0	158	4	23	1	0	0	191	187.5	3	2	79	1	1	0	0	2	88	86.4
17:30	3	3	150	3	14	3	0	2	178	177.3	8	1	65	2	1	0	0	0	77	70
17:45	2	2	154	4	10	3	0	2	177	177.7	1	1	62	1	2	0	0	1	68	67.6
H/TOT	13	5	646	15	73	9	2	6	769	768.7	14	5	266	5	5	0	0	6	301	292.8
18:00	3	3	143	4	17	2	0	1	173	170.8	5	1	62	1	2	0	0	1	72	68.4
18:15	2	0	134	6	19	1	0	1	163	162.9	4	4	74	2	0	0	0	1	85	80.4
18:30	3	3	150	2	12	1	2	2	175	175.9	1	0	43	1	1	0	0	1	47	47.2
18:45	1	0	139	2	14	1	0	1	158	158.7	0	0	37	1	1	0	0	0	39	39
H/TOT	9	6	566	14	62	5	2	5	669	668.3	10	5	216	5	4	0	0	3	243	235
12 TOT	133	70	8035	227	1202	284	65	53	10069	10200	53	24	1446	84	75	16	3	22	1723	1700



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site3
Location: Leoardstown Rd / Foxrock Racecourse
Date: 29-May-2019

TIME	B => B										B => C									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	1	15	16.5
07:15	0	0	0	0	0	0	0	0	0	0	0	0	23	0	2	0	0	2	27	29
07:30	0	0	0	0	0	0	0	0	0	0	0	0	28	0	6	0	0	3	37	40
07:45	0	0	0	0	0	0	0	0	0	0	0	0	46	0	4	1	0	1	52	53.5
H/TOT	0	0	109	0	13	2	0	7	131	139										
08:00	0	0	0	0	0	0	0	0	0	0	1	1	63	1	4	0	0	2	72	72.6
08:15	0	0	0	0	0	0	0	0	0	0	1	0	59	2	3	1	0	3	69	71.7
08:30	0	0	0	0	0	0	0	0	0	0	0	0	68	0	2	0	1	2	73	76.3
08:45	0	0	0	0	0	0	0	0	0	0	1	1	56	2	0	1	0	2	63	64.1
H/TOT	0	3	2	246	5	9	2	1	9	277	284.7									
09:00	0	0	0	0	0	0	0	0	0	0	1	0	48	0	3	1	0	4	57	60.7
09:15	0	0	0	0	0	0	0	0	0	0	0	0	37	0	2	0	0	3	42	45
09:30	0	0	0	0	0	0	0	0	0	0	0	0	21	0	4	0	0	3	28	31
09:45	0	0	0	0	0	0	0	0	0	0	0	0	15	2	2	1	0	1	21	22.5
H/TOT	0	1	0	121	2	11	2	0	11	148	159.2									
10:00	0	0	0	0	0	0	0	0	0	0	0	0	20	2	2	1	0	0	25	25.5
10:15	0	0	0	0	0	0	0	0	0	0	0	0	17	0	3	2	1	0	23	25.3
10:30	0	0	0	0	0	0	0	0	0	0	0	0	25	2	1	1	0	0	29	29.5
10:45	0	0	0	0	0	0	0	0	0	0	0	0	22	0	4	0	0	0	26	26
H/TOT	0	0	84	4	10	4	1	0	103	106.3										
11:00	0	0	0	0	0	0	0	0	0	0	0	0	20	1	8	2	0	0	31	32
11:15	0	0	0	0	0	0	0	0	0	0	0	0	16	0	4	0	0	0	20	20
11:30	0	0	0	0	0	0	0	0	0	0	0	0	19	2	1	2	1	0	25	27.3
11:45	0	0	0	0	0	0	0	0	0	0	0	0	13	3	1	0	0	0	17	17
H/TOT	0	0	68	6	14	4	1	0	93	96.3										
12:00	0	0	0	0	0	0	0	0	0	0	0	0	27	2	3	0	0	0	32	32
12:15	0	0	0	0	0	0	0	0	0	0	0	0	28	0	4	0	0	0	32	32
12:30	0	0	0	0	0	0	0	0	0	0	0	0	42	1	3	0	0	0	46	46
12:45	0	0	0	0	0	0	0	0	0	0	0	0	26	0	4	0	0	0	30	30
H/TOT	0	0	123	3	14	0	0	140	140											
13:00	0	0	0	0	0	0	0	0	0	0	0	0	42	0	3	1	1	0	47	48.8
13:15	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	1	0	24	25.3
13:30	0	0	0	0	0	0	0	0	0	0	0	0	19	0	3	0	0	0	22	22
13:45	0	0	0	0	0	0	0	0	0	0	0	0	26	2	3	0	0	0	31	31
H/TOT	0	0	110	2	9	1	2	0	124	127.1										
14:00	0	0	0	0	0	0	0	0	0	0	0	0	30	2	2	1	1	0	36	37.8
14:15	0	0	0	0	0	0	0	0	0	0	1	1	20	0	6	1	1	0	30	30.4
14:30	0	0	0	0	0	0	0	0	0	0	1	1	24	1	2	0	0	0	29	27.6
14:45	0	0	0	0	0	0	0	0	0	0	0	0	18	3	2	1	0	0	24	24.5
H/TOT	0	2	2	92	6	12	3	2	0	119	120.3									
15:00	0	0	0	0	0	0	0	0	0	0	0	0	16	1	5	2	0	0	24	25
15:15	0	0	0	0	0	0	0	0	0	0	0	1	20	1	5	1	0	0	28	27.9
15:30	0	0	0	0	0	0	0	0	0	0	0	0	33	2	3	1	1	0	40	41.8
15:45	0	0	0	0	0	0	0	0	0	0	0	0	42	2	5	0	0	1	50	51
H/TOT	0	1	111	6	18	4	1	1	142	145.7										
16:00	0	0	0	0	0	0	0	0	0	0	0	0	84	1	8	0	1	3	97	101.3
16:15	0	0	0	0	0	0	0	0	0	0	0	1	84	3	5	0	0	2	95	96.4
16:30	0	0	0	0	0	0	0	0	0	0	0	1	68	0	2	1	0	2	74	75.9
16:45	0	0	0	0	0	0	0	0	0	0	0	1	78	1	1	1	1	3	86	90.2
H/TOT	0	3	314	5	16	2	2	10	352	363.8										
17:00	0	0	0	0	0	0	0	0	0	0	1	1	75	1	2	0	0	3	83	84.6
17:15	0	0	0	0	0	0	0	0	0	0	0	1	84	1	3	1	0	1	91	91.9
17:30	0	0	0	0	0	0	0	0	0	0	0	1	72	0	1	0	0	0	74	73.4
17:45	0	0	0	0	0	0	0	0	0	0	0	0	66	1	3	0	0	2	72	74
H/TOT	0	1	3	297	3	9	1	0	6	320	323.9									
18:00	0	0	0	0	0	0	0	0	0	0	0	0	69	0	2	0	0	2	73	75
18:15	0	0	0	0	0	0	0	0	0	0	1	0	56	0	0	0	0	1	58	58.2
18:30	0	0	0	0	0	0	0	0	0	0	0	0	54	0	1	0	0	2	57	59
18:45	0	0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	0	1	39	40
H/TOT	0	1	0	216	1	3	0	0	6	227	232.2									
12 TOT	0	8	11	1891	43	138	25	10	50	2176	2239									



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site3
Location: Leopardstown Rd / Foxrock Racecourse
Date: 29-May-2019

