

Project

Residential Development, Hacketstown, Skerries, Co Dublin

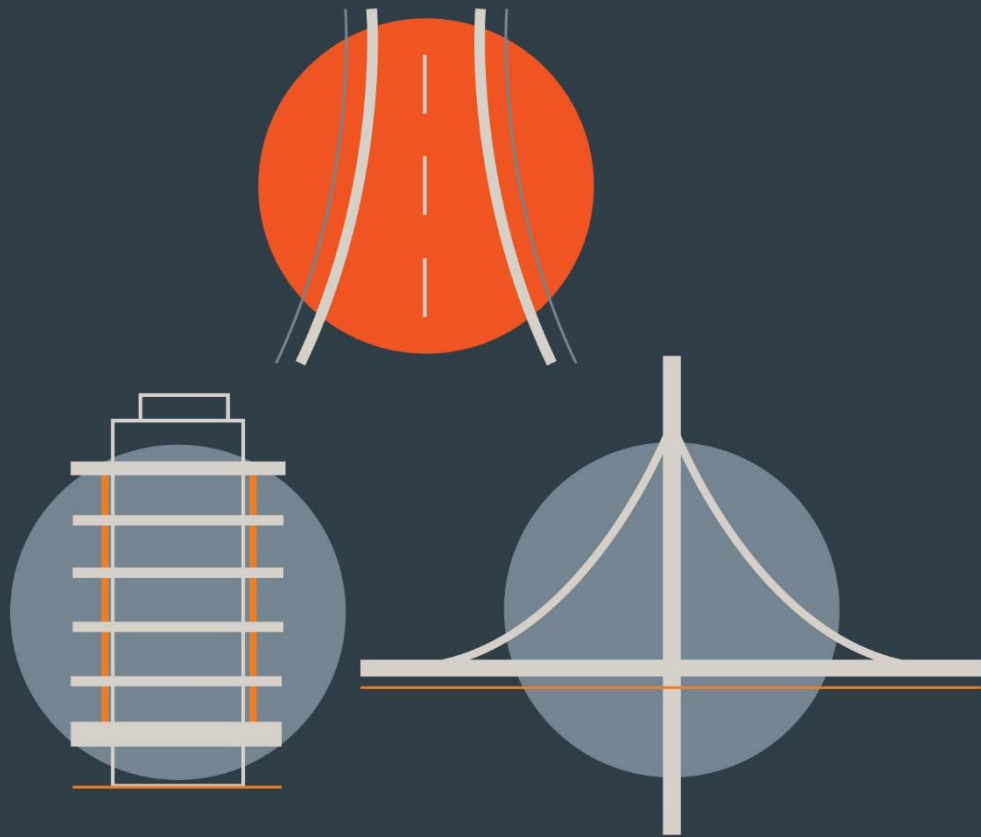
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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 DBFL Consulting Engineers (DBFL) has been commissioned by the Land Development Agency (LDA) to undertake a Traffic and Transport Assessment (TTA) for a proposed residential development on a greenfield site located at Hacketstown, Skerries, Co. Dublin.
- 1.1.2 The subject development lands are located within the southern part (6.68 hectares) of a larger zoned lands for development (16.6 hectares) which in turn is referred to as the Hacketstown Local Area Plan (LAP5.A) lands within the Fingal County Council (FCC) County Development Plan (2017-2023). These LAP5.A are located to the south of Skerries Town and immediately east of the main Dublin-Belfast rail corridor. It is noted that the previous Hacketstown LAP expired in 2019 and as such is not being relied upon nor referenced further in this assessment.
- 1.1.3 As illustrated in **Figure 1.1**, the entire Hacketstown LAP5.A zoned lands incorporates two separate development plots namely (i) the Noonan Construction plot to the north and (ii) the subject Land Development Agency (LDA) plot to the south (8.2 hectares).
- 1.1.4 To date Phase 1 (103 houses) of the larger LAP5.A zoned lands (FCC Planning Ref F11A/0309/E1), as located on part of the northern Noonan Construction plot, has been completed / fully occupied and has subsequently been named Ballygossan Park. This existing development currently utilizes a newly constructed priority-controlled site access junction off Golf Links Road. As discussed later within this report a separate planning application is being advanced for the remaining portion of the zoned lands on the northern Noonan Construction plot. This pending application by Noonan Construction is referred to as Ballygossan Park Phase 2 within this assessment.
- 1.1.5 This TTA report has been compiled in support of the planning application which is being made by the LDA for the development of the Hacketstown LAP5.A zoned lands southern plot. The LDA proposals incorporate a total of 345 no. residential units including:
- 152 no. Apartments
 - 154 no. Duplex
 - 39 no. Houses
- 1.1.6 In addition to accommodating permeable pedestrian, bicycle and vehicle connections with the northern plot, the LDA scheme proposals will also benefit from the provision

of a new 'second' site access junction on Golf Links Road which is to be located to the south within the LDA plot.

- 1.1.7 The proposed development is located to the south of the Advance Infrastructure Application (AIA) works which are being advanced by the applicant and subject to a separate planning application as discussed in greater detail in Chapter 4. These AIA works, the location of which is illustrated in **Figure 1.1A**; include the construction of a 66m length of a new link road access that will connected the existing Ballygossan Park Phase 1 (to the north) with the proposed LDA SHD development (to the south) as part of the coordinated design approach to the Hacketstown LAP5.A zoned lands.
- 1.1.8 The proposed development thereby fully integrates both the LAP5.A' southern and northern development plots and subsequently delivers a second site access junction between the zoned LAP5.A lands and the Golf Links Road corridor. The AIA aims to facilitate both the LDA and Noonan development proposals as well as associated works including landscaping, public lighting, diversion / undergrounding of existing overhead ESB tower lines amongst others.

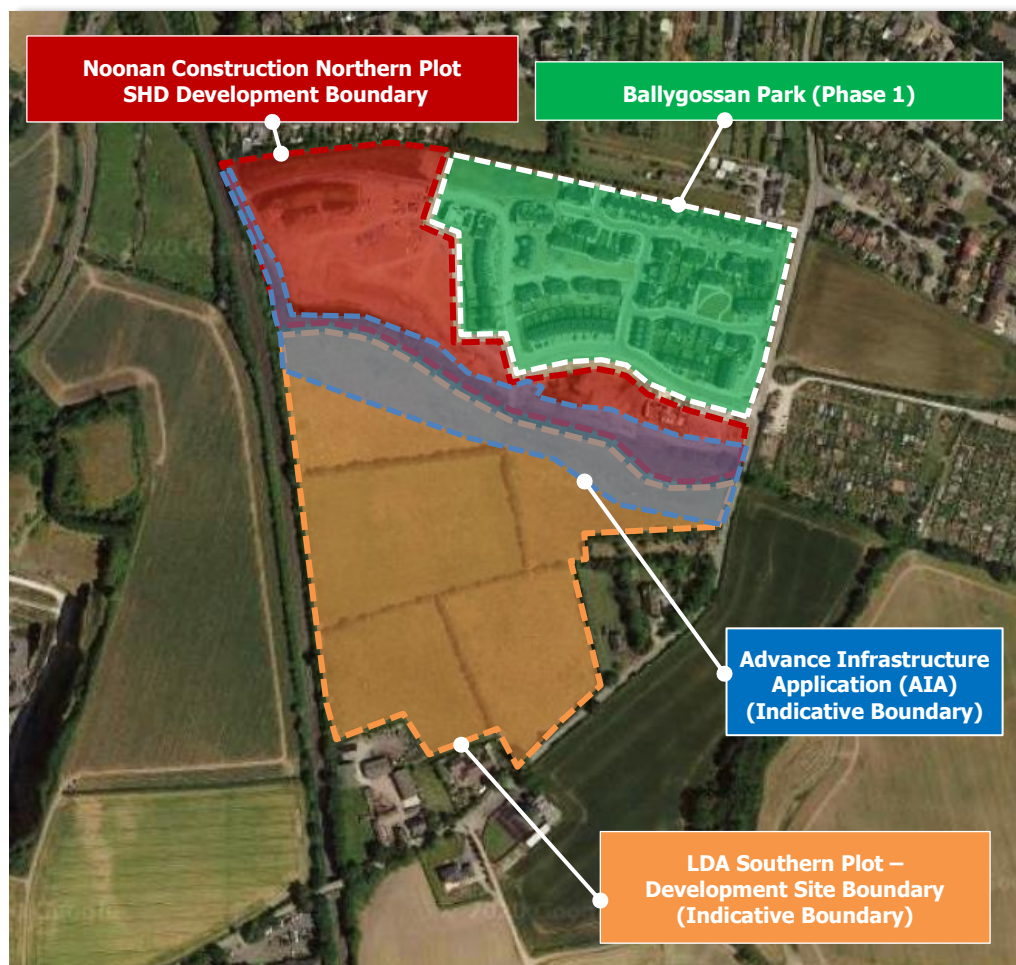


Figure 1.1A: Hacketstown LAP5.A Zoned Lands - Indicative Development Plot Extents

- 1.1.9 This report has been produced to address any potential concerns that the local planning authority may have pertaining to the level of impact of the proposed development may generated upon the local transportation system.

1.2 SCOPE OF ASSESSMENT

- 1.2.1 The objective of this TTA is to assess and quantify:

- The principle accessibility characteristics of the existing local receiving environment,
- The proposed method of access for pedestrians, cyclists and vehicles travelling to / from the proposed development, and
- The identification of the potential scale of impact upon the local transport network.
- The identification and assessment of mitigation measures to minimise any likely significant effects identified.

- 1.2.2 The scope of the assessment covers transport and sustainability issues including vehicular and pedestrian access, cyclist and public transport connectivity and capacity. The findings of the assessment contained within this report are based on existing and proposed road infrastructure layout arrangements (e.g. mitigation works that are to be implemented by the applicant), site visits, traffic observations and junction vehicle turning count data commissioned specifically for the purpose of this assessment.

- 1.2.3 The availability and subsequent review of this information will enable the planning authority to gain a more detailed understanding of the proposed development at an early stage. This information will enable the authority to respond in an appropriate manner in the context of the scale and nature of the potential impact generated by the proposed LDA residential development .

1.3 APPRAISAL METHODOLOGY

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

- '*Traffic and Transport Assessment Guidelines*' (May 2014) National Road Authority;
- '*Traffic Management Guidelines*' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- '*Guidelines for Traffic Impact Assessments*' The Institution of Highways and Transportation;
- *Hacketstown Skerries Local Area Plan* (May 2009 – Extended until 2019) and
- *Fingal Development Plan 2017-2023*.

1.3.2 Our technical methodology respects the best practice recommendations detailed in both Transport Infrastructure Ireland (TII) document entitled *Traffic & Transport Assessment Guidelines* (2014) and the Chartered Institution of Highways and Transportation (IHT) entitled *Guidelines for Traffic Impact Assessments*. The approach to the preparation of this assessment subsequently involves the use of relevant data and established analytical techniques such that the conclusions are sufficiently robust and supported by evidence. In summary the assessment methodology incorporated a number of key inter-related stages, including;

- **Site Audit:** A site audit was undertaken to quantify (i) existing transport infrastructure characteristics, (ii) identify local traffic management arrangements, (iii) public transport network and interchange provision, (iv) establish the level of accessibility to the site in terms of walking, cycling and public transport, (iv) identify the level of retail, medical, service, educational, leisure and amenity provision currently available within a 15 minute travel duration to/from the subject Hacketstown site. An inventory of the local road network was also developed as this stage of the assessment.
- **Background Review:** This important exercise incorporated two parallel tasks which included (a) an examination of the local regulatory and development management documentation, and (b) an analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals across the Hacketstown and Skerries area.
- **Pre-planning Scoping and Technical Meetings:** A number of pre-planning meetings (and joint site visits) have been undertaken with officers of Fingal

County Council including representatives of the Transport Planning Department. These discussions directly influenced the

- (i) geographical scope of the assessment including
- (ii) the number of off-site junctions that have been analysed in detailed as part of the assessment,
- (iii) the range of data to be collected and submitted with the assessment;
- (iv) the methodology to be adopted for the identification of development generated vehicles trips; in addition to
- (v) recommendations in regard to the design and extent of infrastructure-based mitigation works such as car and bicycle parking, pedestrian crossing facilities, design of footpath / cycle tracks and off-site junction works.



Figure 1.1B: Geographical Scope of Active Travel Infrastructure Assessment

- **Traffic Counts:** A range of different data collection exercise have been undertaken including (i) classified junction turning counts (JTC's) at key nodes, (ii) Automatic Traffic Counts (ATC's) to establish vehicle types, volume and speeds, (iii) public transport surveys at local interchanges, and (iv) trip generation surveys at local residential donor sites. The analysis of the survey findings assist in establishing (i) local baseline traffic demand characteristics in the immediate area of the proposed residential development, and (ii) the potential level of trips that the proposed development could potentially generate.

- **Proposed Development:** The proposed residential developments key 'traffic and transportation' attributes are confirmed as influenced by its land use, size, unit type and size (bedrooms), street and footpath / cycle route layouts, car parking provision and management, bicycle parking and level of connectivity provided by the scheme proposals integration with the external transport networks and associated access to local and regional travel destinations.
- **Modal Split and Trip Generation:** A trip generation exercise has been carried out to establish the potential level of person trips that could potentially be generated by the proposed residential development. As agreed with the local roads authority a twofold methodology has been adopted with (i) the existing Ballygossan Phase 1 being adopted as a 'donor' site for the proposed developments 'house' units, and (ii) the industry standard TRICS database utilised to establish trip data for the developments 'apartment' and 'duplex' units which were subsequently modified (increased by 50% further to preplanning discussions with the local roads authority) with the objective of providing a robust appraisal. The exercise includes an analysis of accumulative impacts as influenced by key third party committed developments across the study area.
- **Vehicle Trip Generation, Distribution and Assignment:** Based upon existing traffic characteristics and anticipated travel patterns generated by the proposed development, a trip distribution exercise has been undertaken to assign site generated trips across the local road network.
- **Road Safety Assessment:** Further to the assessment of the receiving environments road safety record as part of an earlier stage of the assessment, the specific design of the LDA residential scheme proposals, and its connections with Gold Links Road corridor; have been subject to an independent Road Safety Audit (RSA) as per and in accordance with TII best practice guidance. The recommendations raised within the RSA by the auditors have been incorporated into the revised scheme design now being presented for planning to ensure that all potential safety issues are addressed.
- **Network Impact & Assessment:** Considering the receiving environments characteristics, the proposed mitigation strategy and the additional scale of demand predicted to be generated by both the LDA residential scheme proposals and third party committed developments; it has been possible to undertake an assessment of the potential scale of impact significance across the

local road networks key junctions. Accordingly, an analysis of junction capacity, including vehicle queue lengths and reserve capacity at base year, year of opening, year of opening plus 5 years and year of opening plus 15 years have been undertaken and reported.

- **Mitigation** : The assessment includes the analysis of alternative junction designs at critical off-site junctions as proposed to mitigate the additional demands being generated by the both the LDA residential scheme and local third party committed development.

1.4 REPORT STRUCTURE

- 1.4.1 As introduced above, this TTA seeks to assess the potential level of impact generated by the proposed development upon the local transportation network and subsequently ascertain the existing and future operational performance of the local transport system. The structure of the report responds to the various stages of this exercise including the key tasks summarised below.
- 1.4.2 **Chapter 2** of this report describes the existing conditions at the proposed development location and surrounding area, whilst **Chapter 3** provides a summary of the relevant transport policies that influence the design and appraisal of the subject commercial proposals.
- 1.4.3 A description of the proposed development scheme and the proposed site access arrangements is described in **Chapter 4** whilst **Chapter 5** details the proposed developments bicycle and car parking strategy's.
- 1.4.4 **Chapter 6** outlines the trip generation exercise carried out and the adopted methodology for applying growth factors to establish design year network traffic flows and the predicted scale of impact upon both the local road network and public transport network.
- 1.4.5 The operational performance of the key road junctions are assessed for the 2024 Opening Year and the 2029 (Opening Year +5 years) and the 2039 (Opening Year +15 years) Horizon Years are summarised within **Chapter 6**.
- 1.4.6 The operational performance of the site access, the key local junctions for a range of different development / traffic scenarios both prior to and following the commissioning of the proposed residential development as well as the junction enhancement analysis are investigated and reported within **Chapter 7**.

1.4.7 The main conclusions and recommendations derived from the analysis are summarised in **Chapter 8**.

2.0 RECEIVING ENVIRONMENT

2.1 LAND USE

2.1.1 The subject LDA site is located on a greenfield area within the Hacketstown suburb of Skerries. The LDA plot lies within the southern portion of the Hacketstown Skerries Local Area Plan (LAP5.A) zoned lands as identified in the current Fingal County Council development plan. The subject site predominantly comprises greenfield site and is zoned as Objective RA (Residential Area) which aims to “*Provide for new residential communities subject to the provision of the necessary social and physical infrastructure*” as stated within the 2017-2023 Fingal County Development Plan as shown in **Figure 2.1**.

2.1.2 The subject development plot is bounded to the north with a ‘buffer zone’ which runs along the interface between the LDA’s southern plot and Noonan Construction’s northern plot which together constitute the Hacketstown LAP5.A zoned lands. This ‘buffer’ area is zoned as Objective OS (Open Space) which aims to “*Preserve and provide for open space and recreational amenities*”.

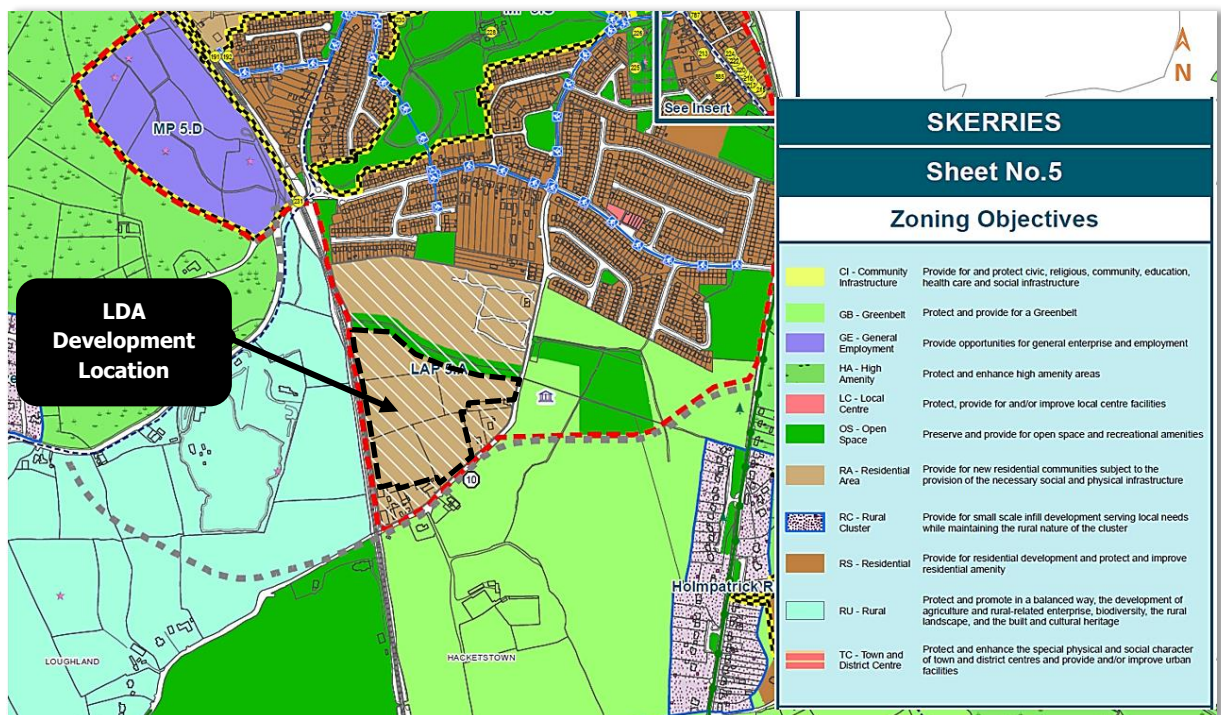


Figure 2.1: Fingal County Council Zoning Objectives

2.2 LOCATION

2.2.1 The Hacketstown LAP lands are located on Golf Links Road and lie approximately 1.6km south of Skerries Town Centre. Aligned in a north-south orientation, Golf Links

Road provides access to the north connecting with the R128 Holmpatrick corridor in addition to both Miller's Lane and Shenick Rd which together form an east-west link between the R127 Skerries Rd and R128 Rush Rd corridors to the south of Skerries urban area. To the south of the Hacketstown lands, Golf Links Road continues but narrows after the rail overbridge continuing south-westwards meandering through the rural countryside until eventually adjoining the Ballaghstown Lane corridor.

2.2.2 It is noted that the Ballygossan Park (103 houses – formerly known as Phase 1) residential development on the northern Noonan Construction plot is already completed / occupied as permitted by Fingal County Council under the planning conditions associated with application reference F11A/0309/E1. **Figure 2.2** illustrates the LDA subject site in relation to the Noonan Construction Plot, the Advanced Infrastructure Works as well as the permitted Off-Site Accommodation Works to the north.

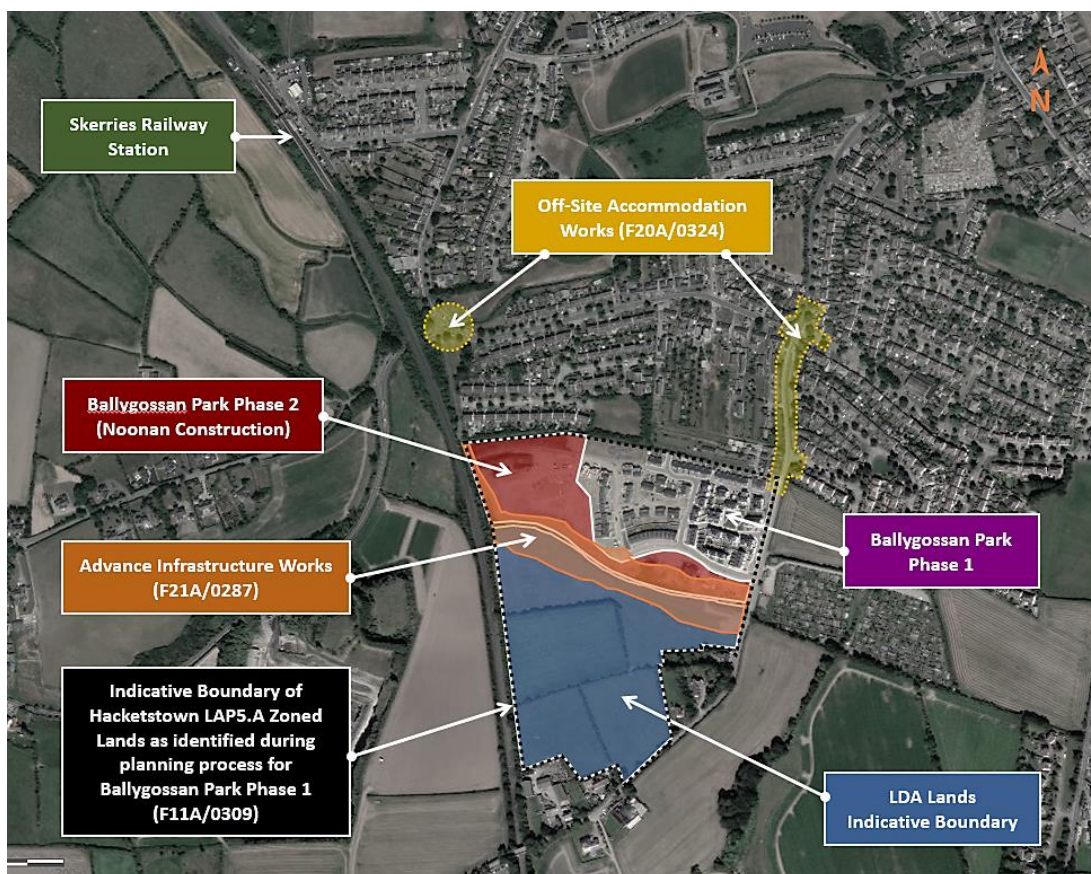


Figure 2.2: Site Locations (Source: OSI MapViewer)

2.2.3 Strategically, the Hacketstown lands lie approximately 6km north-west of Rush (accessible via Shenick Rd and the R128 Rush Rd), criteria 7.8km north-east of Lusk (accessible via Millers Lane and R127 Skerries Rd), and approximately 7.6km south-east of Balbriggan (accessible via Millers Lane and the R127 corridor). The M1

Motorway is accessible via either Junction 5 (as located approx. 11 km) or Junction 4 (as located approx. 14.3km) to the west and southwest respectively. Vehicle access to both of these M1 junctions is achieved by traveling via Millers Lane and the R127 Skerries Road corridor.

2.2.4 The general location of the subject site in relation to the surrounding road network is illustrated in below in **Figure 2.3**, while **Figure 2.4** indicatively shows the extent of the subject site boundary and neighbouring lands.



Figure 2.3: Hacketstown Site Location (Source: www.google.ie/maps)



Figure 2.4: LDA's Southern Plot - Indicative Boundary (Source: www.google.ie/maps)

- 2.2.5 Forming the southern plot of the Hacketstown lands the LDA site is bounded;
- to the north by the Noonan Construction lands (which incorporate Phase 1 Ballygossan Park and the zoned Phase 2 and Phase 3 development plots) of the LAP5.A lands as well as the Advance Infrastructure Application (AIA),
 - to the east by Golf Links Road and three number private dwelling plots,
 - to the south by Golf Links Road and two further private dwelling plots one of which includes a farm yard and associated agricultural outbuildings, and
 - to the west by the main Dublin-Belfast railway corridor.
- 2.2.6 Opposite the LDA site, lands to the east and southeast of Golf Links Road are generally agricultural lands with the exception of a small parcel assigned for allotment use and St. Michaels Special School (to the south).

2.3 LOCAL AMENITIES

- 2.3.1 The proposed development site is very well placed in terms of proximity to local amenities as shown in **Figure 2.5**.
- 2.3.2 There are a number of schools close to the subject site such as St. Michael's Special School, Skerries Community College, Realt na Mara National School, Holmpatrick National School and Skerries Educate Together National School. These schools are all within 2.5km from the Hacketstown subject site.
- 2.3.3 In terms of leisure facilities, the subject site is approximately 700m to the north of Skerries Golf Club. Sports club such as Skerries GAA Club and Skerries Rugby Football Club are approximately 1.8km north and 1.3km north-east of the subject site respectively and are located in Skerries Town while Skerries Sailing Club is situated on Harbour Rd and is approximately 2km north of the subject site.
- 2.3.4 Medical clinics such as the Windmill Medical Centre and Coastal Dental Care are approximately 1.8km and 400m away from the subject site. In addition, hospitals such as Our Lady of Lourdes Hospital in Drogheda (approx. 32km), St. James's Hospital (approx. 43km), Clontarf Hospital (approx. 30km) and the National Maternity Hospital (approx. 33km) are all also highly accessible via the M1 and the M50.
- 2.3.5 Convenience stores that are accessible from the subject site include Centra Skerries (approx. 1.7km), SuperValu Skerries (approx. 1.3km), C & T Supermarket (approx. 550m) and EUROSPAR (approx. 2.9km).

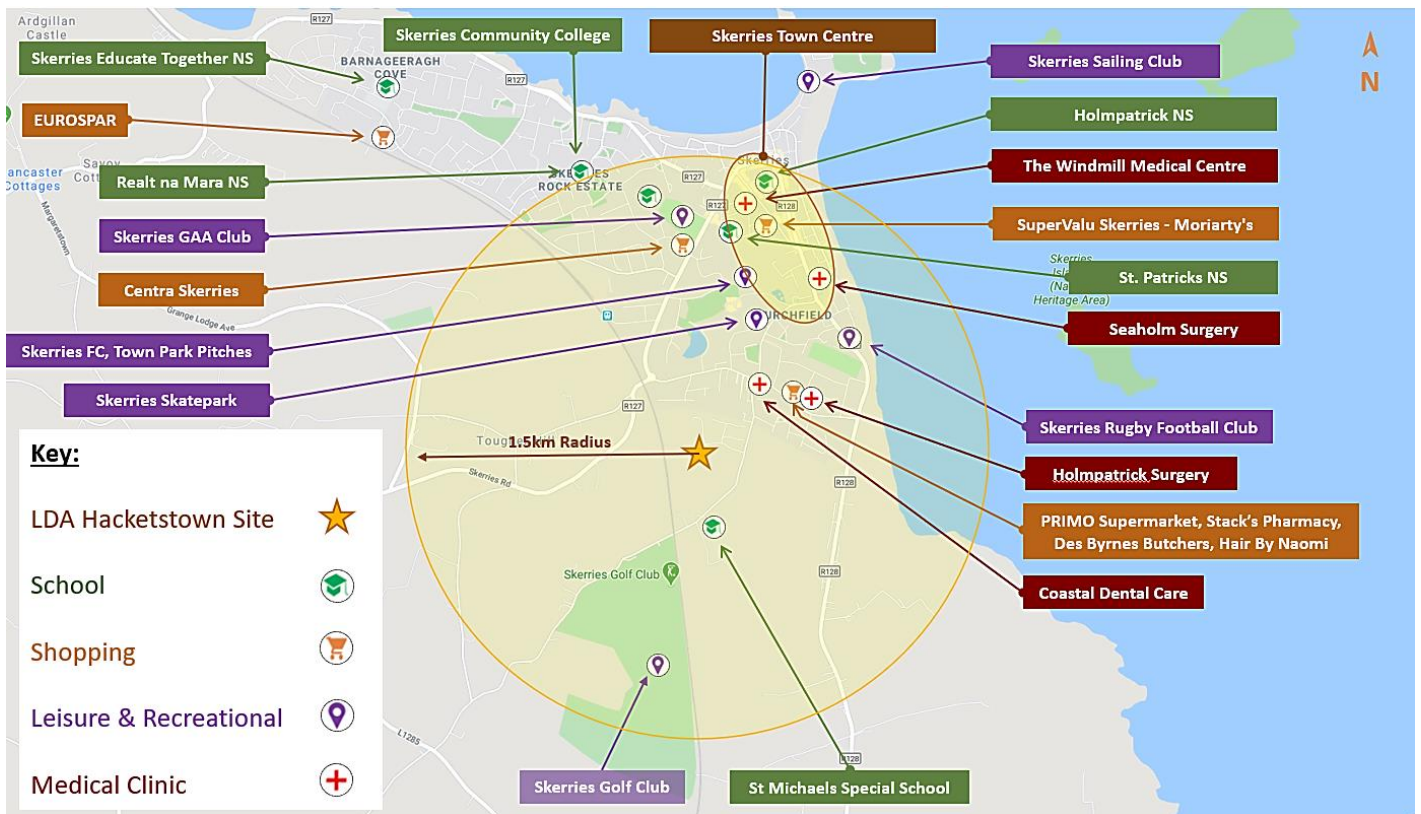


Figure 2.5: Local Amenities Surrounding the LDA Hacketstown Site

2.4 EXISTING SITE ACCESSIBILITY

Walking

- 2.4.1 **Figure 2.6** below presents the significant extent of pedestrian catchments accessible from the subject Hacketstown site for different walking times ranging from 5 minutes to 20 minutes.
- 2.4.2 In a 10-minute walking timeframe, C & T Supermarket, Stack's Pharmacy and Coastal Dental Care medical clinic can be accessed. Within a 15-minute timeframe, Skerries Rugby Football Club and retail units on Strand St. are accessible. In a 20-minute timeframe, Skerries Railway Station, SuperValu, Windmill Medical Centre and Skerries Town is accessible.



Figure 2.6: Pedestrian Accessibility (Walking Time from Site) (Source: ArcGIS)

Cycling

2.4.3 **Figure 2.7** below illustrates cycle travel time catchment areas from the Hacketstown subject site. In **15 minutes** of cycling, a significant number of nearby neighbourhood centres and their employment / educational facilities in Skerries Town as well as Loughshinny village in the south are accessible. In **30 minutes** of cycling, Balbriggan, Rush and Lusk are accessible. In **45 minutes** of cycling, areas such as Balcaddan and Gormanston in the north and Donabate in the south are all accessible from the subject site.

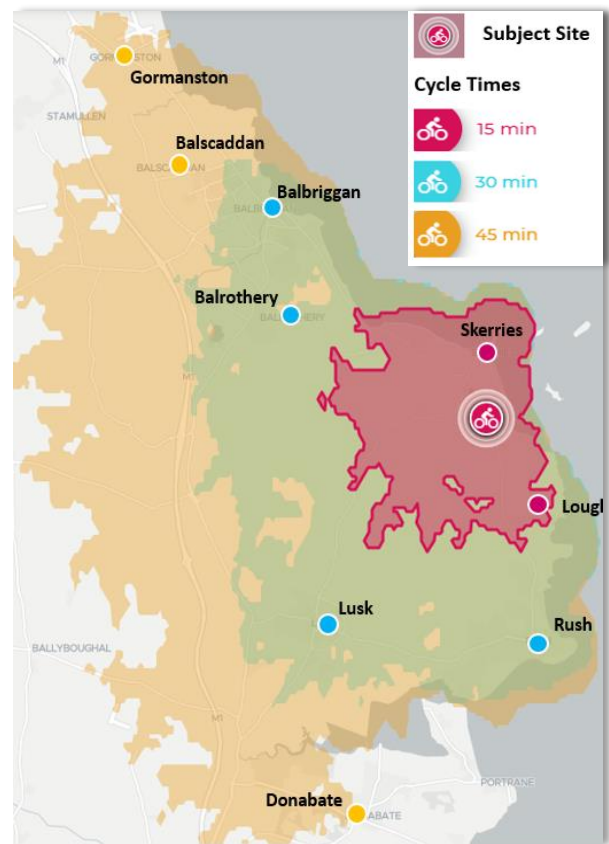


Figure 2.7: Bicycle Accessibility (Cycle Time from Hacketstown Site)

(Source: TravelTime platform)

Public Transport and Walking

- 2.4.4 Regarding public transport accessibility, the subject site currently benefits from a number of existing bus services with interchange opportunities in close proximity to the site as outlined in the following section. In order to obtain realistic journey times, the following maps give travel times during the AM peak time hours (Ref. **Section 6.2**), in this case 08:00 on a Tuesday. **Figure 2.8** below illustrates an analysis of public transport catchment areas accessible from the site within a **30-minute** transit and walking timeframe. Areas such as Balbriggan, Rush and Skerries Town are easily accessible from the subject site within 30 minutes.
- 2.4.5 The catchment for transit and walking times within a **45-minute** timeframe from the site is illustrated in **Figure 2.8** below. Towns in Meath such as Bettystown, Donacarney, Julianstown and Laytown are accessible. Rush and the coastal towns of Donabate and Malahide in the south can be reached within 45 minutes.
- 2.4.6 The catchment for transit and walking times within a **60-minute** timeframe from the site is illustrated in **Figure 2.8** below. In 60 minutes, the public transport catchment is extended to include Drogheda and Mornington in the north and Naul in the west. Dublin suburbs such as Swords, Portmarnock, Clongriffin, Raheny and Dublin City Centre are accessible.

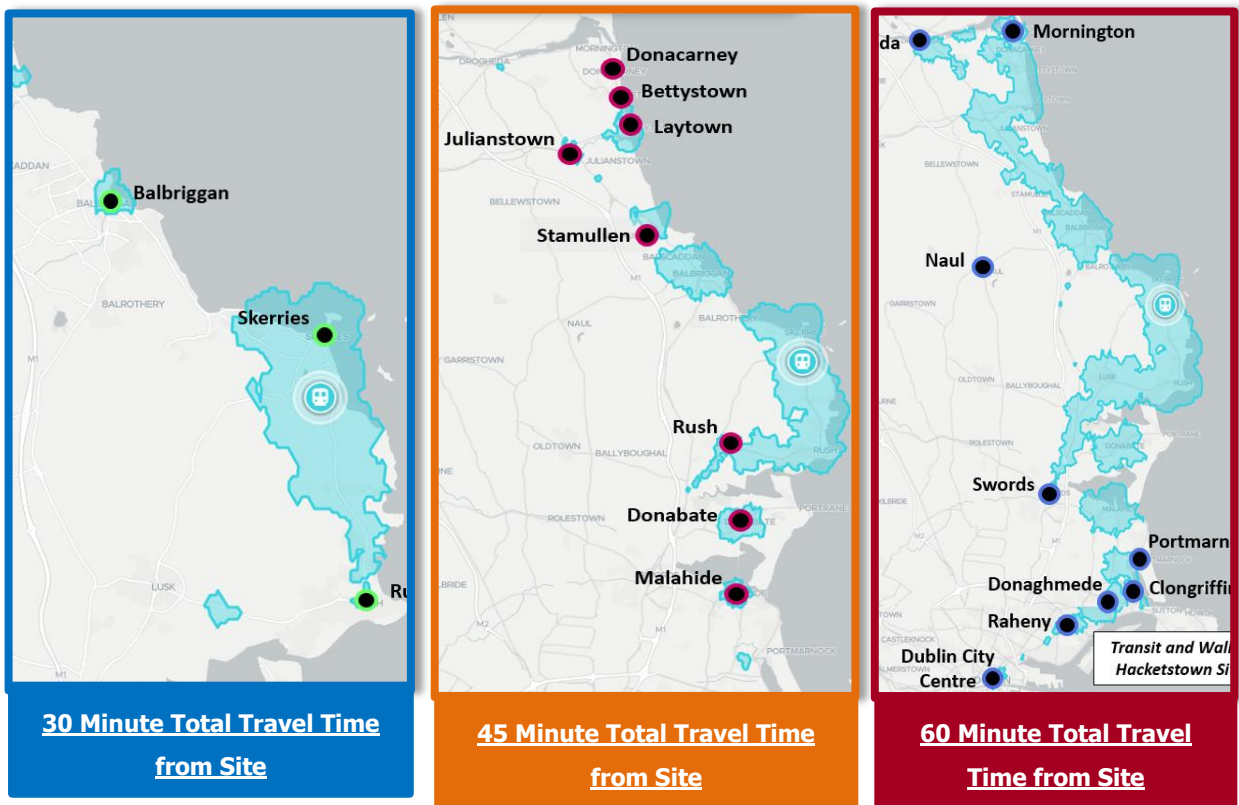


Figure 2.8: Public Transport Accessibility – Travel Time Catchments (Public Transit and Walking Time from Hacketstown Site) (Source: TravelTime platform)

2.5 EXISTING TRANSPORTATION INFRASTRUCTURE

Road Network

- 2.5.1 Golf Links Rd runs in a north-south direction along the eastern site boundary, comprising a two-way single lane carriageway with criteria 3.0m wide traffic lanes in both directions in the vicinity of the site. Golf Links Rd adjacent to the subject site access contains road markings and continue northbound towards the Golf Links Rd/Miller's Ln/Shenick Rd staggered junction, and southbound towards Baldongan. The southbound route narrows after the road bridge structure close to Skerries Golf Club which is built over the railway line. South-west wards, Golf Link Road continues until the Baldongan Close/Ballaghstown Lane priority junction.
- 2.5.2 The Dublin Rd / Miller's Ln / Skerries Rd junction is located to the southwest of Skerries Town Centre. This R127 junction layout currently incorporates a small three arm roundabout (approximately 28m ICD) configuration. On all three arms of the junction the approach lanes benefit from the provision of flared approach with two lanes provided at the circulation carriageway yield line. The circulation carriageway around the central landscaped island incorporates a very wide single circulation lane.
- 2.5.3 Along the eastern site boundary, Golf Links Rd runs in a north-south alignment through until it joins with the slightly staggered (east-west) crossroad junction arrangement with both Miller's Lane (western arm) and Shenick Rd (eastern arm) being the minor arms of the junction configuration. With the exception of Gold Links Road South, the other three arms all benefit from the provision of pedestrian footpaths along both sides of the streets (**Figure 2.9**).

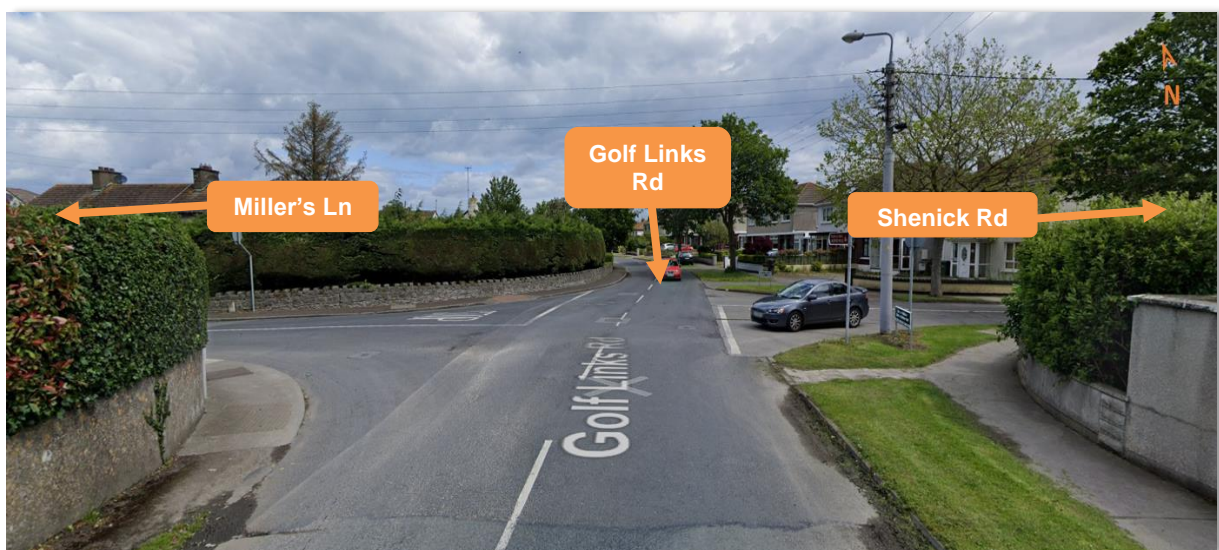


Figure 2.9: Golf Links Rd/Miller's Ln/Shenick Rd Staggered Junction

- 2.5.4 The main Dublin-Belfast rail corridor is located a short distance to the west of the Skerries Rd/Dublin Rd/Miller's Ln three-arm roundabout junction on an elevated embankment (**Figure 2.10**). The southwestern arm (Skerries Rd R127) of the existing roundabout junction is aligned through this rail embankment and facilitated by way of a road underbridge beneath the rail line. Incorporating a stone arched bridge this underbridge is a protected structure in the Fingal County Development Plan (2017-2023).
- 2.5.5 The entrance to the arched underbridge is located approximately 20m back from the roundabout circulating carriageway. Both the low level (3.44m height clearance) of the underbridge and the arched nature of the bridge structure (which limits the 3.44m height clearance to the centre of the carriageway) restricts large and high sided HGV vehicles and buses from travelling through the underbridge. Whilst private motorcars and small / medium sized light goods vehicles (LGV's) can continue two-way unopposed through the underbridge, on occasions when larger vehicles such as high sided LGV's and HGV's (below the 3.44m height clearance) seek to travel under the rail lines, they are required to wait until opposing traffic movements have cleared before progressing through the underbridge along the centre of the carriageway.



Figure 2.10: Skerries Rd/Dublin Rd/Miller's Ln Three-Arm Roundabout

- 2.5.6 Travelling northbound on Dublin Rd (R127) takes vehicles towards Skerries Town while Balbriggan St. off Thomas Hand St. (R127) can be used to travel to Balbriggan. Skerries Rd (R127) travels towards Lusk in a south-westerly direction off Skerries Rd/Dublin Rd/Miller's Ln three-arm roundabout.
- 2.5.7 Travelling southbound onto Skerries Rd can also be used to access the M1 Motorway which provides convenient access to Dublin City Centre to the south and the M50

which provides strategic network access across the Greater Dublin Area. Destinations such as Drogheda and Dundalk can be accessed via the M1 to the north. As introduced above, a single arch railway bridge is situated at Skerries Rd west of the Skerries Rd/Dublin Rd/Miller's Ln three-arm roundabout.