TIME	C => A									C => B										
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	130	5	35	5	0	3	178	183.5	0	0	52	0	11	1	0	0	64	64.5
07:15	4	0	143	3	29	5	0	1	185	185.3	0	1	94	0	5	1	0	3	104	106.9
07:30	4	0	121	2	22	6	0	0	155	154.8	0	2	125	2	8	3	1	4	145	150.6
07:45	3	1	158	2	29	5	1	0	199	199.8	0	2	127	1	5	1	0	1	137	137.3
H/TOT	11	1	552	12	115	21	1	4	717	723.4	0	5	398	3	29	6	1	8	450	459.3
08:00	3	4	168	1	19	9	1	1	206	208	0	0	137	2	5	2	0	3	149	153
08:15	7	1	148	1	19	8	0	0	184	181.8	0	1	132	3	3	1	0	2	142	143.9
08:30	6	2	124	4	33	7	1	2	179	179.8	3	1	154	1	7	2	0	3	171	172
08:45	2	1	122	3	19	2	0	1	150	149.8	1	1	120	4	6	3	0	2	137	139.1
H/TOT	18	8	562	9	90	26	2	4	719	719.4	4	3	543	10	21	8	0	10	599	608
09:00	1	0	132	5	25	4	0	1	168	170.2	0	5	147	4	5	2	0	3	166	167
09:15	2	0	142	7	29	3	2	0	185	187.5	1	3	131	5	6	2	0	2	150	150.4
09:30	0	0	145	4	26	6	2	2	185	192.6	0	2	109	2	4	0	1	3	121	124.1
09:45	0	0	128	6	27	4	1	1	167	171.3	0	0	82	7	6	3	0	1	99	101.5
H/TOT	3	0	547	22	107	17	5	4	705	721.6	1	10	469	18	21	7	1	9	536	543
10:00	1	0	105	4	30	4	0	0	144	145.2	0	2	65	3	9	3	1	0	83	84.6
10:15	0	2	121	2	29	7	2	0	163	167.9	0	1	56	2	7	2	1	0	69	70.7
10:30	0	2	129	5	18	7	1	2	164	169.6	0	0	58	5	5	0	1	0	69	70.3
10:45	0	1	125	6	32	11	4	0	179	189.1	0	1	34	1	5	0	0	0	41	40.4
H/TOT	1	5	480	17	109	29	7	2	650	671.8	0	4	213	11	26	5	3	0	262	266
11:00	0	1	129	3	27	6	2	0	168	173	0	2	35	1	4	0	1	0	43	43.1
11:15	1	0	108	3	23	4	1	1	141	144.5	0	0	30	3	7	1	2	0	43	46.1
11:30	0	0	125	1	29	9	0	3	167	174.5	0	1	26	1	5	1	0	0	34	33.9
11:45	1	0	140	2	28	8	0	0	179	182.2	0	1	31	6	13	1	1	0	53	54.2
H/TOT	2	1	502	9	107	27	3	4	655	674.2	0	4	122	11	29	3	4	0	173	177.3
12:00	2	0	127	4	27	4	0	0	164	164.4	0	0	25	3	5	2	0	0	35	36
12:15	2	1	155	3	24	5	3	1	194	199.2	0	0	30	0	4	0	0	0	34	34
12:30	0	0	141	5	22	4	0	2	174	178	0	0	29	1	3	1	1	0	35	36.8
12:45	1	1	151	3	25	8	1	1	191	195.9	0	0	34	6	7	1	0	0	48	48.5
H/TOT	5	2	574	15	98	21	4	4	723	737.5	0	0	118	10	19	4	1	0	152	155.3
13:00	1	0	152	1	25	3	1	0	183	185	0	0	38	3	4	2	0	0	47	48
13:15	1	2	140	2	18	4	2	0	169	171.6	0	0	34	2	5	1	0	0	42	42.5
13:30	0	1	128	11	25	10	0	1	176	181.4	0	0	43	2	4	1	0	0	50	50.5
13:45	1	0	151	5	22	5	1	5	190	198	0	0	44	2	11	1	2	0	60	63.1
H/TOT	3	3	571	19	90	22	4	6	718	736	0	0	159	9	24	5	2	0	199	204.1
14:00	2	0	149	3	19	11	0	2	186	191.9	0	1	42	2	5	0	0	0	50	49.4
14:15	1	2	155	3	29	6	2	3	201	207.6	0	0	40	1	4	1	1	0	47	48.8
14:30	2	0	147	4	18	3	0	2	176	177.9	0	0	40	5	4	0	0	0	49	49
14:45	1	2	137	3	27	6	0	0	176	177	1	1	34	2	9	1	0	0	48	47.1
H/TOT	6	4	588	13	93	26	2	7	739	754.4	1	2	156	10	22	2	1	0	194	194.3
15:00	0	1	135	6	21	9	0	1	173	177.9	2	0	28	1	8	1	0	3	43	44.9
15:15	0	1	156	4	19	1	1	1	183	185.2	0	0	27	1	6	0	0	0	34	34
15:30	0	2	149	7	22	2	1	2	185	188.1	0	0	26	3	5	1	1	0	36	37.8
15:45	3	0	135	4	20	2	0	1	165	164.6	0	1	31	1	2	0	0	0	49	42.4
H/TOT	3	4	575	21	82	14	2	5	706	715.8	2	1	112	6	21	2	1	7	152	159.1
16:00	2	2	188	3	14	3	2	0	214	215.3	0	0	30	1	5	0	0	1	37	38
16:15	0	2	176	0	14	3	0	0	195	195.3	0	1	34	3	2	1	0	3	44	46.9
16:30	5	2	179	5	14	3	0	0	208	204.3	0	0	27	2	2	1	0	6	38	44.5
16:45	7	1	191	4	11	0	0	1	215	209.8	0	0	40	4	1	0	0	2	47	49
H/TOT	14	7	734	12	53	9	2	1	832	824.7	0	1	131	10	10	2	0	12	166	178.4
17:00	5	3	196	0	10	3	0	0	217	212.7	1	0	27	2	1	1	0	1	33	33.7
17:15	6	3	172	1	7	0	0	0	189	182.4	0	1	36	0	2	0	0	2	41	42.4
17:30	12	3	198	5	6	1	0	0	225	214.1	0	0	33	1	1	0	0	2	37	39
17:45	9	2	190	3	17	1	0	0	222	214.1	1	0	32	0	12	0	0	1	46	46.2
H/TOT	32	11	756	9	40	5	0	0	853	823.3	2	1	128	3	16	1	0	6	157	161.3
18:00	3	4	194	9	5	1	0	1	217	213.7	0	0	29	0	3	0	0	2	34	36
18:15	2	1	168	4	11	3	0	0	189	188.3	1	0	34	2	1	0	0	0	38	37.2
18:30	5	2	213	2	9	0	0	0	231	225.8	0	0	42	0	1	0	0	1	44	45
18:45	6	1	223	6	12	1	0	1	250	246.1	0	1	22	2	1	1	0	1	28	28.9
H/TOT	16	8	798	21	37	5	0	2	887	873.9	1	1	127	4	6	1	0	4	144	147.1
12 TOT	114	54	7239	179	1021	222	32	43	8904	8976	11	32	2676	105	244	46	14	56	3184	3253



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site3
Location: Leoardstown Rd / Foxrock Racecourse
Date: 29-May-2019

TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
15:00	0	0	1	0	0	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	0	1	1
16:00	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
12 TOT	0	0	1	0	0	0	0	0	1	1



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site4
Location: Leopardstown Rd / Tudor Lawns
Date: 29-May-2019

TIME	A => A										A => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
07:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
H/TOT	0	7	0	0	0	0	0	0	7	7										
08:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
08:15	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	3
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
08:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	4
H/TOT	0	8	1	2	0	0	0	11	11											
09:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
09:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
09:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
H/TOT	0	9	1	0	0	0	0	10	10											
10:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	2
10:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
10:30	0	0	0	0	0	0	0	0	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	4	0	1	0	0	0	0	5	5
H/TOT	0	7	0	2	0	0	0	9	9											
11:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
11:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
H/TOT	0	9	0	0	0	0	0	9	9											
12:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
12:15	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4	4
12:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	6
12:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
H/TOT	0	15	0	1	0	0	0	16	16											
13:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
13:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	5
13:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	8
13:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
H/TOT	0	20	0	0	0	0	0	20	20											
14:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	4
14:15	0	0	1	0	0	0	0	0	1	1	0	2	0	1	0	0	0	0	3	3
14:30	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	4
14:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
H/TOT	0	0	1	0	0	0	0	0	1	1	0	12	2	1	0	0	0	15	15	
15:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1.2
15:15	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	7	7
15:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
H/TOT	0	1	0	13	0	1	0	0	0	15	14.2									
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	3
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6	6
16:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	5	5.5
H/TOT	0	14	0	2	1	0	0	17	17.5											
17:00	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	0	0	8	8
17:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	7
17:30	0	0	0	0	0	0	0	0	0	0	2	5	0	1	0	0	0	0	8	6.4
17:45	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	7	6.2
H/TOT	0	3	0	24	1	2	0	0	0	30	27.6									
18:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	5
H/TOT	0	12	0	1	0	0	0	13	13											
12 TOT	0	0	1	0	0	0	0	0	1	1	4	0	150	5	12	1	0	0	172	169.3



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site4
Location: Leopardstown Rd / Tudor Lawns
Date: 29-May-2019

TIME	A => C										B => A									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	5	1	171	1	20	4	1	0	203	201.7	0	0	2	0	0	0	0	0	2	2
07:15	3	1	208	1	13	3	0	2	231	231.5	0	0	6	0	0	0	0	0	6	6
07:30	6	2	241	3	10	2	0	3	267	265	0	0	4	0	0	0	0	0	4	4
07:45	10	4	286	2	19	6	1	2	330	325.9	0	0	5	0	0	0	0	0	5	5
H/TOT	24	8	906	7	62	15	2	7	1031	1024	0	0	17	0	0	0	0	0	17	17
08:00	14	0	275	7	12	2	2	2	314	308.4	2	1	6	0	0	1	0	0	10	8.3
08:15	7	4	290	3	15	4	0	2	325	321	1	0	3	0	1	0	0	0	5	4.2
08:30	11	2	308	4	10	5	0	0	340	332.5	0	0	8	0	0	0	0	0	8	8
08:45	15	6	296	4	14	9	1	3	348	341.2	0	0	2	0	0	0	0	0	2	2
H/TOT	47	12	1169	18	51	20	3	7	1327	1303	3	1	19	0	1	1	0	0	25	22.5
09:00	9	3	236	3	21	3	2	3	280	278.1	0	0	4	0	0	0	0	0	4	4
09:15	4	2	263	11	25	4	1	3	313	314.9	0	0	5	0	0	0	0	0	5	5
09:30	7	2	174	9	29	6	3	3	233	236.1	0	0	2	1	0	0	0	0	3	3
09:45	1	0	176	7	15	8	3	1	211	219.1	0	0	4	0	0	0	0	0	4	4
H/TOT	21	7	849	30	90	21	9	10	1037	1048	0	0	15	1	0	0	0	0	16	16
10:00	4	1	168	11	20	4	2	3	213	216.8	0	0	3	0	0	0	0	0	3	3
10:15	1	3	162	12	13	6	3	0	200	204.3	0	0	5	0	0	0	0	0	5	5
10:30	1	0	127	7	19	6	1	0	161	164.5	0	0	4	0	0	0	0	0	4	4
10:45	1	0	133	7	24	16	1	2	184	194.5	0	0	4	1	1	0	0	0	6	6
H/TOT	7	4	590	37	76	32	7	5	758	780.1	0	0	16	1	1	0	0	0	18	18
11:00	2	1	135	2	29	5	1	2	177	180.6	0	0	2	0	0	0	0	0	2	2
11:15	0	0	147	5	30	8	2	2	194	202.6	0	0	2	0	0	0	0	0	2	2
11:30	1	0	138	6	26	7	2	1	181	187.3	0	0	3	0	0	0	0	0	3	3
11:45	3	1	158	3	24	12	1	0	202	206.3	0	0	5	0	0	0	0	0	5	5
H/TOT	6	2	578	16	109	32	6	5	754	776.8	0	0	12	0	0	0	0	0	12	12
12:00	0	2	135	4	32	10	4	1	188	198	0	0	2	1	0	0	0	0	3	3
12:15	1	0	148	5	30	14	3	0	201	211.1	0	0	3	1	0	0	0	0	4	4
12:30	0	3	175	8	31	5	0	0	222	222.7	0	0	4	0	0	0	0	0	4	4
12:45	2	2	178	9	29	10	3	1	234	241.1	0	0	5	0	0	0	0	0	5	5
H/TOT	3	7	636	26	122	39	10	2	845	872.9	0	0	14	2	0	0	0	0	16	16
13:00	0	2	182	7	36	6	1	2	236	241.1	0	0	3	0	2	0	0	0	5	5
13:15	2	1	198	5	21	9	0	1	237	240.3	0	0	2	0	2	0	0	0	4	4
13:30	0	1	177	4	29	11	2	2	226	235.5	0	0	2	0	0	0	0	0	2	2
13:45	2	0	167	8	33	11	0	0	221	224.9	0	0	3	0	0	0	0	0	3	3
H/TOT	4	4	724	24	119	37	3	5	920	941.8	0	0	10	0	4	0	0	0	14	14
14:00	3	1	163	10	26	4	1	1	209	210.3	0	0	6	0	0	0	0	0	6	6
14:15	3	3	200	5	33	7	5	2	258	265.8	0	0	6	0	1	0	0	0	7	7
14:30	3	2	178	10	27	9	1	3	233	238.2	0	0	2	0	0	0	0	0	2	2
14:45	2	0	196	7	39	8	4	0	256	263.6	0	0	2	0	0	0	0	0	2	2
H/TOT	11	6	737	32	125	28	11	6	956	977.9	0	0	16	0	1	0	0	0	17	17
15:00	1	4	171	8	41	10	2	2	239	245.4	0	0	4	0	0	0	0	0	4	4
15:15	2	2	193	7	46	7	1	0	258	260	0	0	2	0	0	0	0	0	2	2
15:30	4	1	172	4	42	3	1	2	229	230	1	0	3	0	0	0	0	0	4	3.2
15:45	3	1	187	1	54	13	2	0	261	267.1	0	0	5	0	1	0	0	0	6	6
H/TOT	10	8	723	20	183	33	6	4	987	1003	1	0	14	0	1	0	0	0	16	15.2
16:00	1	0	196	2	57	9	1	1	267	275	0	0	3	0	0	0	0	0	3	3
16:15	1	2	180	8	42	3	2	2	240	244.1	0	0	4	0	1	0	0	0	5	5
16:30	4	1	162	8	38	7	1	1	222	224	0	0	2	0	0	0	0	0	2	2
16:45	4	5	135	7	18	5	1	4	179	180.6	1	0	4	0	0	0	0	0	5	4.2
H/TOT	10	8	673	25	155	24	5	8	908	921.7	1	0	13	0	1	0	0	0	15	14.2
17:00	4	0	182	6	24	2	2	1	221	222.4	0	0	3	1	0	0	0	0	4	4
17:15	6	0	164	4	23	1	0	1	199	195.7	0	0	5	0	0	0	0	0	5	5
17:30	4	2	156	3	13	3	0	2	183	182.1	0	0	7	0	0	0	0	0	7	7
17:45	2	2	161	5	14	3	0	2	189	189.7	0	0	5	0	0	0	0	0	5	5
H/TOT	16	4	663	18	74	9	2	6	792	789.9	0	0	20	1	0	0	0	0	21	21
18:00	3	3	145	4	17	2	0	4	178	178.8	0	0	2	0	0	0	0	0	2	2
18:15	2	0	146	6	19	1	0	2	176	176.9	0	0	5	0	0	0	0	0	5	5
18:30	5	3	155	2	10	0	3	2	180	180.1	0	0	6	0	0	0	0	0	6	6
18:45	1	0	145	4	15	1	0	1	167	167.7	0	0	6	0	0	0	0	0	6	6
H/TOT	11	6	591	16	61	4	3	9	701	703.5	0	0	19	0	0	0	0	0	19	19
12 TOT	170	76	8839	269	1227	294	67	74	11016	11143	5	1	185	5	9	1	0	0	206	201.9



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site4
Location: Leopardstown Rd / Tudor Lawns
Date: 29-May-2019

TIME	B => B										B => C									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7
07:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
07:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	
H/TOT	0	17	0	1	0	0	18	18												
08:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
08:15	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0	0	9	9	
08:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	
08:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	
H/TOT	0	19	1	2	0	0	0	22	22											
09:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	
09:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
09:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
H/TOT	0	8	1	0	0	0	0	9	9											
10:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
10:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
10:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	
10:45	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	
H/TOT	0	10	1	1	0	0	0	12	12											
11:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
11:15	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	4	
11:30	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	
11:45	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	
H/TOT	0	14	0	4	0	0	0	18	18											
12:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	
12:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
12:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
H/TOT	0	14	0	0	0	0	0	14	14											
13:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	
13:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
13:30	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	
13:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	
H/TOT	0	11	1	2	0	0	0	14	14											
14:00	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	
14:15	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	
14:30	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3	
14:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	8	2	2	0	0	0	12	12											
15:00	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	
15:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	6.5	
15:30	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5	
15:45	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
H/TOT	0	20	1	2	1	0	0	24	24.5											
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
16:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	6.5	
16:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
16:45	0	0	0	0	0	0	0	0	0	0	0	9	0	1	1	0	0	11	11.5	
H/TOT	0	17	0	1	2	0	0	20	21											
17:00	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	
17:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
17:30	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	
17:45	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	
H/TOT	0	35	0	1	0	0	0	36	36											
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
18:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
18:30	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	10	0	1	0	0	0	11	11											
12 TOT	0	183	7	17	3	0	0	210	211.5											



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site4
 Location: Leopardstown Rd / Tudor Lawns
 Date: 29-May-2019