2.5.8 To the east of the railway corridor, the local road network benefits from streetlighting and is subject to 50kph vehicle speeds regulations. Whilst a narrow defensible strip is provided for those pedestrians that need to walk through the rail underbridge, both the R127 Dublin Road arm (northern arm) and the Miller's Lane arm (south-eastern arm) benefit from the provision of pedestrian footpaths on both sides of the street corridors.

2.5.9 **Figure 2.11** below illustrates the location of the subject site within the context of the existing road network.

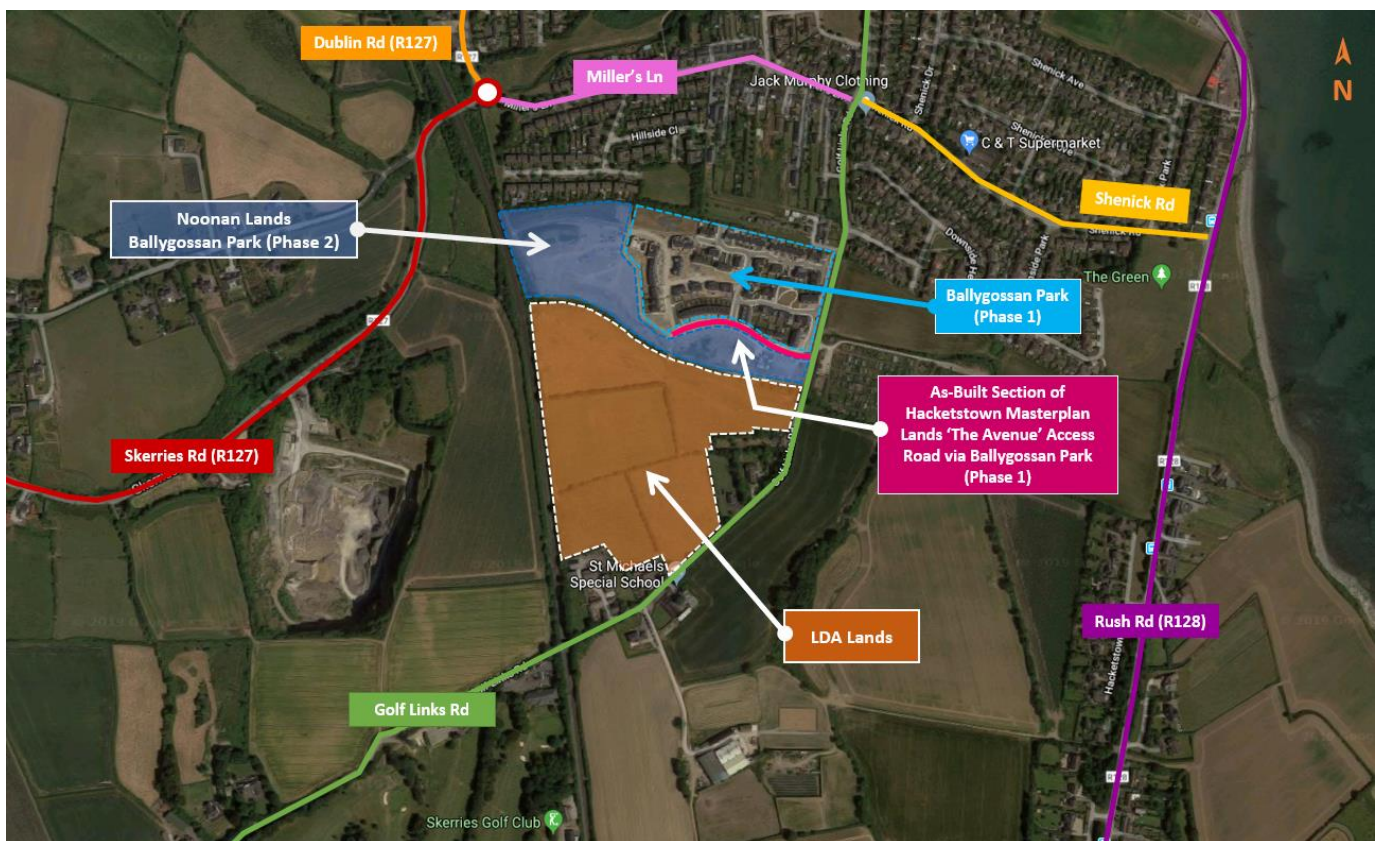


Figure 2.11: Existing Road Network (Source: www.google.ie/maps)

Existing Pedestrian and Cycling Facilities

2.5.10 An existing shared pedestrian/bicycle 'greenway' connects (**Photo 1**) connects the R127 roundabout junction to both Hillside Gardens and the subject Hacketstown lands. The greenway begins at Ballygossan Park and is approximately 350m in length. **Photo 1 Left** shows the footway beginning at Ballygossan Park while **Photo 1 Right**

shows the shared foot/cycle path terminating at the R127 Dublin Road roundabout junction.



Photo 1: Existing Pedestrian / Cycle Connection between Ballygossan Park and R127 Skerries Rd

2.5.11 This pedestrian/cycle link (**Figure 2.12**) proves particularly attractive for existing local residents (including those residing in Ballygossan Park) based upon DBFL's on-site observations. Similarly future residents of the Hacketstown development lands are also predicted to utilise this active travel connection as it offers a shorter more convenient traffic free route to Skerries Railway Station compared to the alternative route via Gold Links Road. Accordingly, it is predicted that any future development on the LAP5.A zoned lands will result in an increase in pedestrian / cyclist traffic using this link.

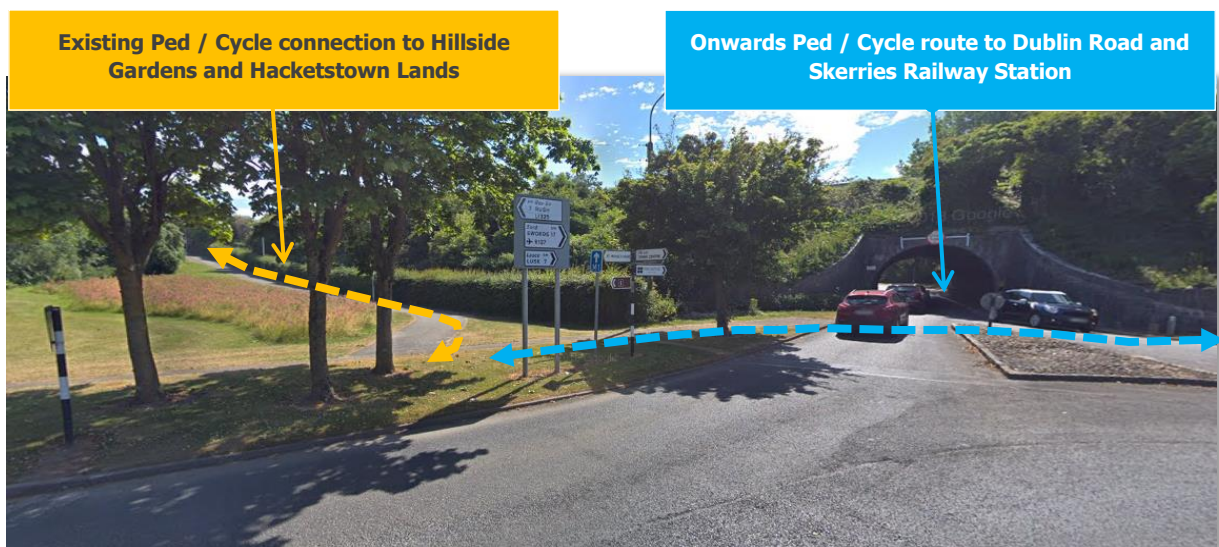


Figure 2.12: Existing Greenway Connection with Junction 2 (Source: Google Maps)

2.5.12 It is noted that whilst the above pedestrian connections accommodate pedestrians travel to and from the R127 Dublin Rd roundabout junction, the current configuration of the junction does not provide for any formal or informal road crossing facilities on any of the junctions three arms.

2.5.13 Golf Links Rd leading up to Downside Heights currently contains a footpath of sub-standard quality. A newly built footpath then begins at Cabra Hill on Golf Links Rd which leads into Ballygossan Park. Pedestrian and cycling facilities are provided within Ballygossan Park and is located at two locations, (i) the east of the development at Cabra Hill (**Photo 2**) and (ii) at the main vehicular site access of Ballygossan Park (**Photo 3**). In addition, a footpath is also provided immediately adjacent the access traffic allotments (as located to the east of Golf links Road) and then begins to narrow before ending opposite the existing Ballygossan Park vehicle access junction.



Photo 2: Pedestrian and Cycling Facilities At Ballygossan Park (Cabra Hill Entrance)



Photo 3: Pedestrian and Cycling Facilities At Ballygossan Park Site Access

- 2.5.14 The Golf Links Rd/Miller's Ln/Shenick Rd staggered junction benefits from tactile paving in access but no formal pedestrian crossing is provided. Miller's Lane heading west and Golf Links Rd heading north from this junction both contain a footpath on both sides of the road in addition to street lighting.
- 2.5.15 The footpath on Miller's Ln continues towards the three-arm Skerries Rd/Dublin Rd/Miller's Ln roundabout and onto Dublin Rd (R127) (**Figure 2.13**). Footpaths are also provided on Shenick Rd until the Shenick Rd/Holmpatrick Rd/Rush Rd (R128) priority junction.



Figure 2.13: Pedestrian Facilities on Miller's Ln (Towards Skerries Rd/Dublin Rd/Miller's Ln Roundabout)

- 2.5.16 Pedestrian facilities are provided on both sides of Dublin Road corridor northwards Station Road. Station Rd leading towards Skerries Railway Station contains a footpath on both sides (**Figure 2.14**). Shenick Rd also benefits from having a footpath on both sides of the road and terminates at the three-arm junction with Rush Rd (R128).



Figure 2.14: Pedestrian Facilities Station on Station Rd (Towards Skerries Railway Station)

2.5.17 Skerries Town currently has limited dedicated cycling facilities but has enormous potential to become a cycling town. The Greater Dublin Area Cycle Network Plan currently proposes a number of cycle route networks within Skerries Town. These include a primary/secondary route, an inter-urban route, a feeder route and a greenway. These cycle routes have been analysed in Chapter 2.6 of this TTA.

Public Transport – Bus

- 2.5.18 *Dublin Bus* operate route numbers 33, 33e, 33n and 33x that serve the subject site locale. The nearest bus interchange opportunities to the subject site are located on Holmpatrick Rd (R128) and is situated east of the site (approx. 850m). Bus stops on this corridor are approximately 10 minutes walking distance from the site which include stops no. 3793 and 3824 as illustrated in **Figure 2.15**. These stops are for the bus routes heading northbound towards Balbriggan and heading southbound towards Rush, respectively.
- 2.5.19 Route 33e is a north/south service that departs from Abbey St Lower, Dublin and terminates in Mourne View, Skerries. Route 33n continues northbound towards Balbriggan via Skerries departing from Westmoreland St. in Dublin City Centre. This route is a *Nitelink* route which exclusively operates up to midnight on Saturdays and Sundays. Route 33x provides a two-way connection from Custom House Quay to Skerries.
- 2.5.20 *Go-Ahead* also operates route number 33 and 33a in conjunction with Dublin Bus. Route 33 provides a connection from Balbriggan to Dublin City Centre via Skerries. Route 33a provides a link from Skerries to Dublin Airport via Rush Rd (R128) interchanges which are a 850m walk from the subject site.
- 2.5.21 In addition, *Fingal Express* operated by *Sword Express* offer route 533 and which connects Skerries to UCD via Dublin City Centre. This route travels on Holmpatrick and Rush Rd and serves stop no. 3824. **Figure 2.15** presents the existing bus stop locations on Rush Rd (R128) and the approximate walking distance from the Hacketstown development.



Figure 2.15: Existing Bus Stops walking distance from Subject Site (Source: Google Maps)

2.5.22 *Dublin Bus 33* and *Go-Ahead 33a* both operate daily and offer frequent services (i.e., every 15-20 minutes at peak times) as summarised in **Table 2.1**. Additional areas that can be accessed via route 33 by way of interchange connections at Rush, Lusk, Swords, Santry and Drumcondra.

2.5.23 *Dublin Bus 33e* provides a single one-way service and commences at 07:00 from Abbey St. Lower to Skerries. Route 33n operates every two hours from 00:00 to 04:00 on weekends as mentioned above. Reference **Section 2.9** which details the capacity of the existing public transport network.

Operator	Route Number	Route	Monday – Friday	Saturday	Sunday
Dublin Bus	33	Balbriggan (Via Skerries) - Abbey St. Lower	45	75	82
Go-Ahead	33a	Skerries - Swords/Dublin Airport	45	45	45
Dublin Bus	33e	Abbey St. Lower to Mourne View (Skerries)	1 Service ¹	-	-
Dublin Bus	33n	Westmoreland St. to Balbriggan	-	-	120
Dublin Bus	33x	Skerries - Custom House Quay/St. Stephen's Green	20	-	-
Fingal Express	533	Skerries – UCD (Via City Centre)	1 Service ²	-	-

¹33e: Single service commencing at 07:00 from Abbey St. Lower to Skerries.

²533: One single service in each direction. 07:10 from Skerries to UCD and 1645 from UCD to Skerries

Table 2.1: Bus Routes and Service Frequency in Skerries (In minutes)

Public Transport – Heavy Rail

2.5.24 The subject development site is located approximately 650m (830m walking distance) to the south-east of Skerries Railway Station. Skerries has an established rail infrastructure that provides linkages to Dublin in the south, and Drogheda to the north (15 services daily on average) from where further onwards connections can be made to other regional and strategic destinations. Irish Rail also includes other local intermediate destinations as part of its Regional and Dublin commuter services. **Table 2.2** below presents a summary of rail services available at Skerries Railway Station.

Route	Monday – Friday	Saturday	Sunday
Skerries to Dublin	31	20	15
Dublin to Skerries	30	21	15
Skerries to Drogheda	29	21	15
Drogheda to Skerries	30	20	15
Skerries to Dundalk	8	5	2
Dundalk to Skerries	7	5	1
Skerries to Rush & Lusk	29	19	15
Rush & Lusk to Skerries	27	21	15
Skerries to Malahide	30	19	15
Malahide to Skerries	27	21	15
Skerries to Balbriggan	30	21	15
Balbriggan to Skerries	31	20	15
Skerries to Laytown	29	21	15
Laytown to Skerries	29	19	15

Table 2.2: Rail Services to and from Skerries (No. of Services)

2.5.25 The availability, convenient access, frequency of services and range of destinations reachable via Skerries Railway station is likely to attract a number of rail users with an ultimate multi-modal trip origin/destination within the potential future development in the Hacketstown lands. Such rail users, utilising either walking, the bicycle or even motor vehicle will be required to travel via one or both of the key off-site junctions.

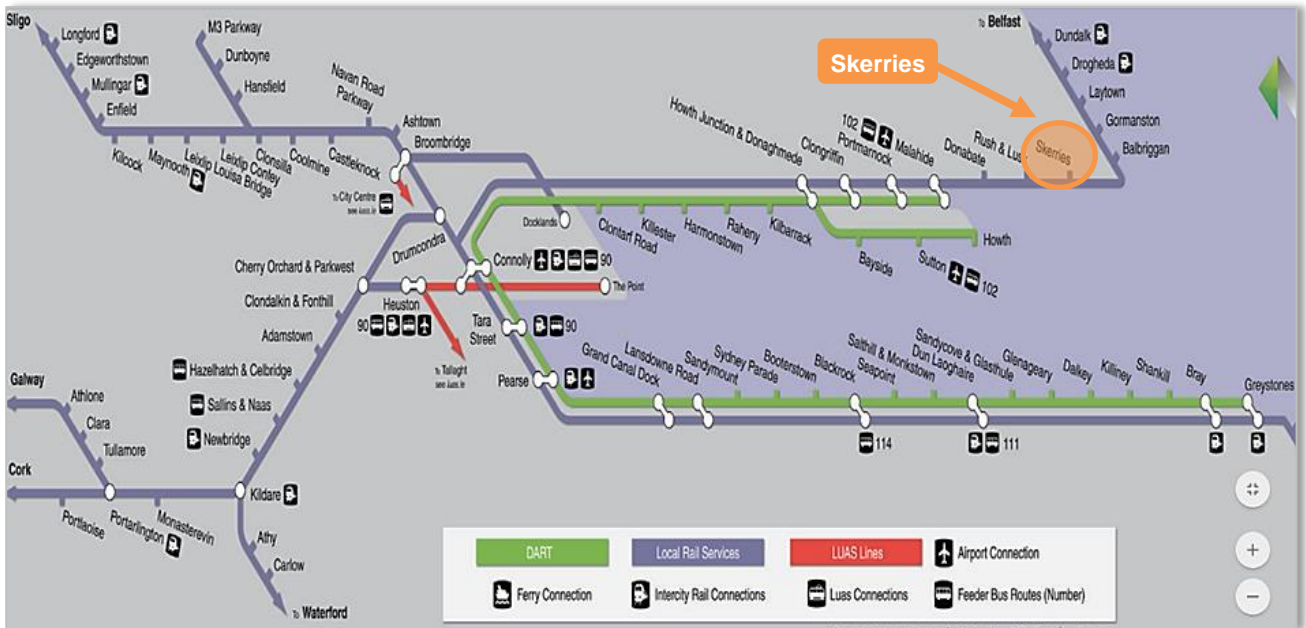


Figure 2.16: Irish Rail Network and Onwards Potential Connections from Skerries Station

2.6 EMERGING TRANSPORT DEVELOPMENTS

GDA Cycle Network Plan

- 2.6.1 The subject site is located within the “North Fingal Sector” as outlined within the Greater Dublin Area Cycle Network Plan (2013). The Sector “*extends from Balbriggan in the north to Skerries in the south. It includes the towns of Balbriggan and Skerries and the smaller village of Balrothery that is a satellite of the larger population centres and is included in the analysis of cycle route requirements*”.
- 2.6.2 GDA’s Cycle Network Plan proposes four categories of cycle route networks within Skerries Town. These include an introduction of a primary/secondary route, an inter-urban route, a feeder route and a greenway. Route **F4** is proposed to begin in Lusk and ends on Golf Links Rd adjacent to the subject site. This cycle network would then shift to a feeder route which begins adjacent to the subject site and continues towards Brookville Lane in Skerries Town.
- 2.6.3 Route **SK2** will be located to the east and north of the subject site. It is proposed to run on Rush Rd, Shenick Rd, Miller’s Ln, Dublin Rd (R127) and would terminate at Skerries Harbour while Route **SK1** is planned to run on Newtown Parks.
- 2.6.4 The Cycle Network Plan also proposes the East Coast Trail (**National Route 5**) which will follow a coastal path northward from Rush rather than the Rush Rd (R128). National Route 5 would begin in Rush and continue along Skerries, Balbriggan and

Gormanston. It is proposed that the coastal strip of open space along Skerries can be upgraded to accommodate a cycleway.

2.6.5 In summary, the Cycle Network Plan proposes the following route additions as indicated on **Figure 2.17** below:

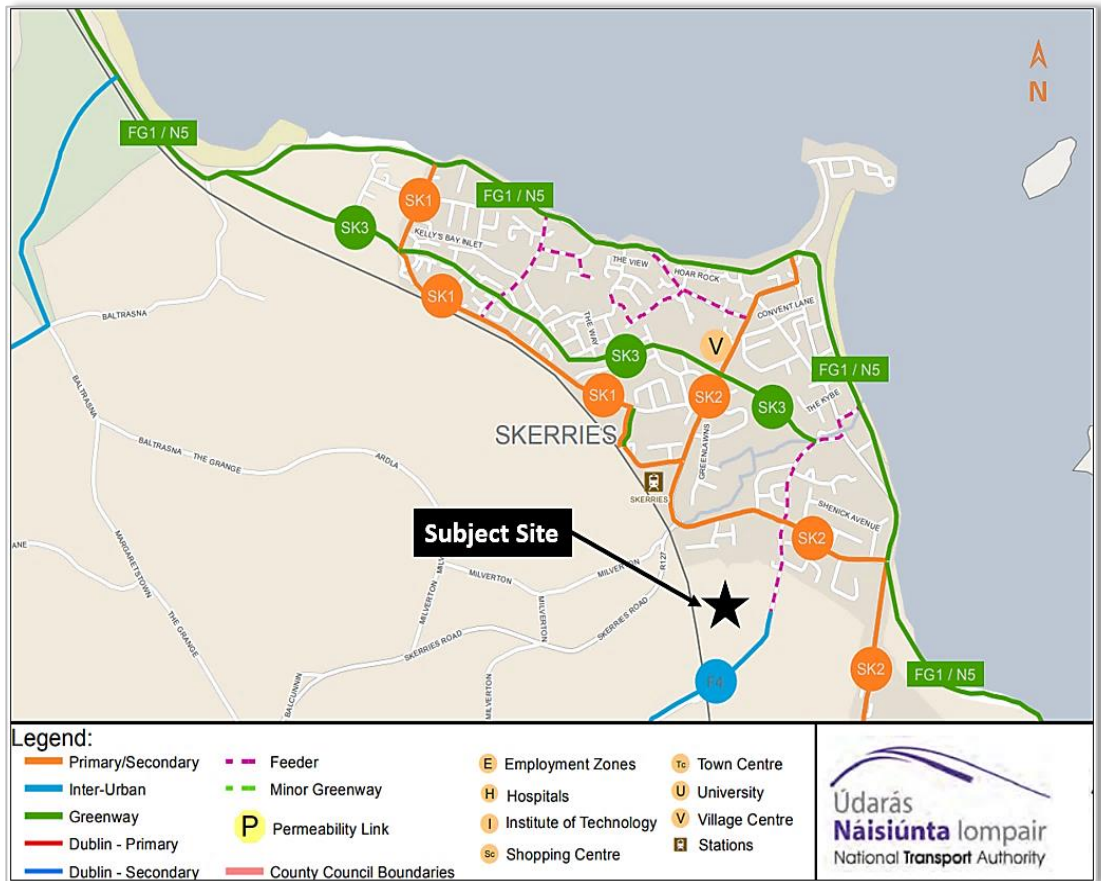


Figure 2.17: Proposed GDA Cycle Routes in Skerries (Extrant of Sheet N11: GDA Cycle Network Plan 2013)

BusConnects

2.6.6 The National Transport Authority (NTA) has developed a strategic transport plan, known as *BusConnects* (Ref. www.busconnects.ie for more information), which will transform and overhaul the current bus network to provide a more efficient network. The proposed network will deliver the 'next generation' of bus corridors on the busiest routes and redesign routes with the aim of offering fast, predictable and reliable bus journeys.

2.6.7 Under the BusConnects proposals, the following routes will replace the existing bus services as shown below in **Figure 2.18**:

- Route **L85**: Balbriggan – Skerries – Rush/Lusk – Swords - Airport
- Route **X76**: Skerries – Rush – Lusk – City Centre - UCD

- 2.6.8 Route **L85**, proposed under BusConnects, will run every 30 minutes on weekdays and weekends from Balbriggan to Dublin Airport via Skerries, Rush, Lusk and on to Swords. It is proposed to operate along Rush Rd and Holmpatrick Rd approximately 800m east of the subject site.
- 2.6.9 Route **X76** will exclusively be a peak time route which will run from Skerries to University College Dublin (UCD) via Rush, Lusk, Dublin City Centre and St. Vincent's Hospital. This route is proposed with 5 southbound AM trips from Skerries between 6:00 and 8:00, and 5 northbound PM trips from UCD starting between 16:00 and 18:00. Both of these routes are proposed to operate along Rush Rd and Holmpatrick Rd approximately 800m east of the subject site.



Figure 2.18: Proposed BusConnects Bus Routes in Skerries

(Source: www.busconnects.ie)

Dublin Area Rapid Transit Expansion Programme

- 2.6.10 The Dublin Area Rapid Transit (DART+) Programme aims to modernise and improve the existing rail network, which radiates from Dublin City Centre. It will provide a sustainable, electrified, faster, reliable and user friendly rail system, which increases train frequencies and customer carrying capacity. It intends to increase the length of DART network from the currently 50km to 150km railway corridor through the electrification and upgrade of existing lines transforming commuter train travel in the Greater Dublin Area (GDA). The DART+ Programme also includes the purchase of new train fleet.
- 2.6.11 The DART+ Programme will deliver frequent, modern, electrified services within the GDA and improve connectivity to regional routes as part of the following projects:
- DART+ West - Maynooth and M3 Parkway to the City Centre
 - DART+ South West - Hazelhatch & Celbridge to the City Centre
 - DART+ Coastal North - Drogheda to the City Centre Greystones
 - DART+ Coastal South - Greystones to the City Centre
- 2.6.12 This proposed DART+ Coastal North project (for which public consultation commenced in Q1 of 2022) will further increase the accessibility of Skerries and its environs. The timeline for the delivery of the Dart Expansion is unclear however the Strategy states that the strategic transport infrastructure is proposed to be delivered within the lifetime of the Strategy (i.e., 2035).
- 2.6.13 The delivery of the DART+ Coastal North project will form the third infrastructural project of the DART+ Programme in addition to DART+ West and DART+ South West. DART+ Coastal North is seeking to extend the existing electrified rail network from Malahide to Drogheda as well as increasing rail capacity on the Northern Line between Dublin City Centre and Drogheda MacBride Station, including the Howth Branch (Ref. **Figure 2.19A**).
- 2.6.14 **Figure 2.19B** below shows the Greater Dublin Area Heavy Rail Network (Commuter Rail and DART Services) in 2035. **Figure 2.19C** illustrates the planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services towards Dublin City Centre. Between the Drogheda and Malahide services, the number of trains will increase from 11 to 24 while passengers number will potentially increase from 12,500 to 26,600.

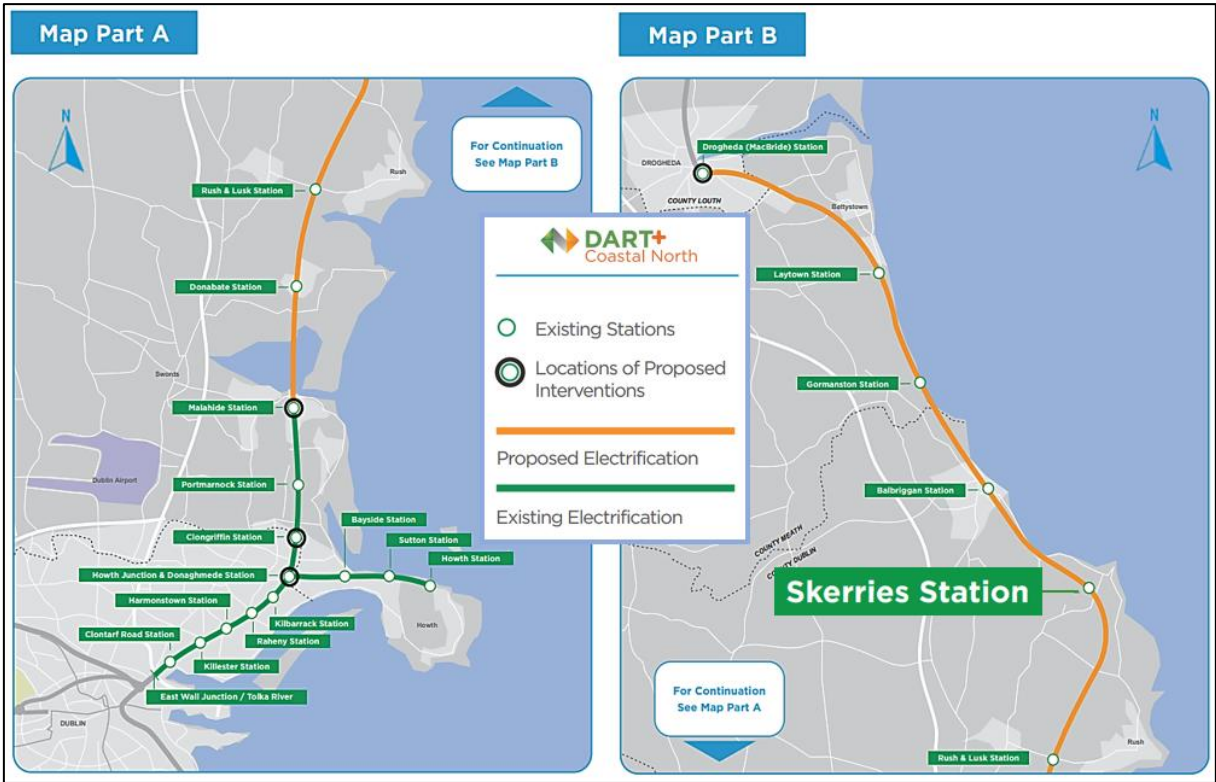


Figure 2.19A: DART+ Coastal North Programme (Source: National Transport Authority & Irish Rail)



Figure 2.19B: DART+ Programme (Source : www.irishrail.ie)

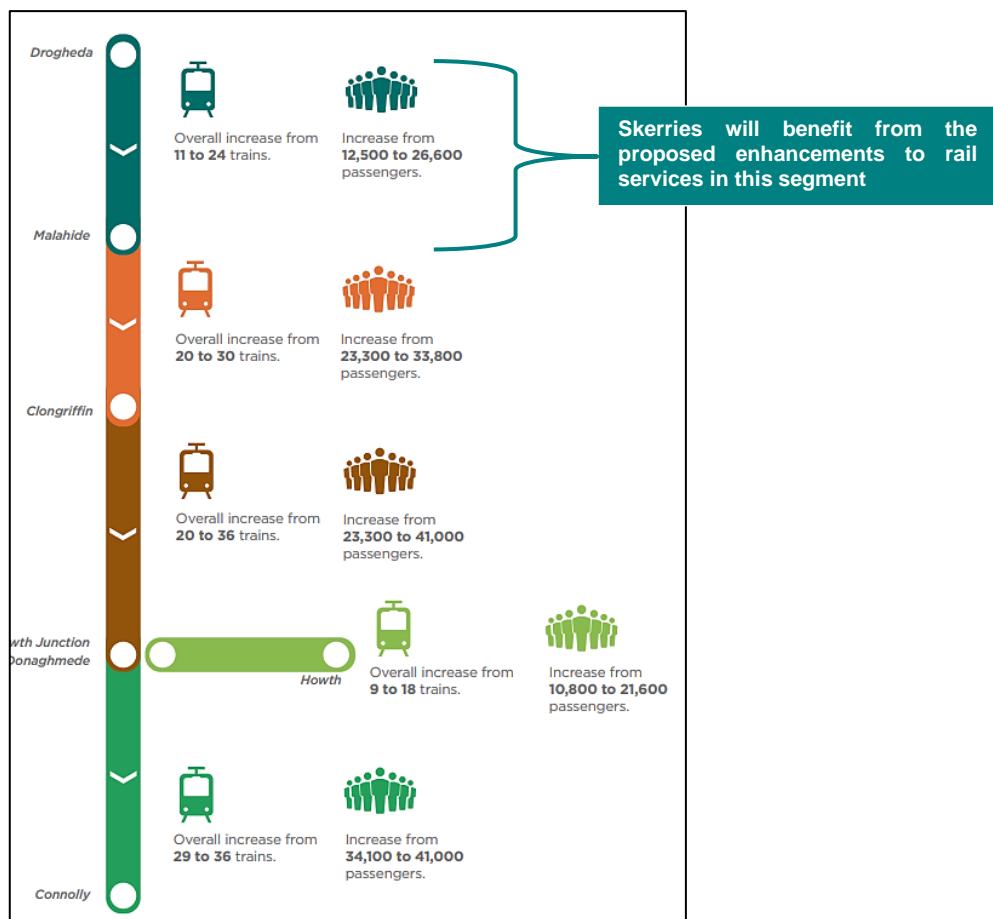


Figure 2.19C: Planned Increase In Train Frequency And Passenger Capacity (Source: NTA & Irish Rail)

2.7 ROAD SAFETY REVIEW

2.7.1 With the objective of ascertaining the road safety record of the immediate routes leading to and from the subject site, the collision statistics as detailed on the Road Safety Authority’s (RSA) website (www.rsa.ie) have been examined. The RSA website includes basic information relating to reported collisions over the most recent twelve-year period, from 2005 to 2016 inclusive.

2.7.2 The RSA database records details where collision events had been officially recorded such as the when the Garda were present to formally record details of the incident. In reference to **Figure 2.20** and **Table 2.3** below, 1 no. fatal incident, 3 no. serious incidents and 7 no. minor incidents were recorded within the vicinity of the subject site.

- Incident no. 1 involved a single vehicle which had occurred on Rush Rd (R128). It was reported that 1 no. fatality, 1 no. serious injury and 1 no. minor injury arose from this incident. The accident occurred between 23:00 to 03:00

on a Tuesday and occurred on a road that was subject to a speed limit of 80 km/h.

- Incident no. 2, 3 and 4 was assigned a severity level of 'serious' and all three collisions involved a car. Incident no. 2 occurred on the Shenick Rd/Rush Rd/Holmpatrick Rd priority junction, incident no. 3 occurred on Rush Rd while incident no. 4 had occurred on Skerries Rd (R127) between 03:00 to 07:00. All three accidents had one casualty each.
- Incident no. 5 occurred at the Golf Links Rd / Miller's Lane / Shenick Rd junction in 2010 (Saturday between 1600 and 1900) and involved an 'undefined' vehicle and 'other' circumstance. The severity of the incident is categorised as being only 'minor'. Incident no. 7 and 9 involved pedestrians and both occurred during the hours of 16:00 to 19:00.
- Incident no. 11 occurred within the neighbouring rail underbridge on the R127 Skerries Road corridor. This incident is reported as occurring in 2011 (on a Friday between 2300 and 0300) and involved a single car. The severity of the incident is categorised as being only 'minor'.

2.7.3 Based upon the RSA data in comparison with industry standards the roads and junctions surrounding the site can be described as exhibiting a good safety record with no underlining incident trends evident.

Ref. No	Severity	Year	Vehicle	Circumstances	Day of Week	Time	Speed limit	Casualties
1	Fatal	2016	Car	Single vehicle only	Tuesday	2300-0300	80 KPH	3
2	Serious	2016	Car	Single vehicle only	Tuesday	0300-0700	60 KPH	1
3	Serious	2013	Car	Other	Saturday	1000-1600	50 KPH	1
4	Serious	2008	Car	Single vehicle only	Sunday	0300-0700	80 KPH	1
5	Minor	2010	undefined	Other	Saturday	1600-1900	50 KPH	1
6	Minor	2010	Car	Rear end, straight	Saturday	1000-1600	50 KPH	1
7	Minor	2012	Car	Pedestrian	Sunday	1600-1900	50 KPH	1
8	Minor	2014	Car	Rear end, straight	Saturday	1000-1600	80 KPH	1
9	Minor	2010	Goods vehicle	Pedestrian	Wednesday	1600-1900	50 KPH	1
10	Minor	2010	Goods vehicle	Angle, both straight	Wednesday	0700-1000	30 KPH	2
11	Minor	2011	Car	Single vehicle only	Friday	2300-0300	80 KPH	1

Table 2.3: Collision Reference Points - (Source www.rsa.ie)

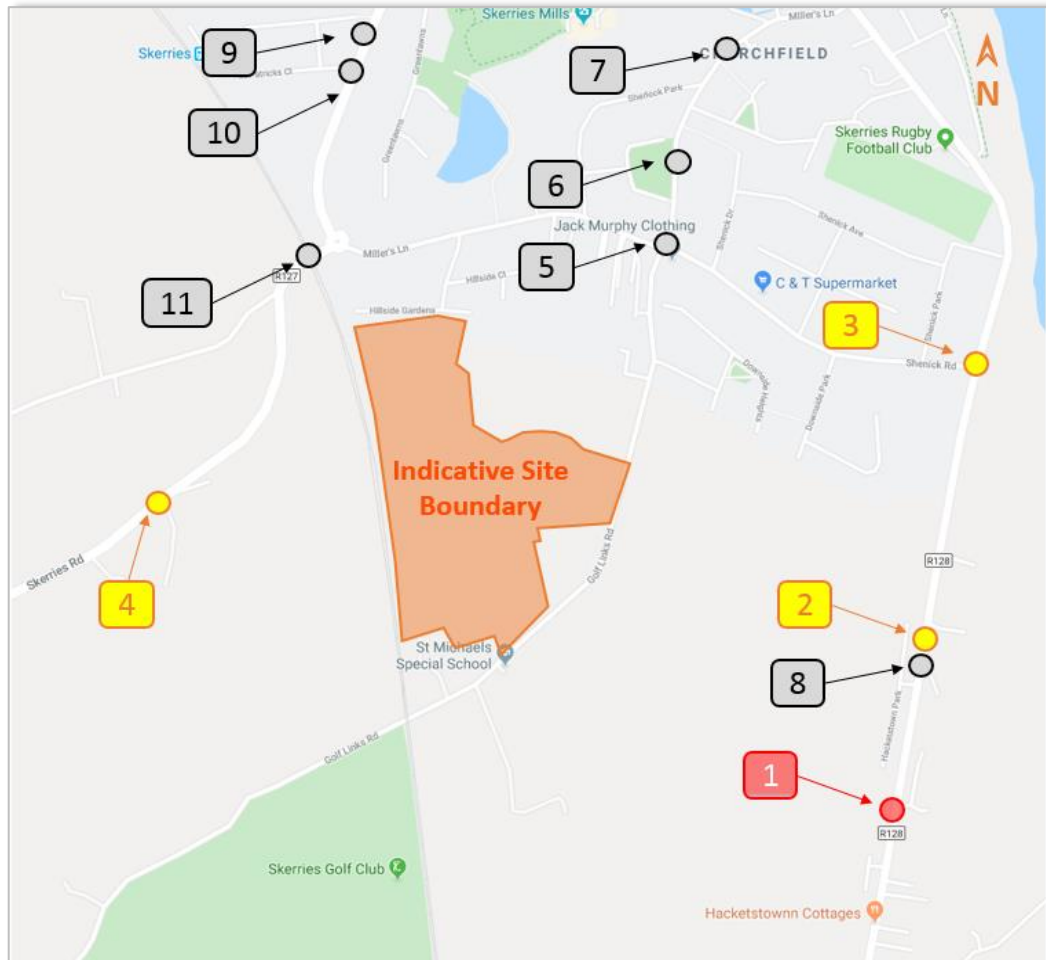


Figure 2.20: Collision Points around Subject Site (Source: www.rsa.ie)

2.8 BASELINE TRAVEL CHARACTERISTICS

- 2.8.1 In order to develop an understanding for the existing travel trends within the area of the subject development site, the 2016 Census travel data was reviewed. The information below has also been incorporated into the MMP which has also been submitted within this planning application. The MMP has been issued to analyse different travel modes and to encourage support more sustainable travel patterns.
- 2.8.2 This data illustrates how residents within the surrounding residential estates are travelling to work/college or school. **Figure 2.22** below illustrates the existing baseline modal split trends within the surrounding 'Small Areas' (as per CSO classification) of the subject site. This was chosen to provide travel trends for these areas as a collective within the Central Statistics Office's SAPMAP using 2016 census data. The adopted areas as located nearest to the proposed development (and as such with familiar characteristics) from which data is derived for this analysis is shown in **Figure 2.21** below.



Figure 2.21: 2016 CSO SAPMAP Surrounding 'Small Areas'

2.8.3 The local residential areas analysed include the following:

- 1 - Ballygossan Park, Golf Links Road, Hillside Gardens, Hillside Close and Miller's Lane
- 2 - Dublin Road, Mill Hill Park, Greenlawns and Miller's Road
- 3 - Cabra Hill, Golf Links Road and Miller's Lane
- 4 - Golf Links Road, Downside Heights
- 5 - Shenick Road, Shenick Grove, Shenick Drive and Golf Links Road
- 6 - Shenick Road, Shenick Drive, Shenick Park and Shenick Avenue

2.8.4 The current travel trends within the existing residential areas surrounding the subject site are illustrated in **Figure 2.22** below. This graph shows the overall travel trends for trips both to Work and to School/College combined. The modal split observed shows that a high percentage of trips are currently undertaken by sustainable travel modes, which helps form a baseline for sustainable travel trends to be based upon.

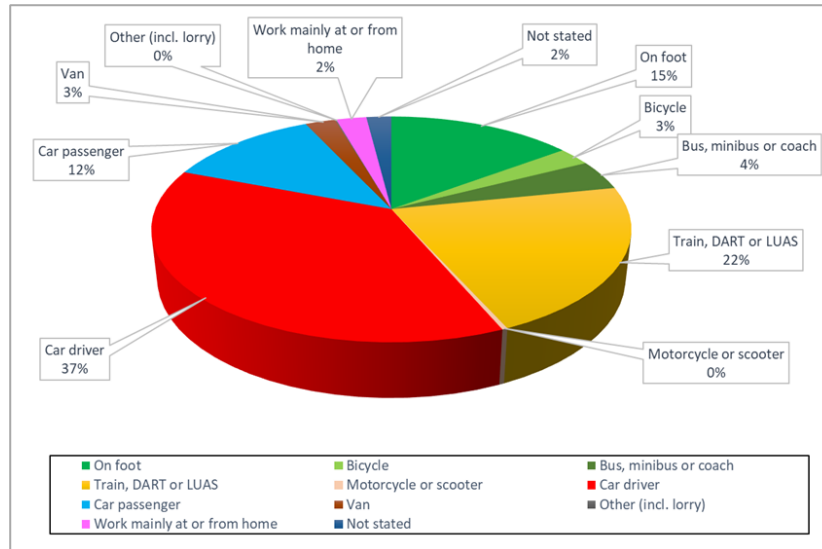


Figure 2.22: Current Modal Split for Existing Development Areas

2.8.5 **Figure 2.23** and **2.24** below illustrates the MMP 1st Year Target and 5-year Modal Split Target respectively, which have been set out for the proposed development site.

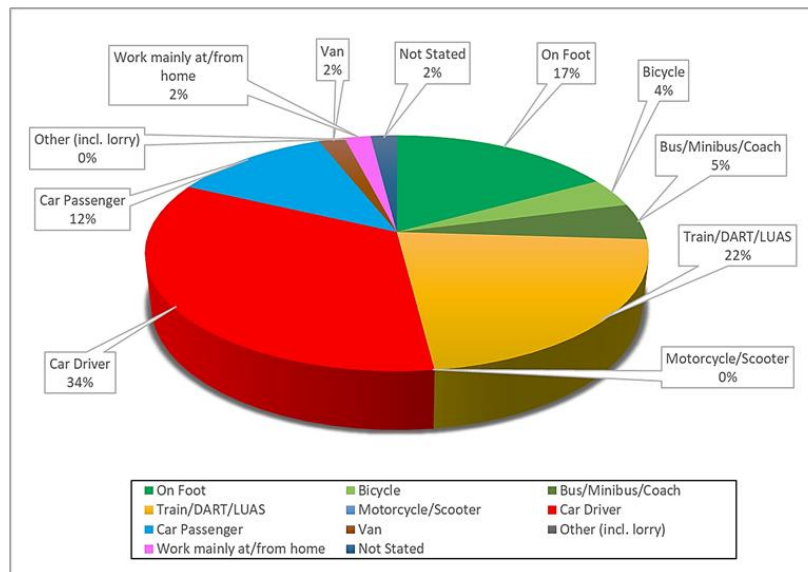


Figure 2.23: MMP 1st Year Modal Split Targets (2024)

2.8.6 **Figure 2.23** shows a slight adjustment from base travel trends observed in **Figure 2.22**, with the MMP strategy in place to create a modal split shift towards more sustainable options such as walking, cycling, train and buses for trips undertaken to work, school and college. Bus and cycling trips undertaken for these purposes would supplement vehicle trips and allows the development to meet the Smarter Travel national transport policies which state “a maximum of 45% of trips are to be car-based by 2020.”