TIME	C => A								C => B											
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	129	7	41	5	0	3	185	190.5	0	0	1	0	0	1	0	0	2	2.5
07:15	3	0	149	5	35	6	0	1	199	200.6	0	0	2	0	0	1	0	0	3	3.5
07:30	4	1	138	5	25	6	0	4	183	186.2	0	0	3	0	0	0	0	0	3	3
07:45	5	1	173	5	28	5	1	0	218	217.2	0	0	7	0	1	0	0	0	8	8
H/TOT	12	2	589	22	129	22	1	8	785	794.5	0	0	13	0	1	2	0	0	16	17
08:00	3	4	188	2	21	9	1	2	230	233	0	0	3	0	0	0	0	0	3	3
08:15	8	1	162	3	20	8	1	0	203	201.3	0	0	8	0	0	0	0	0	8	8
08:30	7	3	137	5	34	7	1	3	197	197.4	0	0	8	1	0	0	0	0	9	9
08:45	3	1	148	5	22	5	0	1	185	185.5	0	0	3	0	0	0	0	0	3	3
H/TOT	21	9	635	15	97	29	3	6	815	817.2	0	0	22	1	0	0	0	0	23	23
09:00	1	0	150	7	25	5	0	2	190	193.7	0	0	4	0	0	0	0	0	4	4
09:15	2	0	151	12	33	5	2	0	205	208.5	0	0	3	0	0	0	0	0	3	3
09:30	0	0	160	7	30	6	2	3	208	216.6	0	0	3	0	0	0	0	0	3	3
09:45	0	0	140	10	27	4	2	2	185	191.6	0	0	1	0	0	0	0	0	1	1
H/TOT	3	0	601	36	115	20	6	7	788	810.4	0	0	11	0	0	0	0	0	11	11
10:00	1	0	119	8	38	6	0	0	172	174.2	0	0	1	0	1	0	0	0	2	2
10:15	0	3	127	3	32	7	2	0	174	178.3	0	0	3	0	0	0	0	0	3	3
10:30	0	2	149	6	21	7	4	2	191	200.5	0	0	4	0	1	0	0	0	5	5
10:45	0	1	139	11	35	11	5	0	202	213.4	0	0	2	0	1	0	0	0	3	3
H/TOT	1	6	534	28	126	31	11	2	739	766.4	0	0	10	0	3	0	0	0	13	13
11:00	1	1	152	5	28	6	2	0	195	199.2	0	0	3	0	0	0	0	0	3	3
11:15	1	1	116	5	25	4	1	1	154	156.9	0	0	0	0	1	0	0	0	1	1
11:30	1	0	142	2	30	11	0	3	189	196.7	0	0	1	0	0	0	0	0	1	1
11:45	1	0	152	3	31	8	0	0	195	198.2	0	0	6	0	0	0	0	0	6	6
H/TOT	4	2	562	15	114	29	3	4	733	751	0	0	10	0	1	0	0	0	11	11
12:00	1	0	155	6	24	3	0	0	189	189.7	0	0	3	0	0	0	0	0	3	3
12:15	2	0	173	6	28	7	2	1	219	224.5	0	0	5	1	0	0	0	0	6	6
12:30	1	2	183	7	24	4	0	2	223	225	0	0	0	0	0	0	0	0	0	0
12:45	0	1	173	6	25	8	1	1	215	220.7	0	0	6	0	2	0	0	0	8	8
H/TOT	4	3	684	25	101	22	3	4	846	859.9	0	0	14	1	2	0	0	0	17	17
13:00	1	0	191	4	23	3	1	0	223	225	0	0	1	1	2	0	0	0	4	4
13:15	1	2	167	4	18	4	2	0	198	200.6	0	0	3	0	0	0	0	0	3	3
13:30	0	1	153	10	22	11	0	2	199	205.9	0	0	4	0	0	0	0	0	4	4
13:45	2	0	183	4	22	5	1	5	222	229.2	0	0	4	2	0	0	0	0	6	6
H/TOT	4	3	694	22	85	23	4	7	842	860.7	0	0	12	3	2	0	0	0	17	17
14:00	3	1	172	6	20	11	1	2	216	221.8	0	0	5	0	0	0	0	0	5	5
14:15	1	2	173	6	24	7	2	3	218	225.1	0	0	4	0	2	0	0	0	6	6
14:30	2	0	169	4	20	3	0	1	199	199.9	0	0	3	0	0	0	0	0	3	3
14:45	1	2	148	6	28	6	0	0	191	192	0	0	2	0	0	0	0	0	2	2
H/TOT	7	5	662	22	92	27	3	6	824	838.8	0	0	14	0	2	0	0	0	16	16
15:00	0	2	165	5	25	8	0	1	206	209.8	0	0	3	0	0	1	0	0	4	4.5
15:15	0	1	176	5	19	1	1	1	204	206.2	0	0	0	0	0	0	0	0	0	0
15:30	0	3	183	5	24	2	2	1	220	222.8	0	0	3	0	0	0	0	0	3	3
15:45	3	0	165	5	20	2	0	1	196	195.6	0	0	1	0	0	0	0	0	1	1
H/TOT	3	6	689	20	88	13	3	4	826	834.4	0	0	7	0	0	1	0	0	8	8.5
16:00	3	3	215	4	13	4	1	1	244	244.1	0	0	5	0	0	0	0	0	5	5
16:15	3	3	203	3	15	3	0	1	231	229.3	0	0	3	0	0	0	0	0	3	3
16:30	8	3	215	7	17	3	0	0	253	246.3	0	0	4	0	0	0	0	0	4	4
16:45	13	2	236	3	15	0	0	1	270	259.4	0	0	5	0	0	0	0	0	5	5
H/TOT	27	11	869	17	60	10	1	3	998	979.1	0	0	17	0	0	0	0	0	17	17
17:00	8	4	249	1	11	3	0	3	279	274.7	0	0	2	0	0	0	0	0	2	2
17:15	9	5	250	1	8	0	0	2	275	266.8	0	0	3	0	0	0	0	0	3	3
17:30	19	3	253	4	6	1	0	0	286	269.5	0	0	6	0	0	0	0	0	6	6
17:45	10	3	252	3	19	1	0	1	289	280.7	1	0	5	0	0	0	0	0	6	5.2
H/TOT	46	15	1004	9	44	5	0	6	1129	1092	1	0	16	0	0	0	0	0	17	16.2
18:00	7	4	245	9	7	1	0	2	275	269.5	0	1	8	0	0	0	0	0	9	8.4
18:15	8	5	244	5	9	2	0	1	274	266.6	0	0	4	0	1	0	0	0	5	5
18:30	7	2	254	4	8	0	0	1	276	270.2	0	0	5	0	0	0	0	0	5	5
18:45	6	1	253	7	13	1	0	1	282	278.1	0	0	8	0	0	0	0	0	8	8
H/TOT	28	12	996	25	37	4	0	5	1107	1084	0	1	25	0	1	0	0	0	27	26.4
12 TOT	160	74	8519	256	1088	235	38	62	10432	10489	1	1	171	5	12	3	0	0	193	193.1



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site4
Location: Leopardstown Rd / Tudor Lawns
Date: 29-May-2019

C => C										
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0
12:30	0	0	1	0	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0
12 TOT	0	0	1	0	0	0	0	0	1	1



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site5
Location: Leopardstown Rd / Laura Lynn
Date: 29-May-2019

TIME	A => A										A => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	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	5	0	0	0	0	0	5	5
07:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
07:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	
08:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
08:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
08:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	
09:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
09:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
09:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2.5	
12:00	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	
13:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
14:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
14:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
14:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
14:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	0	6	6	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:45	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
18:45	0	0	0	0	0	0	0	0	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	0	1	0	0	0	1	1	
12 TOT	0	0	0	0	0	0	0	0	0	0	0	41	0	3	1	0	0	45	45.5	



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site5
Location: Leopardstown Rd / Laura Lynn
Date: 29-May-2019

TIME	A => C								B => A								TOT	PCU		
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2			PSV	
07:00	5	1	173	3	20	4	1	0	207	205.7	0	0	0	0	0	0	0	0	0	0
07:15	3	2	209	2	12	3	0	2	233	232.9	0	0	0	0	0	0	0	0	0	0
07:30	6	3	248	3	12	2	0	3	277	274.4	0	0	0	0	0	0	0	0	0	0
07:45	9	4	279	5	17	6	1	2	323	319.7	0	0	2	0	0	0	0	0	2	2
H/TOT	23	10	909	13	61	15	2	7	1040	1033	0	0	2	0	0	0	0	0	2	2
08:00	14	2	271	8	16	3	2	2	318	311.7	0	0	2	0	0	0	0	0	2	2
08:15	9	4	291	5	14	3	0	2	328	321.9	0	0	0	0	0	0	0	0	0	0
08:30	12	3	309	6	13	5	0	2	350	343.1	0	0	0	0	0	0	0	0	0	0
08:45	16	5	288	8	18	5	3	1	344	335.6	0	0	1	0	0	0	0	0	1	1
H/TOT	51	14	1159	27	61	16	5	7	1340	1312	0	0	3	0	0	0	0	0	3	3
09:00	12	3	243	4	18	4	2	3	289	285.2	0	0	0	0	0	0	0	0	0	0
09:15	6	2	264	9	24	4	1	3	313	313.3	0	0	0	0	0	0	0	0	0	0
09:30	6	2	165	7	27	7	3	3	220	224.4	0	0	0	0	20	0	0	0	0	0
09:45	1	0	174	9	17	6	3	1	211	218.1	0	0	0	0	0	0	0	0	0	0
H/TOT	25	7	846	29	86	21	9	10	1033	1041	0	0	0	0	0	0	0	0	0	0
10:00	4	1	175	7	20	4	2	3	216	219.8	0	0	0	0	0	0	0	0	0	0
10:15	1	1	166	11	10	6	3	0	198	203.5	0	0	0	0	0	0	0	0	0	0
10:30	1	0	122	6	20	6	1	0	156	159.5	0	0	0	0	0	0	0	0	0	0
10:45	1	0	137	8	21	15	2	2	186	197.3	0	0	0	0	0	0	0	0	0	0
H/TOT	7	2	600	32	71	31	8	5	756	780.1	0	0	0	0	0	0	0	0	0	0
11:00	2	1	137	2	26	4	1	2	175	178.1	0	0	0	0	0	0	0	0	0	0
11:15	1	0	150	3	30	8	2	2	196	203.8	0	0	0	0	0	0	0	0	0	0
11:30	1	0	141	7	26	6	2	1	184	189.8	0	0	0	0	0	0	0	0	0	0
11:45	3	1	156	6	24	11	2	0	203	208.1	0	0	1	0	1	0	0	0	2	2
H/TOT	7	2	584	18	106	29	7	5	758	779.8	0	0	1	0	1	0	0	0	2	2
12:00	0	2	141	4	26	11	4	1	189	199.5	0	0	1	0	0	0	0	0	1	1
12:15	1	0	145	6	32	15	2	0	201	210.3	0	0	1	0	0	0	0	0	1	1
12:30	0	3	177	7	30	5	0	0	222	222.7	0	0	1	0	0	0	0	0	1	1
12:45	2	2	183	6	28	12	1	1	235	240.5	0	0	1	0	0	0	0	0	1	1
H/TOT	3	7	646	23	116	43	7	2	847	873	0	0	4	0	0	0	0	0	4	4
13:00	0	2	197	3	39	6	1	2	250	255.1	0	0	1	0	0	0	0	0	1	1
13:15	2	1	195	4	20	9	0	1	232	235.3	0	0	0	0	0	0	0	0	0	0
13:30	1	1	178	5	28	11	2	2	228	236.7	0	0	0	0	0	0	0	0	0	0
13:45	2	0	177	7	33	11	0	0	230	233.9	0	0	1	0	0	0	0	0	1	1
H/TOT	5	4	747	19	120	37	3	5	940	961	0	0	2	0	0	0	0	0	2	2
14:00	2	1	164	9	26	4	1	1	208	210.1	0	0	1	0	0	0	0	0	1	1
14:15	2	3	202	3	36	7	5	2	260	268.6	1	0	3	0	0	0	0	0	4	3.2
14:30	3	2	176	9	26	9	1	3	229	234.2	0	0	0	0	0	0	0	0	0	0
14:45	2	1	197	7	40	9	3	0	259	265.2	0	0	0	0	0	0	0	0	0	0
H/TOT	9	7	739	28	128	29	10	6	956	978.1	1	0	4	0	0	0	0	0	5	4.2
15:00	2	3	177	6	42	11	2	2	245	251.7	0	0	2	0	0	0	0	0	2	2
15:15	2	2	197	7	47	6	1	0	262	263.5	0	0	1	0	0	0	0	0	1	1
15:30	3	2	170	6	39	3	1	2	226	227.2	0	0	3	0	1	0	0	0	4	4
15:45	3	1	189	1	56	15	1	0	266	271.8	0	0	1	0	0	0	0	0	1	1
H/TOT	10	8	733	20	184	35	5	4	999	1014	0	0	7	0	1	0	0	0	8	8
16:00	1	0	196	3	55	8	1	1	265	270.5	0	0	4	0	0	0	0	0	4	4
16:15	1	2	189	11	38	3	2	2	248	252.1	0	0	3	0	0	0	0	0	3	3
16:30	4	2	157	7	38	6	1	1	216	216.9	0	0	1	0	0	0	0	0	1	1
16:45	3	6	152	4	21	6	1	4	197	199.3	0	0	3	0	0	0	0	0	3	3
H/TOT	9	10	694	25	152	23	5	8	926	938.8	0	0	11	0	0	0	0	0	11	11
17:00	3	0	170	5	24	2	2	1	207	209.2	0	0	4	0	0	0	0	0	4	4
17:15	6	0	173	3	23	1	0	1	207	203.7	0	0	2	0	0	0	0	0	2	2
17:30	5	2	161	3	14	3	0	2	190	188.3	0	0	0	0	0	0	0	0	0	0
17:45	3	2	165	4	15	3	0	2	194	193.9	0	0	1	0	0	0	0	0	1	1
H/TOT	17	4	669	15	76	9	2	6	798	795.1	0	0	7	0	0	0	0	0	7	7
18:00	3	3	144	5	18	2	0	4	179	179.8	0	0	1	0	0	0	0	0	1	1
18:15	2	0	154	4	20	1	0	2	183	183.9	0	0	1	0	0	0	0	0	1	1
18:30	4	1	150	3	10	0	3	2	173	175.1	0	0	1	0	0	0	0	0	1	1
18:45	1	0	146	3	14	1	0	1	166	166.7	0	0	1	0	0	0	0	0	1	1
H/TOT	10	4	594	15	62	4	3	9	701	705.5	0	0	4	0	0	0	0	0	4	4
12 TOT	176	79	8920	264	1223	292	66	74	11094	11212	1	0	45	0	2	0	0	0	48	47.2



IDASO

Survey Name: 133 19172 Leopardstown
 Site: Site5
 Location: Leopardstown Rd / Laura Lynn
 Date: 29-May-2019

TIME	B => B										B => C									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	3	0	0	0	0	0	3	3											
08:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
08:15	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	6	0	0	0	0	0	6	6											
09:00	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	4	4
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	2
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	1.5
H/TOT	0	3	0	3	1	0	0	7	7.5											
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2	2
10:30	0	0	0	0	0	0	0	0	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	0	0	1	0	0	0	1	1	1
H/TOT	0	1	0	2	0	0	0	3	3											
11:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2.5	2.5
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	1.5
11:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1
H/TOT	0	2	0	0	2	0	0	4	5											
12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	5
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
H/TOT	0	7	0	1	0	0	0	8	8											
13:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
13:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
H/TOT	0	6	0	0	0	0	0	6	6											
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
14:30	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	7
14:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	3
H/TOT	0	11	0	1	0	0	0	12	12											
15:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
15:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
H/TOT	0	5	0	0	0	0	0	5	5											
16:00	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	5
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
H/TOT	0	9	0	1	0	0	0	10	10											
17:00	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2	4.2
17:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	3
17:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	8	0	0	0	0	0	9	8.2									
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
18:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	2
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	2
H/TOT	0	7	0	1	0	0	0	8	8											
12 TOT	0	1	0	68	0	9	3	0	0	81	81.7									



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site5
Location: Leopardstown Rd / Laura Lynn
Date: 29-May-2019