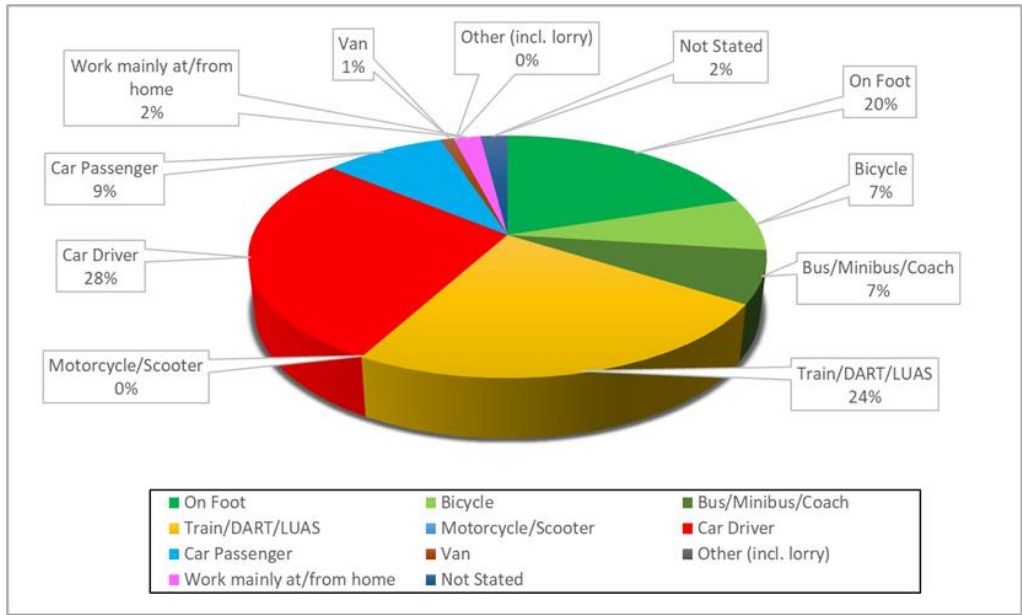


Figure 2.24: MMP 5-Year Modal Split Target (2029)

2.8.7 **Figure 2.24** above shows a modal split which moves further away from private car reliance for trips and aims to further reduce car-based trips undertaken, in accordance with Smarter Travel policies. These trips are supplemented with public transport trips, walking and cycle trips, in this future scenario.

2.8.8 **Table 2.4** outlines the proposed mode split targets for the subject site as referenced above in **Figures 2.22, 2.23 and 2.24**.

Mode of Travel	Local Area Mode Splits (CSO 2016)	1 st Year Target (2024)	MMP 5-year Target (2029)
On foot	15%	17%	20%
Bicycle	3%	4%	7%
Bus, minibus or coach	4%	5%	7%
Train, DART or LUAS	21%	22%	24%
Motorcycle or scooter	0%	0%	0%
Car driver	37%	34%	28%
Car passenger	12%	12%	9%
Van	2%	2%	1%
Other (incl. lorry)	0%	0%	0%
Work mainly at or from home	2%	2%	2%
Not stated	2%	2%	2%
Total	100%	100%	100%

Table 2.4 Interim Mode Share Targets for the Proposed Development

2.8.9 The above targets are intended to be both realistic and aspirational and to act as a motivation for the MMP in general whilst remaining attainable. These targets are

subject to ongoing revision following the completion of the baseline surveys (and subsequent surveys) once the site is occupied and the input of the MMP's key stakeholders are taken into account.

- 2.8.10 The review of the CSO Census data also revealed that across Skerries the existing car ownership levels equate to 1.3 vehicles per dwelling unit whilst 12% of all households do not have access to a private motor vehicle.

2.9 PUBLIC TRANSPORT NETWORK CAPACITY

- 2.9.1 It is widely accepted in the industry that the periods of maximum demand generated upon the public transport networks on a typical weekday are focused upon the AM (0600-1000) and PM (1600-2000) periods as predominantly influenced by travel to work, school, and colleague patterns at any given location. Accordingly, in reference to the baseline modal data detailed in **Figure 2.22** and considering the journey times required to reach potential work, school, and colleague destinations (as accessed by public transport bus and rail services) the number of existing (February 2022) public transport services calling at interchanges in Skerries (in close proximity to the proposed development site) have been the focuses of the public transport capacity analysis.
- 2.9.2 With the objective of establishing the existing capacity on the local public transport network; as defined by (i) frequency of service (e.g. timetabled services); (ii) type / size of vehicle / No. of carriages; and (iii) passenger demand; IDASO Ltd (a specialist data collection firm) were commissioned to undertake surveys of the local rail and bus routes in Skerries. These surveys were commissioned with the objective of establishing (i) the type / size of vehicle / No. of carriages used on each public transport service calling at Skerries and (ii) patronage levels on these existing public transport services call at the local interchanges in Skerries. Following the lifting of Covid-19 travel restrictions in mid-January, the surveys were undertaken on 2nd of February 2022 at Skerries Railway Station and the closest bus stops (Northbound and Southbound interchanges) to the subject site on the R128 at Holmpatrick (Ref. **Figure 2.15**).
- 2.9.3 Whilst the Covid-19 travel restrictions had been lifted by the time these surveys were undertaken on 2nd February 2022 it is generally accepted that 'normal' travel levels have not in many cases returned to pre Covid levels. Accordingly, reference has been made to the Central Statistics Office (CSO) publication Transport Bulletin (<https://>

www.cso.ie /en /releases and publications /ep /p-tb /transportbulletinfebruary2022/) which has enabled the identification of an appropriate conversion factor by which the recorded February 2022 patronage data can be converted to corresponding pre-Covid-19 patronage levels in early March 2020.

2.9.4 **Table 2.5** below provides a summary of the data available, and the corresponding conversion factor identified for both Rail and Bus patronage levels. The CSO data reveals that the passenger data recorded during the last week of 2022 is still notably lower to that recorded in early March 2020.

Public Transport Service	Rail Patronage	Bus Patronage
CSO Data (Dublin Area) - 1 st Week of March 2020	856,295	3,118,388
CSO Data (Dublin Area) - 1 st Week of March 2021	136,507	958,077
CSO Data (Dublin Area) - Last week of Jan 2022	452,623	2,103,666
Last week Jan 2022 V's March 2020	52.85%	67.46%
Conversion Factor End Jan 2022 to March 2020	1.891	1.482

Table 2.5: CSO Patronage Levels - Dublin Area

(Source : CSO Transport Bulletin March 2022)

Rail Network

2.9.5 The surveys undertaken by IDASO Ltd surveyed both the northbound (5 no.) and the southbound (11 no.) rail services calling at Skerries Rail between 06:15 and 10:05 (peak travel period) on Wednesday 2nd of February 2022 with the objective of establishing the capacity of the network during this period. The principal results are summarised in **Table 2.6** below.

Train Direction	No. of Services	Existing Passenger Capacity	Recorded Passenger Numbers	Reserve Capacity (2 nd February 2022)		Adjusted Reserve Capacity (Post Covid-19)	
				Pass. No's	%	Pass. No's	%
Southbound	11	4421	1567	2854	65%	1458	33%
Northbound	5	1400	379	1021	73%	683	49%
Total	16	5821	1946	3875	67%	2141	37%

Table 2.6: AM Rail Service Utilisation - Skerries Railway Station

2.9.6 The analysis of the survey data reveals that the rail network benefits from an overall AM peak period two-way passenger capacity of 5,821. Based upon the observed passenger levels the survey reveals and existing reserve capacity of 67% (or 3,875 passenger places) as of 2nd of February 2022. When the CSO conversion factor is applied to convert the passenger numbers to corresponding pre-Covid-19 demand

levels the level of reserve capacity is reduced to an overall level of 37% (or 2,141 passenger places).

2.9.7 The principal survey results during the evening period are summarised in **Table 2.7** below. This is based on the 10 number northbound and the 5 number southbound rail services passing through Skerries Rail during between the 16:00 - 19:20 time period.

Train Direction	No. of Services	Existing Passenger Capacity	Predicted Passenger Numbers	Predicted Reserve Capacity (2 nd February 2022)		Adjusted Reserve Capacity (Post Covid-19)	
				Pass. No's	%	Pass. No's	%
Southbound	8	2240	413	1827	82%	1459	65%
Northbound	10	4020	1708	2312	58%	790	20%
Total	18	6260	2121	4139	66%	2249	36%

Table 2.7: PM Rail Service Utilisation - Skerries Railway Station

2.9.8 The data reveals that the rail network benefits from an overall PM peak period two-way passenger capacity of 6,260. The prediction of PM period passenger numbers reveals a reserve capacity of 66% (or 4,139 passenger places) during this evening period. When the CSO conversion factor is applied to convert the passenger numbers to corresponding pre-Covid-19 demand levels the level of reserve capacity is reduced to an overall level of 36%.

2.9.9 The patronage data above excludes the additional loading that the proposed LDA residential development is likely to generate. Further, in a similar manner to the road network analysis, it is considered prudent that the potential additional loading from committed third party schemes is also considered in the assessment. Accordingly, the potential additional public transport demands generated by the adjoining third party Noonan Construction scheme on the neighbouring lands to the north of the subject LDA site have been identified and included within the assessment reported in Section 7.3.

Bus Network

2.9.10 In a similar manner to the surveys undertaken at Skerries Railway Station, IDASO Ltd undertook surveys of the boarding, alighting and utilisation levels of the Dublin Bus (Routes 33, 33e, 33x) and GoAhead (Route 33a) operated bus services that call at the local bus interchanges near the subject site (Reference Figure 2.15).

Bus Direction	No. of Services	Total Passenger Capacity	Total Passengers	Reserve Capacity (2nd Feb. 2022)		Adjusted Reserve Capacity (Post Covid-19)	
				Pass. No's	%	Pass. No's	%
Southbound	19	1515	110	1295	92.7%	1352	89.2%
Northbound	9	681	84	513	87.7%	557	81.7%
Total	28	2196	194	1808	90.3%	1908	86.9%

Table 2.10: Bus Service Utilisation – AM Period

2.9.11 The recorded patronage levels (2nd of February 2022) for the southbound and northbound bus services are detailed in **Table 2.10** above. The survey results reveal that currently the southbound and northbound bus services have significant spare capacity in the order of 92.7% and 87.7% respectively. The analysis of the survey data reveals that the bus network benefits from an overall reserve capacity of 90.3% (or 1,808 passenger places) as of 2nd of February 2022. When the CSO conversion factor is applied to convert the passenger numbers to pre-Covid-19 demand levels, the level of reserve capacity is reduced to an overall level of 86.9%.

Bus Direction	No. of Services	Total Passenger Capacity	Total Passengers	Reserve Capacity (2nd Feb. 2022)		Adjusted Reserve Capacity (Post Covid-19)	
				Pass. No's	%	Pass. No's	%
Southbound	9	720	92	628	88.7%	584	81.2%
Northbound	21	1636	120	1516	93.2%	1458	89.1%
Total	30	2356	211	2145	91.8%	2043	86.7%

Table 2.11: Bus Service Utilisation – PM Period

2.9.12 During the evening period, southbound and northbound bus services returning to Skerries have significant spare capacity in the order of 88.7% and 93.2% respectively with an overall reserve capacity of 91.8% (or 2,145 passenger places). When the CSO conversion factor is applied to obtain pre-Covid-19 demand levels in the evening period, the level of reserve capacity is reduced to an overall level of 86.7%.

Conclusion

2.9.13 The assessment of the existing 2022 timetabled local rail services (calling at Skerries Railway Station between 0615-1005 and 1600-1920) and bus services (calling at local bus stops between 0634-1009 and 1600-2000) reveals that the public transport

network has a total capacity of 8017 (5821+2196) and 8616 (6260+2356) passengers during the peak AM and PM periods respectively as detailed in **Table 2.12** below.

Mode of Travel	AM Peak Period				PM Peak Period			
	No. of Services (Direction of Travel)	Network Passenger Capacity	Reserve Capacity (Feb 2022)	Reserve Capacity (Post Covid)	No. of Services	Network Passenger Capacity	Reserve Capacity (Feb 2022)	Reserve Capacity (Post Covid)
Rail	11 (S'bound)	4421	2854	1458	8 (S'bound)	2240	1827	1459
	5 (N'bound)	1400	1021	683	10 (N'bound)	4020	2314	790
	16 (Two-way)	5821	3875	2141	18 (Two-way)	6260	4139	2249
Bus	19 (S'bound)	1515	1405	1352	9 (S'bound)	720	628	584
	9 (N'bound)	681	597	557	21 (N'bound)	1636	1516	1458
	28 (Two-way)	2196	2002	1908	30 (Two-way)	2356	2144	2042
Total (Two-way)	44 (Two-way)	8017	5877	4049	46 (Two-way)	8616	6283	4291

Table 2.12: Public Transport Network Capacity – Existing 2022 Baseline Scenario

3.0 POLICY FRAMEWORK

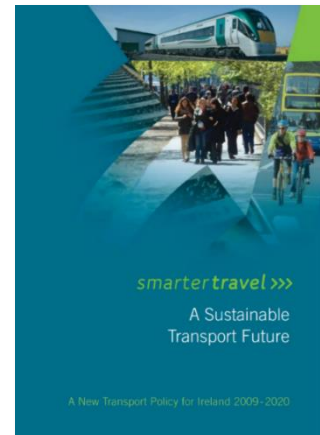
3.1 INTRODUCTION

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

- *Smarter Travel – A Sustainable Transport Future* (2009)
- *Transport Strategy for the Greater Dublin Area* (2016-2035)
- *Sustainable Urban Housing: Design Standards for New Apartments* (2020)
- *Fingal Development Plan 2017-2023*

3.2 SMARTER TRAVEL – A SUSTAINABLE TRANSPORT FUTURE

3.2.1 *Smarter Travel*, published in 2009 by the Department of Transport, represents the national policy documentation outlining a broad vision for the future and establishes the transport objectives and targets. The document examines past trends in population and economic growth and transport concluding that these trends are unsustainable into the future.



3.2.2 Although this document outlines objectives and targets from 2009 to 2020, the goals set out will continue to play active role from 2021 onwards in order to address the unsustainable nature of current travel behaviour. Smarter Travel sets down a number of key goals and targets for 2020 – including:

- Total vehicle km travelled by car will not significantly increase;
- Work-related commuting by car will be reduced from 65% to 45%;
- 10% of all trips will be by cycling;
- The efficiency of the transport system will be significantly improved.

3.2.3 The document recognises that these are ambitious targets, and outlines a suite of 49 actions required to achieve these targets – summarised under the following four main headings:

- Actions aimed at reducing distances travelled by car and the use of fiscal measures to discourage use of the car;
- Actions aimed at ensuring that alternatives to the car are more widely available;
- Actions aimed at improving fuel efficiency of motorised travel; and
- Actions aimed at strengthening institutional arrangements to deliver the targets.

3.3 TRANSPORT STRATEGY FOR THE GREATER DUBLIN AREA 2016-2035

3.3.1 The Transport Strategy for the Greater Dublin Area 2016-2035 is a document compiled by the National Transport Authority (NTA) which sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2035. This sets out an integrated long-term strategy for the area, including new public transport proposals such as expansions to DART and Luas services and also a new Metro route.



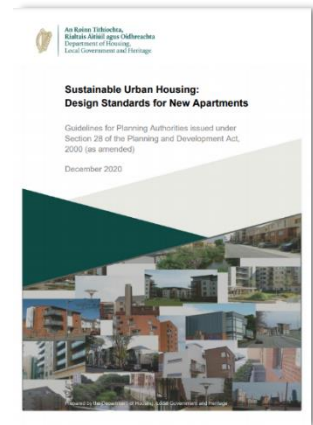
3.3.2 This document will influence transport planning across the region until 2035 and replaces 'A Platform for Change – An Integrated Transportation Strategy for the Greater Dublin Area 2000 to 2016'. It thereby underpins all transportation strategies, traffic management schemes and development plans prepared by Dublin City Council during this timeframe.

3.3.3 The Strategy sets out a clear hierarchy of transport users, commencing with the sustainable modes of travel such as walking, cycling and public transport users at the very top of the hierarchy. The Strategy adopts the general principle that these users should have their safety and convenience needs considered first and that the hierarchy is applied where a large share of travel is (or could be) made by walking, cycling and public transport.

3.3.4 In addition to guiding the development of specific Strategy measures, the NTA encourages that the “*transport user hierarchy should guide engineers, planners and urban designers on the order in which the needs of transport users should be considered in designing new developments or traffic schemes in the Greater Dublin Area.*”

3.4 SUSTAINABLE URBAN HOUSING: DESIGN STANDARDS FOR NEW APARTMENTS

3.4.1 This guideline document was produced by the Department of Housing, Planning and Local Government and was recently updated in December 2020. The purpose of this document is to set out standards for apartment development, mainly in response to circumstances that had arisen whereby some local authority standards were at odds with national guidance.



3.4.2 With the demand for housing increasing, this means that there is a need for an absolute minimum of 275,000 new homes in Ireland’s cities by 2040. It is therefore critical to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures.

3.4.3 These Guidelines apply to all housing developments that include apartments that may be made available for sale, whether for owner occupation or for individual lease. They also apply to housing developments that include apartments that are built specifically for rental purposes, whether as ‘Build To Rent’ or as ‘shared accommodation’.

3.4.4 Cycling provides a flexible, efficient and attractive transport option for urban living and these guidelines require that this transport mode is fully integrated into the design and operation of all new apartment development schemes.

3.4.5 The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria.

3.5 FINGAL DEVELOPMENT PLAN 2017-2023

3.5.1 The *Fingal Development Plan 2017-2023* sets out a new approach to meet the needs and aspirations of citizens of Fingal, Dublin County as a whole and the country, not only for the 6-year life of the plan, but for the long term. This approach is based on the principles of sustainability and resilience on the social, economic and environmental fronts.



3.5.2 The Development Plan's Strategic Policy in response to the challenges facing the economy of the city and its role as the national and regional economic engine are as follows:

- Promote a vibrant, attractive environment for living and working, facilitating efficient movement by sustainable modes of transport throughout the County;
- Improve the use of key resources such as land, water, energy, waste and transportation infrastructure;
- Create a competitive business environment supporting economic development, job creation, tourism and prosperity for all;
- Improving the general attractiveness of a city for people and investors as a key part of maintaining competitiveness and creating a vibrant place that attracts and retains creative people within the city; and
- Encourage inclusive and active sustainable communities based around a strong network of community facilities.

3.5.3 The *Fingal Development Plan 2017-2023* provides a number of policies Fingal County Council aims to deliver including but not limited to:

- *"Promote sustainable development by providing for the integration of economic, environmental, social and cultural issues into Development Plan policies and objectives, utilising the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) processes."*
- *"Add quality to the places where Fingal's communities live, work and recreate by integrating high quality design into every aspect of the Plan promoting adaptable residential buildings and ensuring developments contribute to a positive sense of place and local distinctiveness of an area."*

- *"Promote enterprise and employment throughout the County, particularly in the growth centres of Swords, Blanchardstown and Balbriggan and work with the Dublin Local Authorities to promote the Dublin City Region as an engine for economic growth"*
- *"Seek the development of a high quality public transport system throughout the County and linking to adjoining counties, including the development of the indicative route for New Metro North and Light Rail Corridor, improvements to railway infrastructure including the DART Expansion Programme, Quality Bus Corridors (QBCs) and Bus Rapid Transit (BRT) systems, together with enhanced facilities for walking and cycling."*
- *"Promote, improve and develop a well-connected national, regional and local road and public transport infrastructure system, geared to meet the needs of the County and the Region, and providing for all road users, prioritising walking, cycling and public transport."*

3.5.4 In the context of the Hacketstown proposals, the following are the relevant transport and development policies and objectives set out in the plan:-

"Objective MT01: *Support National and Regional transport policies as they apply to Fingal. In particular, the Council supports the Government's commitment to the proposed new Metro North and DART expansion...The Council also supports the implementation of sustainable transport solutions."*

"Objective MT02: *Support the recommendations of the National Transport Authority's Transport Strategy for the Greater Dublin Area 2016-2035 to facilitate the future sustainable growth of Fingal."*

"Objective MT03: *Implement Smarter Travel – A Sustainable Travel Future policy and work to achieve the Key Goals set out in this policy."*

Integrated Land Use and Transportation Objectives

"Objective MT05: *Integrate land use with transportation by allowing higher density development along higher capacity public transport corridors."*

"Objective MT06: *Integrate the County's transport and tourism strategies to promote increasingly sustainable travel patterns and improved linkages between the City Centre, Villages and the Coast among visitors to the County."*

Electric Vehicles

"Objective MT10: *Facilitate the provision of electricity charging infrastructure for electric vehicles both on street and in new developments in accordance with car parking standards."*

"Objective MT11: *Support the growth of Electric Vehicles and Ebikes, with support facilities, through a roll-out of additional electric charging points in collaboration with relevant agencies at appropriate locations."*

Walking and Cycling Objectives

"Objective MT13: *Promote walking and cycling as efficient, healthy, and environmentally-friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas."*

"Objective MT14: *The Council will work in cooperation with the NTA and adjoining Local Authorities to implement the Greater Dublin Area Cycle Network Plan subject to detailed engineering design and the mitigation measures presented in the SEA and Natura Impact Statement accompanying the NTA Plan."*

"Objective MT17: *Improve pedestrian and cycle connectivity to schools and third level colleges and identify and minimise barriers to children walking and cycling to primary and secondary schools."*

"Objective MT18: *Review existing cycle infrastructure which was not designed in line with the Principles of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets and undertake appropriate remedial works."*

"Objective MT19: *Design roads and promote the design of roads, including cycle infrastructure, in line with the Principles of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets."*

"Objective MT20: *Investigate the use of demand management measures to improve the attractiveness of urban centres for cyclists (and public transport users)."*

"Objective MT22: *Improve pedestrian and cycle connectivity to stations and other public transport interchanges."*

Public Transport Objectives

"Objective MT24: Support and advise the NTA and TII on the planning and implementation of public transport infrastructure, in particular by providing an understanding of Fingal's policies, objectives and requirements, including environmental sensitivities."

Public Transport Interchanges

"Objective MT28: Facilitate, encourage and promote high quality interchange facilities at public transport nodes throughout the County."

Rail

"Objective MT30: Support Iarnród Éireann and the NTA in implementing the DART Expansion Programme, including the extension of the DART line to Balbriggan..."

Quality Bus Corridors (QBC)

"Objective MT33: Facilitate and promote the enhancement of bus services through bus priority measures including bus lanes and bus gates. Support the NTA in the implementation of Bus Rapid Transit from Blanchardstown to Belfield and from Swords to Merrion Square, subject to detailed design."

Roads and Street Objective

"Objective MT36: Maintain and protect the safety, capacity and efficiency of National roads and associated junctions in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities, DECLG, (2012), the Trans-European Networks (TEN-T) Regulations and with regard to other policy documents, as required."

Traffic Calming

"Objective MT37: Implement traffic calming on particular roads and in appropriate areas of the County, especially residential areas, to reduce vehicle speeds in the interests of road safety and residential amenity. Ensure that where appropriate, traffic calming is included as a pre-condition as part of the development of all new estates or extensions to existing estates."

Traffic Management

"Objective MT38: Maximise capacities of junctions by using traffic management measures thereby reducing congestion."

"Objective MT39: Review the results of the 30km/h Residential Speed Limit Pilot Study, with a view to rolling out a 30km/h speed limit in all residential estates. "

Road Improvement Measures

"Objective MT40: Implement a programme of road construction and improvement works closely integrated with existing and planned land uses, taking into account both car and non-car modes of transport whilst promoting road safety as a high priority. Major road construction and improvement works will include an appraisal of environmental impacts."

"Objective MT41: Seek to implement the Road Improvement Schemes indicated in Table 7.1 within the Plan period, subject to assessment against the criteria set out in Section 5.8.3 of the NTA Transport Strategy for the GDA, where appropriate and where resources permit. Reserve the corridors of the proposed road improvements free of development."

- 3.5.5 Fingal County Council is responsible for the management of the regional and local network across the county. The county Development Plan contains a list of road scheme objectives (Table 7.1 as referred to above in MT41) for the implementation of both new and upgraded road schemes. In addition to MT41 above it is noted that the county development plan identifies **Local Objective No. 10** (Skerries Southern Relief Road between R126 Luck Rd and R127 Sherries Rd corridors) the indicative alignment of which is illustrated in **Figure 3.1** below.
- 3.5.6 Due to resourcing constraints, it is now generally accepted that the planning and subsequent physical delivery of the Skerries Southern Relief Road will be delayed and likely extend into the next development plan period. Accordingly, in the interim period it is envisioned that FCC will seek to protect the identified indicative route free from development to facilitate the planning and accommodate the construction of the Skerries Southern Relief Road (SSRR) link sometime in the medium term.



Figure 3.1: Fingal County Council Local Objective No 10 – SSRR

3.5.7 The land use zoning objectives and associated specific objectives in the area of the Hacketstown LAP5.A zoned lands and at key off-site junctions is reproduced in **Figure 3.1** above and Figure 3.2 below (extract of Sheet No 5 Zoning Objective of FCC County Development Plan 2017-2023). Specific objectives include “Indicative Cycle / Pedestrian Routes” through the off-site Golf Links Rd / Millers Lane / Shenick Rd junction and the potential delivery in the future of the Greater Dublin Area (GDA) Cycle Network through the R127 Skerries Rd / R127 Dublin Rd / Miller’s Lane junction subject to the findings of a strategic cycle network design exercise and procurement of third party private lands to accommodate the bicycle infrastructure.



Figure 3.2: Fingal County Council Zoning and Specific Objectives at Key Off-Site Junctions

- 3.5.8 Chapter 4 of the Development Plan provides a description of the individual settlements that make up Urban Fingal across Fingal including the largest towns, urban areas and a number of villages. It provides a brief description of the key settlements, outlining a development strategy for each, and then where applicable introduces associated Specific Objectives.
- 3.5.9 The plan introduces a total of 13 No Specific Objectives for the defined Skerries area which in the context of the proposed residential development include;
- "Objective SKERRIES 4: Promote and facilitate the operation of a local bus service to the rail station and high-quality bus transport links between Skerries and Dublin City Centre."*
- "Objective SKERRIES 10: Promote and ensure a safe and convenient road, pedestrian and cycle system highlighting accessibility and connectivity both within the town as well as between the town and surrounding towns and villages."*
- "Objective SKERRIES 11: Promote and facilitate increased permeability and accessibility for those using active travel modes, prams, wheelchairs, personal scooters and other similar modes."*
- "Objective SKERRIES 14: Prepare and/or implement the Hacketstown Local Area Plan."*

3.6 DEVELOPMENT CONTROL

Car Parking Standards

- 3.6.1 The appropriate level of car parking provision for the proposed development will be provided with reference to Chapter 12 (Table 12.8) of the Fingal Development Plan (2017-2023) as published by Fingal County Council which outlines the maximum car parking standards for the county. Reference was also made to Chapter 4 of the Sustainable Urban Housing: Design Standards For New Apartments Guidelines For Planning Authorities, as published by the Department of Housing, Planning and Local Government (DHPLG December 2020).
- 3.6.2 The Fingal Development Plan car parking standards are split into Zone 1 which allows fewer car parking spaces and Zone 2 which allows a higher number of car parking spaces. Zone 1 relates to developments within 800m of a QBC or high quality bus service, or 1.6km of an existing or planned Luas/DART/Metro/Rail station or within an area covered by a Section 49 Scheme. Zone 2 applies to all other areas.

3.6.3 Within the DHPLG standards, the location of the subject site can be described as 'Intermediate Urban Locations'. Intermediate Urban Locations, according to the DHPLG standards, are defined as:-

- 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;
- Sites within walking distance (i.e., between 10-15 minutes or 1,000-1,500m) of high capacity urban public transport stops (such as 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.

3.6.4 The development is criteria a 830m walking distance from Skerries Railway Station in regards to FCC's Development Plan. Accordingly, Zone 1 will be applied to the car parking requirements.

3.6.5 In reference to the DHPLG guidelines, it is considered that the subject development site is located within an 'Intermediate Urban Location' as the LDA site is located only 650m (or 830m walking distance) from Skerries Railway Station from where commuter rail services can be accessed. The DHPLG document states that for sites in such an 'Intermediate Urban Location':

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

3.6.6 DHPLG also states that in regards to the quantum short stay spaces:

"For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure, where possible, the provision of an appropriate number of drop off, service, visitor parking spaces and parking for the mobility impaired."

3.6.7 Reference has been made to Table 12.8 of the Fingal Development Plan (2017-2023) which outlines the car parking provision sought for new developments within the area governed by FCC and the DHPLG guidelines as illustrated below.

Land Use		Quantity of Units	FCC Standards		DHPLG Requirements	
			Long Stay	Short Stay	Long Stay	Short Stay
Apartments / Duplexes	1-Bed	84	1 / Unit	1 Visitor space/ 5 Units	“...must consider a reduced overall car parking standard...”	“... An appropriate number of drop off, service, visitor parking spaces...”
	2-Bed	104	1.5 / Unit			
	3-Bed	118	2 / Unit			
Houses	3+ Beds	39	2 / Unit		n/a	n/a
Crèche (No. of Classrooms)		4	0.5 spaces per classroom	-	n/a	n/a

Table 3.1: Development Management Car Parking Standards

Land Use		Quantity of Units	FCC Standards		DHPLG Requirements	
			Long Stay	Short Stay	Long Stay	Short Stay
Apartments / Duplexes	1-Bed	84	84	61	“...must consider a reduced overall car parking standard...”	“... An appropriate number of drop off, service, visitor parking spaces...”
	2-Bed	104	156			
	3-Bed	118	236			
Houses	3+ Beds	39	78	-	n/a	n/a
Crèche (No. of Classrooms)		4	2	-	n/a	n/a
Sub-Total Car Parking (Requirements)			556	61	Less than 556	TBC
Total Car Parking (Requirements)			617		Less than 617	

Table 3.2: Development Management Car Parking Requirements

Disabled Car Parking

3.6.8 The Fingal Development Plan state that “One space or more per 100 spaces should be reserved for disabled parking bays”.

Electrical Vehicle Parking

3.6.9 The Fingal Development Plan state that “One space or more per 100 spaces should be reserved for electric vehicles with charging facilities.”

Cycle Parking Standards

3.6.10 Reference has been made to Table 12.9 of the Fingal Development Plan (2017-2023) which outlines the minimum cycle parking provision sought for new developments within the area governed by FCC. The bicycle parking standards applicable to the subject development are detailed in **Table 3.3** while **Table 3.4** provides the subject site’s cycle parking requirements.

Land Use		Quantity of Units	FCC Standards		DHPLG Requirements	
			Long Stay	Short Stay	Long Stay	Short Stay
Apartments/Duplexes	1-Bed	84	1 / Unit	1 Visitor space / 5 Units	1 cycle storage space / bedroom	1 space / 2 residential units
	2-Bed	104				
	3-Bed	118				
Houses	3-Bed +	39	-	-	n/a	n/a
Crèche	377.6 sq.m	4 Classrooms	0.5 spaces per classroom		n/a	n/a

Table 3.3: Development Management Bicycle Parking Standards

Land Use		Quantity of Units	FCC Standards		DHPLG Requirements	
			Long Stay	Short Stay	Long Stay	Short Stay
Apartments / Duplexes	1-Bed	84	84	61	84	153
	2-Bed	104	104		208	
	3-Bed	118	118		354	
Houses	3+ Beds	39	-	-	n/a	n/a
Crèche	377.6 sq.m	4 Classrooms	2	-	n/a	n/a
Sub-Total Bicycle Parking			308	61	646 (648)¹	153
Total Bicycle Parking			369		799 (801)¹	

Note 1 – Total provision including FCC's requirements for Crèche Units.

Table 3.4: Development Management Bicycle Parking Requirements

4.0 CHARACTERISTICS OF PROPOSALS

4.1 ACCOMMODATION WORKS APPLICATION

4.1.1 Further to preplanning discussions with the local authority, it has been identified that off-site junction infrastructure enhancements would be required to facilitate any further development on the Hacketstown LAP5.A zoned lands beyond the completed Phase 1 scheme (Ballygossan Park) on Noonan Construction's northern plot (Ref. **Figure 1.1**).

4.1.2 The enhancement works are considered necessary by the local authority to;

- 1) address existing operational and safety concerns,
- 2) mitigate any potential impact arising from the additional demands generated as a result of new development on the Hacketstown lands, and
- 3) to respect the zoning objectives applied to the Hacketstown lands in regard to the provision of the necessary physical infrastructure.

4.1.3 Discussions with the local road authority established that junction enhancement works would be required at the following two off-site junctions to facilitate new development proposals on the Hacketstown lands;

- **Junction A** – Miller's Lane / Shenick Road / Golf Links Road Junction, and
- **Junction B** – R127 Skerries Road / Miller's Lane / Dublin Road Roundabout.

4.1.4 Preliminary analysis revealed that the accumulative impact associated with the development of both remaining northern (Noonan Construction lands) and southern plots (LDA lands) within the Hacketstown lands has the potential to generate additional pedestrian, bicycle and motorised vehicle movements through both of these two off-site junctions on Miller's Lane, Skerries.

4.1.5 Accordingly, with the purpose of addressing the concerns expressed by the local planning authority and ensuring that the necessary physical infrastructure is implemented at these two specific junctions prior to the occupation of any future residential development phase on the zoned Hacketstown lands, the LDA have already applied to FCC (Ref. F20A/0324) for planning permission to undertake the requested junction improvement works as part of the advanced off-site application works.

4.1.6 Further to the submission of Additional Information and Clarification of Additional Information to Fingal County Council, planning permission was granted for the proposed off-site works (subject to 4 no. conditions) on 15th of January 2021 (FCC

Ref. F20A/0324). On the 16th of February 2021, the applicant was notified that a third-party appeal has been submitted to An Bord Pleanála (ABP). Following the submission of a formal response by the applicant, a decision to grant permission was made by ABP on 19th of July 2021 (ABP Ref No. 309409-21).

4.2 NOONAN CONSTRUCTION PROPOSALS

- 4.2.1 The applicant is aware that a new planning application for the development of the remaining (Phase 2) on the undeveloped parcels of the Hacketstown lands northern development plot (Ballygossan Park) is imminent. Architects working on behalf of Noonan Construction have developed a scheme that could accommodate 144 no. residential dwellings on this part of the zoned lands.
- 4.2.2 These Noonan Construction proposals will be subject to a separate planning application and subsequently do not form part of the subject LDA proposals. Nevertheless, as outlined in section 5.4 of this report, the Noonan Construction proposal have been considered as committed development within the scope of this TTA with the objective of providing a robust worst case appraisal of the networks future operational performance.

4.3 PROPOSED ADVANCE INFRASTRUCTURE APPLICATION PROPOSALS

- 4.3.1 This scheme consists of advance infrastructure works on a 2.5 hectare site at Hacketstown, Skerries as located in between the northern extents of the subject LDA residential scheme and the southern extents of Ballygossan Park (Phase 1) and adjoining Noonan Construction lands). These infrastructural works include:
- Construction of 66m of a new Link Road, crossing the Regional Drainage Facility and providing access to the future Land Development Agency (LDA) SHD Scheme to the south from the existing Ballygossan Park to the north;
 - Construction of Regional Drainage Facility (RDF) for the surface water management of the Hacketstown LAP Lands;
 - Services to facilitate both the emerging Ballygossan Park (Phase 2) and the LDA SHD Schemes (new surface water outlet structures, new foul sewer pipeline and manholes to connect to the existing foul sewer network and new watermain

pipeline and associated valves and fittings to connect to the existing water network);

- Landscaping, Public Lighting and ESB Overhead Power Lines.

4.3.2 The proposed works are to be undertaken across lands under the control of (i) the applicant LDA (as located to the south of the Hacketstown LAP lands east-west Open Space Lands drainage facility), and (ii) Noonan Construction Co. Ltd. (as located to the north of the Hacketstown LAP lands east-west Open Space Lands drainage facility).

4.3.3 Permission was granted by Fingal County Council on this application on 15th of November 2021 (FCC Ref. F21A/0287). Subsequently, an appeal was lodged on the 13th of December 2021 with the application now under consideration by ABP (ABP-312189-21).

4.4 LDA RESIDENTIAL SCHEME PROPOSALS (SUBJECT SITE)

4.4.1 The subject LDA development site at Hacketstown, Skerries, which occupies the southern plot of the larger Hacketstown lands; comprises an area of circa 6.6 hectares (total net developable area). The LDA scheme proposals incorporating private housing and a creche (377.6m²) comprises a total of 345 no. residential units. The breakdown is as follows:

- 72 no. Triplexes
 - 24 no. 1-bed
 - 24 no. 2-beds
 - 24 no. 3-beds
- 70 no. Duplex Units (Type 01)
 - 70 no. 3-beds
- 120 no. Duplexes (Type 02)
 - 60 no. 1-bed
 - 36 no. 2-beds
 - 24 no. 3-beds
- 44 no. Corner Apartments

- 44 no. 2-beds
- 39 no. Houses
 - 39 no. 3-beds

4.4.2 Further detail of the development proposals including the site layout, details of the integrated creche facility, internal connections and linkages with neighbouring areas are illustrated in OMP architects' scheme drawings and BSLAs' proposals as submitted with this planning application. **Figure 4.1** below illustrates the general layout of the proposed LDA development.



Figure 4.1: Proposed LDA Development Layout (Extract: OMP Site Layout Drawing)

4.5 SITE ACCESS ARRANGEMENTS

4.5.1 The proposals include the provision of two number vehicle access points as shown in **Figure 4.2**. The main vehicular access is proposed to connect, by way of a slightly elevated connection across the zoned lands central east-west landscaped buffer, with the as-built street network in the northern Noonan Development plot (Ballygossan Park) which in turn leads to the existing three-arm priority junction on Gold Links Road. A supplementary second vehicle access point is also being proposed to the south of the scheme proposals with a new three arm access junction directly between the LDA lands and Golf Links Road. Further details of the internal streets layouts and site access junction is detailed in DBFL drawing 190170-DBFL-RD-SP-DR-C-1001.



Figure 4.2: Proposed LDA Site Access Locations and Internal Streets

4.5.2 The design of the sites new 'southern' access junction on Golf Links Road in addition to the internal streets have been actively influenced and subsequently complies with

DMURS. As illustrated in Figure 4.3 the internal street network includes a hierarchy of linkages including:

- **Linkage Type 1** – The Avenue. Streets with generally 6.0m wide carriageways, on-street car parking, parallel dedicated cycle track facilities and footpaths.
- **Linkage Type 2** – Streets generally 6.0m wide carriageways, on-street car parking and adjoining footpaths.
- **Linkage Type 3** – Parking Courtyards with dedicated footpaths
- **Linkage Type 4** – Streets / public realm areas with only pedestrian access permitted access.
- **Linkage Type 5** – Shared pedestrian / bicycle connection

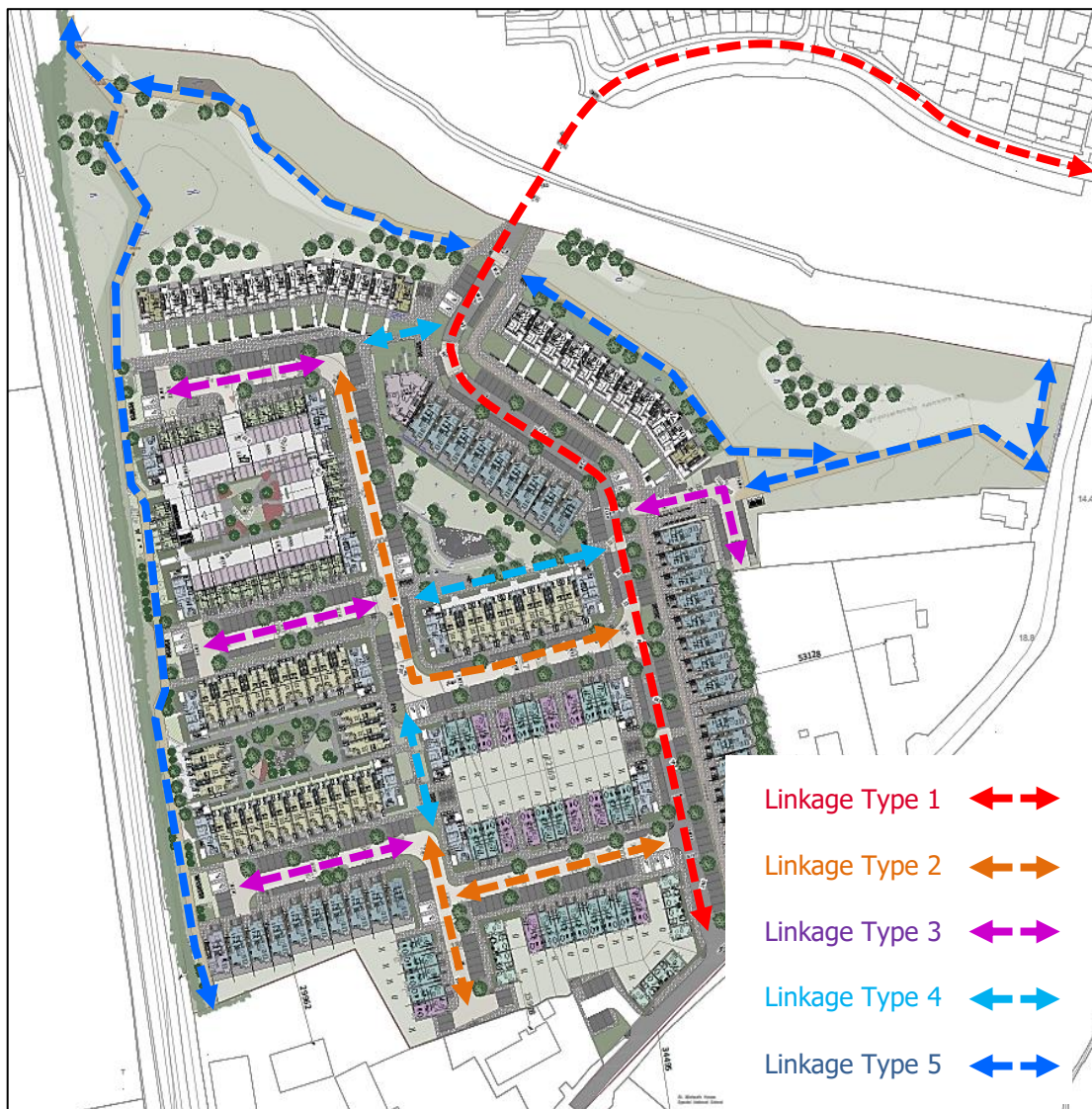


Figure 4.3: Internal Street Hierarchy by Linkage Type

- 4.5.3 A shared north-south bicycle / pedestrian connection will be located along the western boundary of the site while a second greenway (east-west orientation) will be located to the north of the site. This will continue eastwards towards Golf Links Road and could cater as a potential future connection to the future school.
- 4.5.4 The design of the internal streets have in accordance with DMURS sought to (i) achieve a balance between the difference movement and place functions, (ii) accommodate all road user requirements, (iii) minimise the use of long straight sections of road carriageway with geometric initiatives introduced at appropriate spacings to actively manage and self-enforce appropriate internal vehicle speeds whilst retaining a legible street network, and (iii) to provide a positive advantage in terms of travel distance for active modes of travel.