TIME	C => A								TOT	PCU	C => B								TOT	PCU			
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV					
07:00	0	0	128	7	41	5	0	3	184	189.5	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	5	0	153	4	34	6	0	1	203	203	0	0	4	0	0	0	0	0	0	4	4	4	4
07:30	4	1	135	5	25	6	0	4	180	183.2	0	0	5	0	0	0	0	0	5	5	5	5	
07:45	3	2	175	4	26	5	1	0	216	216.2	0	0	5	0	0	0	0	0	5	5	5	5	
H/TOT	12	3	591	20	126	22	1	8	783	791.9	0	0	14	0	0	0	0	0	14	14	14	14	
08:00	3	5	198	2	20	10	1	2	241	243.9	0	0	3	0	0	0	0	0	3	3	3	3	
08:15	7	2	164	1	20	7	1	1	203	202	1	0	3	0	0	0	0	0	4	4	3.2	3.2	
08:30	6	3	144	4	33	8	1	3	202	203.7	0	0	1	0	0	0	0	0	1	1	1	1	
08:45	3	1	141	6	22	5	0	1	179	179.5	0	0	10	0	1	0	0	0	11	11	11	11	
H/TOT	19	11	647	13	95	30	3	7	825	829.1	1	0	17	0	1	0	0	0	19	18.2	18.2	18.2	
09:00	1	0	146	8	23	5	0	2	185	188.7	0	0	8	0	2	0	0	0	10	10	10	10	
09:15	1	1	156	11	33	4	2	0	208	211.2	0	0	0	0	0	0	0	0	0	0	0	0	
09:30	0	0	160	11	31	6	2	3	213	221.6	0	0	0	0	0	1	0	0	1	1.5	1.5	1.5	
09:45	0	0	143	9	26	4	2	2	186	192.6	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	2	1	605	39	113	19	6	7	792	814.1	0	0	8	0	2	1	0	0	11	11.5	11.5	11.5	
10:00	1	0	129	8	33	6	0	0	177	179.2	0	0	0	0	0	0	0	0	0	0	0	0	
10:15	0	3	130	3	32	6	2	0	176	179.8	0	0	0	0	0	0	0	0	0	0	0	0	
10:30	0	2	149	7	21	8	1	1	189	194.1	0	0	2	0	0	0	0	0	2	2	2	2	
10:45	0	1	141	12	34	9	6	1	204	216.7	0	0	3	0	1	1	0	0	5	5.5	5.5	5.5	
H/TOT	1	6	549	30	120	29	9	2	746	769.8	0	0	5	0	1	1	0	0	7	7.5	7.5	7.5	
11:00	1	1	153	5	30	6	2	0	198	202.2	0	0	2	0	0	0	0	0	2	2	2	2	
11:15	1	1	120	5	22	4	1	1	155	157.9	0	0	0	0	0	0	0	0	0	0	0	0	
11:30	0	0	142	2	30	11	0	3	188	196.5	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	1	0	158	5	29	8	0	0	201	204.2	0	0	0	0	1	0	0	0	1	1	1	1	
H/TOT	3	2	573	17	111	29	3	4	742	760.8	0	0	2	0	1	0	0	0	3	3	3	3	
12:00	1	0	156	9	24	3	0	0	193	193.7	0	0	1	0	0	0	0	0	1	1	1	1	
12:15	2	1	176	5	28	7	2	1	222	226.9	0	0	2	0	0	0	0	0	2	2	2	2	
12:30	1	2	184	6	25	4	0	2	224	226	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	1	181	6	24	8	1	1	222	227.7	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	4	4	697	26	101	22	3	4	861	874.3	0	0	3	0	0	0	0	0	3	3	3	3	
13:00	1	0	191	6	24	3	1	0	226	228	0	0	1	0	0	0	0	0	1	1	1	1	
13:15	1	2	162	6	19	4	2	0	196	198.6	0	0	2	0	0	0	0	0	2	2	2	2	
13:30	1	1	154	9	22	11	0	2	200	206.1	0	0	3	0	0	0	0	0	3	3	3	3	
13:45	2	0	183	3	22	5	1	5	221	228.2	0	0	4	0	1	0	0	0	5	5	5	5	
H/TOT	5	3	690	24	87	23	4	7	843	860.9	0	0	10	0	1	0	0	0	11	11	11	11	
14:00	3	1	174	7	20	11	1	2	219	224.8	0	0	2	0	0	0	0	0	2	2	2	2	
14:15	2	2	177	9	25	7	2	3	227	233.3	0	0	2	0	0	0	0	0	2	2	2	2	
14:30	3	0	169	3	22	2	0	1	200	199.6	0	0	3	0	1	0	0	0	4	4	4	4	
14:45	1	2	151	3	29	7	0	0	193	194.5	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	9	5	671	22	96	27	3	6	839	852.2	0	0	7	0	1	0	0	0	8	8	8	8	
15:00	0	2	163	7	27	8	0	1	208	211.8	0	0	0	0	0	0	0	0	0	0	0	0	
15:15	0	1	173	5	21	1	1	1	203	205.2	0	0	0	0	0	0	0	0	0	0	0	0	
15:30	0	3	181	6	25	2	2	1	220	222.8	0	0	2	0	0	0	0	0	2	2	2	2	
15:45	4	0	166	4	23	2	0	1	200	198.8	0	0	1	0	0	0	0	0	1	1	1	1	
H/TOT	4	6	683	22	96	13	3	4	831	838.6	0	0	3	0	0	0	0	0	3	3	3	3	
16:00	3	3	217	6	13	3	2	1	248	248.9	0	0	1	0	0	0	0	0	1	1	1	1	
16:15	3	3	207	2	17	3	0	1	236	234.3	0	0	0	0	0	0	0	0	0	0	0	0	
16:30	7	3	213	8	16	3	0	0	250	244.1	0	0	1	0	0	0	0	0	1	1	1	1	
16:45	10	2	239	6	17	0	0	1	275	266.8	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	23	11	876	22	63	9	2	3	1009	994.1	0	0	2	0	0	0	0	0	2	2	2	2	
17:00	8	4	247	2	12	3	0	3	279	274.7	0	0	1	0	0	0	0	0	1	1	1	1	
17:15	6	5	260	1	7	0	0	2	281	275.2	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	17	3	253	6	5	1	0	0	285	270.1	0	0	1	0	0	0	0	0	1	1	1	1	
17:45	6	4	251	4	20	0	0	1	286	279.8	0	0	1	0	0	0	0	0	1	1	1	1	
H/TOT	37	16	1011	13	44	4	0	6	1131	1100	0	0	3	0	0	0	0	0	3	3	3	3	
18:00	8	3	249	9	7	1	0	2	279	273.3	0	0	0	0	0	0	0	0	0	0	0	0	
18:15	7	5	246	6	10	2	0	1	277	270.4	0	0	0	0	0	0	0	0	0	0	0	0	
18:30	7	2	254	3	9	0	0	1	276	270.2	0	0	1	0	0	0	0	0	1	1	1	1	
18:45	5	1	266	7	13	1	0	1	294	290.9	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	27	11	1015	25	39	4	0	5	1126	1105	0	0	1	0	0	0	0	0	1	1	1	1	
12 TOT	146	79	8608	273	1091	231	37	63	10528	10590	1	0	75	0	7	2	0	0	85	85.2	85.2	85.2	



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site6
Location: Leopardstown Rd / Leopardstown Ave
Date: 29-May-2019

TIME	A => A										A => B									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	
07:45	0	0	0	0	0	0	0	0	0	0	1	0	8	0	2	0	0	11	10.2	
H/TOT	0	1	0	18	0	3	0	0	22	21.2										
08:00	0	0	0	0	0	0	0	0	0	0	2	0	10	0	0	0	0	12	10.4	
08:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	
08:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	6.5	
08:45	0	0	0	0	0	0	0	0	0	0	1	1	7	0	2	0	0	11	9.6	
H/TOT	0	3	1	26	0	2	1	0	0	33	30.5									
09:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	
09:15	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13	13	
09:30	0	0	0	0	0	0	0	0	0	0	0	1	9	0	1	0	0	11	10.4	
09:45	0	0	0	0	0	0	0	0	0	0	0	9	0	2	1	0	0	12	12.5	
H/TOT	0	1	39	0	3	1	0	0	44	43.9										
10:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	
10:15	0	0	0	0	0	0	0	0	0	0	1	10	0	0	2	0	0	13	13.2	
10:30	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9	
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	
H/TOT	0	1	0	30	0	0	2	0	0	33	33.2									
11:00	0	0	0	0	0	0	0	0	0	0	0	1	13	0	1	1	0	16	15.9	
11:15	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	10	10	
11:30	0	0	0	0	0	0	0	0	0	0	0	10	1	1	0	0	0	12	12	
11:45	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	0	0	9	9	
H/TOT	0	1	39	1	5	1	0	0	47	46.9										
12:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
12:15	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	
12:30	0	0	0	0	0	0	0	0	0	0	0	15	0	2	1	0	0	18	18.5	
12:45	0	0	0	0	0	0	0	0	0	0	0	15	0	2	0	0	0	17	17	
H/TOT	0	49	0	2	1	0	0	54	54.5											
13:00	0	0	0	0	0	0	0	0	0	0	1	12	0	0	0	0	0	13	12.2	
13:15	0	0	0	0	0	0	0	0	0	0	1	9	0	1	0	0	0	11	10.2	
13:30	0	0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	0	12	11.4	
13:45	0	0	0	0	0	0	0	0	0	0	1	14	0	0	0	0	0	15	14.2	
H/TOT	0	3	1	46	0	1	0	0	0	51	48									
14:00	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	0	16	16	
14:15	0	0	0	0	0	0	0	0	0	0	0	19	0	2	0	0	0	21	21	
14:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	
14:45	0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	0	19	19	
H/TOT	0	57	2	2	0	0	0	63	63											
15:00	0	0	0	0	0	0	0	0	0	0	2	10	0	0	0	0	0	12	10.4	
15:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9	
15:30	0	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	0	14	14	
15:45	0	0	0	0	0	0	0	0	0	0	0	1	15	0	1	0	0	17	16.4	
H/TOT	0	2	1	47	0	2	0	0	0	52	49.8									
16:00	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	20	
16:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	
16:30	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	
16:45	0	0	0	0	0	0	0	0	0	0	1	19	0	0	0	0	0	20	19.2	
H/TOT	0	1	0	66	0	0	0	0	0	67	66.2									
17:00	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	23	23	
17:15	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	20	
17:30	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	30	30	
17:45	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	25	25	
H/TOT	0	98	0	0	0	0	0	98	98											
18:00	0	0	0	0	0	0	0	0	0	0	0	20	0	1	0	0	0	21	21	
18:15	0	0	0	0	0	0	0	0	0	0	0	22	0	1	0	0	0	23	23	
18:30	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21	21	
18:45	0	0	0	0	0	0	0	0	0	0	2	14	0	0	0	0	0	16	14.4	
H/TOT	0	2	0	77	0	2	0	0	0	81	79.4									
12 TOT	0	13	5	592	3	26	6	0	645	634.6										



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site6
Location: Leopardstown Rd / Leopardstown Ave
Date: 29-May-2019

TIME	A => C										B => A									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4	3.4
07:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7
07:45	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13	13	
H/TOT	0	0	1	0	0	0	0	0	1	1	0	1	25	0	0	0	0	0	26	25.4
08:00	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4	3.4
08:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
08:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	1	11	0	0	0	0	0	12	11.4									
09:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
09:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	6	0	0	0	0	0	6	6									
10:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
10:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	5	0	0	0	0	0	5	5									
11:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
11:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
11:30	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	4	1	0	0	0	0	5	5
12:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
12:30	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	4	0	1	0	0	0	5	5
13:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
13:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	7	0	0	0	0	0	7	7									
14:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
14:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
14:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
H/TOT	0	0	0	7	0	1	0	0	0	8	8									
15:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
15:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
15:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
H/TOT	0	0	0	12	0	0	0	0	0	12	12									
16:00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
16:15	0	0	1	0	0	0	0	0	1	1	0	0	3	0	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
H/TOT	0	0	2	0	0	0	0	0	2	2	0	0	6	0	0	0	0	0	6	6
17:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
17:45	0	0	2	0	0	0	0	0	2	2	0	0	2	0	0	0	0	0	2	2
H/TOT	0	0	2	0	0	0	0	0	2	2	0	0	8	0	0	0	0	0	8	8
18:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
18:15	1	0	0	0	0	0	0	0	1	0.2	0	0	3	0	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
18:45	0	0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	0	3	3
H/TOT	1	0	0	0	1	0	0	0	2	1.2	0	0	9	0	0	0	0	0	9	9
12 TOT	1	0	7	0	1	0	0	0	9	8.2	0	2	104	1	2	0	0	0	109	107.8



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site6
Location: Leopardstown Rd / Leopardstown Ave
Date: 29-May-2019

TIME	B => B										B => C									
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	8	1	171	2	21	4	1	0	208	204.3
07:15	0	0	0	0	0	0	0	0	0	0	4	1	228	2	14	3	0	2	254	253.7
07:30	0	0	0	0	0	0	0	0	0	0	6	3	262	3	13	4	0	3	294	292.4
07:45	0	0	0	0	0	0	0	0	0	0	4	4	285	5	18	4	1	2	323	322.7
H/TOT	0	22	9	946	12	66	15	2	7	1079	1073									
08:00	0	0	1	0	0	0	0	0	1	1	18	2	271	8	15	3	2	2	321	311.5
08:15	0	0	0	0	0	0	0	0	0	0	12	3	297	5	14	3	0	2	336	328.1
08:30	0	0	0	0	0	0	0	0	0	0	11	3	303	7	12	5	0	2	343	336.9
08:45	0	0	0	0	0	0	0	0	0	0	19	6	285	7	17	6	3	1	344	333.1
H/TOT	0	0	1	0	0	0	0	0	1	1	60	14	1156	27	58	17	5	7	1344	1310
09:00	0	0	0	0	0	0	0	0	0	0	17	3	260	4	21	5	1	3	314	305.4
09:15	0	0	0	0	0	0	0	0	0	0	6	2	248	11	21	3	1	4	296	296.8
09:30	0	0	0	0	0	0	0	0	0	0	6	1	157	8	30	7	3	2	214	218
09:45	0	0	0	0	0	0	0	0	0	0	1	0	180	11	17	6	3	1	219	226.1
H/TOT	0	30	6	845	34	89	21	8	10	1043	1046									
10:00	0	0	0	0	0	0	0	0	0	0	6	1	164	10	19	4	2	3	209	211.2
10:15	0	0	0	0	0	0	0	0	0	0	1	1	168	14	11	6	3	0	204	209.5
10:30	0	0	0	0	0	0	0	0	0	0	1	0	119	6	22	6	1	0	155	158.5
10:45	0	0	0	0	0	0	0	0	0	0	0	0	136	9	22	16	2	1	186	197.6
H/TOT	0	8	2	587	39	74	32	8	4	754	776.8									
11:00	0	0	0	0	0	0	0	0	0	0	2	1	144	1	27	4	1	2	182	185.1
11:15	0	0	0	0	0	0	0	0	0	0	1	0	150	4	29	9	2	2	197	205.3
11:30	0	0	0	0	0	0	0	0	0	0	1	0	141	6	27	6	2	1	184	189.8
11:45	0	0	0	0	0	0	0	0	0	0	4	1	158	5	25	13	1	0	207	211
H/TOT	0	8	2	593	16	108	32	6	5	770	791.2									
12:00	0	0	1	0	0	0	0	0	1	1	0	2	138	9	29	10	4	1	193	203
12:15	0	0	0	0	0	0	0	0	0	0	2	0	148	6	33	15	2	0	206	214.5
12:30	0	0	0	0	0	0	0	0	0	0	0	3	173	7	31	8	0	0	222	224.2
12:45	0	0	0	0	0	0	0	0	0	0	2	2	181	7	31	9	1	1	234	238
H/TOT	0	0	1	0	0	0	0	0	1	1	4	7	640	29	124	42	7	2	855	879.7
13:00	0	0	0	0	0	0	0	0	0	0	0	2	206	4	38	6	1	2	259	264.1
13:15	0	0	0	0	0	0	0	0	0	0	1	1	189	4	22	9	0	1	227	231.1
13:30	0	0	0	0	0	0	0	0	0	0	1	1	179	4	28	11	2	2	228	236.7
13:45	0	0	0	0	0	0	0	0	0	0	3	0	183	8	32	12	1	0	239	243.9
H/TOT	0	5	4	757	20	120	38	4	5	953	975.8									
14:00	0	0	0	0	0	0	0	0	0	0	3	1	165	10	27	3	0	1	210	209.5
14:15	0	0	0	0	0	0	0	0	0	0	2	3	194	3	38	7	5	2	254	262.6
14:30	0	0	0	0	0	0	0	0	0	0	2	2	183	9	26	9	1	3	235	241
14:45	0	0	1	0	0	0	0	0	1	1	2	1	193	7	40	9	4	0	256	263.5
H/TOT	0	0	1	0	0	0	0	0	1	1	9	7	735	29	131	28	10	6	955	976.6
15:00	0	0	0	0	0	0	0	0	0	0	3	3	183	8	42	10	2	2	253	258.4
15:15	0	0	0	0	0	0	0	0	0	0	2	2	193	5	45	6	1	0	254	255.5
15:30	0	0	0	0	0	0	0	0	0	0	3	2	171	5	37	3	1	2	224	225.2
15:45	0	0	0	0	0	0	0	0	0	0	3	0	199	1	57	15	1	0	276	282.4
H/TOT	0	11	7	746	19	181	34	5	4	1007	1022									
16:00	0	0	0	0	0	0	0	0	0	0	1	0	193	3	56	8	1	1	263	268.5
16:15	0	0	0	0	0	0	0	0	0	0	1	2	188	9	44	4	2	2	252	256.6
16:30	0	0	0	0	0	0	0	0	0	0	3	1	161	5	38	6	1	1	216	218.3
16:45	0	0	0	0	0	0	0	0	0	0	4	6	157	3	20	7	1	4	202	204
H/TOT	0	9	9	699	20	158	25	5	8	933	947.4									
17:00	0	0	0	0	0	0	0	0	0	0	4	0	163	6	25	1	2	1	202	202.9
17:15	0	0	0	0	0	0	0	0	0	0	7	0	176	3	23	1	0	1	211	206.9
17:30	0	0	0	0	0	0	0	0	0	0	5	3	167	3	14	3	0	2	197	194.7
17:45	0	0	0	0	0	0	0	0	0	0	3	2	158	9	11	3	0	2	188	187.9
H/TOT	0	19	5	664	21	73	8	2	6	798	792.4									
18:00	0	0	0	0	0	0	0	0	0	0	3	3	150	4	19	2	0	4	185	185.8
18:15	0	0	0	0	0	0	0	0	0	0	3	0	153	5	18	1	0	2	182	182.1
18:30	0	0	0	0	0	0	0	0	0	0	5	3	150	4	13	0	3	2	180	180.1
18:45	0	0	0	0	0	0	0	0	0	0	1	0	144	3	12	1	0	1	162	162.7
H/TOT	0	12	6	597	16	62	4	3	9	709	710.7									
12 TOT	0	0	3	0	0	0	0	0	3	3	197	78	8965	282	1244	296	65	73	11200	11301