5.0 PARKING STRATEGY

5.1 BICYCLE PARKING FACILITIES

5.1.1 In accordance with the FCC’s Development Plan requirements, the scheme is required to provide at least 369 no. on-site cycle parking spaces, comprising 308 no. long term and 61 no. short stay bicycle parking spaces. DHPLG’s guidelines state that up to 646 no. long stay spaces and 153 no. short stay spaces could potentially be required for the apartments.

5.1.2 The scheme proposes a total of 674 no. ‘long-term’ bicycle parking spaces at both surface and podium level equating to an overall bicycle parking ratio of 1.95 spaces per unit. A total of 128 no. ‘short-term’ (visitor spaces) cycle spaces are proposed to be provided at surface level. In reference to **Table 5.1** below, a total of 802 no. bicycle parking opportunities are proposed on site as part of the LDA’s scheme proposals.

Block	Bicycle Parking Location							SHORT TERM Sheffield Stand (External)
	LONG TERM							
	Lower Level	External Hub (Single Tier)	External Hub (Two-Tier)	Podium Level (Two-Tier)	Sheffield Stand (In-curtilage)	Crèche Sheffield Stand (External)	Rear Garden Access (Assumed 2 Bikes per unit)	
Block A1	13		20					13
Block A2	11		20					13
Block B1 & B2		32	20		32		8	11
Block C					60			15
Block D			80		28		16	11
Block E			20	80	52		8	22
Block F					108			23
Block G					26		8	9
Block H					12		16	5
Crèche						4		6
Sub-Total (Per Location Type)	24	32	160	80	318	4	56	128
Total Parking (Long-Term)	674							
Total Cycle Parking	802							

Table 5.1: Proposed Bicycle Parking Per Location

5.1.3 A total of 802 no. bicycle parking opportunities are proposed on site comprising;

- Apartment/duplexes units (long-term): 592 no. spaces (1.93 spaces / unit)
- Apartment/duplexes units (short-term): 102 no. spaces (0.3 spaces / unit)

- House units (long-term): 78 no. spaces incl. at least 56 spaces in rear private gardens (that benefit from a side / rear access) - (2 spaces / unit)
- House units (short-term): 20 no. spaces (0.512 spaces / unit)
- Creche (short-term for parents / guardians): 6 no. spaces
- Creche (long-term for staff): 4 no. spaces

5.1.4 The following summarises how the above level of provision is generally in compliance with the DHPLG standards or above the FCC's minimum bicycle parking standards as introduced previously in Section 3.6 (Ref. Table 3.3 and 3.4).

- **Apartments (Residents)**: In total, for the 306 apartments / duplexes, the development provides 592 no. 'long-term' cycle spaces. This equates to 1.93 spaces per unit on average, however, in reference to the DHPLG requirements, the proposed provision equates to the following;
 - 84 no. 1-bed apartment/duplex: The provision of 84 bike spaces complies with the DHPLG standards (one per bedroom).
 - 104 no. 2-bed apartment/duplex: The provision of 208 bike spaces complies with the DHPLG standards (one per bedroom).
 - 118 no. 3-bed apartment/duplex: The provision of 300 bike spaces is slightly below the DHPLG standards (one per bedroom) which would generally require 354 spaces. The proposed development provides 85% of this requirements is considered an appropriate level of provision for this type of units in response to bicycle ownership levels.
- **Apartments (Visitors)**: The development management standards require between 61 no. 'short-term' spaces (as per FCC requirements) and 153 no. 'short-term' spaces (as per DHPLG requirements). The proposed provision of 102 no. visitor spaces lies within these two thresholds. Considering the sites location at the edge of the urban environment and the short term function of these spaces, DBFL believes that this provision of 102 no. visitor spaces is more than sufficient to meet the predicted demand.
- **Houses**: The provision of 78 no. 'long-term' spaces exceeds FCC's standard of 1 spaces per unit. Whilst FCC does not provide a standard for 'short-term', the provision of 20 no. spaces for visitors is considered to be more than sufficient to meet the projected demand.
- **Creche**: The provision of 10 no. bike spaces at the creche exceeds FCC's minimum requirements of two spaces.

- 5.1.5 Some 160 no. long-term residential bicycle parking spaces are to be incorporated in dedicated architectural designed external storage units (hubs) in a similar manner to the examples presented in **Figure 5.1** below. This approach will ensure that long term bicycle parking is both secure and weather protected.
- 5.1.6 It has been assumed that at least two bikes spaces can be parked in the rear gardens of houses that benefit from a dedicated side / rear pedestrian access to the garden. The duplex / triplex units benefit from the provision of their own Sheffield stand (In-curtilage spaces comprising some 318 no. bike spaces) immediately adjoining the residential unit in the manner detailed by the examples in **Figure 5.5** for Blocks B1, C1 and F.



Figure 5.1: Example of Secured and Weather Protected 'Long Term' Cycle Hub Storage Units

- 5.1.7 The development proposes a total of 122 no 'short-term' spaces in the form 67 Sheffield stands for the residential units. The location of bicycle parking spaces will be conveniently located considering the best practice proximity distances of 25m for 'short stay' cycle parking spaces, and 50m for 'long stay' cycle parking as per best practise recommendations (Ref. **Figure 5.2**).
- 5.1.8 A total of 10 no. cycle spaces will be provided to the creche unit comprising 6 no. 'short stay' for parents / visitors and 4 no. 'long stay' staff parking.

Location	No. of Spaces
S1	12
S2	12
S3	16
S4	6
S5	8
S6	8
S7	12
S8	6
S9	10
S10	4
S11	6
S12	12
S13	6
S14	4
Total Visitor Spaces	122

Table 5.2: Short-Term Bicycle Parking Locations Per location (Ref. Figure 5.2 for Location)

5.1.9 The scheme proposals provide a total of 272 no. secure long-stay residential bike parking spaces within communal hubs / storage areas. These will be in the form of both single and two-tier racks systems located at external hubs and communal stores detailed in Figure 5.2. The specific quantum in each hub / store is outlined in Table 5.3 below.

Long-Stay Residential Cycle Parking (External Hubs and Communal Stores)	
Location	No. of Spaces
L1 (External Hub)	40
L2 (External Hub)	20
L3 (External Hub)	40
L4 (External Hub)	40
L5 (External Hub)	20
L6 (Communal Store)	80
L7 (Communal Store)	32
Total	272

Table 5.3: Long-Term Bicycle Parking 'Hub' Locations (Ref. Figure 5.2 for Location)



Figure 5.2: Proposed Bicycle Parking Communal Hub Locations

5.1.10 **Table 5.4** below illustrates the type of residential cycle parking proposed at the LDA site and allocates cycle parking at each block.

Block	Unit Type	No. of Units	Location of Cycle Parking (Residential)				
			Lower Level	External Hub / Communal Store	Podium Level	In-Curtilage	Rear Garden
A1	1-bed Apartment	13	13	30	-	-	-
	2-bed Apartment	13					
	3-bed Duplex	13					
Block A1 Total			43				
A2	1-bed Apartment	11	11	30	-	-	-
	2-bed Apartment	11					
	3-bed Duplex	11					
Block A2 Total			41				
B1	3-bed Duplexes	16	-	26	-	16	4
Block B1 Total			46				
B2	3-bed Duplex	16	-	26	-	16	4
Block B2 Total			46				
C	1-bed Apartment	9	-	20	-	60	-
	2-bed Apartment	6					
	2-bed Duplex	9					
	3-bed Duplex	18					
Block C Total			80				
D	2-bed Apartment	12	-	50	-	28	16
	3-bed Houses	20					
Block D Total			94				
E	1-bed Apartment	24	-	-	80	52	8
	2-bed Apartment	14					
	3-bed Duplex	24					
Block E Total			140				
F	1-bed Apartment	27	-	-	-	108	-
	2-bed Apartment	12					
	2-bed Duplex	27					
Block F Total			108				
G	3-bed Duplex	20	-	10	-	26	8
	3-bed Houses	5					
Block G Total			44				
H	3-bed Houses	14	-	-	-	12	16
Block H Total			28				
Sub-Total Cycle Parking			24	192	80	318	56
Total Cycle Parking (Residents)			670				

Table 5.4: Proposed Development Long-Term Cycle Parking Allocation (Per Block)

5.1.11 As illustrated in **Figure 5.3**, each unit at the lower level at Block A1 and Block A2 will provide a cycle space each for resident. A total of 24 no. residential cycle spaces will be provided at this level, in parallel with the 40 no. space external hub located to the east of Block A1 (L1 in Figure 5.2).

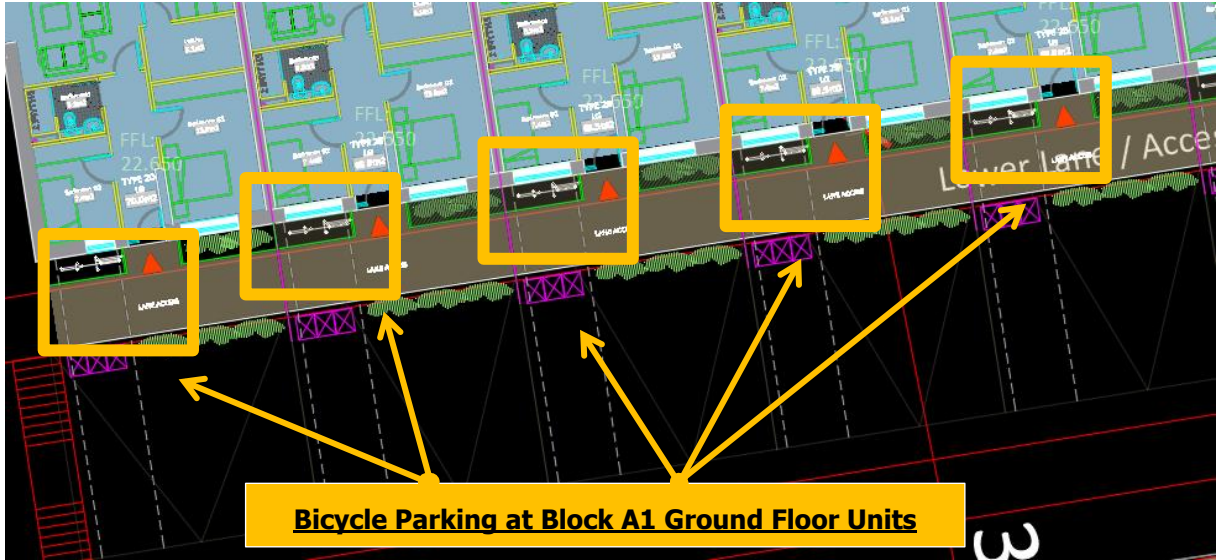


Figure 5.3: Cycle Parking at Block A1 (Lower Ground Floor Units)

5.1.12 The residents 'long term' bicycle parking (80 spaces) in the Block E undercroft facility and associated pedestrian / access routes to / from the external area is illustrated in Figure 5.4 below.



Figure 5.4 : Proposed Bicycle Parking at Block E (Undercroft Level)

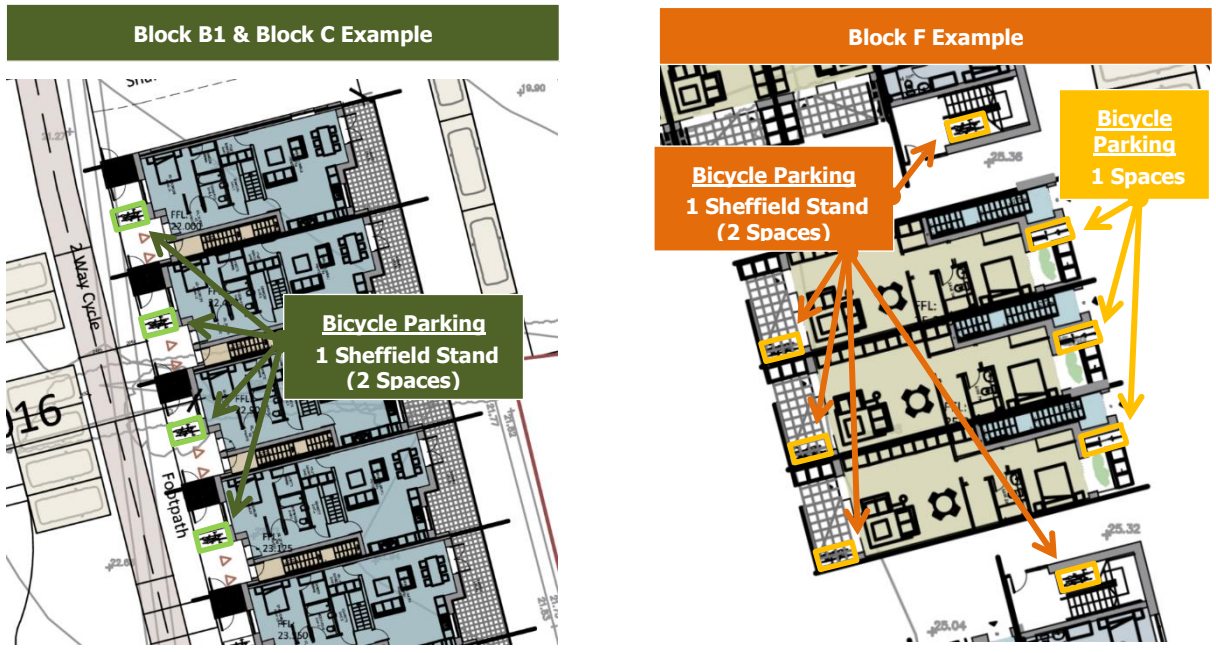


Figure 5.5 : Example of Residents Bicycle Parking at Block B / C1 and F

5.2 CAR PARKING FACILITIES

General Car Parking

- 5.2.1 The proposed development provides a total of 414 no. on-site car parking spaces as shown in **Figure 5.3**. This level of provision is considered to be appropriate to accommodate the demand for both residents and visitors in accordance with the planning requirements.
- 5.2.2 It can be established that the subject development proposals is permitted to provide a maximum of 617 no. on-site car parking spaces within the residential development (476 no. long stay spaces for the apartment/duplex units, 78 no. spaces for the houses and 2 no. spaces at the creche unit) comprising 556 residents spaces and 61 no. visitor spaces in reference to FCC development management standards. In comparison as discussed in section 3.6 the DHPLG standards however states that planning authorities in reference to their county development plan standards "*...must consider a reduced overall car parking standard...*".
- 5.2.3 Accordingly, in reference to this DHPLG advice and the accessibility characteristics of the subject Hacketstown site, the proposed development's car parking strategy has been derived with the provision of 414 car parking spaces which equates to approximately 1.2 spaces per unit on average. The proposed 414 no. parking spaces are summarised as follows;
- 368 no. residents spaces comprising:
 - 307 no. standard residential bays,
 - 19 no. disabled bays of which 6 are provided with EV charge points,
 - 42 no. standard sized bays with EV charge points
 - 40 no. permanent resident visitor spaces
 - 5 no. creche parking spaces (which can also be used as additional visitor parking at times when the creche is closed e.g., night time and weekends) comprising:
 - 2 no. spaces allocated to staff (and provided with EV charge points) and
 - 3 no. drop-off / set-down spaces.
 - 1 no. Dedicated Car Share (GoCar) bay
- 5.2.4 The proposed 414 no. parking spaces equates to on average 1.2 spaces per dwelling on average. Nevertheless, this average assignment level does not acknowledge the slightly higher provision afforded to the house units (at 2 spaces per unit) compared

to the lower assignment of 1.1 spaces being assigned to the apartment / duplex units in response to national guidance and the sites accessibility credentials.

5.2.5 The proposed car parking assigned to the each of the individual residential blocks is illustrated in the **Figure 5.4** (an extract of DBFL Drawing 190170-DBFL-TR-SP-DR-C-1020 which accompanies the application) and outlined in **Table 5.5** below.



Figure 5.4: Allocation of On-Street Car Parking (Per Block)

5.2.6 The creche unit is allocated 5 no. car parking spaces comprising 2 no. staff spaces and 3 no. drop-off / set-down spaces (Ref. **Figure 5.5**). The spaces allocated to the staff will be EV integrated. It is noted that these five creche spaces will perform a dual function as they can be made available for residential visitor parking during the hours of 19:00 to 07:00 on weekdays and at all other times during the weekends / bank holidays. During these times, visitors will be permitted access to these additional five spaces which will increase short-stay visitor parking at the subject site from 40 to 45 spaces at peak visitor times. A dedicated car share (GoCar) bay has also been provided at this location (with EV charge point) as shown below.

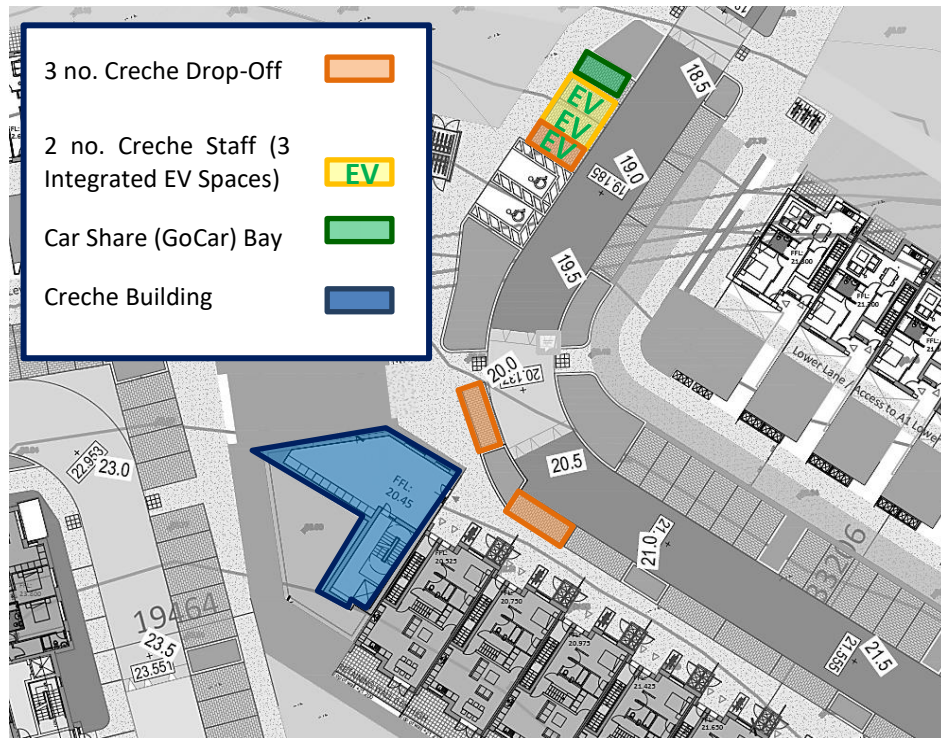


Figure 5.5: Proposed Creche and GoCar Car Parking

5.2.7 In addition to on-street parking, car parking will also be located at undercroft level within Block E. The scheme proposals include a further 107 no. car parking spaces at this location of which 10 no. spaces will provide EV charging. Vehicles will be able access / egress the facility via 6.0m wide entrance that will be located at the northern end of Block E (Ref. **Figure 5.6**).

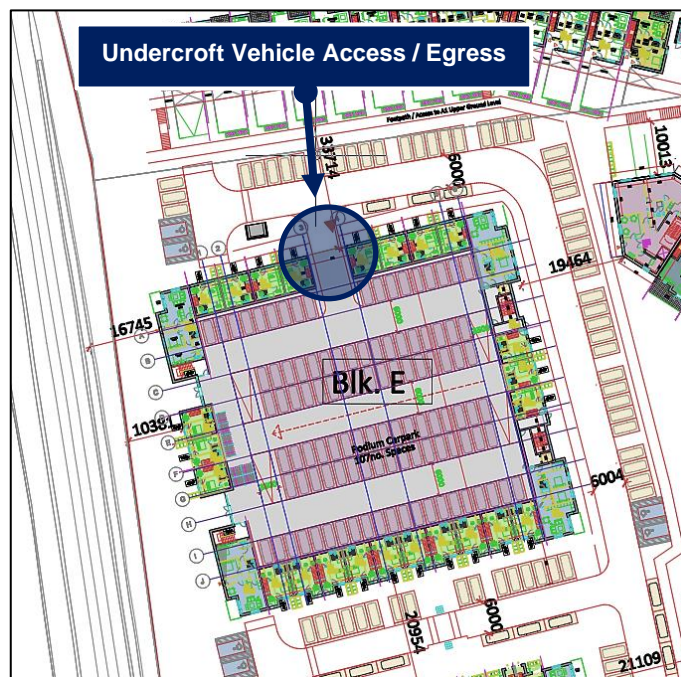


Figure 5.6: Podium Level Car Parking at Block E

Resident Car Parking Provision (Long & Short Stay)												
Block	Standard Car Parking Bay (Surface)	Podium Level at Block E (Standard Spaces)	Disabled Bay	EV Bay	EV / Disabled Bay	EV Spaces at Podium Level	Visitor Bays (Surface)	Creche Staff (EV Visitor Spaces)	Creche Set-Down / Drop-Off (Visitor Spaces)	Sub-Total (Per Block)	Overall Parking Ratio (414 Units)	
Block A1	15	13	1	3	1	2	2	2	-	39	1.20	
Block A2	27	-	2	4	-	-	4	-	1	38		
Block B1	13	-	1	2	-	-	2	-	-	18		
Block B2	13	-	1	2	-	-	2	-	-	18		
Block C	32	-	2	6	-	-	4	-	2	46		
Block D	41	-	2	6	-	-	6	-	-	55		
Block E	-	54	-	-	3	4	7	-	-	68		
Block F	24	30	1	3	2	4	7	-	-	71		
Block G	24	-	2	3	-	-	3	-	-	32		
Block H	21	-	1	3	-	-	3	-	-	28		
Sub-Total (Per Parking Type)	210	97	13	32	6	10	40	2	3	413		
Total Car Parking (Residents)	413											

Table 5.5: Proposed Car Parking Per Location (Residential)

Disabled Car Parking

- 5.2.8 As introduced previous on section 3.6 the Fingal Development Plan state that “*One space or more per 100 spaces should be reserved for disabled parking bays*”. Accordingly, the scheme proposals incorporate a total of 19 no. disabled parking bays of which six disabled bays will be EV integrated.

Electrical Vehicle Parking

- 5.2.9 In response to FCC’s development management standards which require “*One space or more per 100 spaces should be reserved for electric vehicles with charging facilities*”. A total of 48 no. EV parking spaces are being proposed as part of the scheme proposals equating to 11.6% of the total number of spaces and greatly exceeds FCC’s requirement of one electric vehicle spaces per 100 spaces. Ten of these EV spaces will be located at podium level with Block E. This provision excludes the three EV visitor spaces allocated at the creche facility.

5.3 CAR PARKING MANAGEMENT STRATEGY

- 5.3.1 All of the proposed developments on-site car parking facilities whilst accessible via internal public roads (as adopted by the local authority) will be located in areas retained within private ownership (e.g., areas not adopted by the local roads authority). Accordingly, the proposed developments on-site car parking spaces, including the undercroft level, will remain within the control of the appointed management company. A management regime will be implemented by the development’s management company to control access to these on-site apartment car parking bays thereby actively managing the availability of onsite car parking for residents and visitors.
- 5.3.2 The occupation of one of the proposed residential unit will NOT include the ownership or free uncontrolled access to an on-site car parking space. Nevertheless, all residents of the proposed scheme will have the opportunity to apply to the management company for both a (i) residents car parking permit to the management company to gain access to a dedicated (assigned) on-site car parking space or (ii) a visitor’s car parking permit (which will be issued electronically and subject to time restrictions to discourage prolonged use).
- 5.3.3 Each permit will enable the resident (or visitor) to park a vehicle within a specific assigned parking bay at surface level or within the podium level car park for a defined

period of time. This management regime will enhance the availability of onsite car parking, ensure that every resident who needs car parking can avail of an onsite car parking space whilst residents that don't own a car are not unnecessarily assigned a car parking space.

- 5.3.4 In parallel all marketing and lease material / documentation will make it clear that the proposed car parking spaces will remain within the control of the appointed management company and that all resident may apply for a permit for a car parking space.
- 5.3.5 The management team will be responsible for the day-to-day management of on-site car parking operations and enforcement. Residents who request a car parking space will be allocated one on a 'first come, first served' basis and a maximum of two spaces per unit considered by the management company depending upon demand variations.
- 5.3.6 A nominal charge will be applied to obtain a permit with the objective of covering the associated management costs, discouraging unnecessary long term usage of the car parking space and encouraging travel by sustainable modes of travel. Access to the under croft car park will be strictly controlled. Entry will be facilitated by coded entry and/or number plate recognition which will permit registered vehicles only to enter.
- 5.3.7 In the context of the above management regime and the following characteristics it is considered that the proposed provision of 414 no. car park spaces for the proposed 345 residential units (1.2 spaces per unit on average) represents an appropriate level of provision in reference to the sites sustainable accessibility credentials.
- The current low levels of car ownership across Skerries (e.g., 12% of households in Skerries do not currently have a private motor vehicle in reference to 2016 Census data)
 - The requirement for planning authorities to consider 'a reduced overall car parking standard' as set out in the DHPLG guidelines (2020) for new apartment developments.
 - The availability of viable alternative modes of travel including rail bus based public transport services in addition to the provision on-site of a dedicated car share (GoCar) vehicle.

- The proximity of the site to a range of everyday requirements such as retail, education, services etc within a convenient walk / cycle distance as per the principles of the best practice 15-minute urban settlement.

6.0 TRIP GENERATION AND DISTRIBUTION

6.1 INTRODUCTION

6.1.1 The following paragraphs present the process by which the potential level of vehicle trips, associated with the proposed development within the Hacketstown lands have been generated and subsequently assigned across the local road network. In order to assess the operation of the proposed road network and its future capacity, an Excel based traffic model of the existing network and proposed links were created.

6.2 TRAFFIC SURVEYS

6.2.1 In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed development, a number of traffic surveys were commissioned and undertaken by IDASO Ltd. in September 2019.

6.2.2 Further to pre-planning scoping discussions with the local roads authority, with the objective of quantifying the existing traffic movements across the local road network, classified vehicle junction turning counts (JTC) and an automatic traffic count (ATC) were conducted.

6.2.3 Twelve-hour JTC survey periods were conducted from 07:00 to 19:00 on Tuesday 24th September 2019 at the following two junctions;

- JTC 1 - Dublin Road (R127) / Miller's Lane / Skerries Road (R127) three-arm roundabout
- JTC 2 - Golf Links Rd / Miller's Ln / Shenick Rd staggered junction

6.2.4 Two no. three-hour JTC survey periods from 07:00 to 10:00 in the AM and from 16:00 to 19:00 in the PM period on the aforementioned date had been conducted at the following junction;

- JTC 3 - Site access at Ballygossan Park

6.2.5 An ATC was carried out along the Golf Links Rd at the location of the proposed southern site access of the Hacketstown development over a seven-day period from Friday 20th September 2019 until Thursday 26th September 2019.

6.2.6 The analysis of the road traffic survey results established that the local weekday AM and PM peak hours occurred between 08:15 - 09:15 and 17:15 – 18:15 respectively.

6.2.7 In order to analyse and assess the predicted traffic generation from the proposed development upon the local road network, an area wide Excel based generation and distribution traffic model incorporating the aforementioned local junctions has been created. **Figure 6.1** illustrates the junctions surveyed and included in the analysis. The 2019 peak hour flows at these key junctions are presented in **Appendix A**.



Figure 6.1: Junctions Surveyed by IDASO

6.3 TRIP GENERATION

6.3.1 A trip generation exercise has been undertaken to establish the potential level of vehicle trips that the entire Hacketstown LAP Lands could generate. To estimate the potential level of vehicle trips that could be generated by the proposed residential development, reference has been made to the TRICS database as well as utilizing trip rates from an existing 'donor site'. TRICS provides trip rate information for a variety of different land uses and development types, which can be applied to the subject development.

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

development. Notwithstanding the above, internal research undertaken by TRICS has shown that there is no direct evidence of trip rate variation by country or region. The use of English, Scottish or Welsh data can be equally applicable to Ireland if users take into account important site selection filtering factors such as levels of population, location type, local public transport provision, and development size and car ownership level, amongst others.

- 6.3.3 Data supplied for inclusion in TRICS undergoes a procedure of validation testing, and there is no evidence from this procedure suggesting that data from Ireland bears any significant fundamental differences to that from the other countries included. Consequently, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.
- 6.3.4 With the objective of investigating the actual demand that could potentially be generated by the proposed residential houses within the residential development, Ballygossan Park (Phase 1) within the Noonan plot of the Hacketstown development has been used as a 'donor' site which is subject to similar land uses and public transport accessibility.
- 6.3.5 As for the apartment/duplex trip rates, pre-planning discussions with local roads officers raised concerns in regards to the use of TRICS database for reciprocating potential values of traffic travelling to and from apartment type developments. As a result, with the objective of providing a robust and even worst-case scenario, DBFL have increased the apartment trip rates derived from TRICS by an additional 50%. Accordingly, the following assessment overestimates these trip rates obtained from TRICS.
- 6.3.6 **Table 6.1** presents the predicted trip generation and the estimated traffic flows arriving and departing the proposed development during the morning and evening peak hour periods. The TRICS output data is provided within **Appendix B**.

Period	AM Peak Hour			PM Peak Hour		
	In	Out	2-way	In	Out	2-way
Houses	0.175	0.359	0.534	0.359	0.146	0.505
Apartments/Duplexes	0.084	0.299	0.384	0.306	0.108	0.414
Crèche ¹	3.735	2.823	6.557	2.125	2.836	4.961

¹ Crèche trip rates discounted by 75%.

Table 6.1: LDA Proposed Development Vehicle Trip Rates

6.3.7 The subject crèche unit is predicted to largely serve the nearby residential development. Therefore, it is anticipated that a proportion of the trips arriving to / departing from the crèche will already be occurring on the network. Therefore, in order to avoid the double counting of trips, DBFL has assumed that 75% of trips generated by the crèche will be 'new' or 'diverted' trips, whilst the other 25% will be trips generated from either within the development or by the existing dwellings within walking distance of the subject site.

6.3.8 Based on the above trip rates, potential peak hour vehicle traffic flow has been calculated for the proposed development. **Table 6.2A** summarises the predicted AM and PM peak hour traffic generated by the LDA development.

Units	AM (08:15 - 09:15)			PM (17:15 - 18:15)		
	Arrival	Departure	Total	Arrival	Departure	Total
345 Units (Incl. crèche)	36	108	144	110	41	151

Table 6.2A: Potential LDA Development Peak Hour Vehicle Trips

6.3.9 The assignment of the predicted vehicle trips generated by the LDA Development across the local road network is detailed within **Figure 3** in Appendix A of this TTA.

Sustainable Travel Based Trips

6.3.10 In reference to the baseline modal split data presented in section 2.8 (Census Data) for the local Skerries area adjoining the site in Hacketstown, the proposed number of dwelling units, it has been possible to estimate the number of trips undertaken by sustainable modes of travel that the proposed development could generate. The predicted AM and PM peak period trips are presented in **Table 6.2B** below.

Peak Period	PT Rail Trips	PT Bus Trips	Cycling	Walking
AM (08:00-09:00)	82	16	12	59
AM (06:00-10:00)	245	47	35	175
PM (1700-1800)	89	17	13	64
PM (06:00-10:00)	287	55	41	205

Table 6.2B: Potential LDA Development Trips by Sustainable Modes of Travel

Construction Rate

6.3.11 For the purpose of this assessment and utilising typical residential unit construction rates, it is assumed that 103 no. units could potentially be constructed and occupied

by the end of the 2024 Opening Year. The traffic model assumes that the entire development will be occupied and operational by Future Design Year 2029.

6.4 COMMITTED DEVELOPMENT

6.4.1 The utilisation of TII published traffic growth rates (Ref. Section 6.6) ensures that the assessment considers the growth in baseline traffic conditions in the future design years as a result in part of additional developments in the area. Nevertheless with the objective of providing a robust appraisal, DBFL have established the presence of and subsequently incorporated into this assessment 2 no. third party commitment developments, which could potentially result in a material impact upon the key nodes located within the adopted study area (Ref. Figure 1.1B) and being investigated as part of this assessment. DBFL have subsequently included the following third-party scheme proposals as committed developments within this assessment.

- **Committed Development 1:** Noonan Construction Development Plot located north of the LDA subject site and is included within the boundary of the Hacketstown lands. The development (Ballygossan Pk Phase 2) proposes a total of 144 no. units (95 no. apartments, 16 no. duplexes and 33 no. houses).
- **Committed Development 2:** A potential development located west of Skerries Railway Station on lands zoned Objectives GE – General Employment under the FCC Development Plan. Two recent third-party applications have been refused by FCC the latter of which (F21A/0388) is currently under appeal to ABP (ABP Ref. PL06F.311566) and with a decision reportedly due in early to mid April 2022. With the objective of providing a robust assessment we have assumed for the purposes of this analysis that development in the order of at least 4,500m² GFA facility on this site will be granted permission in the short term.



Figure 5.2: Committed Development Location

Vehicle Trip Generation

6.4.2 In order to establish the potential quantum of vehicle traffic generated by the two identified committed developments, trip rates for Committed Development 2 were obtained from TRICS under the land use 'Employment' and its corresponding category 'Industrial Estate'. Trip rates assigned for the Noonan Development (Committed Development 1) was also obtained from TRICS and is comparable to the rates used by the LDA Development.

6.4.3 **Table 6.3** presents the trips rates for the committed developments, for both arrivals and departures during the morning and evening peak hour periods. **Table 6.4** summarises the total number of trips generated by the committed development in the AM and PM period.

Land Use	Unit/GFA	AM Peak Hour		PM Peak Hour	
		Arr	Dep	Arr	Dep
Residential (Noonan Construction Plot)	144	LDA Trip Rates used. (Ref. Table 5.1)			
Light Industry	4,500 Sqm.	0.221	0.108	0.069	0.191

Table 6.3: Committed Development Trip Rates

6.4.4 Based on the above trip rates, the corresponding forecast peak hour trip generation for both of the committed developments is presented in **Table 6.4A** for the AM and PM peak hour arrivals and departures.

Land Use	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Residential (Noonan Plot)	18	48	66	48	19	67
Light Industry	10	5	15	3	9	12

Table 6.4A: Adopted Committed Development Potential Trips

Sustainable Travel Based Trip Generation

6.4.5 In reference to the baseline modal split data presented in section 2.8 (Census Data) for the local Skerries area adjoining the site in Hacketstown it has been possible to estimate the number of trips undertaken by sustainable modes of travel that the committed development could generate. The predicted AM and PM peak period trips are presented in **Table 6.4B** below by mode of travel.

Peak Period	PT Rail Trips	PT Bus Trips	Cycling	Walking
AM (08:00-09:00)	35	7	5	25
AM (06:00-10:00)	103	20	15	74
PM (1700-1800)	38	7	5	27
PM (06:00-10:00)	122	23	17	87

Table 6.4B: Potential Committed Development Trips by Sustainable Modes of Travel

6.5 VEHICLE TRIP DISTRIBUTION

6.5.1 The distribution of the proposed LDA generated traffic has been based upon the recorded distribution of existing traffic travelling to/from Ballygossan Park (103 house units representing Phase 1 of Noonan Construction development). The junction turning counts and associated vehicle registration plate surveys undertaken by IDASO Ltd. in 2019 have enabled the distribution of existing Ballygossan Park traffic to be established.

6.5.2 DBFL believes the adoption of the Phase 1 development as a 'donor' site (in terms of 'house' trip rates and vehicle distribution) provides a reasonable basis for predicting the proposed vehicle trip generation and assignment across the local road network.

6.6 TRAFFIC GROWTH

6.6.1 The TTA adopts an Opening Design year of 2024 and accordingly an Interim Year of 2029 (Opening Year +5 years) and a Future Year of 2039 (Opening Year + 15 years) as per Transport Infrastructure Ireland (TII) guidelines.

6.6.2 To ensure a robust analysis of the impact of traffic upon the local road network we have adopted growth rates using the TII traffic projections. Table 6.2 (Unit 5.3 – Travel Demand Projections) within the TII Project Appraisal Guidelines provides Annual Growth Factors for the different regions within Ireland. The subject site lies within ‘County – Dublin’ with the growth factors as outlined within **Table 6.5** below.

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

Table 6.5: National Traffic Growth Forecasts: Annual Growth Factors (Extract from Table 6.1 of Unit 5.3 PAG)

6.6.3 Applying the annual factors as outlined in **Table 6.5** above to the surveyed 2019 traffic flows for the two identified key local junctions, enabled the corresponding 2022 flows to be determined. The appropriate annual TII derived factors were also adopted for the Opening Year of 2024, the Interim Year of 2029 (Opening Year +5 years) and the Future Year 2039 (Opening Year +15 years). Accordingly, the following growth rates shown in **Table 6.6** below, have been adopted to establish corresponding 2024, 2029 and 2039 baseline network flows.

Period	2019 to 2024	2019 to 2029	2019 to 2039
Central Growth	1.0933	1.1953	1.2715
	9.3%	19.5%	27.2%

Table 6.6: Adopted Growth Rates

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

7.0 NETWORK IMPACT

7.1 ASSESSMENT SCOPE

Assessment Scenarios

- 7.1.1 Two different traffic scenarios have been assessed, namely (a) the 'Base' ("Do-Nothing") traffic characteristics and (b) the 'Post Development' ("Do-Something").
- 7.1.2 The "Do-Nothing" traffic scenario takes into account the potential level of traffic that could be generated by the 'Committed Developments' in addition to the existing flows travelling across the network.
- 7.1.3 The proposed development traffic flows are then added to the network's "Do-Nothing" (Base + Committed Development) traffic flows to establish the new 'Post Development' traffic flows. In summary the following scenarios are considered: -
- Do Nothing (DN) A1 – 2024 Base Flows + Committed Developments
 - Do Nothing (DN) A2 – 2029 Base Flows + Committed Developments
 - Do Nothing (DN) A3 – 2039 Base Flows + Committed Developments
 - Do Something (DS) B1 – 2024 Do Nothing (A1) + Proposed Development Flows
 - Do Something (DS) B2 – 2029 Do Nothing (A2) + Proposed Development Flows
 - Do Something (DS) B3 – 2039 Do Nothing (A2) + Proposed Development Flows

Assessment Period

- 7.1.4 The AM and PM peak hour flows have been identified as occurring between 08:15 - 09:15 and 17:15 – 18:15 respectively. These peak hour periods form the basis of the 2024, 2029 and 2039 network assessments.

Network Vehicle Flows

- 7.1.5 The following Figures as included in **Appendix A** present the vehicle flows across the local road network for each of the adopted development scenarios: -
- **Figure 13** – 2024 Do-Nothing
 - **Figure 14** – 2029 Do-Nothing
 - **Figure 15** – 2039 Do-Nothing
 - **Figure 16** – 2024 Do-Something
 - **Figure 17** – 2029 Do-Something
 - **Figure 18** – 2039 Do-Something

7.2 ROAD NETWORK IMPACT

- 7.2.1 The Institution of Highways and Transportation document '*Guidelines for Traffic Impact Assessments*' states that the impact of a proposed development upon the local road network (i.e. surrounding the proposed development) is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks, respectively. When such levels of impact are generated a more detailed assessment should be undertaken to ascertain the specific impact upon the network operational performance. These same thresholds are reproduced in the NRA (TII) document entitled *Traffic and Transport Assessment Guidelines* (2014).
- 7.2.2 In accordance with the IHT and NRA guidelines detailed, assessments have been undertaken to establish the potential level of impact upon the operational performance of key junctions of the local road network. To enable this calculation and associated junction modelling to be undertaken we will base the analysis upon the 2024 Opening Year and the subsequent 2029 and 2039 Future Design Year scenarios.
- 7.2.3 **Table 7.1** below details the specific scale of network impact predicted at each of the key local junctions during the 2024, 2029 and 2039 design years. For the key local junctions, it can be seen that the proposed development upon full completion would have a significant effect on the surrounding junctions.

Junction ID	Junction	Design Year	Percentage Impact	
			AM	PM
1	Existing Site Access off Golf Link Rd (North)	2024	30.16%	33.99%
		2029	65.91%	74.65%
		2039	63.14%	71.60%
2	Proposed Site Access off Golf Link Rd (South)	2024	0.00%	0.00%
		2029	117.39%	136.24%
		2039	110.80%	128.10%
3	Golf Links Rd/Miller's Ln/Shenick Rd Junction	2024	5.61%	5.45%
		2029	15.04%	15.02%
		2039	14.19%	14.18%
4	Skerries Rd/Miller's Ln/Dublin Rd Roundabout	2024	1.96%	1.22%
		2029	5.44%	3.45%
		2039	5.13%	3.25%

Table 7.1: Proposed LDA Developments Recorded Network Impact

- 7.2.4 Based on the scale of impact generated in the adopted worst case scenario, more detailed assessments in regards to the nodes' operational performance have been

undertaken. **Table 7.1** indicates that the impact on the surrounding road network will exceed the 10% threshold at site 1, 2 and 3.

7.2.5 A maximum percentage impact of 136.24% is observed at the proposed site access off Golf Link Rd to the south during the 2029 PM peak hour and 117.39% during the 2029 AM peak hour. The existing access at Ballygossan Park experiences a maximum percentage impact of 74.65% is observed during the 2029 PM peak hour and 65.91% during the AM peak hour. At the Golf Links Rd/Miller's Ln/Shenick Rd Junction, a maximum percentage impact of 15.04% is observed during the 2029 AM peak hour and 15.02% during the AM peak hour. To ensure a robust assessment, an assessment of the impact of the proposed development has been undertaken at the existing and proposed site accesses as well as both the local off-site junctions in Hacketstown.

7.2.6 **Figure 7.1** and **7.2** below details the total amount of two-way vehicle trips that will pass through the key off-site junctions in the 2039 Future Design Year and the resulting percentage increase in traffic flows as a result of the traffic generated by the proposed development.



Figure 7.1: Increase in Vehicle Trips Generated Through Key Off-Site Junctions (DS 2039 AM Peak)



Figure 7.2: Increase in Vehicle Trips Generated Through Key Off-Site Junctions (DS 2039 PM Peak)

- 7.2.7 During the 2039 AM Peak Hour (**Figure 7.1**), the existing Ballygossan Park site access experiences an increase of 63.22% with 141 new vehicle trips generated. At the proposed site access off Golf Link Rd (Junction 2), an increase of 110.63% is experienced with 71 new vehicle trips are generated.
- 7.2.8 During the 2039 PM Peak Hour (**Figure 7.2**), Junction 1 experiences an increase of 71.56% with 151 new vehicle trips generated. At Junction 2, an increase of 129.82% is experienced with 74 new vehicle trips are generated.
- 7.2.9 As noted previously, the percentage increase at Junction 4 (Skerries Rd/Miller's Ln/Dublin Rd Roundabout) are below the TII threshold for assessment for normal non congested networks and as such the proposed development is not anticipated to have a material impact on the roundabout. However, the level of traffic at Junction 1, 2 and 3 surpasses the 10% threshold and as such, an assessment of the impact of the proposed development has been undertaken to ensure a robust assessment.

7.3 PUBLIC TRANSPORT NETWORK IMPACT

- 7.3.1 The capacity of the existing 2022 public transport networks serving Skerries has been quantified previously in Section 2.9 whilst the demand that the proposed development is predicted to generate is presented in Section 6.3.
- 7.3.2 Furthermore, in a similar manner to the road network analysis, it is considered prudent that the potential additional loading from committed third party schemes is also considered in the assessment. Accordingly, the potential additional public transport demands generated by the adjoining third party Noonan Construction scheme on the neighbouring lands to the north of the subject LDA site have been identified in Section 6.4 and included within the following assessment.
- 7.3.3 The following section establishes the scale of impact that the proposed development is predicted to generate upon the public transport networks and quantifies the capacity of the public transport network to accommodate the proposed development. The Rail and Bus public transport networks are initially considered separately in the following section.