IDASO

Survey Name: 133 19172 Leopardstown
Site: Site6
Location: Leopardstown Rd / Leopardstown Ave
Date: 29-May-2019

TIME	C => A									C => B										
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	5	0	0	0	0	0	5	5	0	0	118	7	40	5	0	3	173	178.5
07:15	0	0	7	0	0	1	0	0	8	8.5	6	0	143	3	35	5	0	1	193	191.7
07:30	0	0	12	0	1	0	0	0	13	13	5	1	127	5	23	6	0	4	171	173.4
07:45	1	0	18	1	1	0	0	0	21	20.2	4	1	154	1	27	5	1	0	193	193
H/TOT	1	0	42	1	2	1	0	0	47	46.7	15	2	542	16	125	21	1	8	730	736.6
08:00	0	0	15	2	0	0	0	0	17	17	5	5	188	3	20	9	1	1	232	231.8
08:15	0	0	12	0	0	0	0	0	12	12	6	1	150	3	20	7	0	2	189	189.1
08:30	0	0	18	1	1	0	0	0	20	20	7	3	129	4	33	9	2	3	190	192.7
08:45	0	0	19	1	2	1	0	0	23	23.5	4	1	118	6	20	4	0	1	154	153.2
H/TOT	0	0	64	4	3	1	0	0	72	72.5	22	10	585	16	93	29	3	7	765	766.8
09:00	0	0	12	0	0	0	0	0	12	12	3	0	140	7	23	4	0	2	179	180.6
09:15	0	0	10	0	1	0	0	0	11	11	1	1	141	11	33	5	2	0	194	197.7
09:30	1	0	7	1	1	0	0	0	10	9.2	1	0	152	10	27	6	2	2	200	206.8
09:45	0	0	7	1	1	0	0	0	9	9	2	0	138	10	31	4	2	3	190	196
H/TOT	1	0	36	2	3	0	0	0	42	41.2	7	1	571	38	114	19	6	7	763	781.1
10:00	0	0	8	0	2	1	0	0	11	11.5	1	0	114	10	36	5	0	0	166	167.7
10:15	0	1	7	0	0	0	0	0	8	7.4	0	2	121	3	33	6	2	0	167	171.4
10:30	0	0	8	0	0	0	0	0	8	8	0	2	143	7	22	8	1	1	184	189.1
10:45	0	0	8	1	0	0	0	0	9	9	0	1	130	9	30	10	5	1	186	197.9
H/TOT	0	1	31	1	2	1	0	0	36	35.9	1	5	508	29	121	29	8	2	703	726.1
11:00	0	0	5	0	0	1	0	0	6	6.5	0	1	157	6	33	5	2	0	204	208.5
11:15	0	0	3	1	0	0	0	0	4	4	1	1	113	7	23	4	1	1	151	153.9
11:30	0	0	6	0	0	0	0	0	6	6	1	0	130	2	31	10	0	3	177	184.2
11:45	0	0	8	1	0	0	0	0	9	9	1	0	152	5	30	9	0	0	197	200.7
H/TOT	0	0	22	2	0	1	0	0	25	25.5	3	2	552	20	117	28	3	4	729	747.3
12:00	0	0	8	0	0	0	0	0	8	8	1	0	150	9	24	3	0	0	187	187.7
12:15	0	0	12	0	0	0	0	0	12	12	2	1	165	4	26	7	2	1	208	212.9
12:30	0	1	18	0	3	0	0	0	22	21.4	1	1	164	6	23	4	0	2	201	203.6
12:45	0	0	16	2	0	0	0	0	18	18	0	1	159	5	23	8	1	1	198	203.7
H/TOT	0	1	54	2	3	0	0	0	60	59.4	4	3	638	24	96	22	3	4	794	807.9
13:00	0	0	16	1	0	0	0	0	17	17	1	0	188	5	28	3	1	0	226	228
13:15	0	0	13	1	0	0	0	0	14	14	2	1	150	5	20	4	2	0	184	186.4
13:30	0	0	9	0	0	1	0	0	10	10.5	0	1	137	9	23	10	0	2	182	188.4
13:45	0	0	11	1	0	0	0	0	12	12	3	0	178	3	21	5	1	5	216	222.4
H/TOT	0	0	49	3	0	1	0	0	53	53.5	6	2	653	22	92	22	4	7	808	825.2
14:00	0	1	14	0	0	0	0	0	15	14.4	3	0	156	6	19	10	2	2	198	205.2
14:15	0	0	10	1	1	0	0	0	12	12	2	2	173	6	26	7	2	3	221	227.3
14:30	1	0	11	0	0	0	0	0	12	11.2	0	0	155	3	15	2	0	1	176	178
14:45	0	0	12	2	0	0	0	0	14	14	2	2	143	4	30	7	0	0	188	188.7
H/TOT	1	1	47	3	1	0	0	0	53	51.6	7	4	627	19	90	26	4	6	783	799.2
15:00	0	1	9	0	0	0	0	0	10	9.4	1	1	156	9	27	7	0	1	202	205.1
15:15	0	0	5	0	0	0	0	0	5	5	0	1	170	5	18	2	0	1	197	198.4
15:30	0	0	11	0	1	0	0	0	12	12	2	3	170	8	24	2	3	0	212	213.5
15:45	0	0	13	0	1	0	0	0	14	14	5	0	149	4	22	2	0	2	184	183
H/TOT	0	1	38	0	2	0	0	0	41	40.4	8	5	645	26	91	13	3	4	795	800
16:00	0	0	16	1	0	0	0	0	17	17	3	3	210	5	13	3	2	1	240	240.9
16:15	0	0	13	0	0	1	0	0	14	14.5	2	2	195	2	16	3	0	1	221	220.7
16:30	0	0	18	0	1	0	0	0	19	19	8	4	203	7	16	3	0	0	241	233.7
16:45	3	0	19	1	0	0	0	0	23	20.6	10	2	215	4	16	0	0	1	248	239.8
H/TOT	3	0	66	2	1	1	0	0	73	71.1	23	11	823	18	61	9	2	3	950	935.1
17:00	0	0	21	0	1	0	0	0	22	22	9	3	240	3	11	3	0	3	272	267.5
17:15	2	2	23	1	0	0	0	0	28	25.2	7	4	229	1	7	0	0	2	250	244
17:30	1	0	19	0	2	0	0	0	22	21.2	18	3	241	5	6	1	0	0	274	258.3
17:45	0	1	20	0	0	0	0	0	21	20.4	14	3	228	4	20	0	0	1	270	258
H/TOT	3	3	83	1	3	0	0	0	93	88.8	48	13	938	13	44	4	0	6	1066	1028
18:00	1	0	28	0	1	0	0	0	30	29.2	7	4	229	10	6	2	0	1	259	253
18:15	1	2	22	2	0	0	0	0	27	25	10	3	215	3	9	3	0	2	245	238.7
18:30	0	0	12	1	0	0	0	0	13	13	8	2	252	3	9	0	0	1	275	268.4
18:45	0	0	17	2	2	0	0	0	21	21	6	0	241	6	10	1	0	1	265	261.7
H/TOT	2	2	79	5	3	0	0	0	91	88.2	31	9	937	22	34	6	0	5	1044	1022
12 TOT	11	9	611	26	23	6	0	0	686	674.8	175	67	8019	263	1078	228	37	63	9930	9975