Scale of Network Impact

- 7.3.4 In reference to **Table 6.2b**, **Table 7.2** below establishes that the additional rail and bus trips that the proposed development is predicted to generate amounts to only 3.6% and 3.9% of the total public transport network capacity available during the morning (0600-1000) and evening (1600-2000) peak periods respectively.

Mode of Travel	Peak Period	Existing Two-Way Capacity	Additional Proposed Development Trips	Scale of Impact (%)
Rail	AM (0600-1000)	5821	245	4.2 %
	PM (1600-2000)	6260	287	4.5 %
Bus	AM (0600-1000)	2196	47	2.1 %
	PM (1600-2000)	2356	55	2.3 %
Network Total	AM (0600-1000)	8017	292	3.6 %
	PM (1600-2000)	8616	342	3.9 %

Table 7.2: Proposed LDA Developments Recorded Network Impact

7.4 MITIGATION STRATEGY

- 7.4.1 A package of integrated mitigation measures has been identified to off-set the additional local demand that the proposed residential development on the subject

zoned lands could potentially generate as a result of the forecast increase in vehicle movements by residents of the scheme. The strategy includes specific measures for both the construction and operational stages of the proposed development.

Construction Stage

- 7.4.2 The Construction Management Plan (as compiled by the appointed contractor) and the associated Construction Traffic Management Plan (CTMP) in addition to the applications accompanying Construction and Waste Management Plan will incorporate a range of integrated control and management initiatives with the objective of mitigating the impact of the proposed developments on-site construction activities.
- 7.4.3 A dedicated Construction Access (for the duration of the works) is to be provided as shown in **Figure 7.3**. This temporary access will accommodate segregated access for all construction traffic flow to and from the site and on-site temporary contractors compound.

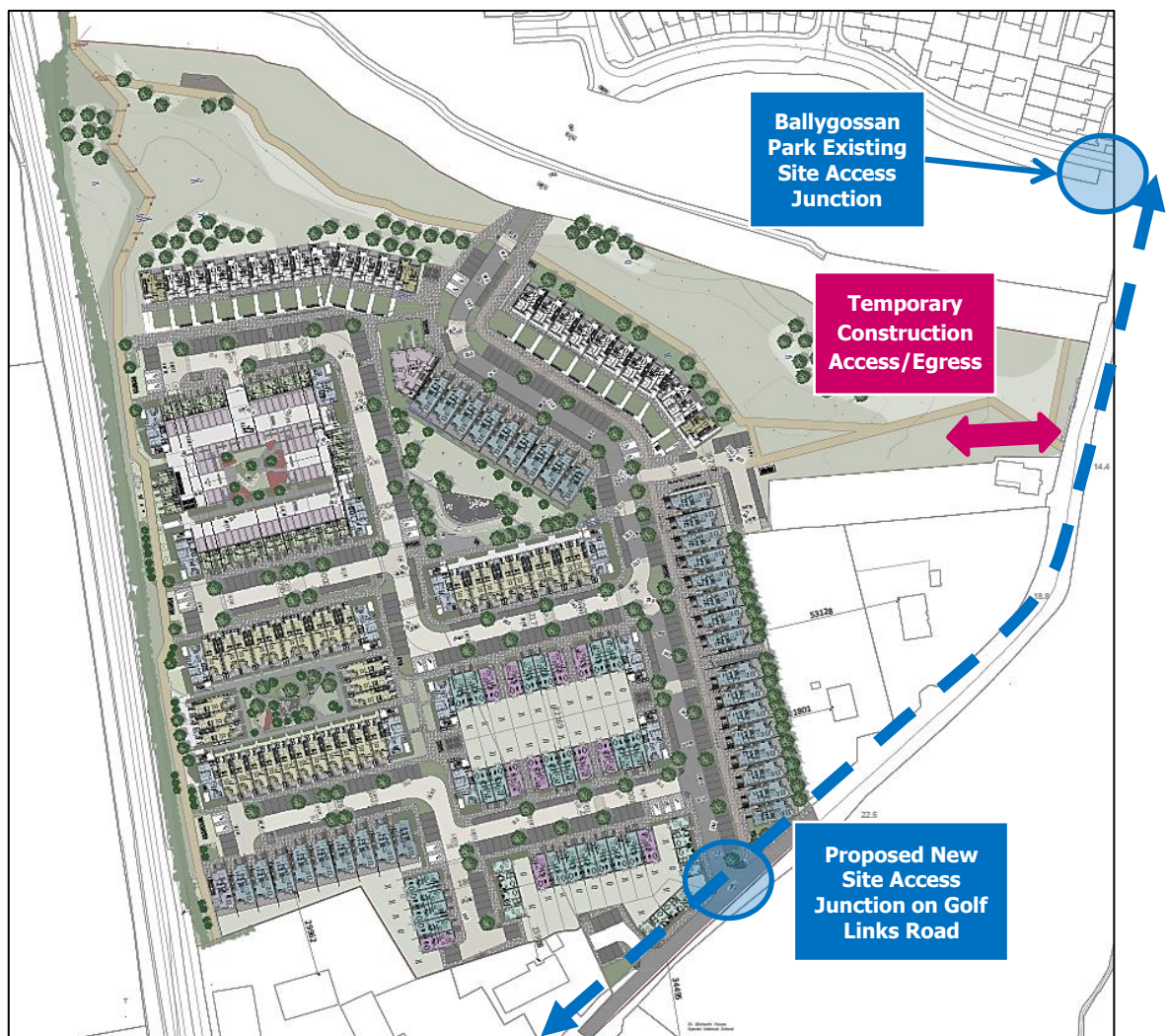


Figure 7.3: Proposed Temporary Construction Access to/from Contractors Compound

Operational Stage

7.4.4 With the objective of mitigating the potential impact of the proposed development as predicted above during its operational stage, the following initiatives and associated timescale for their implementation have been identified and subsequently form an integral part of the subject development proposals.

- **Management** – A Mobility Management Plans (MMP) are to be compiled with the aim of guiding the delivery and management of coordinated initiatives by the scheme promotor. The MMP's ultimately seeks to encourage sustainable travel practices for all journeys, by residents and visitors travelling to and from the proposed development.
- **Infrastructure (by applicant) 2023 / 2024** – The advanced infrastructure works by the applicant including the off-site junction enhancements at the two Millers Lane junctions (Ref Section 4.1) .
- **Infrastructure (By Others)** – The aspirations of the Fingal County Council Development Plan seeks the implementation of the Skerries Southern Relief Road (Local Objective No 10) which upon delivery will transform local traffic characteristics along Golf Links Road. Whilst the proposed off-site junction enhancements have been proved to fully mitigate the predicted impact of the subject LDA development (Ref. Section 8).
- **Infrastructure (Bicycle Facilities)** – The development proposals seek to encourage sustainable travel habits through the provision of a network of dedicated infrastructure connections for active modes of travel. This includes the implementation of (i) segregated bicycle tracks along the eastern side of the proposed developments main north-south 'link' street, (ii) the provision of a dedicated shared ped / cycle connection along the entire western boundary of the subject site which links into existing and emerging (Noonan Construction site) onwards connections subsequently providing an attractive and convenient route to/from the R127 Dublin Rd corridor, (iii) the provision of a dedicated shared ped / cycle connection along the northern boundary of the site connecting the western shared connection to Golf Links Rd to the east and (iv) internal traffic free pedestrian links that provide an attractive and positive advantage (e.g. shortest route) for pedestrians.
- **Infrastructure (Bicycle Facilities)** – With the objective of encouraging the local journeys to be undertaken by bicycle, the design of the LDA residential

development includes the provision of a total of 802 bicycle parking opportunities including both long term (residents) and short term (visitors) bicycle parking facilities. This overall quantum complies with development management standards. Furthermore, in accordance with best practice the dedicated long term (residents) bicycle parking all benefit from the provision of secure weather protection

- **Infrastructure (Permeability)** – The design of the scheme proposals has sought to maximise the ability to provide attractive connections to the third-party lands surrounding the subject development site. The implementation of pedestrian / cycle infrastructure extending right up to the boundary of the site enables the planning authority, in consultation with third parties as appropriate; to deliver a network of permeable linkages between the subject development lands and both existing and future developments adjoining the subject site.
- **Service (Car Sharing)** – The applicant is in negotiations with GoCar to provide 1 no. GoCar space at the subject site. GoCar is currently the leading car sharing service provider in Ireland; GoCar members can book cars online or via the app for as little as an hour, then unlock with their phone or GoCar; the keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include, (i) reduces the number of cars on the road and therefore traffic congestion, noise and air pollution; (ii) frees up land traditionally used for private parking spaces but which may not be used, (iii) increases use of public transport, walking and cycling as the need for car ownership is reduced and (iv) Car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity.

8.0 NETWORK ANALYSIS

8.1 ROAD NETWORK

8.1.1 This network assessment considers the impact of the subject development only on the surrounding road network. The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer packages ARCADY and PICADY for roundabout and priority controlled junctions.

8.1.2 For both the ARCADY and PICADY analyses, a 90-minute AM and PM period has been simulated, from 07:45 to 09:15 and 17:00 to 18:30, respectively. For these junction analysis sets traffic flows were entered using an Origin-Destination table for the peak hours. When considering these junctions, a Ratio of Flow to Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and the performance of the junction deteriorates quickly.

8.1.3 In order to analyse and assess the impact of the potential development on the surrounding road network, a traffic model replicating the local road network including the key off-site junctions (**Figure 8.1**) was developed to quantify condition in each of the following three future design years:

- 2024 Opening Year
- 2029 Interim Design Year (Opening Year +5 years)
- 2039 Future Horizon Design Year (Opening Year +15 years)



Figure 8.1: Junctions Included Within the Network Analysis

8.2 JUNCTION 1: BALLYGOSSAN PARK SITE ACCESS (NORTH)

8.2.1 The existing Ballygossan Park site access priority junction has been analysed for all of the modelling scenario using the Junctions 9 PICADY software package. The three arms were labelled as follows within the PICADY model, as shown in **Figure 8.2** below:

- Arm A: Golf Links Rd (S)
- Arm B: Existing Site Access
- Arm C: Golf Links Rd (N)



Figure 8.2: Junction 1 – Ballygossan Park Existing Site Access

Do Nothing Scenario

8.2.2 The PICADY results (**Table 8.1**) indicate that the existing site access three-arm priority junction will operate within capacity for the 2024 “Do Nothing” AM peak hour with a maximum Ratio to Flow Capacity (RFC) value of 0.10 and a corresponding queue of 0.1 pcu being recorded on stream B-AC (existing site access). For the corresponding PM peak hour, a maximum RFC value of 0.08 occurs on the north arm of Golf Links Rd with a queue of 0.1 pcu.

Scenario	Period	Arm	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DN	AM Peak	B-AC	0.1	5.88	0.10
		C-B	0.0	5.92	0.04
	PM Peak	B-AC	0.0	5.46	0.03
		C-B	0.1	6.22	0.08
2029 DN	AM Peak	B-AC	0.2	6.18	0.14
		C-B	0.1	6.06	0.06
	PM Peak	B-AC	0.1	5.60	0.05
		C-B	0.2	6.69	0.14
2039 DN	AM Peak	B-AC	0.2	6.21	0.14
		C-B	0.1	6.08	0.06
	PM Peak	B-AC	0.1	5.62	0.06
		C-B	0.2	6.73	0.15

Table 8.1: Do Nothing Analysis – Ballygossan Park Site Access

8.2.3 For the 2029 Future Horizon Year “Do Nothing” scenario, the PICADY results indicate that the priority junction will also operate within capacity during the AM peak hour with a maximum RFC value of 0.14 and a corresponding queue of 0.2 pcu being recorded on the site access stream. For the corresponding PM peak hour, a maximum RFC value of 0.14 occurs on the north arm of Golf Links Rd with a queue of 0.2 pcu.

8.2.4 In the 2039 Future Horizon Year “Do Nothing” scenario, the results once again indicate that the junction will operate within capacity during the AM peak hour with a maximum RFC value of 0.14 and a corresponding queue of 0.2 pcu being recorded on stream B. For the corresponding PM peak hour, a maximum RFC value of 0.15 occurs on the north arm with a queue of 0.2 taking place.

Do Something Scenario

8.2.5 The PICADY results (**Table 8.2**) indicate that the Ballygossan Park site access junction will operate within capacity for the 2024 “Do Something” AM peak hour with a maximum RFC value of 0.13 and a corresponding queue of 0.1 pcu being recorded on stream B-AC. In the PM peak hour, a maximum RFC value of 0.13 occurs on stream C-B with a queue of 0.2.

8.2.6 In the 2029 scenario, the PICADY results indicate that the priority junction will also operate within capacity during the AM peak hour with a maximum RFC value of 0.22 and a corresponding queue of 0.3 pcu being recorded again on stream B-AC. For the corresponding PM peak hour, a maximum RFC value of 0.23 occurs again on stream C-B with a queue of 0.3.

Scenario	Period	Arm	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	B-AC	0.1	6.07	0.13
		C-B	0.1	6.03	0.06
	PM Peak	B-AC	0.1	5.58	0.05
		C-B	0.2	6.61	0.13
2029 DS	AM Peak	B-AC	0.3	6.94	0.22
		C-B	0.1	6.39	0.09
	PM Peak	B-AC	0.1	5.84	0.09
		C-B	0.3	7.51	0.23
2039 DS	AM Peak	B-AC	0.3	6.98	0.23
		C-B	0.1	6.41	0.1
	PM Peak	B-AC	0.1	5.86	0.09
		C-B	0.3	7.57	0.24

Table 8.2: Do Something Analysis - Ballygossan Park Site Access

8.2.7 In the 2039 scenario, the results one again indicate that the priority junction will operate within capacity during the AM peak hour with a maximum RFC value of 0.23 and a corresponding queue of 0.3 pcu being recorded on stream B-AC. For the corresponding PM peak hour, a maximum RFC value of 0.24 occurs on stream C-B with 0.3 queue taking place.

8.3 JUNCTION 2: PROPOSED SITE ACCESS OFF GOLF LINK RD (SOUTH)

8.3.1 The proposed site access priority junction (at Ballygossan Park) has been analysed for all of the modelling scenario using the Junctions 9 PICADY software package. The three arms were labelled as follows within the PICADY model, as shown in **Figure 8.3** below:

- Arm A: Golf Links Rd (SW)
- Arm B: Proposed Site Access
- Arm C: Golf Links Rd (NE)



Figure 8.3: Junction 2 – LDA Proposed Site Access Location

Do Nothing Scenario

8.3.2 As there is no existing site access from the southern half of the LDA development site onto Golf Links Road at present, a PICADY analysis for the “Do Nothing” Scenario has been omitted.

Do Something Scenario

8.3.3 The PICADY results (**Table 8.3**) indicate that the proposed site access three-arm priority junction will operate within capacity for the 2024 “Do Something” AM peak hour with a maximum RFC value of 0.10 and a corresponding queue of 0.1 pcu being recorded on stream B-AC. For the corresponding PM peak hour, a maximum RFC value of 0.01 occurs on the stream C-B with no corresponding queue.

8.3.4 For the 2029 “Do Something” scenario, the results indicate that the proposed site access will also operate within capacity during the AM peak hour with a maximum RFC value of 0.10 and a corresponding queue of 0.1 pcu being recorded on stream B-AC. For the corresponding PM peak hour, a maximum RFC value of 0.09 occurs on stream C-B with a queue of 0.1.

8.3.5 In the 2039 “Do Something” scenario, the results once again indicate that the proposed site access will operate within capacity during the AM peak hour with a maximum RFC value of 0.10 and a corresponding queue of 0.1 pcu being recorded on stream B-AC. In the PM peak hour, a maximum RFC value of 0.09 occurs on the stream C-B with a corresponding queue of 0.1 is recorded.

Scenario	Period	Arm	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	B-AC	0.1	5.37	0.10
		C-B	0.0	0.00	0.00
	PM Peak	B-AC	0.0	4.87	0.01
		C-B	0.0	0.00	0.00
2029 DS	AM Peak	B-AC	0.1	5.37	0.10
		C-B	0.0	6.04	0.03
	PM Peak	B-AC	0.0	4.99	0.03
		C-B	0.1	6.46	0.09
2039 DS	AM Peak	B-AC	0.1	5.37	0.10
		C-B	0.0	6.05	0.03
	PM Peak	B-AC	0.0	5.00	0.03
		C-B	0.1	6.46	0.09

Table 8.3: Do Something Analysis – LDA Proposed Site Access

8.4 JUNCTION 3: GOLF LINKS RD/MILLER'S LN/SHENICK RD JUNCTION

8.4.1 The existing Golf Links Road / Miller's Lane / Shenick Road staggered junction (Junction 3) has been analysed for all modelling scenarios using the Junctions 9 PICADY software package. The results of the operational assessment of this junction for both the "Do-Nothing" and "Do-Something" scenarios are summarised in **Table 8.4** and **Table 8.5**, respectively. Results may also be observed in full within The detailed PICADY modelling output files are contained within **Appendix C** of this report.

8.4.2 In the "Do-Nothing" and "Do-Something" scenarios the four arms were labelled as follows within the PICADY model as shown in **Figure 8.4**:

- Arm A: Golf Links Road (S)
- Arm B: Miller's Lane (W)
- Arm C: Golf Links Road (N)
- Arm D: Shenick Road (E)



Figure 8.4: Golf Links Road/Miller's Lane/Shenick Road Junction

Do-Nothing Scenario

8.4.3 The PICADY results (**Table 8.4**) indicate that the Golf Links Road / Miller's Lane / Shenick Road staggered junction will operate within capacity for the Opening Year 2024 "Do-Nothing" AM peak hour with a maximum Ratio of Flow to Capacity (RFC) value of 0.59 and a corresponding queue of 1.5 pcu resulting on the Golf Links Rd stream (North/South). In the "Do-Nothing" PM peak hour, a maximum Ratio of Flow to Capacity (RFC) value of 0.57 is experienced on Miller's Lane (W), with a maximum queue of 1.3 pcu being recorded on this arm.

8.4.4 In the 2029 “Do-Nothing” scenario AM peak hour, a maximum RFC of 0.65 can be observed on the Golf Links Rd stream, which experiences a maximum queue of 2.0 pcu. For the PM peak hour scenario, a maximum RFC of 0.64 can be observed on Miller’s Lane (W) with a maximum queue length of 1.7 pcu.

8.4.5 In the Future Horizon Year 2039 “Do-Nothing” scenario AM peak hour, a maximum RFC of 0.70 can be observed along the Golf Links Rd stream, which experiences a maximum queue of 2.4 pcu. For the PM peak hour, a maximum RFC of 0.68 can be observed along the on Miller’s Lane (W) arm with a maximum queue length of 2.1 pcu.

Scenario	Period	Stream	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DN	AM Peak	B-ACD	0.6	8.51	0.38
		AB-CD	0.5	8.99	0.34
		D-ABC	0.6	8.74	0.38
		CD-AB	1.5	14.12	0.59
	PM Peak	B-ACD	1.3	12.01	0.57
		AB-CD	0.9	10.23	0.45
		D-ABC	0.4	7.52	0.27
		CD-AB	1.0	11.07	0.48
2029 DN	AM Peak	B-ACD	0.8	9.48	0.43
		AB-CD	0.7	9.47	0.38
		D-ABC	0.7	9.51	0.42
		CD-AB	2.0	16.87	0.65
	PM Peak	B-ACD	1.7	14.73	0.64
		AB-CD	1.2	11.09	0.50
		D-ABC	0.4	8.17	0.31
		CD-AB	1.2	12.01	0.53
2039 DN	AM Peak	B-ACD	0.9	10.14	0.46
		AB-CD	0.7	9.78	0.40
		D-ABC	0.8	10.11	0.45
		CD-AB	2.4	19.21	0.70
	PM Peak	B-ACD	2.1	16.98	0.68
		AB-CD	1.4	11.72	0.53
		D-ABC	0.5	8.50	0.33
		CD-AB	1.4	12.89	0.57

Table 8.4: Junction 3 “Do-Nothing” Scenario PICADY Analysis Results

Do Something Scenario

8.4.6 The PICADY results (**Table 8.5**) indicate that the Golf Links Road / Miller’s Lane / Shenick Road staggered junction will operate within capacity for the Opening Year

2024 “Do-Something” AM peak hour, with a maximum Ratio of Flow to Capacity (RFC) value of 0.60 and a corresponding queue of 1.5 pcu being recorded on the Golf Links Rd stream (North/South). In the PM peak hour, a maximum RFC value of 0.58 occurs on Miller’s Lane (W) with a corresponding maximum queue length of 1.3 pcu.

8.4.7 In the 2029 scenario AM peak, a maximum RFC value of 0.69 is observed along on the Golf Links Rd corridor, with a corresponding maximum queue length of 2.3 pcu. In the PM peak hour, the junction approaches capacity with a maximum RFC value of 0.69 is observed on Miller’s Lane with a corresponding queue length of 2.1 pcu.

8.4.8 In the 2039 “Do-Something” scenario AM peak, a maximum RFC value of 0.73 is observed along both the Golf Links Rd stream and Miller’s Lane, with a corresponding maximum queue length of 2.9 pcu. In the PM peak hour, the junction approaches capacity as a maximum RFC value of 0.74 is recorded on Miller’s Lane, with a corresponding queue lengths of 2.7 pcu.

Scenario	Period	Stream	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	B-ACD	0.6	8.73	0.39
		AB-CD	0.6	9.06	0.34
		D-ABC	0.6	8.82	0.39
		CD-AB	1.5	14.52	0.60
	PM Peak	B-ACD	1.3	12.48	0.58
		AB-CD	1.0	10.38	0.45
		D-ABC	0.4	7.72	0.28
		CD-AB	1.0	10.98	0.48
2029 DS	AM Peak	B-ACD	0.8	10.53	0.46
		AB-CD	0.8	9.76	0.41
		D-ABC	0.8	9.80	0.44
		CD-AB	2.3	18.97	0.69
	PM Peak	B-ACD	2.1	18.19	0.69
		AB-CD	1.3	11.72	0.52
		D-ABC	0.5	9.01	0.36
		CD-AB	1.4	11.61	0.54
2039 DS	AM Peak	B-ACD	1.0	11.46	0.49
		AB-CD	0.9	10.12	0.43
		D-ABC	0.9	10.43	0.47
		CD-AB	2.9	22.12	0.73
	PM Peak	B-ACD	2.7	22.27	0.74
		AB-CD	1.6	12.46	0.56
		D-ABC	0.6	9.43	0.38
		CD-AB	1.6	12.47	0.58

Table 8.5: Junction 3 “Do-Something” Scenario PICADY Analysis Results

Do Something Scenario – Mini Roundabout Option

8.4.9 An alternative to the existing priority controlled crossroad arrangement is the implementation of a mini-roundabout (incorporating 50mm raised central run-over island) junction. To enhance both priority and safety for vulnerable road users, zebra crossing facilities (incorporating raised flat top ramps) have been specified on all four arms of the junction layout. Planning permission (Reference section 4.1) has already been granted (subject to planning conditions) for the applicant to implement the junction upgrades as presented in **Figure 8.5**.

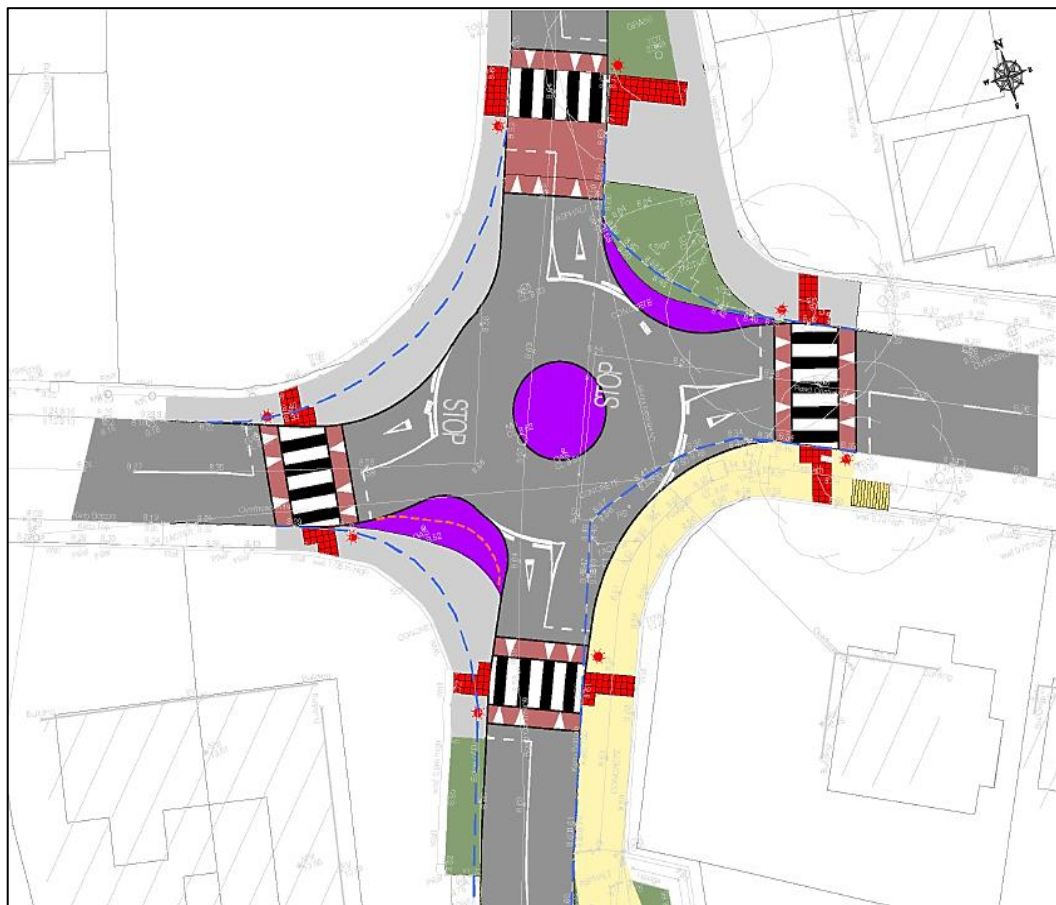


Figure 8.5: Junction 3 - Mini Roundabout Layout

- 8.4.10 The results of the ARCADY mini-roundabout analysis in **Table 8.6** demonstrates that utilizing this alternative configuration, the junction will operate well within capacity in both the Opening Year and the Future Design Years.
- 8.4.11 Even with the additional traffic generated by the proposed development on the subject lands, the maximum RFC values are recorded on Miller's Lane amount to 0.38 and 0.53 during the 2024 AM and PM peak periods, 0.46 and 0.63 during the 2029 AM and PM peak periods and 0.48 and 0.67 during the 2039 AM and PM peak periods, respectively.

Year Scenario	Period	Stream	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	Golf Links Rd (S)	0.3	7.25	0.24
		Miller's Ln	0.6	6.79	0.38
		Golf Links Rd (N)	0.3	5.77	0.22
		Shenick Rd	0.6	6.91	0.36
	PM Peak	Golf Links Rd (S)	0.2	6.10	0.16
		Miller's Ln	1.1	8.92	0.53
		Golf Links Rd (N)	0.5	6.96	0.32
		Shenick Rd	0.4	6.37	0.27
2029 DS	AM Peak	Golf Links Rd (S)	0.8	10.77	0.46
		Miller's Ln	0.8	8.00	0.45
		Golf Links Rd (N)	0.4	6.46	0.27
		Shenick Rd	0.7	7.89	0.42
	PM Peak	Golf Links Rd (S)	0.1	7.03	0.24
		Miller's Ln	1.7	11.72	0.63
		Golf Links Rd (N)	0.8	9.25	0.45
		Shenick Rd	0.6	8.17	0.37
2039 DS	AM Peak	Golf Links Rd (S)	0.9	11.73	0.48
		Miller's Ln	0.9	8.52	0.48
		Golf Links Rd (N)	0.4	6.73	0.29
		Shenick Rd	0.8	8.41	0.45
	PM Peak	Golf Links Rd (S)	0.3	7.33	0.26
		Miller's Ln	2.0	13.19	0.67
		Golf Links Rd (N)	0.9	10.03	0.49
		Shenick Rd	0.6	8.63	0.39

Table 8.6: Junction 3 “Do-Something” Scenario Mini Roundabout Option ARCADY Analysis

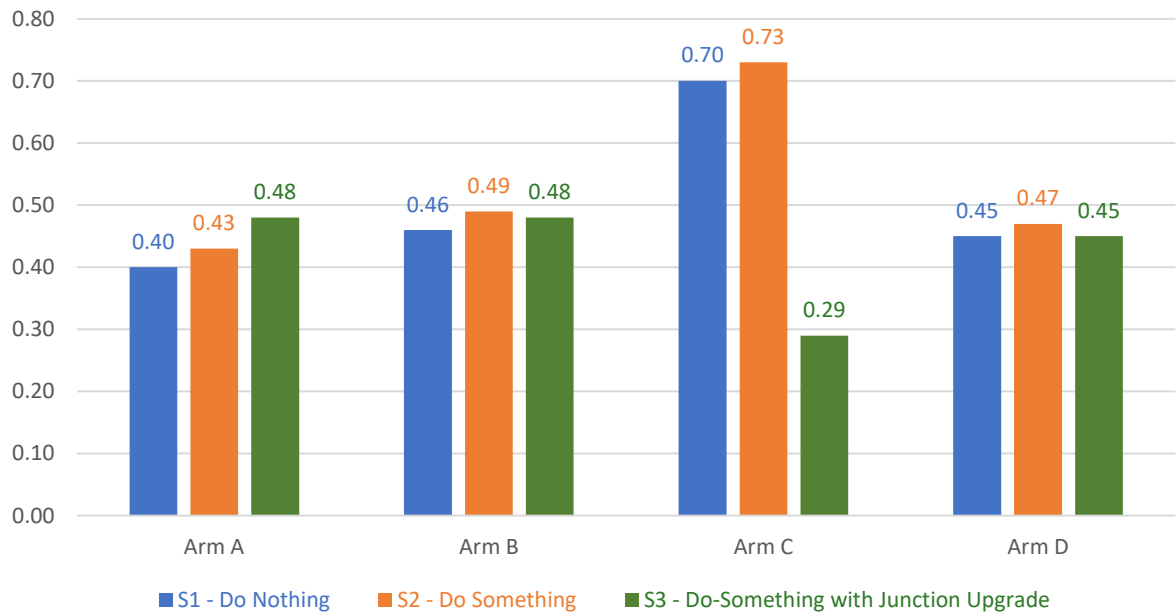
8.4.12 The maximum recorded vehicle queues and the associated vehicle delays are less when compared to the existing priority controlled layout whilst pedestrians can also benefit from less delays (and priority) by way of the Zebra crossing facilities.

Junction 3 - Comparison of Modelling Predictions

8.4.13 In reference to the principal results of the PICADY (existing junction layout) and ARCADY (mini-roundabout layout) based junction simulations, the results of each arm are summarised in Graph 1 and Graph 2 below. The graph shows the maximum recorded capacity below for the 2039 AM and PM peak hour periods, respectively. The scenarios compared below are the following:-

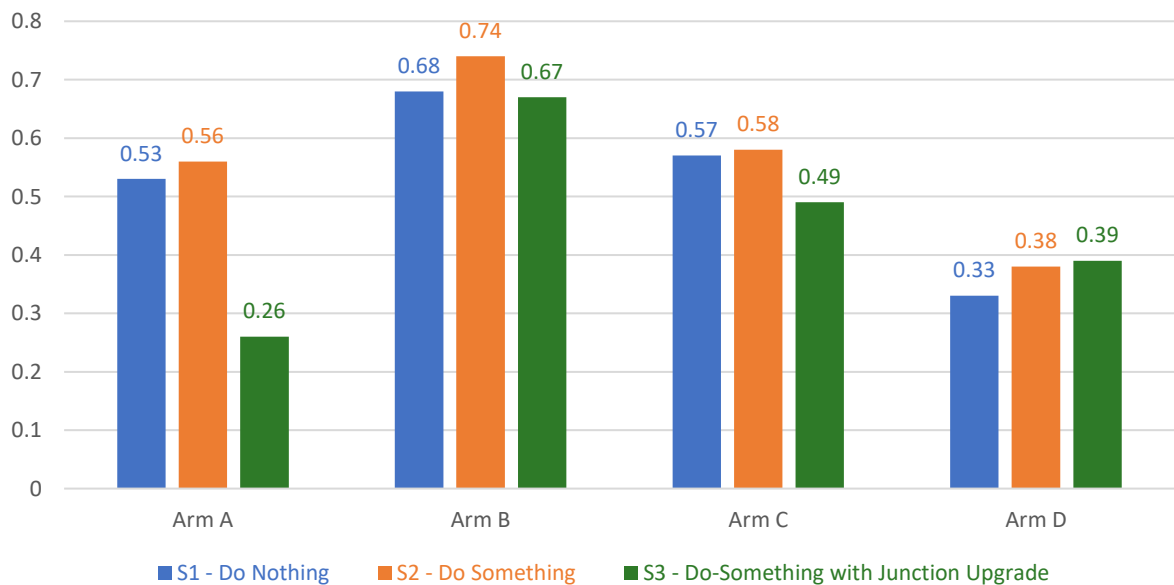
- Scenario S1 – “Do-Nothing”
- Scenario S2 – “Do-Something”
- Scenario S3 – “Do-Something with Junction Upgrade”

8.4.14 The comparison of the key modelling output data reveals that in the 2039 AM peak hour period (**Graph 1**) the mini-roundabout junction arrangement offers the largest level of reserve capacity on all arms (“Do-Something with Junction Upgrade”).



Graph 1: Junction 3 RFC Comparison (2039 AM Peak Hour)

8.4.15 A similar trend is recorded during the 2039 PM peak hour period with the potential mini-roundabout junction layout again offering lower RFC values compared to both the “Do-Nothing” and the “Do-Something” as shown in **Graph 2**.



Graph 2: Junction 3 RFC Comparison (2039 PM Peak Hour)

- 8.4.16 The modelling exercise demonstrates that the potential mini-roundabout junction layout offers the maximum benefits for vehicle drivers. Notwithstanding this key advantage, vulnerable road users are also being adequately catered for through the implementation of dedicated zebra crossing facilities on all four arms of the junction. Furthermore, the mini-roundabout junction layout offers the greatest level of traffic calming, a benefit for which the existing junction configurations can offer.
- 8.4.17 Based upon these key advantages, the mini-roundabout junction layout is considered to be the optimum junction configuration whilst fully mitigating the traffic impact generated by the proposed residential development (incl. the neighbouring Noonan Development plot) on the subject lands in addition to accommodating the requirements of all road uses in an appropriate and controlled manner.

8.5 JUNCTION 4: DUBLIN ROAD/MILLER'S LANE/SKERRIES ROAD ROUNDABOUT

- 8.5.1 The existing Dublin Road (R127) / Miller's Lane / Skerries Road (R127) three-arm Roundabout has been analysed for all modelling scenarios using the Junctions 9 ARCADY software package.
- 8.5.2 The results of the operational assessment of this roundabout for both the "Do-Nothing" and "Do-Something" scenarios are summarised in **Table 8.7** and **Table 8.8**, respectively.
- 8.5.3 Results may also be observed in full within the detailed ARCADY modelling output files are contained within **Appendix D** of this report. In the "Do-Nothing" and "Do-Something" scenarios the three arms were labelled as follows within the ARCADY model as shown in **Figure 8.6**:
- Arm 1: Miller's Lane (E)
 - Arm 2: Dublin Rd (R127) (N)
 - Arm 3: Skerries Rd (R127) (W)



Figure 8.6: Junction 4 Dublin Road/Miller's Lane/Skerries Road Roundabout

Do-Nothing Scenario

- 8.5.4 The Dublin Road (R127) / Miller's Lane / Skerries Road (R127) Roundabout results (**Table 8.7**) indicate that the roundabout will operate within capacity for the Opening Year 2024 "Do-Nothing" AM peak hour with a maximum RFC value of 0.32 and a corresponding queue of 0.5 pcu resulting on the Dublin Rd (N) arm. For the 2024 PM peak hour, a maximum RFC value of 0.60 is experienced on the Skerries Rd (W) arm, with a maximum queue of 1.5 pcu being recorded.
- 8.5.5 In the 2029 scenario AM peak hour, a maximum RFC of 0.35 can be observed on both the Miller's Lane and Dublin Rd arms, whilst both experiences a maximum queue of 0.5 pcu. For the PM peak hour, a maximum RFC of 0.66 can be observed along the Skerries Rd (W) arm with a maximum queue length of 1.9 pcu.
- 8.5.6 In the 2039 scenario AM peak hour, a maximum RFC of 0.38 can be observed on Miller's Lane arms and experience a maximum queue of 0.6 pcu. For the PM peak hour, a maximum RFC of 0.71 can be observed along the Skerries Rd (W) arm with a maximum queue length of 2.4 pcu.

Year Scenario	Period	Description	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DN	AM Peak	Miller's Ln (E)	0.4	3.44	0.30
		Skerries Rd (R127) (W)	0.4	4.90	0.30
		Dublin Rd (R127) (N)	0.5	2.61	0.32
	PM Peak	Miller's Ln (E)	0.3	2.75	0.21
		Skerries Rd (R127) (W)	1.5	8.16	0.60
		Dublin Rd (R127) (N)	0.3	2.46	0.24
2029 DN	AM Peak	Miller's Ln (E)	0.5	3.75	0.35
		Skerries Rd (R127) (W)	0.5	5.31	0.34
		Dublin Rd (R127) (N)	0.5	2.74	0.35
	PM Peak	Miller's Ln (E)	0.3	2.87	0.23
		Skerries Rd (R127) (W)	1.9	9.97	0.66
		Dublin Rd (R127) (N)	0.4	2.58	0.27
2039 DN	AM Peak	Miller's Ln (E)	0.6	3.96	0.38
		Skerries Rd (R127) (W)	0.6	5.60	0.36
		Dublin Rd (R127) (N)	0.6	2.85	0.37
	PM Peak	Miller's Ln (E)	0.3	2.94	0.25
		Skerries Rd (R127) (W)	2.4	11.73	0.71
		Dublin Rd (R127) (N)	0.4	2.66	0.29

Table 8.7: Junction 4 "Do-Nothing" Scenario ARCADY Analysis Results

Do Something Scenario

8.5.7 The ARCADY results (**Table 8.8**) indicate that the Dublin Road (R127) / Miller's Lane / Skerries Road (R127) Roundabout will operate within capacity for the Opening Year 2024 "Do-Something" AM peak hour, with a maximum RFC value of 0.32 on both the Miller's Lane and Dublin Rd arms and both experiencing a queue of 0.5 pcu. For the 2024 "Do-Something" PM peak hour with a maximum RFC value of 0.60 occurring on the Skerries Rd (W) arm with a corresponding maximum queue length of 1.5 pcu.

8.5.8 For the 2029 AM peak hour, a maximum RFC value of 0.40 is observed along the Miller's Ln arm with a corresponding maximum queue length of 0.7 pcu. In the PM

peak hour, a maximum RFC value of 0.68 is observed on the Skerries Rd arm with a corresponding queue length of 2.1 pcu.

8.5.9 For the 2039 AM peak hour, a maximum RFC value of 0.43 is again observed on the Miller's Ln arm with a corresponding maximum queue length of 0.7 pcu. In the PM peak hour, a maximum RFC value of 0.73 is observed on the Skerries Rd arm, with a corresponding queue lengths of 2.6 pcu.

Year Scenario	Period	Description	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	Miller's Ln (E)	0.5	3.51	0.32
		Skerries Rd (R127) (W)	0.4	4.98	0.30
		Dublin Rd (R127) (N)	0.5	2.62	0.32
	PM Peak	Miller's Ln (E)	0.3	2.77	0.21
		Skerries Rd (R127) (W)	1.5	8.28	0.60
		Dublin Rd (R127) (N)	0.3	2.48	0.24
2029 DS	AM Peak	Miller's Ln (E)	0.7	4.04	0.40
		Skerries Rd (R127) (W)	0.5	5.59	0.35
		Dublin Rd (R127) (N)	0.5	2.77	0.35
	PM Peak	Miller's Ln (E)	0.3	2.92	0.25
		Skerries Rd (R127) (W)	2.1	10.58	0.68
		Dublin Rd (R127) (N)	0.4	2.64	0.28
2039 DS	AM Peak	Miller's Ln (E)	0.7	4.29	0.43
		Skerries Rd (R127) (W)	0.6	5.91	0.38
		Dublin Rd (R127) (N)	0.6	2.88	0.38
	PM Peak	Miller's Ln (E)	0.4	3.00	0.26
		Skerries Rd (R127) (W)	2.6	12.54	0.73
		Dublin Rd (R127) (N)	0.4	2.72	0.30

Table 8.8: Junction 4 "Do-Something" Scenario ARCADY Analysis Results

Do Something Scenario – With Zebra Crossing Option

8.5.10 An alternative junction layout has been explored at the Skerries Rd / Dublin Rd / Miller's Lane roundabout with the objective of mitigating the impact of the additional subject generated traffic flows as well as enhancing pedestrian accessibility to and

from Skerries railway station. This design considers the incorporation of a single circulating carriageway, raised flat top pedestrian crossing facilities (Zebra) on two arms (the Skerries Rd and the Miller’s Lane arms), and the slight extension of the two lane approach to reduce vehicle queuing lengths. Planning permission (Reference section 4.1) has already been granted (subject to planning conditions) for the applicant to implement the junction upgrades as presented in **Figure 8.7**.

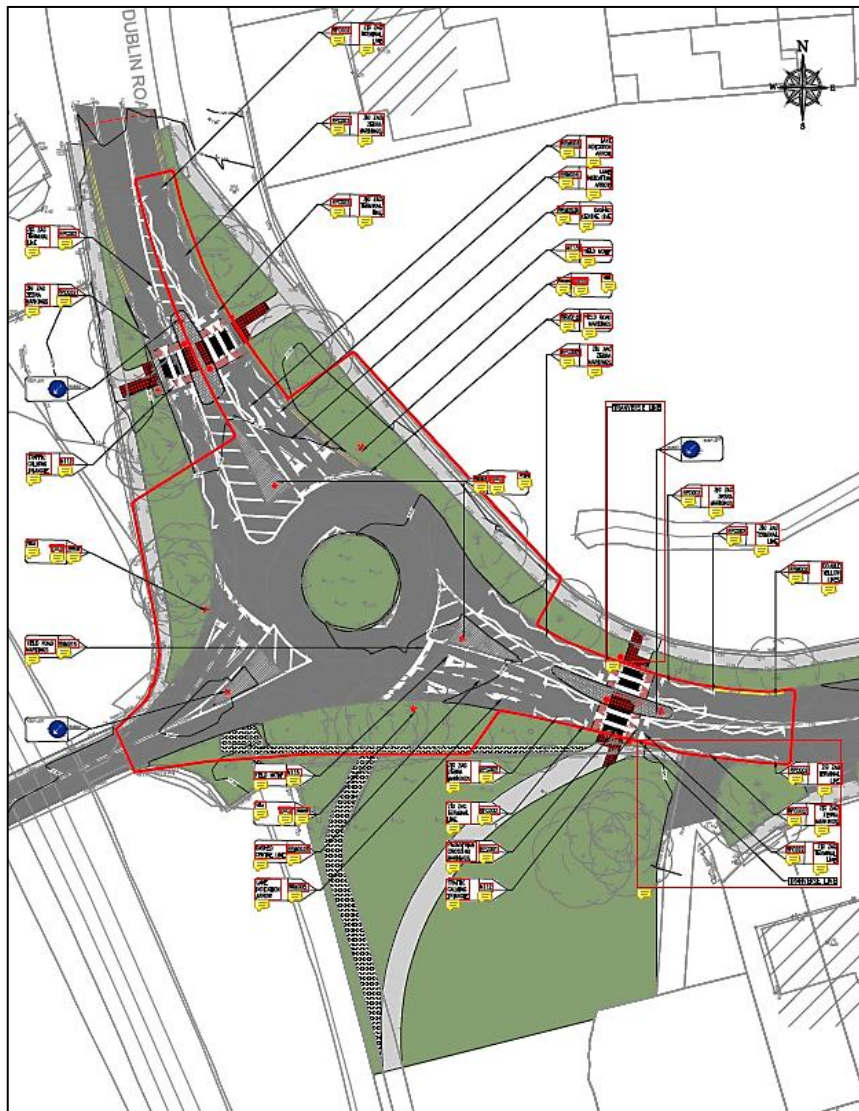


Figure 8.7: Junction 2 Zebra Crossing Option

8.5.11 Additional ARCADY analysis was carried out to establish how the junction will operate with the added traffic flows generated by the development. The maximum RFC and the maximum queue length experienced by vehicles at each arm of the junction is detailed in **Table 8.9** for the Do Something scenario.

Year Scenario	Period	Description	Mean Max Queue (pcu)	Delay (s)	RFC
2024 DS	AM Peak	Miller's Ln (E)	0.4	3.21	0.30
		Skerries Rd (R127) (W)	0.5	5.75	0.34
		Dublin Rd (R127) (N)	0.6	3.30	0.37
	PM Peak	Miller's Ln (E)	0.2	2.56	0.20
		Skerries Rd (R127) (W)	1.2	6.53	0.54
		Dublin Rd (R127) (N)	0.4	2.91	0.27
2029 DS	AM Peak	Miller's Ln (E)	0.6	3.66	0.37
		Skerries Rd (R127) (W)	0.7	7.17	0.41
		Dublin Rd (R127) (N)	0.7	3.61	0.42
	PM Peak	Miller's Ln (E)	0.3	2.69	0.23
		Skerries Rd (R127) (W)	1.6	7.90	0.61
		Dublin Rd (R127) (N)	0.5	3.13	0.32
2039 DS	AM Peak	Miller's Ln (E)	0.7	3.87	0.40
		Skerries Rd (R127) (W)	0.8	8.00	0.45
		Dublin Rd (R127) (N)	0.8	3.83	0.44
	PM Peak	Miller's Ln (E)	0.3	2.76	0.25
		Skerries Rd (R127) (W)	1.9	8.96	0.66
		Dublin Rd (R127) (N)	0.5	3.25	0.34

Table 8.9: Junction 4 "Do-Something" Scenario Zebra Crossing Option ARCADY Analysis

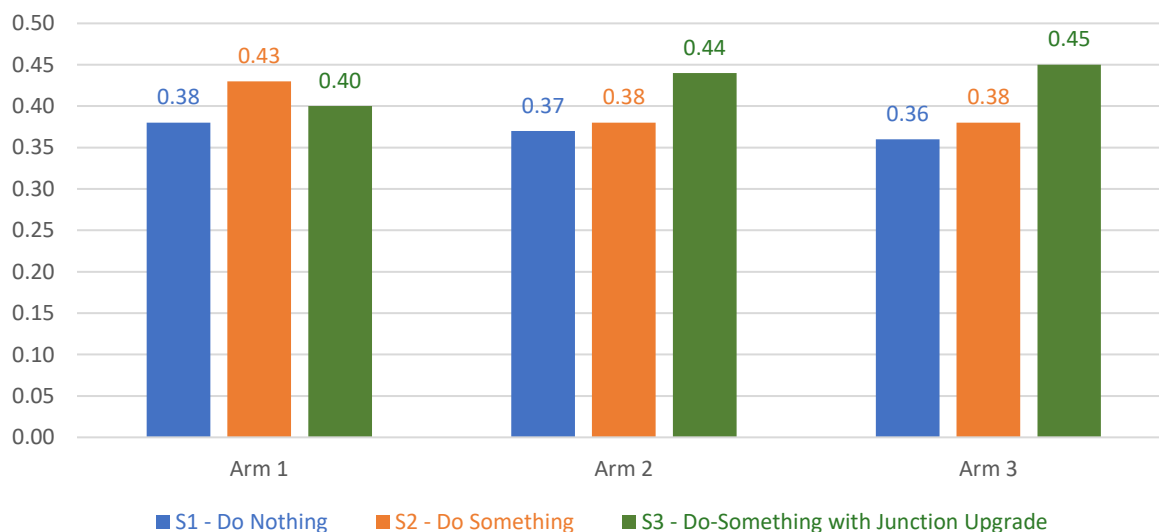
8.5.12 The results of the ARCADY analysis revealed that the junction will continue to operate well within capacity during both the "Do-Something" AM and PM peak hours in the Opening and Future Design Years. The analysis records a maximum RFC of 0.45 and a corresponding maximum queue length of 0.8 pcus during the 2039 AM peak hours and a maximum RFC of 0.66 and queue length of 1.9 during the 2039 PM peak hours.

Junction 4 - Comparison of Modelling Predictions

8.5.13 In reference to the principal results of the ARCADY (existing junction layout and existing junction with zebra crossing) based junction simulations, the results of each arm are summarised in **Graph 3** and **Graph 4** below. The graph shows the maximum recorded capacity below for the 2039 AM and PM peak hour periods, respectively. The scenarios compared below are the following:-

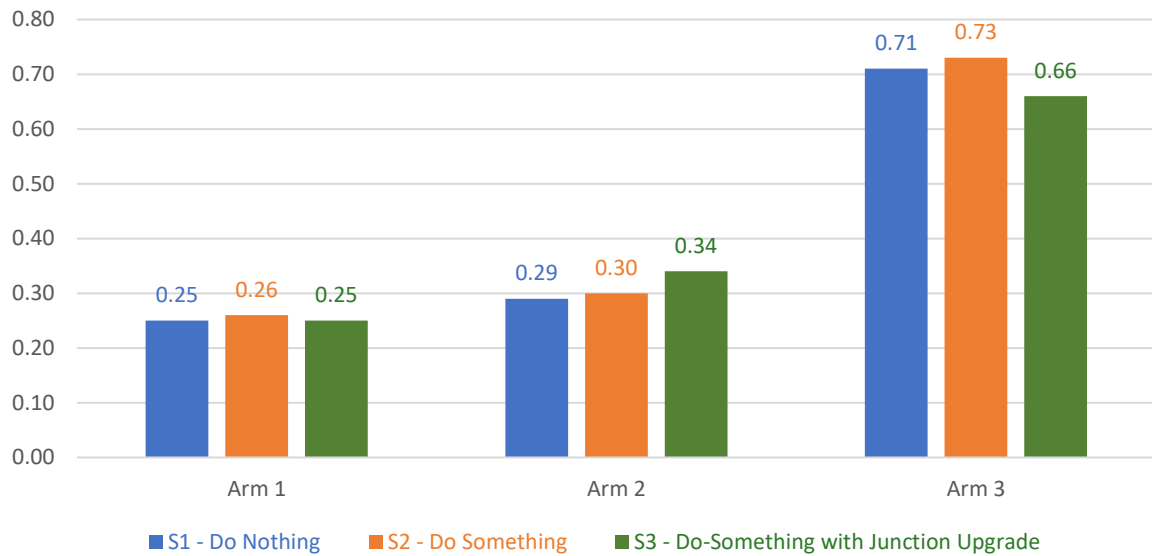
- Scenario S1 – “Do-Nothing”
- Scenario S2 – “Do-Something”
- Scenario S3 – “Do-Something with Junction Upgrade”

8.5.14 The comparison of the key modelling output data reveals that in the 2039 AM peak hour period (**Graph 3**), the introduction of a zebra crossing increases the RFC from 0.36 in Scenario S1 (Arm 3) and 0.38 in Scenario S2 (Arm 2 and 3) to a maximum RFC of 0.40 in Scenario S3 (“Do-Something with Junction Upgrade” on Arm 1). The analysis of the results demonstrates the small adverse impact that the introduction of the Zebra crossing facilities has upon the overall vehicle capacity. However, it must be noted that both the accessibility and road safety levels for vulnerable road users are enhanced following their introduction.



Graph 3: Junction 4 RFC Comparison (2039 AM Peak Hour)

8.5.15 During the 2039 PM peak hour period (**Graph 4**), the upgraded configuration offers lower RFC values on Arm 1 and Arm 3 compared to both the “Do-Nothing” and the “Do-Something”. Although Arm 2 experiences a slight increase in RFC, it’s impact is considered minute.



Graph 4: Junction 4 RFC Comparison (2039 PM Peak Hour)

- 8.5.16 In the context of the subject lands both (i) the enhanced accessibility / safety levels and (ii) operational performance of Miller’s Lane are of particular interest. In terms of accessibility, it is recommended that the provision of enhanced pedestrian crossing facilities is considered a key requirement.
- 8.5.17 The operational performance of Miller’s Lane arm in the AM and Skerries Rd arm in the PM peak periods have the potential to influence driver (with either an origin or destination in the subject Hacketstown zoned lands) routing decisions. Additional vehicle delays experienced on these arms on a regular basis could encourage such drivers to divert and travel to/from the lands via Gold Links Road (South) which would be considered undesirable (at least until such time that the southern relief road is implemented in the long term).
- 8.5.18 Based upon the results reported in regard to the Skerries Rd / Dublin Rd roundabout, it can be concluded that the introduction of a zebra crossing achieves the optimum balance between conflicting demands, retains sufficient capacity to discourage inappropriate strategic rerouting and enhances accessibility and road safety for the benefits of vulnerable road users.

8.6 PUBLIC TRANSPORT NETWORK

8.6.1 The following paragraphs investigate the existing capacity of the local public transport network to accommodate the proposed development. The analysis is based upon a review of the existing service levels as discussed previously in Section 2.9 and the results of surveys and predicted passenger previously in Section 6.4.

Rail Network Capacity

8.6.2 The analysis summarised in **Tables 8.10** and **8.11** below is based upon the assumptions that (i) no additional carriages are provided by Irish Rail to the individual services above that recorded in February 2022, (ii) no additional services are added to the Irish Rail timetable, and (iii) the emerging *Dart+ Coastal North* project is not implemented. As such, no additional capacity is provided to the rail network at Skerries Railway Station above that recorded in the baseline February 2022 scenario.

Train Direction	Existing Network Passenger Capacity	Reserve Capacity (2 nd Feb. 2022)		Adjusted Reserve Capacity (Post Covid-19)		Additional Forecast Passenger Levels per Development			Forecast Reserve Capacity (Post Development)
		Pass. No's	%	Pass. No's	%	LDA	Noonan	Total	
Southbound	4421	2854	65%	1458	33%	197	83	280	1178 (26.6%)
Northbound	1400	1021	73%	683	49%	48	20	68	615 (43.9%)
Total	5821	3875	67%	2141	37%	245	103	348	1793 (30.8%)

Table 8.10: Forecast Capacity at Skerries Railway Station – AM Period

8.6.3 The analysis reveals that the proposed LDA residential development has the potential to generate 245 rail users (Ref. Section 6.3) during the AM period (0600-1000). During the same period the neighbouring Noonan Construction committed development has the potential to generate 103 rail patrons. When this additional passenger loading is considered, it can be established that the rail network serving Skerries Railway Station will continue to benefit from an overall two-way reserve capacity of 30.8% or 1793 passenger spaces. As expected, the southbound services to Dublin experience the largest level of demand in the morning period with the reserve capacity on these services returning a lower level of reserve capacity at 26.6% or 1178 passenger spaces.

Train Direction	Existing Network Passenger Capacity	Reserve Capacity (2 nd Feb. 2022)		Adjusted Reserve Capacity (Post Covid-19)		Additional Forecast Passenger Levels per Development			Forecast Reserve Capacity (Post Development)
		Pass. No's	%	Pass. No's	%	LDA	Noonan	Total	
Southbound	2240	1827	82%	1459	65%	55	23	78	1381 (61.6%)
Northbound	4020	2312	58%	790	20%	232	99	331	459 (11.4%)
Total	6260	4139	66%	2249	36%	287	122	409	1840 (29.3%)

Table 8.11: Forecast Capacity at Skerries Railway Station – PM Period

8.6.4 The analysis reveals that the proposed LDA development has the potential to generate 287 rail users during the PM period (Ref. Section 6.3). The neighbouring Noonan Construction committed development has the potential to generate 122 rail patrons. When this additional passenger loading is considered, it can be established that the rail network serving Skerries Railway Station will continue to benefit from an overall two-way reserve capacity of 29.3% or 1840 passenger spaces.

8.6.5 The northbound services towards Dundalk/Drogheda (via Skerries) from Dublin experience the largest level of demand with the reserve capacity on these services at 11.4% or 459 passenger spaces following the completion of BOTH the proposed LDA residential development and the adjoining third party Noonan Construction development.

Bus Network

8.6.6 The analysis summarised in **Tables 8.12** and **8.13** below is based upon the assumptions that

- larger bus vehicles with greater passenger capacity are NOT provided by the operators of the individual services with carrying capacity remaining as recorded in February 2022,
- no additional services are added to the Dublin Bus / GoAhead timetables, and
- the emerging *Bus Connects* project is not implemented.

8.6.7 Accordingly, the assessment summarised below assumes that the existing bus services remain unaltered with no additional bus services (e.g., increased frequency) or replacement buses (e.g., replacement of existing bus with a larger vehicle) offering any additional capacity beyond that recorded by IDASO Ltd.

Bus Direction	Existing Network Passenger Capacity	Reserve Capacity (2 nd Feb 2022)		Adjusted Reserve Capacity (Post Covid-19)		Additional Forecast Passenger Levels per Development			Forecast Reserve Capacity (Post Development)
		Pass. No's	%	Pass. No's	%	LDA	Noonan	Total	
Southbound	1515	1405	92.7%	1352	89.2%	47	20	67	1285 (84.9%)
Northbound	681	597	87.7%	556	81.6%	0	0	0	556 (81.6%)
Total	2196	2002	91.1%	1908	86.9%	47	20	67	1841 (83.8%)

Table 8.12: Forecast Capacity of Bus Network – AM Period

8.6.8 The trip generation analysis and subsequent modal assignment exercise reveals that the proposed LDA residential development has the potential to generate 47 additional bus users during the AM period (RE. Section 6.3). During the same period the neighbouring third party development proposed by the adopted Noonan Construction committed development has the potential to generate 20 additional bus patrons in the morning period. When this additional passenger loading is considered, it can be established that the bus network serving Skerries will continue to benefit from an overall two-way reserve capacity of 83.8% or 1841 passenger spaces in the morning periods. As expected, the southbound services in the direction of Lusk experience the largest level of demand in the morning period with the reserve capacity on these services returning a reserve capacity of 84.9% or 1285 passenger spaces.

Bus Direction	Existing Network Passenger Capacity	Reserve Capacity (2 nd Feb 2022)		Adjusted Reserve Capacity (Post Covid-19)		Additional Forecast Passenger Levels per Development			Forecast Reserve Capacity (Post Development)
		Pass. No's	%	Pass. No's	%	LDA	Noonan	Total	
Southbound	720	628	88.7%	584	81.2%	0	0	0	584 (81%)
Northbound	1636	1516	93.2%	1458	89.1%	55	23	78	1380 (84.3%)
Total	2356	2145	91.8%	2043	86.7%	55	23	78	1965 (83.4%)

Table 8.13: Forecast Capacity of Bus Network – PM Period

8.6.9 During the PM period, the proposed LDA residential development has the potential to generate 55 additional bus users (Ref. Section 6.3). During the same period, the Noonan Construction committed development has the potential to generate 23 additional bus patrons. When this additional passenger loading is considered, it can be established that the bus network serving Skerries will continue to benefit from an overall two-way reserve capacity of 83.4% or 1965 passenger spaces. The largest level of demand predicted for the PM periods is generated on the northbound services

with a reserve capacity of 84.3% or 1380 passenger spaces remaining following the additional loading generated by the proposed development.

Conclusion

8.6.10 The assessment of the existing public transport network including both local rail and bus based public transport networks reveals that sufficient capacity is available to accommodate the additional demand projected to be generated by the proposed 345 unit residential development by the LDA in Hacketstown, Skerries.

9.0 RESPONSE TO AUTHORITY'S COMMENTS

9.1 INTRODUCTION

9.1.1 This section provides responses to the specific items raised by Fingal County Council and An Bord Pleanála officers in regard to this application as put forward in the Written Opinion by FCC (dated 21st November 2020) and in An Bord Pleanála's Inspector's Report (dated December 2020). The items raised are discussed in detail in the following sections.

9.2 FCC COMMENTS & DBFL RESPONSES

9.2.1 This section provides responses to the 14 number recommendations / queries raised within FCC's Written Opinion (dated 21st November 2020) in regard to the specific topic of traffic and transport.

FCC Item 1

The parking is below Development Plan Standards and below what the Transportation Planning section would consider to be the minimum parking requirements. Parking for the development would be provided at a rate of 1.01 spaces per unit. Consequently, there is a deficit of 265 parking spaces from the Development Plan Standards or 151 below what the Transportation Planning Section would consider to be the absolute minimum practical parking requirement. This deficit does not take into account consideration the visitor parking requirements which would require a further 61 parking spaces.

A breakdown of the Apartment blocks and the allocated parking in that location per unit type should be provided.

DBFL Response to Item 1

9.2.2 DBFL can confirm that in response to the above comments the design of the scheme proposals have been revised with the objective of increasing the number of on-site car parking provision. The updated design now provided for on average 1.2 car parking spaces per unit. The revised proposals now include a total of 414 no. car parking spaces. This provision comprises of 368 no. residential spaces, 40 no. short-stay visitor spaces, 5 no. (dual use) creche spaces and 1 no. dedicated GoCar space. We note that the creche parking can perform a dual use and subsequently be used as visitor spaces on weekday evenings and at all times during weekends when the

creche is closed. This increases the quantum of visitor spaces from 40 to 45 when the creche is closed. Further details are provided in Chapter 5.

- 9.2.3 As introduced above the new provision equates to 1.2 spaces per unit including the visitor spaces. Although the provision is still some 202 spaces less than FCC's requirements which is considered the 'norm', the proposals we believe are in line with the DHPLG guidelines which states that the "*planning authority must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard*" in specific accessible locations such as the subject site and considering the range of mitigation measures proposed.

FCC Item 2

The applicant plans to provide a four-classroom creche located to the north east of the proposed development located on the main access road. It is not clear what staff parking has been provided at this location. The design of the creche does not include a set-down area of parallel parking spaces.

DBFL Response to Item 2

- 9.2.4 A total of 5 no. parking spaces will be allocated to the creche unit as detailed in Chapter 5 of this report. This level of provision comprises 2 no. staff parking as per FCC development standards and an additional 3 no. drop-off / collection spaces. Two of these three drop-off / collection spaces will be parallel spaces with the third position adjoining a disabled bay (and subsequently benefiting from a 1.2m wide buffer to assist access/egress). The spaces are conveniently located within close proximity of the creche building as illustrated in **Figure 5.5** in Section 5.2.

FCC Item 3

There would be a cycle parking requirement of a minimum of 799 residential bicycle parking spaces to be provided. The development is providing 742 spaces.

A breakdown of the apartment blocks and cycle parking requirement per block / unit type should be provided.

Several of the proposed locations of the bicycle parking are generally acceptable, however some locations would not have as good passive supervision of the storage areas as others and are not located in close proximity to the units. Details of the location of bicycle parking should be discussed further and rationalised.

DBFL Response to Item 3

- 9.2.5 The updated design proposals now include for a total of 802 no. on-site cycle parking spaces comprising (i) 674 no. long-term and (ii) 128 no. short-term spaces. This total 'long stay' quantum significantly exceeds FCC's development standards, and is fully in accordance with the corresponding DHPLG's guidelines for both 1 bed and 2 bed apartment / duplex units. The provision for the 3 bed apartment / duplex units equates to 85% of the recommended DHPLG quantum. A breakdown of residential cycle parking for each block is illustrated in **Table 5.4 (Chapter 5)** as requested.
- 9.2.6 The proposed cycle parking spaces will be conveniently located in close proximity to each blocks individual access location and generally in accordance with the recommended distances of (i) 25m for short stay cycle parking spaces, and (ii) within 50m for long stay cycle parking spaces as per best practise. The communal stores / hubs serving Blocks B and E will be available at all times with only residents' permitted to access these dedicated bike parking areas. These facilities will also benefit from the provision of weather protected, secure parking, and the implementation of CCTV in areas already benefiting from good passive security levels.

FCC Item 4

Bicycle parking for housing units without side access has not been adequately addressed in the current layout. Units such as the mid-terrace units would have to drag through the house for secure storage which makes the option of bicycle usage less attractive, and it is not likely that the external storage provided would be utilised. This should be addressed in the layout.

DBFL Response to Item 4

- 9.2.7 All Mid-terraced residential house units with no dedicated external access route to their rear gardens are now provided with dedicated secure 'Sheffield Stands' which are located in-curtilage in secure areas along the frontage of each unit (Reference Figure 9.1). It is also noted that the Duplex/Triplex units that will be accessed from the courtyard (e.g., Block F) will also be provided with stands and will be located immediately adjoining their entrance (Reference 9.2 below). In addition to these dedicated cycle parking spaces at each unit, communal stores are being proposed at Blocks B and E as well as external storage hubs which will be provided throughout the site as detailed in **Section 5.1**.



Figure 9.1: Sheffield Stands at Mid-Terrace Units

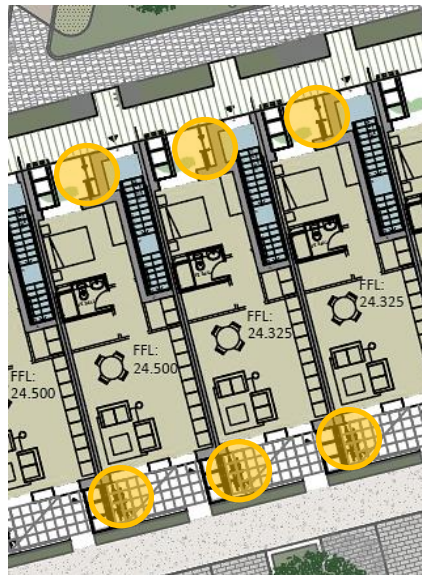


Figure 9.2: Sheffield Stands at Block F

FCC Item 5

Public lighting and CCTV along the proposed pedestrian connection to the railway station should be provided.

DBFL Response to Item 5

9.2.8 DBFL confirm that public lighting and CCTV are to be provided along the route of the extended north-south greenway located parallel to the rail corridor and within the extents of the applications RED LINE boundary.

FCC Item 6

A sightline detail for the main access from Golf Links Road has been provided in accordance with DMURS. However, a sight line drawing for the two units with a separate access onto Golf link road should also be provided.

DBFL Response to Item 6

- 9.2.9 Sightlines with a 'Y' distance parameter of 45m (for a 50kph design speed) have been provided on both of the developments two vehicle connections with Golf Links Road to the south of the residential development as illustrated in DBFL Drawing No. 190170-DBFL-RD-SP-DR-C-1002.

FCC Item 7

The entry to the development is called up as a 29km/hr zone. It should be noted that only a 30km/hr zone would be enforceable. Revised signage should be provided.

DBFL Response to Item 7

- 9.2.10 Revised signage (30km/hr zone) will be provided as requested as detailed in DBFL Drawing No. 190170-DBFL-RD-SP-DR-C-1002.

FCC Item 8

Details of the tie-in to the future proposed Ballygossan Park Phase should be clarified and the road priority clearly defined.

DBFL Response to Item 8

- 9.2.11 The proposed residential development will connect with Ballygossan Park (Phase 1) via the Advance Infrastructure Application works (AIA) detailed in Section 4.3.

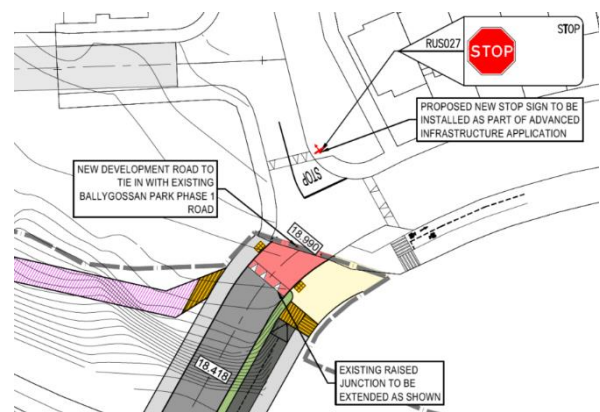
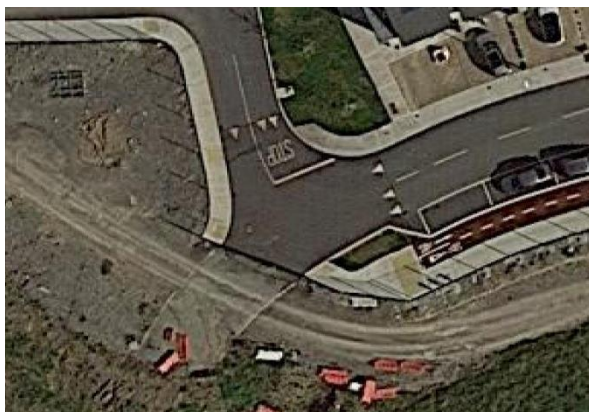


Figure 9.3: Existing and Proposed Connection of AIA with Ballygossan Pk

- 9.2.12 The AIA works being advanced by the LDA considers the construction of Regional Drainage Facility (RDF) for the surface water management of the Hacketstown LAP lands and includes a new 66m long link road across the RDF between the subject LDA residential lands and Ballygossan Park; amongst other associated enabling and service works. Planning permission was granted by Fingal County Council for the AIA works (FCC Ref. F21A/0287) on 15th of November 2021. An appeal was subsequently lodged on the 13th of December 2021 with the AIA application now under consideration by ABP (ABP-312189-21).
- 9.2.13 The details of the tie-in between the subject residential development and the AIA works (across the RDF) are detailed within the scheme drawings accompanying this SHD application. The details of the tie-in between the AIA works and Ballygossan Park (Phase 1) as illustrated in **Figure 9.3** have been considered as part of the previous separate AIA application and subsequently granted planning permission by the local planning authority.

FCC Item 9

It is not clear from the layout drawings if the placement of the proposed traffic calming ramps would be in the way of access and egress from parking spaces. The road ramps should not be placed where vehicles must traverse the slope of the ramp to access parking spaces.

DBFL Response to Item 9

- 9.2.14 The proposed 75mm high traffic calming ramps have been incorporated at locations including (i) positions where informal pedestrian crossings (with tactile paving on both sides of the carriageway) are provided to enhance conspicuousness of the crossing to vehicle drivers and afford greater priority to vulnerable road users, and (ii) at locations where the short straight lengths of the street alignment may otherwise encourage inappropriate vehicle speeds. In response to the authorities concerns the redesign of these flat top traffic calming ramps (reference **Figure 9.5**) has sought to minimise any impact upon the vehicle accessibility to/from the adjoining car parking bays. Nevertheless, the low speed of vehicles in the process of manoeuvring into, or out from, neighbouring the car parking bays will ensure that vehicle swept path that may (or may not) encroach onto or over part of the traffic ramp will not be restricted from completing the manoeuvre.

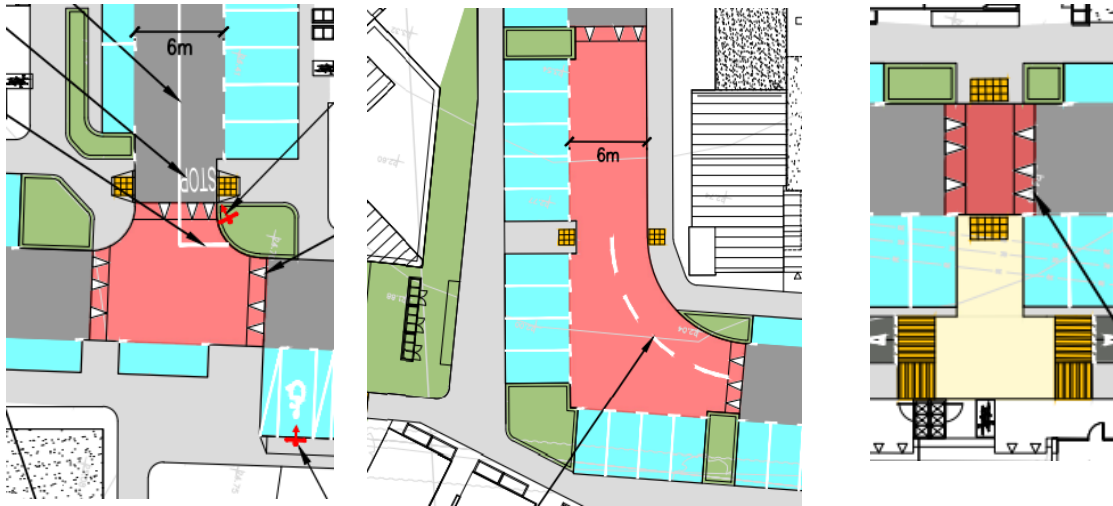


Figure 9.5: Parking Bays at/near Traffic Calming Ramps

Item 10

All the parking spaces for the residential house units should include EV charging points. A minimum of 10% of the residential apartment and duplex unit parking spaces should have EV charging points from completion of the proposed development with all ducting and services provided as part of the proposed development to facilitate non-disruptive retro fitting of EV charging points for all the remaining residential parking spaces. Details of the location and number of charging points should be provided with the main application.

DBFL Response to Item 10

9.2.15 The redesigned scheme now proposes a total of 45 no. of dedicated EV spaces This equates to approximately 12% of all residential spaces. EV parking will be located at both surface and at under croft (reference Section 5.2) level. The specific location of the 45 EV bays is presented in DBFL drawing No. 190170-DBFL-TR-SP-DR-C-1020 which accompanies the planning application.

Item 11

The swept path analysis provided for the bin trucks and emergency vehicles indicates areas of conflict within some of the cul-de sacs where the vehicles appear to overrun parking spaces and footpaths. This should be addressed, and all area of potential conflict or obstruction deigned out.

DBFL Response to Item 11

- 9.2.16 For the updated LDA scheme design, a swept path analysis has been carried out to ensure waste collection and emergency vehicles do not overrun parking spaces and footpaths in order to avoid any potential areas of conflict / obstruction. The findings of the updated swept path analysis had been addressed by DBFL and illustrated in Drawing No. 190170-DBFL-RD-SP-DR-C-1004.

Item 12

All finished should comply with the Council's Standard for Taking in Charge to facilitate any future unplanned plebiscites to have these areas (car parking spaces) taken in charge. Alternatively, a suitable condition excluding these areas from being taken in charge that can legally preclude a future plebiscite should be included in any subsequent grant of planning permission. Further discussions in relation to material type and taking in charge is required.

DBFL Response to Item 12

- 9.2.17 DBFL confirm that all materials located in the specific areas that are to be taken-in-charge (reference to corresponding drawing included with the planning documentation) will comply to FCC development management / adoption standards and welcome any conditions regarding same that the planning authority consider appropriate to ensure compliance.

Item 13

Road Safety Audits should be carried out as part of the proposed development at the relevant stages as outlines in current edition of Transportation Infrastructure Ireland guidelines GE-STY-1027.

DBFL Response to Item 13

- 9.2.18 An independent Stage 1 Road Safety Audit (RSA) has been commissioned and undertaken by Bruton Consulting Engineers. The scheme presented for planning includes the amendments incorporated into the scheme design to address the issues raised by the auditors. The Stage 1 RSA report is included in the application documentation. The applicant welcomes the application of any planning conditions that may require subsequent Stage 2 and / or Stage 3 RSA's to be undertaken during the subsequent design and construction stages respectively.

FCC Item 14

A final Construction Management Plan will need to be agreed with the Operations Department prior to construction of the proposed development. The Plan should include the construction phasing of development and haul routes.

DBFL Response to Item 14

- 9.2.19 As stated in **Section 7.3**, a Construction and Environmental Management Plan has been compiled by DBFL and accompanies the planning application. This plan will in due course be developed in more details, and in consultation with the planning authority by the appointed contractor. The plan incorporates a range of integrated control measures and associated management initiatives to ensure any impacts from the proposed developments on-site construction activities are mitigated.
- 9.2.20 The plan includes the provision of a dedicated Construction Access (for the duration of the works) as detailed in **Figure 7.3**. This temporary access will be located on Golf Links Road and will provide a dedicated but segregated access for all construction traffic traveling to / from the site and the on-site temporary contractors compound.

9.3 AN BORD PLEANÁLA COMMENTS & DBFL RESPONSES

- 9.3.1 This section provides responses to the opinions provided and queries raised within An Bord Pleanála's Inspector's Report (dated December 2020) for this SHD application. Items are numbered as they appear in section 8 of the Inspector's Report

ABP Item 7

Identify the location of cycle storage, its allocation to units and how appropriate security is achieved.

DBFL Response to Item 7

- 9.3.2 The location and type bicycle storage facilities across the LDA SHD scheme is discussed in section 5.1 of this report. Whilst many dwellings have been provided with their own individual bicycle parking facilities (Ref Figure 5.5) adjoining the dwelling unit entrance the design approach also includes the implementation of a number of external private and communal bike storage facilities / sharded 'hubs' as illustrated in **Figure 5.2** with the specific number provided in hub / storage area detailed in Table 5.2 (short Term) and Table 5.3 (long Term). The allocation of the total 802 bicycle

parking opportunities to each of the 10 residential blocks (A1 – H) is detailed in **Table 5.4**.

- 9.3.3 The 'long term' communal storage hubs such as those illustrated in Figure 5.1 are located in areas which benefit from good passive surveillance, provision of CCTV, weather protection, and gated / secure store within which racks are provided to which bicycles can be locked to. The dispersed nature of these 'hubs' seeks to minimise walk distance and provide convenience access to bicycles from the adjoining residential dwellings.

ABP Item 8

Demonstrate accordance with DMURS. The inclusion of surface car parking should be considered in light of any impact upon the quality of the proposed landscape, and further detail and/or justification should be provided around this.

DBFL Response to Item 8

- 9.3.4 In direct response to the above comments the scheme proposals have been redesigned with the introduction of a podium level / undercroft car parking facility within a remodelled Block E. This new design approach has enabled the quantum of on-street car parking to be significantly reduced (compared to earlier proposals) which in turn has provided the opportunity to redesign the streetscape with the objectives of ensuring full compliance with the design recommendations outlined in DMURS. An accompanying DMURS Compliance Statement summarises how the redesigned streetscape layout has successfully incorporated the principles, placemaking attributes and geometric characteristics advocated within DMURS for residential streets .

ABP Item 12

Detail of infrastructure upgrades to Golf Links Road and the timeframe for delivery in context with the phasing programme for the proposed development.

DBFL Response to Item 12

- 9.3.5 In July 2020 the LDA submitted a planning application to Fingal County Council to undertake the off-site Accommodation Works as discussed previously in Section 4.1 of this report. The local planning authority granted planning permission for these off-site works (subject to 4 no. conditions) on 15th of January 2021 (FCC Ref. F20A/0324).

On the 16th of February 2021, the applicant was notified that a third-party appeal had been submitted to An Bord Pleanála (ABP). Following the submission of a formal response by the applicant, a decision to grant permission was made by ABP on 19th of July 2021 (ABP Ref No. 309409-21).

9.3.6 The permitted off-site accommodation works considers the enhancement of the following two off-site junctions as located to the north of the subject SHD lands;

- Junction 1 – Gold Links Rd / Miller’s Lane / Shenick Rd
- Junction 2 – Dublin Rd (R127) / Millers Lane / Skerries Rd

9.3.7 The proposed new infrastructure works at Junction 1 (as presented in **Figure 8.5**) can be summarised as follows;

- Realignment of the southern arm (Gold Links Rd – South) over a distance of approximately 180m.
- Implementation of a ‘Blister’ type four arm shared roundabout incorporating 50mm raised central island.
- The provision of Zebra Crossing facilities on all four arms of the junction.
- The implementation of flat top traffic calming ramps on all four arms of the junctions (approximately 5m back from the roundabouts circulating carriageway).
- New Traffic Calming ramp on the southern arm (Gold Links Rd – South) located approximately 56m south of the centre of the junction.
- Removal of one existing street tree.
- Relocation of two number ESB / Light columns.
- New footpaths, road gully’s, road marking, signal and carriageway surfacing works.
- New street lighting system covering the junction.

9.3.8 The proposals also include enhancements over an additional 300m section of the Golf Links Rd corridor as located immediately to the south of the Miller’s Lane / Shenick Road junction. This proposed infrastructure improvement along this 300m section of Gold Links Road can be summarised as follows;

- Realignment and widening of the Golf Links Road carriageway
- Implementation of four traffic calming ramps on Golf Links Rd

- Construction of a formal zebra crossing facility at the existing pedestrian entrance to Park
- Reconfiguration of the Golf Links Road / Downside Heights Junction
- Enhancements to pedestrian footpaths along the eastern side of Golf Links Road including the provision of new shared and segregated cycle facilities.

9.3.9 The proposed new infrastructure works at Junction 2 (as presented in **Figure 8.7**) can be summarised as follows;

- Extension of the two-lane flared approach to the junction on both the northern (R127 Dublin Rd) and south-eastern (Millers Lane) arms of the junction.
- The provision of Zebra Crossing facilities on the northern and south-eastern arms of the junction.
- The implementation of flat top traffic calming ramps on the northern and south-eastern arms of the junction.
- New footpaths, road gully's, road marking, signal and carriageway surfacing works.
- New street lighting system covering the junction.
- Realignment of existing shared walk / cycle path (as located to the south) to align and tie-in with the new Zebra Crossing facility on the south-eastern arm of the junction.
- Replacement of existing sections of footpath with new landscaping.

9.3.10 The timescales for the implementation of the above off-site accommodation works is very much governed by planning condition No 2(b) which states;

"The proposed road upgrade works should be completed to the satisfaction of the Planning Authority prior to the completion of the construction (50% occupation) of the remaining Hacketstown LAP lands."

10.0 SUMMARY AND CONCLUSION

10.1 OVERVIEW

- 10.1.1 DBFL Consulting Engineers (DBFL) have been commissioned by the Land Development Agency (LDA) to prepare a Traffic and Transport Assessment (TTA) for a proposed residential development on lands located at Hacketstown, Skerries, County Dublin.
- 10.1.2 The subject development lands are located within the southern part (6.68 hectares) of a larger zoned lands for development (16.6 hectares) which in turn is referred to as the Hacketstown Local Area Plan (LAP5.A) lands within the Fingal County Council (FCC) County Development Plan (2017-2023). These LAP5.A are located to the south of Skerries Town and immediately east of the main Dublin-Belfast rail corridor.
- 10.1.3 As illustrated in **Figure 1.1**, the entire Hacketstown LAP5.A zoned lands incorporate two separate development plots namely (i) the Noonan Construction plot to the north and (ii) the subject Land Development Agency (LDA) plot to the south (8.2 hectares).
- 10.1.4 To date Phase 1 (103 houses) of the zoned lands development (FCC Planning Ref F11A/0309/E1), as located on part of the northern Noonan Construction plot, has been completed / fully occupied and has subsequently been named Ballygossan Park. This existing development currently utilizes a newly constructed priority-controlled site access junction off Golf Links Road. As discussed, within this report a separate third party planning application is being advanced for the remaining portion of the northern Noonan Construction plot (e.g., Ballygossan Park Phase 2).
- 10.1.5 This TTA report has been compiled in support of the planning application which is being made by the LDA for the development of the Hacketstown lands southern plot. The LDA proposals incorporates a total of 345 no. units comprising:
- 152 no. Apartments
 - 154 no. Duplex Units
 - 39 no. Houses
- 10.1.6 The purpose of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed development. Our methodology incorporated a number of key inter-related stages, including;
- Site Audit,

- Planning File Review,
- Policy Review,
- Committed Development Review,
- Commissioning and Analysis of Traffic Surveys,
- Trip Generation, Distribution and Assignment, and Network Impact
- Network Analysis.

10.1.7 As per best practice guidance this TTA has (i) considered the accumulative potential impact arising from third party committed development, (ii) carried out a range of network assessments investigating different traffic conditions for an Opening Year of 2024 and the Future Horizon Years of 2029 and 2039, whilst (iii) the scheme design has been subject to an independent Stage 1 Road Safety Audit.

10.2 SUMMARY

10.2.1 The findings of the analysis summarised within this Traffic and Transport Assessment are as follows:

- The subject site and the proposals being promoted will deliver a number of benefits pedestrians and cycles with a network of dedicated, shared and quite street linkages integrating with the off-site network to provide attractive, safe and convenient connections to the Skerries urban environment.
- The site benefits from good accessibility to both Bus and particularly Rail based public transport services with interchanges to both modes being within a convenient walking distance of the subject development site. These characteristics see the site classified as an '*Intermediate Urban Location*' in reference to the accessibility criteria defined within the DHPLG standards. The analysis has demonstrated that the public transport network has the capacity to accommodate the proposed development.
- The proposed development provides 414 no. on-site formal car parking spaces which equates to approx. 1.2 spaces per unit on average. The total provision is less than the maximum permitted as per the FCC Development Plan. Nevertheless, in reference to national DHPLG guidance the proposed provision is considered appropriate based on the accessibility levels of the site, local baseline (Census 2016) car ownership levels, and that the proposed car parking is anticipated serve only the subject LDA residential development.

- In terms of cycle parking, the proposals provide 802 no. residential cycle parking spaces incorporating 670 no. spaces for residents, 122 no. spaces for visitors and 10 no. spaces for the creche unit. The total provision not only complies with but significantly exceeds the requirements as per the FCC Development Plan, and equates overall to 92% of the DHPLG recommended bicycle parking provision for the apartment / duplex units.
- The 'worst-case' network impact analysis and subsequent junction modelling exercise has established that whilst a material impact is predicted at both of the Hacketstown lands access junctions on Golf Links Road (due predominately to the low level of baseline traffic along Golf Link Road), they are predicted to operate with significant reserve capacity in all three future design year scenarios.
- Furthermore, the proposed off-site junction enhancements at both junctions on Miller Lane (Planning Ref F20A/0324) as being implemented by the applicant have been found to fully mitigate the impact generated by the proposed residential development. The analysis demonstrates that both of these junctions are predicted to be operating within acceptable operational thresholds in each of the future design year scenarios. The identified mitigation strategy includes these off-site network enhancements and the development of a site specific Mobility Management Plan (which accompanies this report) will both facilitate and encourage the uptake of sustainable travel practices for all future residents and visitors journeys to and from the proposed development.

10.3 CONCLUSION

10.3.1 In conclusion, it is considered that the impact on the surrounding road network, as a result of the proposed development, and following the implementation of the identified mitigation strategy, will not have a significant material effect on the surrounding transport networks. This is based on the anticipated levels of traffic generated by the proposed development, the level of mitigation achieved following the implementation of the proposed upgraded road infrastructure and the information and analysis summarised in the above report.

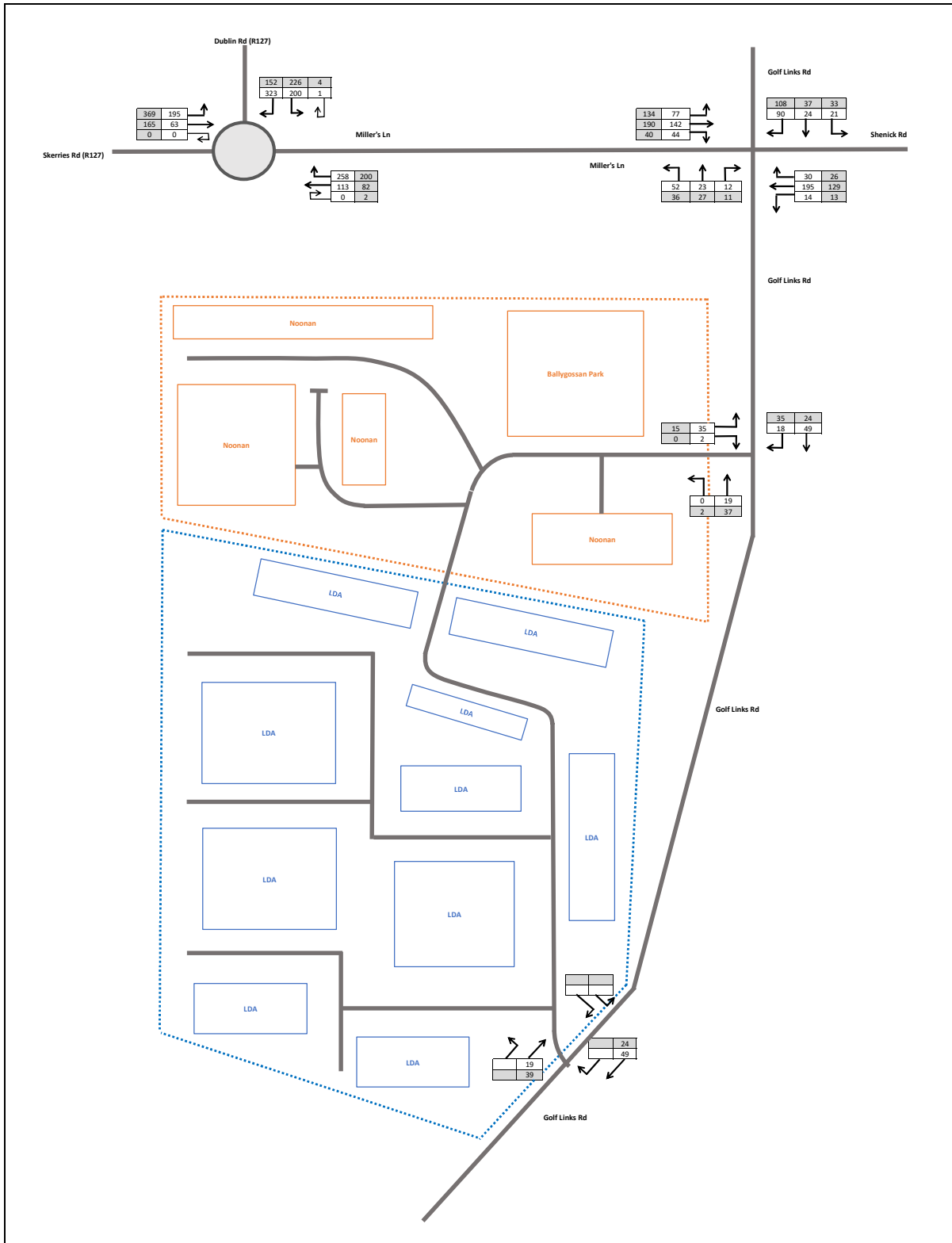
10.3.2 It is concluded that the proposals represent a sustainable and viable approach to development on the subject LDA lands and there are no significant traffic or


transportation related reasons that should prevent the granting of planning permission for the proposed residential development.

APPENDICES


APPENDIX A

Traffic Flow Diagram



 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG</p> <p>Ckd: TJ</p> <p>Date: 22/03/2022</p>
	<p>DRG. Title: Network Traffic Flows - Vehicles 2019 Base Flows</p>		<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 1</p>




 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG</p>	<p>Ckd: TJ</p>	<p>Date: 22/03/2022</p>	
	<p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p>	<p>DRG. Title: Proposed Development Trips 2024 LDA</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 4</p>	<p>Rev: D</p>		
	<p>email: info@dbfl.ie website: www.dbfl.ie</p>						




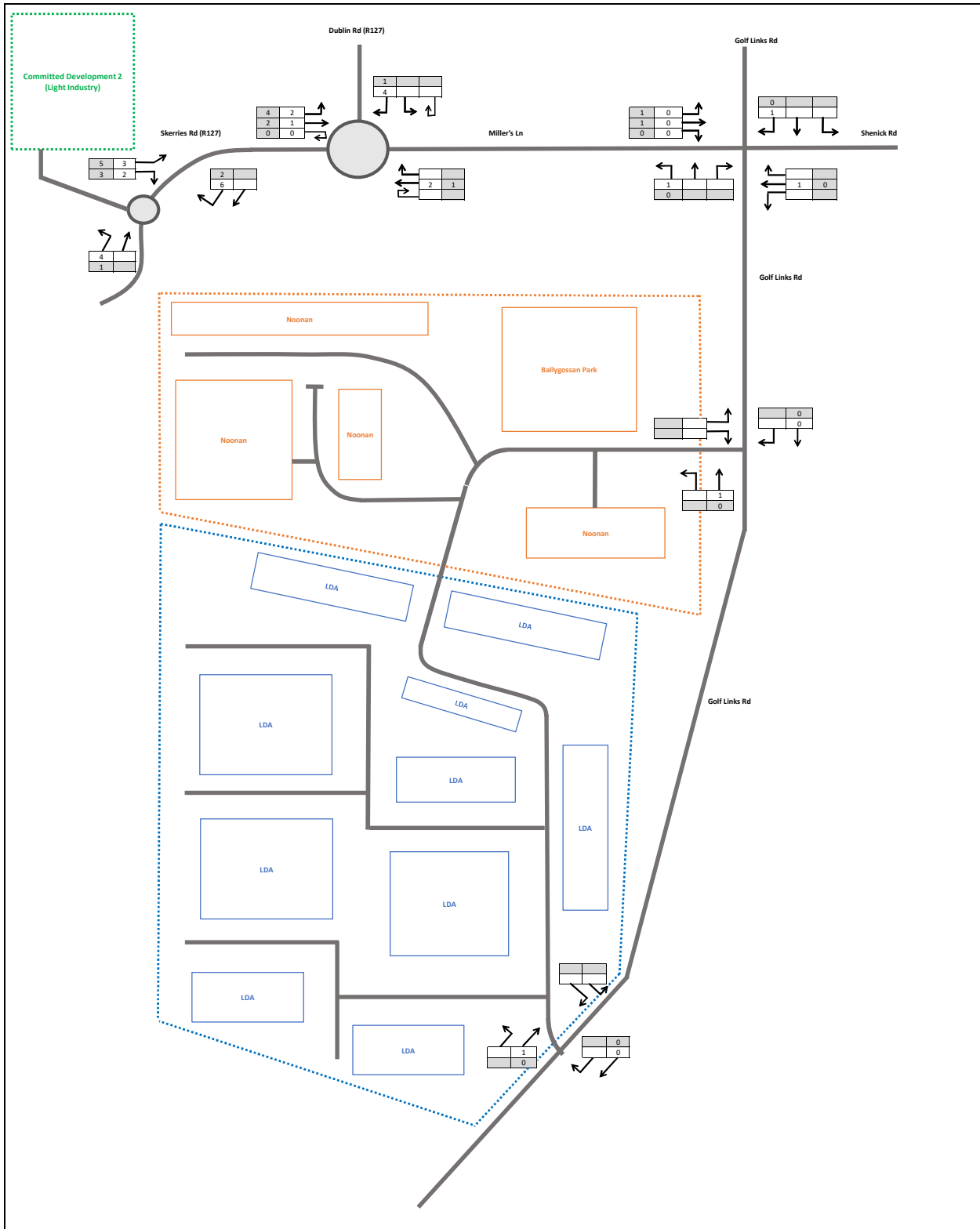
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG</p> <p>Ckd: TJ</p> <p>Date: 22/03/2022</p>	
	<p>DRG. Title: Total Proposed Development Trips 2029-39 (North & South Access)</p>				<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>
			<p>Figure: 7</p>	<p>Rev: D</p>	




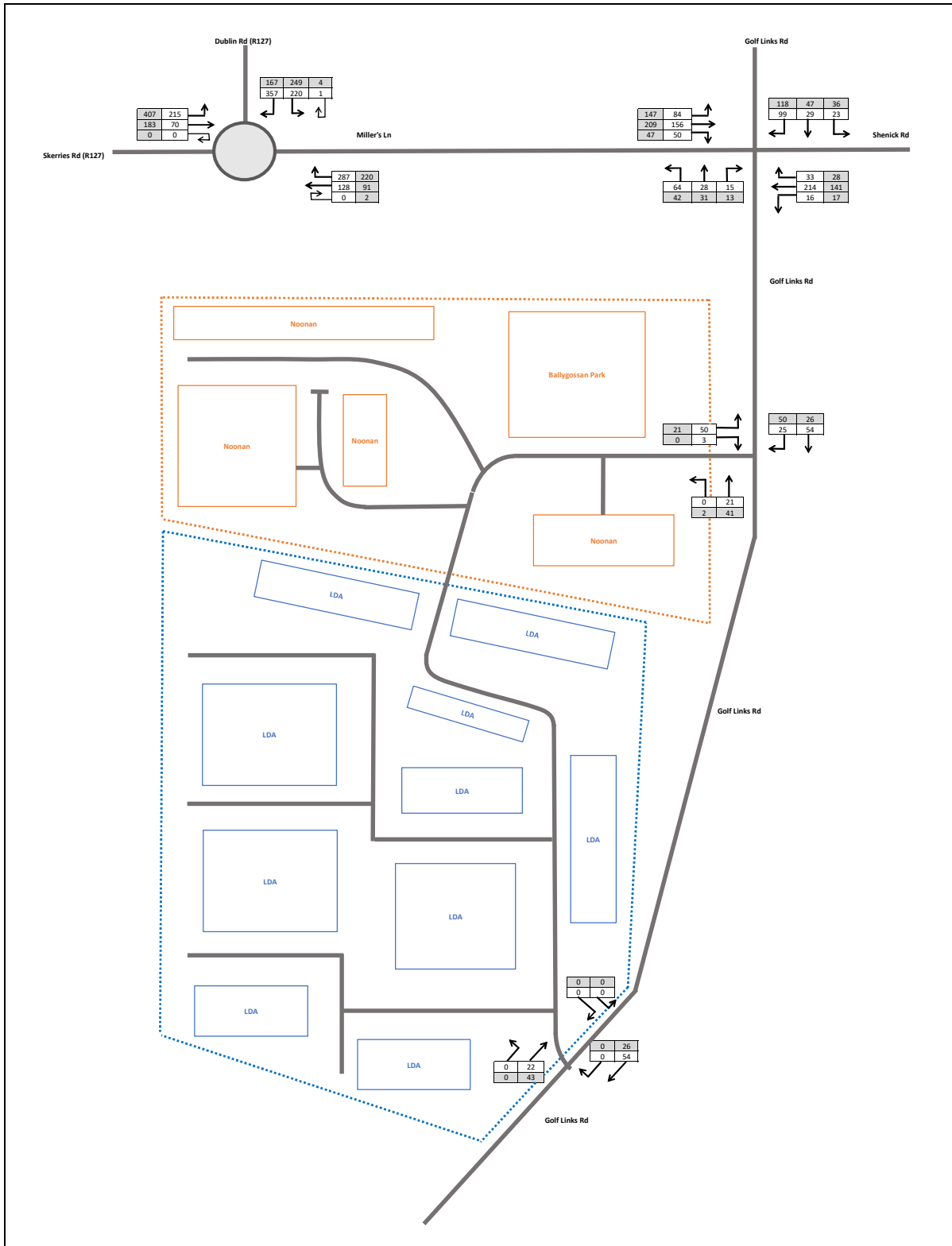
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG</p> <p>Ckd: TJ</p> <p>Date: 22/03/2022</p>
	<p>DRG. Title: Committed Development (Ballygossan Park Phase 2) Trips 2024</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 9</p>	<p>Rev: D</p>




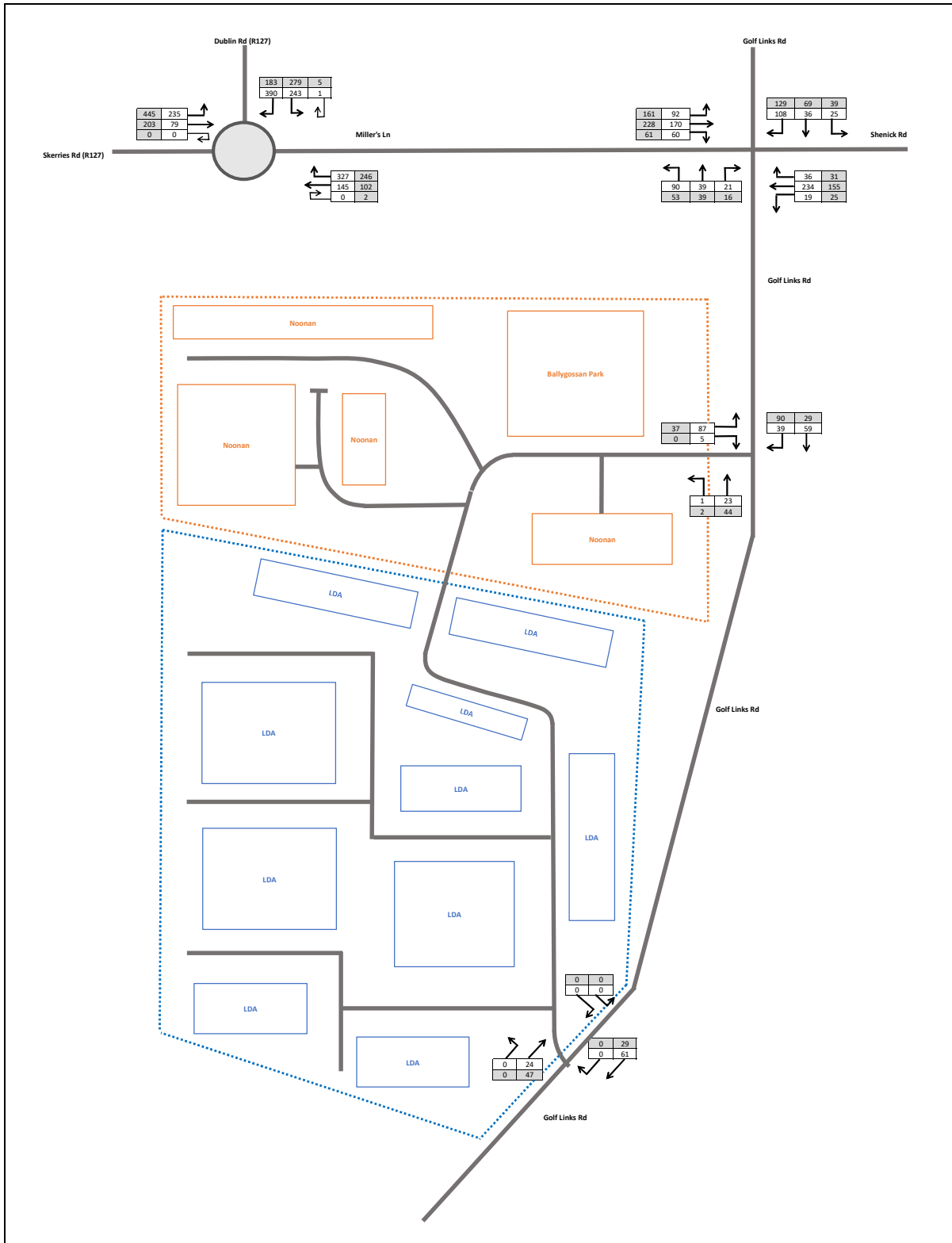
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p>
	<p>DRG. Title: Committed Development (Ballygossan Park Phase 2) Trips 2029-39</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 10</p>	<p>Rev: D</p>




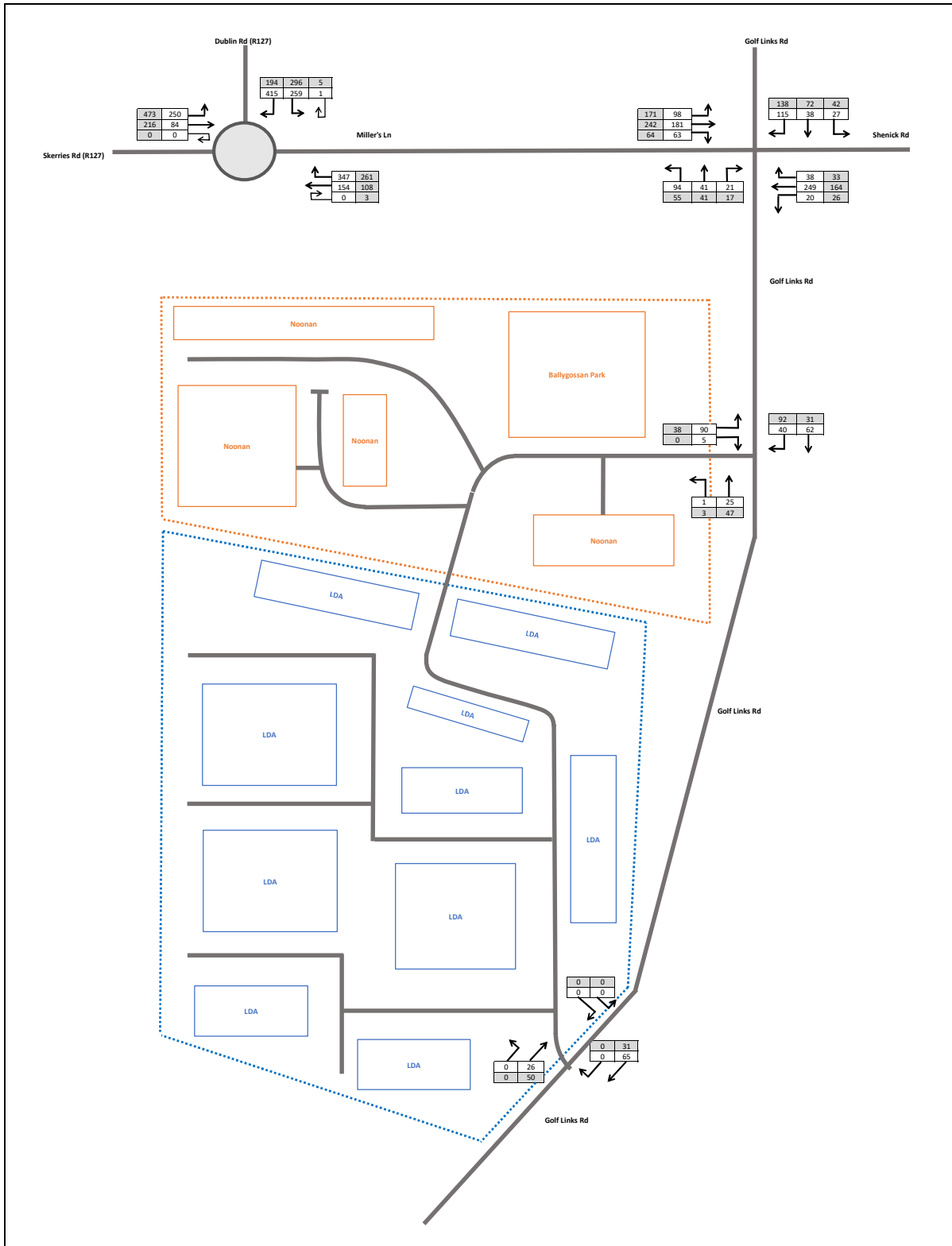
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <p>AM Peak Hour (08:15 to 09:15)</p> <p>PM Peak Hour (17:15 to 18:15)</p>	<p>Dwn: DG</p> <p>Ckd: TJ</p> <p>Date: 22/03/2022</p>
	<p>DRG. Title: Committed Development 2 Development Trips (Light Industry) 2024 Onwards</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 12</p>	<p>Rev: D</p>




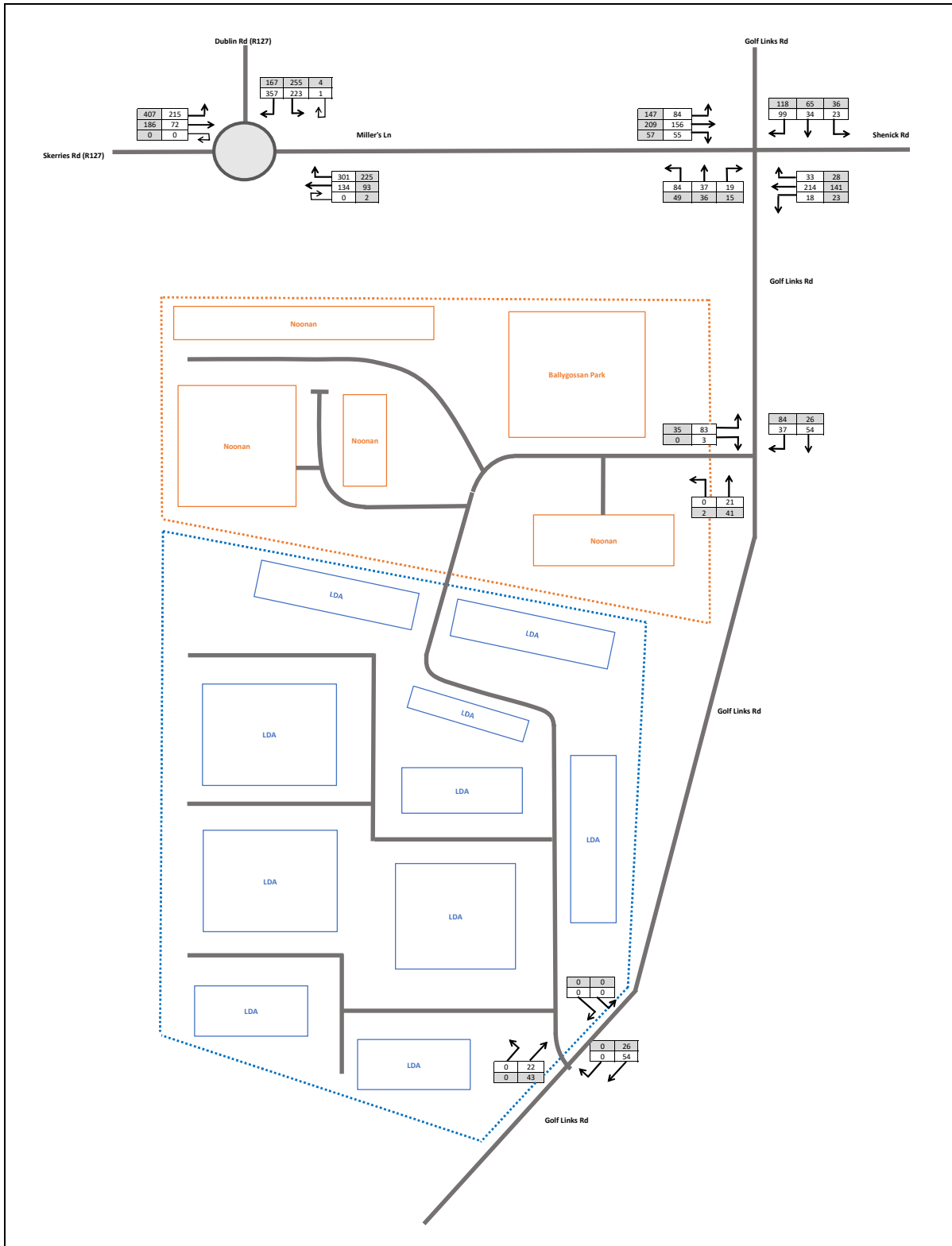
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p> <p>DRG. Title: Network Traffic Flows - Vehicles Do Nothing 2024</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) <p>Growth Factor: 1.09</p>	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p> <p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>
	<p>Figure: 13</p>	<p>Rev: D</p>		




 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p> <p>DRG. Title: Network Traffic Flows - Vehicles Do Nothing 2029</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) <p>Growth Factor: 1.20</p>	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p> <p>Ref: G:\2019\p190170\calcs\excel\Traffic</p> <p>Figure: 14 Rev: D</p>
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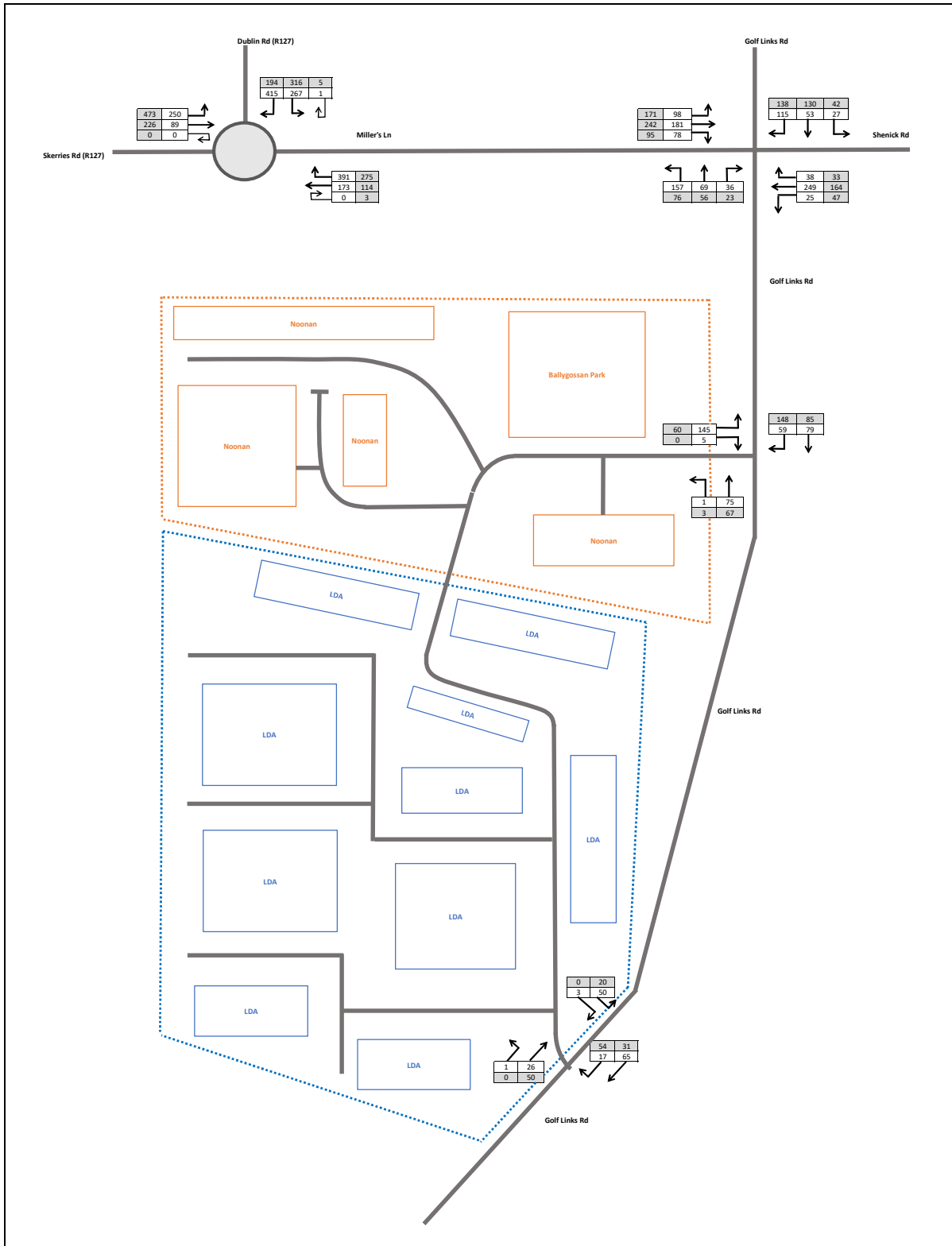
 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) <p>Growth Factor: 1.27</p>	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p>
	<p>DRG. Title: Network Traffic Flows - Vehicles Do Nothing 2039</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 15 Rev: D</p>	




 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG</p> <p>Ckd: TJ</p> <p>Date: 22/03/2022</p>
	<p>DRG. Title: Network Traffic Flows - Vehicles Do Something 2024</p>	<p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>	<p>Figure: 16</p>	<p>Rev: D</p>



 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p> <p>DRG. Title: Network Traffic Flows - Vehicles Do Something 2029</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p> <p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>
	<p>Figure: 17</p>	<p>Rev: D</p>		



 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p> <p>Waterford Office: Maritana Gate, Suite 8b The Atrium Canada St, Waterford phone: +353 51 309 500</p> <p>email: info@dbfl.ie website: www.dbfl.ie</p>	<p>Project: LDA Residential Development Hacketstown, Skerries, Co. Dublin</p> <p>DRG. Title: Network Traffic Flows - Vehicles Do Something 2039</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (08:15 to 09:15) PM Peak Hour (17:15 to 18:15) 	<p>Dwn: DG Ckd: TJ Date: 22/03/2022</p> <p>Ref: G:\2019\p190170\calcs\excel\Traffic</p>
	<p>Figure: 18</p>	<p>Rev: D</p>		

APPENDIX B

TRICS Output Data

Calculation Reference: AUDIT-638801-200526-0557

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

12	CONNAUGHT GA GALWAY	1 days
13	MUNSTER WA WATERFORD	1 days
14	LEINSTER LU LOUTH	3 days
15	GREATER DUBLIN DL DUBLIN	5 days
16	ULSTER (REPUBLIC OF IRELAND) MG MONAGHAN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 20 to 140 (units:)
 Range Selected by User: 18 to 372 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 22/11/16

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

Selected survey days:

Monday	2 days
Tuesday	5 days
Wednesday	1 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	5
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	8
Built-Up Zone	1
No Sub Category	2

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

Secondary Filtering selection:

Use Class:

C3 11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	2 days
250,001 to 500,000	1 days
500,001 or More	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	9 days

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

Travel Plan:

No 11 days

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

PTAL Rating:

No PTAL Present 11 days

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

LIST OF SITES relevant to selection parameters

1	DL-03-C-11	BLOCK OF FLATS	DUBLIN
	WYCKHAM WAY		
	DUBLIN		
	DUNDRUM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	96	
	Survey date: <i>TUESDAY</i>	<i>10/09/13</i>	Survey Type: <i>MANUAL</i>
2	DL-03-C-13	BLOCK OF FLATS	DUBLIN
	SANDYFORD ROAD		
	DUBLIN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Built-Up Zone		
	Total No of Dwellings:	52	
	Survey date: <i>TUESDAY</i>	<i>10/09/13</i>	Survey Type: <i>MANUAL</i>
3	DL-03-C-14	BLOCKS OF FLATS	DUBLIN
	BALLINTEER ROAD		
	DUBLIN		
	DUNDRUM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	140	
	Survey date: <i>TUESDAY</i>	<i>10/09/13</i>	Survey Type: <i>MANUAL</i>
4	DL-03-C-15	BLOCKS OF FLATS	DUBLIN
	MONKSTOWN ROAD		
	DUBLIN		
	MONKSTOWN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: <i>WEDNESDAY</i>	<i>01/10/14</i>	Survey Type: <i>MANUAL</i>
5	DL-03-C-16	BLOCKS OF FLATS	DUBLIN
	BOTANIC AVENUE		
	DUBLIN		
	DRUMCONDRA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	31	
	Survey date: <i>TUESDAY</i>	<i>22/11/16</i>	Survey Type: <i>MANUAL</i>
6	GA-03-C-01	FLATS	GALWAY
	BALLYLOUGHANE ROAD		
	GALWAY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	34	
	Survey date: <i>THURSDAY</i>	<i>31/10/13</i>	Survey Type: <i>MANUAL</i>
7	LU-03-C-01	BLOCKS OF FLATS	LOUTH
	DONORE ROAD		
	DROGHEDA		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	52	
	Survey date: <i>THURSDAY</i>	<i>12/09/13</i>	Survey Type: <i>MANUAL</i>
8	LU-03-C-02	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	33	
	Survey date: <i>MONDAY</i>	<i>16/09/13</i>	Survey Type: <i>MANUAL</i>
9	LU-03-C-03	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: <i>MONDAY</i>	<i>16/09/13</i>	Survey Type: <i>MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

10	MG-03-C-01 MALL ROAD MONAGHAN	BLOCK OF FLATS		MONAGHAN
	Edge of Town Centre No Sub Category			
	Total No of Dwellings:		28	
	<i>Survey date: FRIDAY</i>		<i>06/09/13</i>	<i>Survey Type: MANUAL</i>
11	WA-03-C-01 UPPER YELLOW ROAD WATERFORD	BLOCKS OF FLATS		WATERFORD
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		51	
	<i>Survey date: TUESDAY</i>		<i>12/05/15</i>	<i>Survey Type: MANUAL</i>

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DL-03-C-12	Close to City Centre

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

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	51	0.050	11	51	0.215	11	51	0.265
08:00 - 09:00	11	51	0.056	11	51	0.233	11	51	0.289
09:00 - 10:00	11	51	0.057	11	51	0.099	11	51	0.156
10:00 - 11:00	11	51	0.023	11	51	0.057	11	51	0.080
11:00 - 12:00	11	51	0.050	11	51	0.057	11	51	0.107
12:00 - 13:00	11	51	0.065	11	51	0.088	11	51	0.153
13:00 - 14:00	11	51	0.074	11	51	0.061	11	51	0.135
14:00 - 15:00	11	51	0.075	11	51	0.048	11	51	0.123
15:00 - 16:00	11	51	0.079	11	51	0.056	11	51	0.135
16:00 - 17:00	11	51	0.101	11	51	0.070	11	51	0.171
17:00 - 18:00	11	51	0.197	11	51	0.065	11	51	0.262
18:00 - 19:00	11	51	0.226	11	51	0.093	11	51	0.319
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.053			1.142			2.195

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

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

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Parameter summary

Trip rate parameter range selected: 20 - 140 (units:)
Survey date range: 01/01/12 - 22/11/16
Number of weekdays (Monday-Friday): 11
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 1

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

Calculation Reference: AUDIT-638801-220204-0211

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : D - NURSERY
 TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	1 days
09	NORTH	
	TV TEES VALLEY	1 days
11	SCOTLAND	
	SR STIRLING	1 days
12	CONNAUGHT	
	RO ROSCOMMON	2 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 150 to 750 (units: sqm)
 Range Selected by User: 150 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 06/05/21

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

Selected survey days:

Monday	1 days
Wednesday	2 days
Friday	4 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3
Edge of Town	4

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

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

E(f) 7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	5 days

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

Travel Plan:

No 7 days

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

PTAL Rating:

No PTAL Present 7 days

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

LIST OF SITES relevant to selection parameters

1	RO-04-D-01	NURSERY		ROSCOMMON
	PARK VIEW			
	ROSCOMMON			
	CRUBY HILL			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		500 sqm	
	Survey date: FRIDAY		26/09/14	Survey Type: MANUAL
2	RO-04-D-02	NURSERY		ROSCOMMON
	CIRCULAR ROAD			
	ROSCOMMON			
	BALLYPHEASAN			
	Edge of Town Centre			
	Residential Zone			
	Total Gross floor area:		509 sqm	
	Survey date: FRIDAY		27/04/18	Survey Type: MANUAL
3	SF-04-D-03	NURSERY		SUFFOLK
	CAMP ROAD			
	LOWESTOFT			
	Edge of Town Centre			
	Residential Zone			
	Total Gross floor area:		750 sqm	
	Survey date: WEDNESDAY		10/12/14	Survey Type: MANUAL
4	SH-04-D-01	NURSERY		SHROPSHIRE
	OLD COLEHAM			
	SHREWSBURY			
	Edge of Town Centre			
	Residential Zone			
	Total Gross floor area:		326 sqm	
	Survey date: WEDNESDAY		28/05/14	Survey Type: MANUAL
5	SR-04-D-01	NURSERY		STIRLING
	HENDERSON STREET			
	STIRLING			
	BRIDGE OF ALLAN			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		250 sqm	
	Survey date: MONDAY		16/06/14	Survey Type: MANUAL
6	TV-04-D-01	NURSERY		TEES VALLEY
	COTSWOLD DRIVE			
	REDCAR			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		150 sqm	
	Survey date: FRIDAY		19/05/17	Survey Type: MANUAL
7	WK-04-D-01	NURSERY		WARWICKSHIRE
	THE RIDGEWAY			
	STRATFORD UPON AVON			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		340 sqm	
	Survey date: FRIDAY		29/06/18	Survey Type: MANUAL

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

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

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	404	1.239	7	404	0.389	7	404	1.628
08:00 - 09:00	7	404	4.000	7	404	2.796	7	404	6.796
09:00 - 10:00	7	404	2.938	7	404	2.903	7	404	5.841
10:00 - 11:00	7	404	0.885	7	404	0.673	7	404	1.558
11:00 - 12:00	7	404	1.062	7	404	0.496	7	404	1.558
12:00 - 13:00	7	404	1.805	7	404	2.726	7	404	4.531
13:00 - 14:00	7	404	0.991	7	404	1.274	7	404	2.265
14:00 - 15:00	7	404	1.062	7	404	0.779	7	404	1.841
15:00 - 16:00	7	404	0.814	7	404	1.345	7	404	2.159
16:00 - 17:00	7	404	1.168	7	404	1.239	7	404	2.407
17:00 - 18:00	7	404	2.796	7	404	3.469	7	404	6.265
18:00 - 19:00	6	446	0.112	6	446	0.935	6	446	1.047
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			18.872			19.024			37.896

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

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

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Parameter summary

Trip rate parameter range selected:	150 - 750 (units: sqm)
Survey date range:	01/01/13 - 06/05/21
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

APPENDIX C

LDA Development Site Access Output Files

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2022
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
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Filename: Existing Site Access - LDA.j9

Path: G:\2019\p190170\calcs\picady\LDA Feb 2022 Update

Report generation date: 04/02/2022 16:36:08

-
- »Do Nothing - DN 2024, AM
 - »Do Nothing - DN 2024, PM
 - »Do Nothing - DN 2029, AM
 - »Do Nothing - DN 2029, PM
 - »Do Nothing - DN 2039, AM
 - »Do Nothing - DN 2039, PM
 - »Do Something - DS 2024, AM
 - »Do Something - DS 2024, PM
 - »Do Something - DS 2029, AM
 - »Do Something - DS 2029, PM
 - »Do Something - DS 2039, AM
 - »Do Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Do Nothing - DN 2024								
Stream B-AC	0.1	5.88	0.10	A	0.0	5.46	0.03	A
Stream C-A								
Stream C-B	0.0	5.92	0.04	A	0.1	6.22	0.08	A
Stream A-B								
Stream A-C								
Do Nothing - DN 2029								
Stream B-AC	0.2	6.18	0.14	A	0.1	5.60	0.05	A
Stream C-A								
Stream C-B	0.1	6.06	0.06	A	0.2	6.69	0.14	A
Stream A-B								
Stream A-C								
Do Nothing - DN 2039								
Stream B-AC	0.2	6.21	0.14	A	0.1	5.62	0.06	A
Stream C-A								
Stream C-B	0.1	6.08	0.06	A	0.2	6.73	0.15	A
Stream A-B								
Stream A-C								

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Do Something - DS 2024								
Stream B-AC	0.1	6.07	0.13	A	0.1	5.58	0.05	A
Stream C-A								
Stream C-B	0.1	6.03	0.06	A	0.2	6.61	0.13	A
Stream A-B								
Stream A-C								
Do Something - DS 2029								
Stream B-AC	0.3	6.94	0.22	A	0.1	5.84	0.09	A
Stream C-A								
Stream C-B	0.1	6.39	0.09	A	0.3	7.51	0.23	A
Stream A-B								
Stream A-C								
Do Something - DS 2039								
Stream B-AC	0.3	6.98	0.23	A	0.1	5.86	0.09	A
Stream C-A								
Stream C-B	0.1	6.41	0.10	A	0.3	7.57	0.24	A
Stream A-B								
Stream A-C								

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

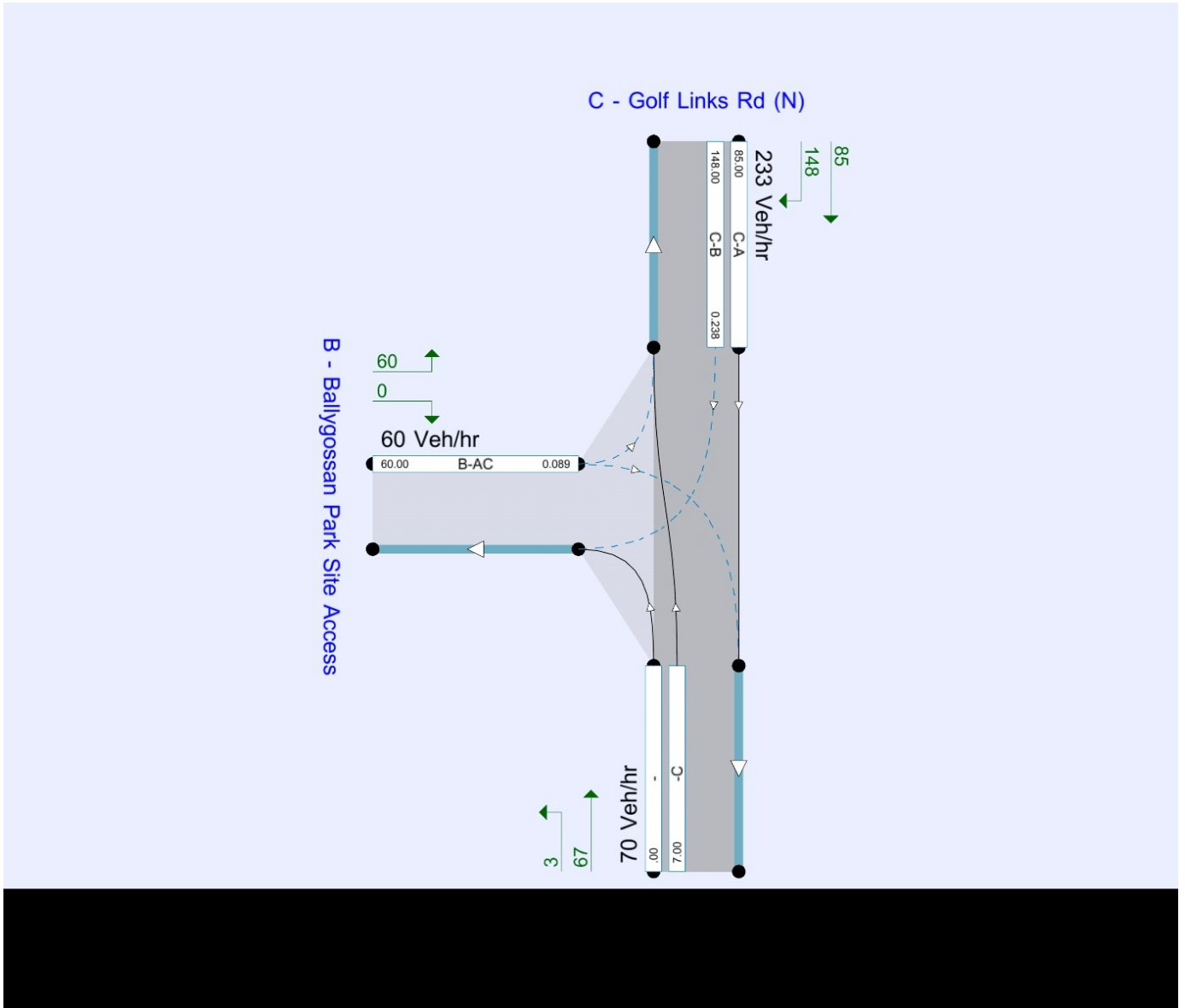
File summary

File Description

Title	LDA Proposed Development
Location	Hacketstown, Skerries
Site number	
Date	25/06/2021
Version	
Status	Existing
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
DN 2024	AM	DIRECT	08:00	09:00	60	15	✓
DN 2024	PM	DIRECT	17:00	18:00	60	15	✓
DN 2029	AM	DIRECT	08:00	09:00	60	15	✓
DN 2029	PM	DIRECT	17:00	18:00	60	15	✓
DN 2039	AM	DIRECT	08:00	09:00	60	15	✓
DN 2039	PM	DIRECT	17:00	18:00	60	15	✓
DS 2024	AM	DIRECT	08:00	09:00	60	15	✓
DS 2024	PM	DIRECT	17:00	18:00	60	15	✓
DS 2029	AM	DIRECT	08:00	09:00	60	15	✓
DS 2029	PM	DIRECT	17:00	18:00	60	15	✓
DS 2039	AM	DIRECT	08:00	09:00	60	15	✓
DS 2039	PM	DIRECT	17:00	18:00	60	15	✓

Do Nothing - DN 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D1	DN 2024	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	21.000
	B - Ballygossan Park Site Access	3.000	0.000	50.000
	C - Golf Links Rd (N)	54.000	25.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - Ballygossan Park Site Access	0.06	0.00	0.94
	C - Golf Links Rd (N)	0.68	0.32	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	21.00	21.00
	B - Ballygossan Park Site Access	53.00	53.00
	C - Golf Links Rd (N)	79.00	79.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.10	5.88	0.1	A	43.50	43.50
C-A					13.50	13.50
C-B	0.04	5.92	0.0	A	6.25	6.25
A-B					46.25	46.25
A-C					5.25	5.25

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	53.00	53.00	13.25	0.00	674.06	0.079	52.66	0.0	0.1	5.791	A
C-A	54.00	54.00	13.50	0.00			54.00				
C-B	25.00	25.00	6.25	0.00	633.05	0.039	24.84	0.0	0.0	5.917	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	21.00	21.00	5.25	0.00			21.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.91	0.025	17.24	0.1	0.0	5.363	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.16	0.0	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Nothing - DN 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	2.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D2	DN 2024	FM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	2.000	41.000
	B - Ballygossan Park Site Access	0.000	0.000	21.000
	C - Golf Links Rd (N)	26.000	50.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.05	0.95
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.34	0.66	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	43.00	43.00
	B - Ballygossan Park Site Access	21.00	21.00
	C - Golf Links Rd (N)	76.00	76.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.03	5.46	0.0	A	12.50	12.50
C-A					6.50	6.50
C-B	0.08	6.22	0.1	A	12.50	12.50
A-B					10.50	10.50
A-C					10.25	10.25

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	21.00	21.00	5.25	0.00	680.25	0.031	20.87	0.0	0.0	5.460	A
C-A	26.00	26.00	6.50	0.00			26.00				
C-B	50.00	50.00	12.50	0.00	627.61	0.080	49.66	0.0	0.1	6.224	A
A-B	2.00	2.00	0.50	0.00			2.00				
A-C	41.00	41.00	10.25	0.00			41.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.07	0.0	0.0	5.294	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.34	0.1	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.293	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Nothing - DN 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	2.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D3	DN 2029	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	23.000
	B - Ballygossan Park Site Access	5.000	0.000	87.000
	C - Golf Links Rd (N)	59.000	39.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - Ballygossan Park Site Access	0.05	0.00	0.95
	C - Golf Links Rd (N)	0.60	0.40	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	24.00	24.00
	B - Ballygossan Park Site Access	92.00	92.00
	C - Golf Links Rd (N)	98.00	98.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.14	6.18	0.2	A	53.25	53.25
C-A					14.75	14.75
C-B	0.06	6.06	0.1	A	9.75	9.75
A-B					46.50	46.50
A-C					5.75	5.75

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	92.00	92.00	23.00	0.00	673.35	0.137	91.37	0.0	0.2	6.179	A
C-A	59.00	59.00	14.75	0.00			59.00				
C-B	39.00	39.00	9.75	0.00	632.31	0.062	38.74	0.0	0.1	6.062	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	23.00	23.00	5.75	0.00			23.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.76	0.025	17.53	0.2	0.0	5.366	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.26	0.1	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Nothing - DN 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D4	DN 2029	FM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	2.000	44.000
	B - Ballygossan Park Site Access	0.000	0.000	37.000
	C - Golf Links Rd (N)	29.000	90.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.24	0.76	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

	To			
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	46.00	46.00
	B - Ballygossan Park Site Access	37.00	37.00
	C - Golf Links Rd (N)	119.00	119.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.05	5.60	0.1	A	16.50	16.50
C-A					7.25	7.25
C-B	0.14	6.69	0.2	A	22.50	22.50
A-B					10.50	10.50
A-C					11.00	11.00

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	37.00	37.00	9.25	0.00	679.45	0.054	36.77	0.0	0.1	5.600	A
C-A	29.00	29.00	7.25	0.00			29.00				
C-B	90.00	90.00	22.50	0.00	626.87	0.144	89.34	0.0	0.2	6.689	A
A-B	2.00	2.00	0.50	0.00			2.00				
A-C	44.00	44.00	11.00	0.00			44.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.17	0.1	0.0	5.297	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.66	0.2	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.293	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Nothing - DN 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D5	DN 2039	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	25.000
	B - Ballygossan Park Site Access	5.000	0.000	90.000
	C - Golf Links Rd (N)	62.000	40.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - Ballygossan Park Site Access	0.05	0.00	0.95
	C - Golf Links Rd (N)	0.61	0.39	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

	To			
	A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)	
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

	To			
	A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)	
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	26.00	26.00
	B - Ballygossan Park Site Access	95.00	95.00
	C - Golf Links Rd (N)	102.00	102.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.14	6.21	0.2	A	54.00	54.00
C-A					15.50	15.50
C-B	0.06	6.08	0.1	A	10.00	10.00
A-B					46.50	46.50
A-C					6.25	6.25

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	95.00	95.00	23.75	0.00	673.10	0.141	94.35	0.0	0.2	6.214	A
C-A	62.00	62.00	15.50	0.00			62.00				
C-B	40.00	40.00	10.00	0.00	631.81	0.063	39.73	0.0	0.1	6.077	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	25.00	25.00	6.25	0.00			25.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.76	0.025	17.55	0.2	0.0	5.369	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.27	0.1	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Nothing - DN 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D6	DN 2039	FM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	3.000	47.000
	B - Ballygossan Park Site Access	0.000	0.000	38.000
	C - Golf Links Rd (N)	31.000	92.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.06	0.94
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.25	0.75	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	50.00	50.00
	B - Ballygossan Park Site Access	38.00	38.00
	C - Golf Links Rd (N)	123.00	123.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.06	5.62	0.1	A	16.75	16.75
C-A					7.75	7.75
C-B	0.15	6.73	0.2	A	23.00	23.00
A-B					10.75	10.75
A-C					11.75	11.75

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	38.00	38.00	9.50	0.00	678.54	0.056	37.76	0.0	0.1	5.617	A
C-A	31.00	31.00	7.75	0.00			31.00				
C-B	92.00	92.00	23.00	0.00	625.88	0.147	91.32	0.0	0.2	6.726	A
A-B	3.00	3.00	0.75	0.00			3.00				
A-C	47.00	47.00	11.75	0.00			47.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.18	0.1	0.0	5.295	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.68	0.2	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.293	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D7	DS 2024	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	21.000
	B - Ballygossan Park Site Access	3.000	0.000	83.000
	C - Golf Links Rd (N)	54.000	37.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - Ballygossan Park Site Access	0.03	0.00	0.97
	C - Golf Links Rd (N)	0.59	0.41	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	21.00	21.00
	B - Ballygossan Park Site Access	86.00	86.00
	C - Golf Links Rd (N)	91.00	91.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.13	6.07	0.1	A	51.75	51.75
C-A					13.50	13.50
C-B	0.06	6.03	0.1	A	9.25	9.25
A-B					46.25	46.25
A-C					5.25	5.25

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	86.00	86.00	21.50	0.00	678.27	0.127	85.42	0.0	0.1	6.068	A
C-A	54.00	54.00	13.50	0.00			54.00				
C-B	37.00	37.00	9.25	0.00	633.05	0.058	36.75	0.0	0.1	6.034	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	21.00	21.00	5.25	0.00			21.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.91	0.025	17.47	0.1	0.0	5.366	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.25	0.1	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D8	DS 2024	FM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	2.000	41.000
	B - Ballygossan Park Site Access	0.000	0.000	35.000
	C - Golf Links Rd (N)	26.000	84.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.05	0.95
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.24	0.76	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	43.00	43.00
	B - Ballygossan Park Site Access	35.00	35.00
	C - Golf Links Rd (N)	110.00	110.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.05	5.58	0.1	A	16.00	16.00
C-A					6.50	6.50
C-B	0.13	6.61	0.2	A	21.00	21.00
A-B					10.50	10.50
A-C					10.25	10.25

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	35.00	35.00	8.75	0.00	680.25	0.051	34.78	0.0	0.1	5.576	A
C-A	26.00	26.00	6.50	0.00			26.00				
C-B	84.00	84.00	21.00	0.00	627.61	0.134	83.39	0.0	0.2	6.608	A
A-B	2.00	2.00	0.50	0.00			2.00				
A-C	41.00	41.00	10.25	0.00			41.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.16	0.1	0.0	5.295	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.61	0.2	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.295	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D9	DS 2029	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	74.000
	B - Ballygossan Park Site Access	5.000	0.000	142.000
	C - Golf Links Rd (N)	76.000	57.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.01	0.99
	B - Ballygossan Park Site Access	0.03	0.00	0.97
	C - Golf Links Rd (N)	0.57	0.43	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	75.00	75.00
	B - Ballygossan Park Site Access	147.00	147.00
	C - Golf Links Rd (N)	133.00	133.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.22	6.94	0.3	A	67.00	67.00
C-A					19.00	19.00
C-B	0.09	6.39	0.1	A	14.25	14.25
A-B					46.50	46.50
A-C					18.50	18.50

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	147.00	147.00	36.75	0.00	663.51	0.222	145.87	0.0	0.3	6.938	A
C-A	76.00	76.00	19.00	0.00			76.00				
C-B	57.00	57.00	14.25	0.00	619.70	0.092	56.60	0.0	0.1	6.389	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	74.00	74.00	18.50	0.00			74.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.73	0.025	18.03	0.3	0.0	5.374	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.40	0.1	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D10	DS 2029	PM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	2.000	64.000
	B - Ballygossan Park Site Access	0.000	0.000	59.000
	C - Golf Links Rd (N)	83.000	145.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.03	0.97
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.36	0.64	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	66.00	66.00
	B - Ballygossan Park Site Access	59.00	59.00
	C - Golf Links Rd (N)	228.00	228.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.09	5.84	0.1	A	22.00	22.00
C-A					20.75	20.75
C-B	0.23	7.51	0.3	A	36.25	36.25
A-B					10.50	10.50
A-C					16.00	16.00

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	59.00	59.00	14.75	0.00	674.09	0.088	58.62	0.0	0.1	5.845	A
C-A	83.00	83.00	20.75	0.00			83.00				
C-B	145.00	145.00	36.25	0.00	621.92	0.233	143.80	0.0	0.3	7.512	A
A-B	2.00	2.00	0.50	0.00			2.00				
A-C	64.00	64.00	16.00	0.00			64.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.32	0.1	0.0	5.298	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	1.20	0.3	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.295	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D11	DS 2039	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	75.000
	B - Ballygossan Park Site Access	5.000	0.000	145.000
	C - Golf Links Rd (N)	79.000	59.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.01	0.99
	B - Ballygossan Park Site Access	0.03	0.00	0.97
	C - Golf Links Rd (N)	0.57	0.43	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	76.00	76.00
	B - Ballygossan Park Site Access	150.00	150.00
	C - Golf Links Rd (N)	138.00	138.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - Ballygossan Park Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - Ballygossan Park Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - Ballygossan Park Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.23	6.98	0.3	A	67.75	67.75
C-A					19.75	19.75
C-B	0.10	6.41	0.1	A	14.75	14.75
A-B					46.50	46.50
A-C					18.75	18.75

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	150.00	150.00	37.50	0.00	663.33	0.226	148.84	0.0	0.3	6.982	A
C-A	79.00	79.00	19.75	0.00			79.00				
C-B	59.00	59.00	14.75	0.00	619.45	0.095	58.58	0.0	0.1	6.415	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	75.00	75.00	18.75	0.00			75.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	688.73	0.025	18.06	0.3	0.0	5.377	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	632.80	0.000	0.42	0.1	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	682.97	0.048	32.90	0.0	0.1	5.538	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	618.46	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	682.65	0.104	70.74	0.1	0.1	5.880	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	617.72	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do Something - DS 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Ballygossan Park Site Access	Ballygossan Park Site Access	T-Junction	Two-way	3.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Ballygossan Park Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			111.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Ballygossan Park Site Access	One lane	3.60	50	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.014	0.100	0.252	0.158	0.360
1	B-C	691.447	0.106	0.268	-	-
1	C-B	638.245	0.247	0.247	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D12	DS 2039	PM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - Ballygossan Park Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	3.000	67.000
	B - Ballygossan Park Site Access	0.000	0.000	60.000
	C - Golf Links Rd (N)	85.000	148.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.36	0.64	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - Ballygossan Park Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - Ballygossan Park Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - Ballygossan Park Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

	To			
		A - Golf Links Rd (S)	B - Ballygossan Park Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - Ballygossan Park Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	70.00	70.00
	B - Ballygossan Park Site Access	60.00	60.00
	C - Golf Links Rd (N)	233.00	233.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - Ballygossan Park Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - Ballygossan Park Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.09	5.86	0.1	A	22.25	22.25
C-A					21.25	21.25
C-B	0.24	7.57	0.3	A	37.00	37.00
A-B					10.75	10.75
A-C					16.75	16.75

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	60.00	60.00	15.00	0.00	673.18	0.089	59.61	0.0	0.1	5.863	A
C-A	85.00	85.00	21.25	0.00			85.00				
C-B	148.00	148.00	37.00	0.00	620.93	0.238	146.76	0.0	0.3	7.572	A
A-B	3.00	3.00	0.75	0.00			3.00				
A-C	67.00	67.00	16.75	0.00			67.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	690.07	0.014	10.33	0.1	0.0	5.298	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	1.24	0.3	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	689.96	0.014	10.00	0.0	0.0	5.295	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	634.78	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	690.07	0.013	9.01	0.0	0.0	5.287	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	635.03	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2022
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Filename: Proposed Site Access - LDA.j9
Path: G:\2019\p190170\calcs\picady\LDA Feb 2022 Update
Report generation date: 07/02/2022 11:23:20

- »Do-Something - DS 2024, AM
- »Do-Something - DS 2024, PM
- »Do-Something - DS 2029, AM
- »Do-Something - DS 2029, PM
- »Do-Something - DS 2039, AM
- »Do-Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Do-Something - DS 2024								
Stream B-AC	0.1	5.37	0.10	A	0.0	4.87	0.01	A
Stream C-A								
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream A-B								
Stream A-C								
Do-Something - DS 2029								
Stream B-AC	0.1	5.37	0.10	A	0.0	4.99	0.03	A
Stream C-A								
Stream C-B	0.0	6.04	0.03	A	0.1	6.46	0.09	A
Stream A-B								
Stream A-C								
Do-Something - DS 2039								
Stream B-AC	0.1	5.37	0.10	A	0.0	5.00	0.03	A
Stream C-A								
Stream C-B	0.0	6.05	0.03	A	0.1	6.46	0.09	A
Stream A-B								
Stream A-C								

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

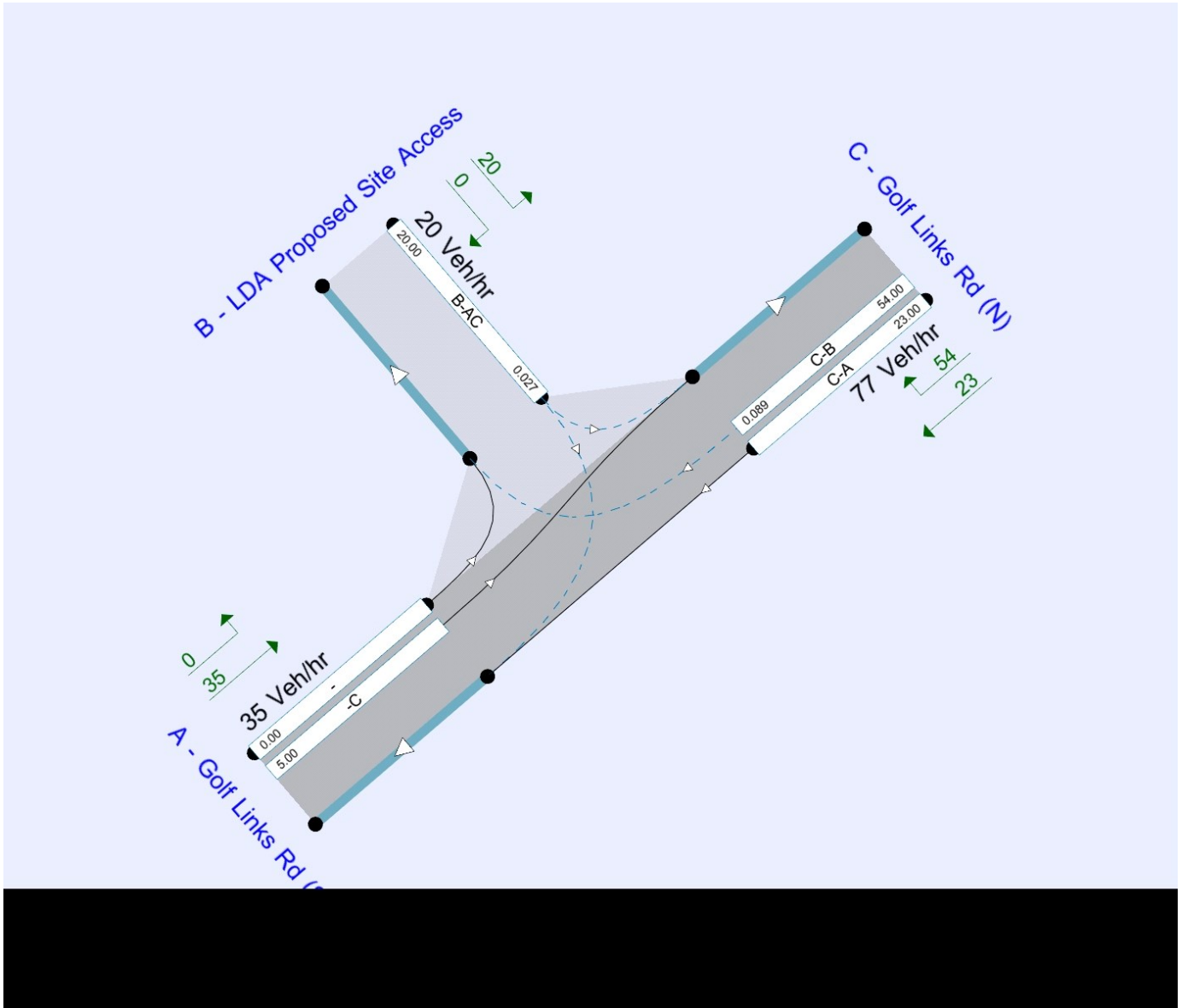
File summary

File Description

Title	LDA Proposed Development
Location	Hacketstown, Skerries
Site number	
Date	07/02/2022
Version	
Status	Proposed
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
DS 2024	AM	DIRECT	08:00	09:00	60	15	✓
DS 2024	PM	DIRECT	17:00	18:00	60	15	✓
DS 2029	AM	DIRECT	08:00	09:00	60	15	✓
DS 2029	PM	DIRECT	17:00	18:00	60	15	✓
DS 2039	AM	DIRECT	08:00	09:00	60	15	✓
DS 2039	PM	DIRECT	17:00	18:00	60	15	✓

Do-Something - DS 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	1.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	LDA Proposed Site Access		Minor
C	Golf Links Rd (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Golf Links Rd (N)	6.00			77.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - LDA Proposed Site Access	One lane	4.50	45	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	591.615	0.108	0.272	0.171	0.389
1	B-C	750.220	0.115	0.291	-	-
1	C-B	618.555	0.240	0.240	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D1	DS 2024	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	22.000
	B - LDA Proposed Site Access	0.000	0.000	0.000
	C - Golf Links Rd (N)	31.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - LDA Proposed Site Access	0.33	0.33	0.33
	C - Golf Links Rd (N)	1.00	0.00	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	22.00	22.00
	B - LDA Proposed Site Access	0.00	0.00
	C - Golf Links Rd (N)	31.00	31.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - LDA Proposed Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - LDA Proposed Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - LDA Proposed Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	5.37	0.1	A	30.25	30.25
C-A					7.75	7.75
C-B	0.00	0.00	0.0	A	0.00	0.00
A-B					46.25	46.25
A-C					5.50	5.50

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	0.00	0.00	0.00	0.00	651.97	0.000	0.00	0.0	0.0	0.000	A
C-A	31.00	31.00	7.75	0.00			31.00				
C-B	0.00	0.00	0.00	0.00	613.28	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	22.00	22.00	5.50	0.00			22.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	17.00	17.00	4.25	0.00	747.69	0.023	16.91	0.0	0.0	4.926	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	613.28	0.000	0.00	0.0	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	33.00	33.00	8.25	0.00	741.02	0.045	32.91	0.0	0.0	5.084	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	599.38	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	71.00	71.00	17.75	0.00	740.68	0.096	70.76	0.0	0.1	5.373	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	598.66	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do-Something - DS 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	1.19	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D2	DS 2024	PM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	30.000
	B - LDA Proposed Site Access	0.000	0.000	0.000
	C - Golf Links Rd (N)	20.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - LDA Proposed Site Access	0.33	0.33	0.33
	C - Golf Links Rd (N)	1.00	0.00	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	30.00	30.00
	B - LDA Proposed Site Access	0.00	0.00
	C - Golf Links Rd (N)	20.00	20.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.01	4.87	0.0	A	7.25	7.25
C-A					5.00	5.00
C-B	0.00	0.00	0.0	A	0.00	0.00
A-B					10.00	10.00
A-C					7.50	7.50

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	0.00	0.00	0.00	0.00	650.89	0.000	0.00	0.0	0.0	0.000	A
C-A	20.00	20.00	5.00	0.00			20.00				
C-B	0.00	0.00	0.00	0.00	611.36	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	30.00	30.00	7.50	0.00			30.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	748.73	0.013	9.95	0.0	0.0	4.872	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	10.00	10.00	2.50	0.00	748.61	0.013	10.00	0.0	0.0	4.873	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.20	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	9.00	9.00	2.25	0.00	748.73	0.012	9.01	0.0	0.0	4.868	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do-Something - DS 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	2.37	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D3	DS 2029	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	24.000
	B - LDA Proposed Site Access	3.000	0.000	50.000
	C - Golf Links Rd (N)	36.000	17.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - LDA Proposed Site Access	0.06	0.00	0.94
	C - Golf Links Rd (N)	0.68	0.32	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	25.00	25.00
	B - LDA Proposed Site Access	53.00	53.00
	C - Golf Links Rd (N)	53.00	53.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - LDA Proposed Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - LDA Proposed Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - LDA Proposed Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.10	5.37	0.1	A	43.50	43.50
C-A					9.00	9.00
C-B	0.03	6.04	0.0	A	4.25	4.25
A-B					46.50	46.50
A-C					6.00	6.00

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	53.00	53.00	13.25	0.00	730.77	0.073	52.69	0.0	0.1	5.306	A
C-A	36.00	36.00	9.00	0.00			36.00				
C-B	17.00	17.00	4.25	0.00	612.56	0.028	16.89	0.0	0.0	6.044	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	24.00	24.00	6.00	0.00			24.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	17.00	17.00	4.25	0.00	747.49	0.023	17.22	0.1	0.0	4.932	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	613.28	0.000	0.11	0.0	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	33.00	33.00	8.25	0.00	741.02	0.045	32.91	0.0	0.0	5.084	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	599.38	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71.00	71.00	17.75	0.00	740.68	0.096	70.76	0.0	0.1	5.373	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	598.66	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do-Something - DS 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	3.01	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D4	DS 2029	PM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	32.000
	B - LDA Proposed Site Access	0.000	0.000	20.000
	C - Golf Links Rd (N)	22.000	54.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.29	0.71	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	32.00	32.00
	B - LDA Proposed Site Access	20.00	20.00
	C - Golf Links Rd (N)	76.00	76.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.03	4.99	0.0	A	12.25	12.25
C-A					5.50	5.50
C-B	0.09	6.46	0.1	A	13.50	13.50
A-B					10.00	10.00
A-C					8.00	8.00

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	20.00	20.00	5.00	0.00	740.92	0.027	19.89	0.0	0.0	4.993	A
C-A	22.00	22.00	5.50	0.00			22.00				
C-B	54.00	54.00	13.50	0.00	610.89	0.088	53.62	0.0	0.1	6.456	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	32.00	32.00	8.00	0.00			32.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	10.00	10.00	2.50	0.00	748.73	0.013	10.06	0.0	0.0	4.875	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.38	0.1	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	10.00	10.00	2.50	0.00	748.61	0.013	10.00	0.0	0.0	4.875	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.20	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	9.00	9.00	2.25	0.00	748.73	0.012	9.01	0.0	0.0	4.868	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do-Something - DS 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	2.35	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D5	DS 2039	AM	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(08:00-08:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	1.000	26.000
	B - LDA Proposed Site Access	3.000	0.000	50.000
	C - Golf Links Rd (N)	38.000	17.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.04	0.96
	B - LDA Proposed Site Access	0.06	0.00	0.94
	C - Golf Links Rd (N)	0.69	0.31	0.00

Demand (Veh/hr)

(08:15-08:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	22.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	17.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:30-08:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	80.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	33.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(08:45-09:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	83.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	71.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A - Golf Links Rd (S)	27.00	27.00
	B - LDA Proposed Site Access	53.00	53.00
	C - Golf Links Rd (N)	55.00	55.00
08:15-08:30	A - Golf Links Rd (S)	22.00	22.00
	B - LDA Proposed Site Access	17.00	17.00
	C - Golf Links Rd (N)	0.00	0.00
08:30-08:45	A - Golf Links Rd (S)	80.00	80.00
	B - LDA Proposed Site Access	33.00	33.00
	C - Golf Links Rd (N)	0.00	0.00
08:45-09:00	A - Golf Links Rd (S)	83.00	83.00
	B - LDA Proposed Site Access	71.00	71.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.10	5.37	0.1	A	43.50	43.50
C-A					9.50	9.50
C-B	0.03	6.05	0.0	A	4.25	4.25
A-B					46.50	46.50
A-C					6.50	6.50

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	53.00	53.00	13.25	0.00	730.16	0.073	52.69	0.0	0.1	5.311	A
C-A	38.00	38.00	9.50	0.00			38.00				
C-B	17.00	17.00	4.25	0.00	612.08	0.028	16.89	0.0	0.0	6.048	A
A-B	1.00	1.00	0.25	0.00			1.00				
A-C	26.00	26.00	6.50	0.00			26.00				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	17.00	17.00	4.25	0.00	747.49	0.023	17.22	0.1	0.0	4.930	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	613.28	0.000	0.11	0.0	0.0	0.000	A
A-B	22.00	22.00	5.50	0.00			22.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	33.00	33.00	8.25	0.00	741.02	0.045	32.91	0.0	0.0	5.084	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	599.38	0.000	0.00	0.0	0.0	0.000	A
A-B	80.00	80.00	20.00	0.00			80.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71.00	71.00	17.75	0.00	740.68	0.096	70.76	0.0	0.1	5.373	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	598.66	0.000	0.00	0.0	0.0	0.000	A
A-B	83.00	83.00	20.75	0.00			83.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Do-Something - DS 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - LDA Proposed Site Access	LDA Proposed Site Access	T-Junction	Two-way	2.96	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Model time period length (min)	Time segment length (min)	Run automatically
D6	DS 2039	PM	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - Golf Links Rd (S)		DIRECT	✓	100.000
B - LDA Proposed Site Access		DIRECT	✓	100.000
C - Golf Links Rd (N)		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

(17:00-17:15)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	0.000	35.000
	B - LDA Proposed Site Access	0.000	0.000	20.000
	C - Golf Links Rd (N)	23.000	54.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	0.00	1.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.30	0.70	0.00

Demand (Veh/hr)

(17:15-17:30)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:30-17:45)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	14.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	10.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Demand (Veh/hr)

(17:45-18:00)

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.000	13.000	0.000
	B - LDA Proposed Site Access	0.000	0.000	9.000
	C - Golf Links Rd (N)	0.000	0.000	0.000

Proportions

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0.00	1.00	0.00
	B - LDA Proposed Site Access	0.00	0.00	1.00
	C - Golf Links Rd (N)	0.33	0.33	0.33

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	0	0	0
	B - LDA Proposed Site Access	0	0	0
	C - Golf Links Rd (N)	0	0	0

Average PCU Per Veh

		To		
		A - Golf Links Rd (S)	B - LDA Proposed Site Access	C - Golf Links Rd (N)
From	A - Golf Links Rd (S)	1.000	1.000	1.000
	B - LDA Proposed Site Access	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
17:00-17:15	A - Golf Links Rd (S)	35.00	35.00
	B - LDA Proposed Site Access	20.00	20.00
	C - Golf Links Rd (N)	77.00	77.00
17:15-17:30	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:30-17:45	A - Golf Links Rd (S)	14.00	14.00
	B - LDA Proposed Site Access	10.00	10.00
	C - Golf Links Rd (N)	0.00	0.00
17:45-18:00	A - Golf Links Rd (S)	13.00	13.00
	B - LDA Proposed Site Access	9.00	9.00
	C - Golf Links Rd (N)	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-A-C	0.03	5.00	0.0	A	12.25	12.25
C-A					5.75	5.75
C-B	0.09	6.46	0.1	A	13.50	13.50
A-B					10.00	10.00
A-C					8.75	8.75

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-A-C	20.00	20.00	5.00	0.00	740.05	0.027	19.89	0.0	0.0	4.999	A
C-A	23.00	23.00	5.75	0.00			23.00				
C-B	54.00	54.00	13.50	0.00	610.17	0.089	53.61	0.0	0.1	6.464	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	35.00	35.00	8.75	0.00			35.00				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	10.00	10.00	2.50	0.00	748.73	0.013	10.06	0.0	0.0	4.873	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.39	0.1	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	10.00	10.00	2.50	0.00	748.61	0.013	10.00	0.0	0.0	4.873	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.20	0.000	0.00	0.0	0.0	0.000	A
A-B	14.00	14.00	3.50	0.00			14.00				
A-C	0.00	0.00	0.00	0.00			0.00				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	9.00	9.00	2.25	0.00	748.73	0.012	9.01	0.0	0.0	4.868	A
C-A	0.00	0.00	0.00	0.00			0.00				
C-B	0.00	0.00	0.00	0.00	615.44	0.000	0.00	0.0	0.0	0.000	A
A-B	13.00	13.00	3.25	0.00			13.00				
A-C	0.00	0.00	0.00	0.00			0.00				

APPENDIX D

Golf Links Rd-Shenick Rd-Miller's Ln Junction Output Files

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2022
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Filename: Junction 1 Existing DN+DS.j9

Path: G:\2019\p190170\calcs\picady\LDA Feb 2022 Update\Miller's Ln-Shenich Rd-Golf Links Rd Offsite Junction

Report generation date: 07/02/2022 13:06:02

- »Do-Nothing - DN 2024, AM
- »Do-Nothing - DN 2024, PM
- »Do-Nothing - DN 2029, AM
- »Do-Nothing - DN 2029, PM
- »Do-Nothing - DN 2039, AM
- »Do-Nothing - DN 2039, PM
- »Do-Something - DS 2024, AM
- »Do-Something - DS 2024, PM
- »Do-Something - DS 2029, AM
- »Do-Something - DS 2029, PM
- »Do-Something - DS 2039, AM
- »Do-Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Nothing - DN 2024								
Stream B-CD	0.6	8.51	0.38	A	1.3	12.01	0.57	B
Stream B-A	0.2	11.57	0.15	B	0.2	12.49	0.15	B
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.5	8.99	0.34	A	0.9	10.23	0.45	B
Stream AB-C								
Stream D-AB	0.6	8.74	0.38	A	0.4	7.52	0.27	A
Stream D-C	0.1	10.48	0.10	B	0.1	11.14	0.09	B
Stream C-D								
Stream C-A								
Stream C-B								
Stream CD-AB	1.5	14.12	0.59	B	1.0	11.07	0.48	B
Stream CD-A								
Do-Nothing - DN 2029								
Stream B-CD	0.8	9.48	0.43	A	1.7	14.73	0.64	B
Stream B-A	0.2	13.21	0.20	B	0.3	15.49	0.22	C
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.7	9.47	0.38	A	1.2	11.09	0.50	B

Stream AB-C								
Stream D-AB	0.7	9.51	0.42	A	0.4	8.17	0.31	A
Stream D-C	0.1	11.31	0.11	B	0.1	12.22	0.10	B
Stream C-D								
Stream C-A								
Stream C-B								
Stream CD-AB	2.0	16.87	0.65	C	1.2	12.01	0.53	B
Stream CD-A								
Do-Nothing - DN 2039								
Stream B-CD	0.9	10.14	0.46	B	2.1	16.98	0.68	C
Stream B-A	0.3	14.20	0.21	B	0.3	17.73	0.26	C
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.7	9.78	0.40	A	1.4	11.72	0.53	B
Stream AB-C								
Stream D-AB	0.8	10.11	0.45	B	0.5	8.50	0.33	A
Stream D-C	0.1	11.90	0.12	B	0.1	12.89	0.12	B
Stream C-D								
Stream C-A								
Stream C-B								
Stream CD-AB	2.4	19.21	0.70	C	1.4	12.89	0.57	B
Stream CD-A								

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2024								
Stream B-CD	0.6	8.73	0.39	A	1.3	12.48	0.58	B
Stream B-A	0.2	12.08	0.17	B	0.2	13.35	0.19	B
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.6	9.06	0.34	A	1.0	10.38	0.45	B
Stream AB-C								
Stream D-AB	0.6	8.82	0.39	A	0.4	7.72	0.28	A
Stream D-C	0.1	10.63	0.10	B	0.1	11.41	0.09	B
Stream C-D								
Stream C-A								
Stream C-B								
Stream CD-AB	1.5	14.52	0.60	B	1.0	10.98	0.48	B
Stream CD-A								
Do-Something - DS 2029								
Stream B-CD	0.8	10.53	0.46	B	2.1	18.19	0.69	C
Stream B-A	0.3	15.43	0.26	C	0.6	21.34	0.38	C
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.8	9.76	0.41	A	1.3	11.72	0.52	B
Stream AB-C								
Stream D-AB	0.8	9.80	0.44	A	0.5	9.01	0.36	A
Stream D-C	0.1	11.90	0.12	B	0.1	13.38	0.11	B
Stream C-D								
Stream C-A								

Stream C-B								
Stream CD-AB	2.3	18.97	0.69	C	1.4	11.61	0.54	B
Stream CD-A								
Do-Something - DS 2039								
Stream B-CD	1.0	11.46	0.49	B	2.7	22.27	0.74	C
Stream B-A	0.4	16.99	0.29	C	0.7	26.24	0.43	D
Stream A-B								
Stream A-C								
Stream A-D								
Stream AB-CD	0.9	10.12	0.43	B	1.6	12.46	0.56	B
Stream AB-C								
Stream D-AB	0.9	10.43	0.47	B	0.6	9.43	0.38	A
Stream D-C	0.1	12.56	0.13	B	0.1	14.23	0.13	B
Stream C-D								
Stream C-A								
Stream C-B								
Stream CD-AB	2.9	22.12	0.73	C	1.6	12.47	0.58	B
Stream CD-A								

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

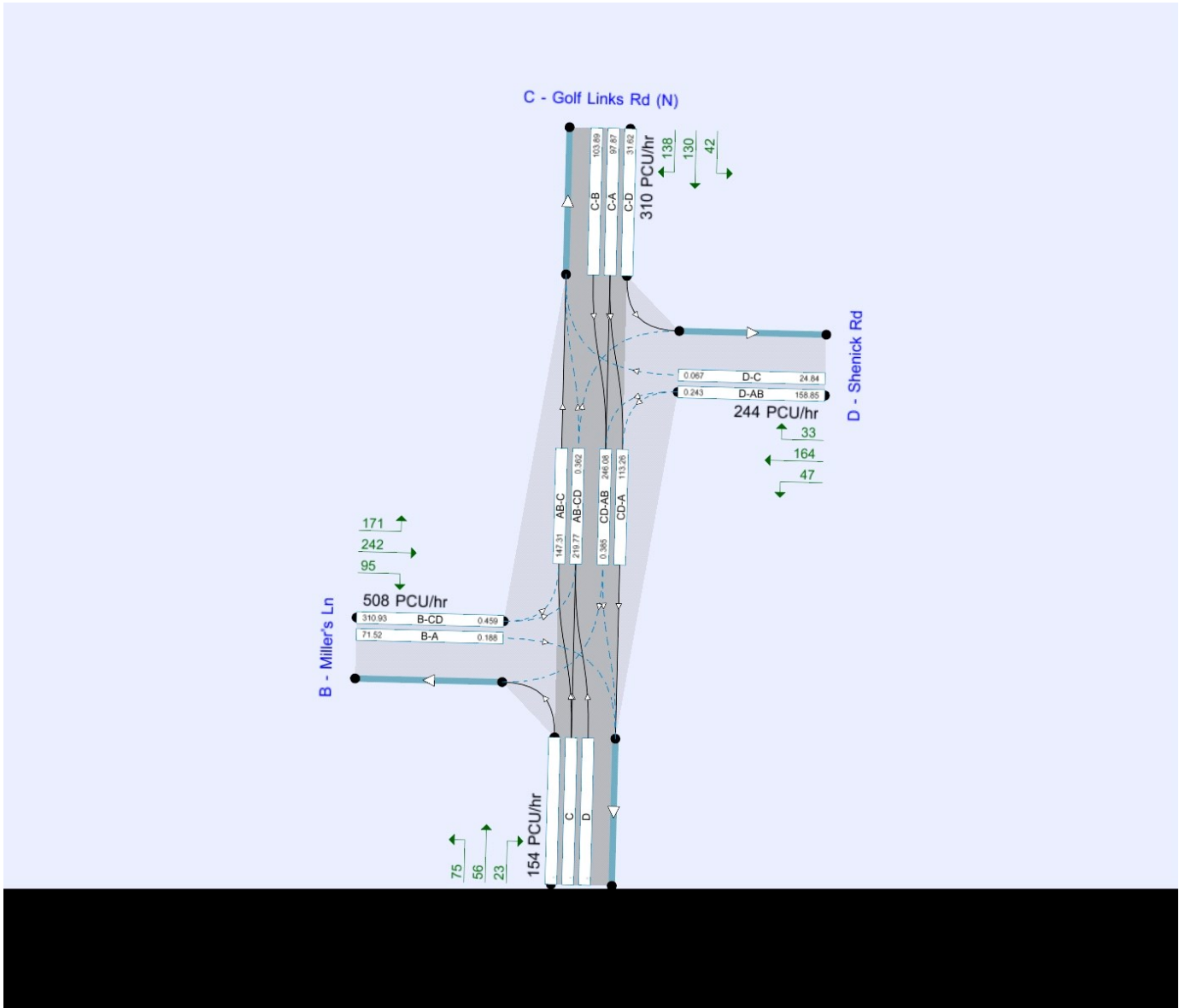
File summary

File Description

Title	Miller's Lane / Golf Links Rd / Shenick Rd Junction
Location	Hacketstown, Skerries
Site number	
Date	07/02/2022
Version	
Status	Proposed Works
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queuing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DN 2024	AM	ONE HOUR	08:00	09:30	15	✓
DN 2024	PM	ONE HOUR	17:00	18:30	15	✓
DN 2029	AM	ONE HOUR	08:00	09:30	15	✓
DN 2029	PM	ONE HOUR	17:00	18:30	15	✓
DN 2039	AM	ONE HOUR	08:00	09:30	15	✓
DN 2039	PM	ONE HOUR	17:00	18:30	15	✓
DS 2024	AM	ONE HOUR	08:00	09:30	15	✓
DS 2024	PM	ONE HOUR	17:00	18:30	15	✓
DS 2029	AM	ONE HOUR	08:00	09:30	15	✓
DS 2029	PM	ONE HOUR	17:00	18:30	15	✓
DS 2039	AM	ONE HOUR	08:00	09:30	15	✓
DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Do-Nothing - DN 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	7.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.100	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	520.303	-	0.151	0.342	0.151	0.342	0.240	0.240	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DN 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	107.00	100.000
B - Miller's Ln		ONE HOUR	✓	290.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	151.00	100.000
D - Shenick Rd		ONE HOUR	✓	263.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	64.000	28.000	15.000
	B - Miller's Ln	50.000	0.000	84.000	156.000
	C - Golf Links Rd (N)	29.000	99.000	0.000	23.000
	D - Shenick Rd	16.000	214.000	33.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	B - Miller's Ln	0.17	0.00	0.29	0.54
	C - Golf Links Rd (N)	0.19	0.66	0.00	0.15
	D - Shenick Rd	0.06	0.81	0.13	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.38	8.51	0.6	A	220.23	330.34
B-A	0.15	11.57	0.2	B	45.88	68.82
A-B					58.73	88.09
A-C					25.69	38.54
A-D					13.76	20.65
AB-CD	0.34	8.99	0.5	A	165.23	247.85
AB-C					94.22	141.33
D-AB	0.38	8.74	0.6	A	211.05	316.58
D-C	0.10	10.48	0.1	B	30.28	45.42
C-D					21.11	31.66
C-A					26.61	39.92
C-B					90.84	136.27
CD-AB	0.59	14.12	1.5	B	297.47	446.20
CD-A					30.81	46.22

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	180.68	180.68	45.17	0.00	708.04	0.255	179.33	0.0	0.3	6.793	A
B-A	37.64	37.64	9.41	0.00	428.81	0.088	37.26	0.0	0.1	9.186	A
A-B	48.18	48.18	12.05	0.00			48.18				
A-C	21.08	21.08	5.27	0.00			21.08				
A-D	11.29	11.29	2.82	0.00			11.29				
AB-CD	132.02	132.02	33.01	0.00	592.28	0.223	130.85	0.0	0.3	7.784	A
AB-C	79.68	79.68	19.92	0.00			79.68				
D-AB	173.16	173.16	43.29	0.00	685.76	0.253	171.82	0.0	0.3	6.986	A
D-C	24.84	24.84	6.21	0.00	432.58	0.057	24.60	0.0	0.1	8.821	A
C-D	17.32	17.32	4.33	0.00			17.32				
C-A	21.83	21.83	5.46	0.00			21.83				
C-B	74.53	74.53	18.63	0.00			74.53				
CD-AB	239.62	239.62	59.90	0.00	609.72	0.393	237.02	0.0	0.6	9.597	A
CD-A	28.57	28.57	7.14	0.00			28.57				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	215.76	215.76	53.94	0.00	699.99	0.308	215.35	0.3	0.4	7.421	A
B-A	44.95	44.95	11.24	0.00	403.39	0.111	44.83	0.1	0.1	10.037	B
A-B	57.53	57.53	14.38	0.00			57.53				
A-C	25.17	25.17	6.29	0.00			25.17				
A-D	13.48	13.48	3.37	0.00			13.48				
AB-CD	160.79	160.79	40.20	0.00	595.61	0.270	160.43	0.3	0.4	8.267	A
AB-C	93.22	93.22	23.30	0.00			93.22				
D-AB	206.77	206.77	51.69	0.00	677.31	0.305	206.37	0.3	0.4	7.637	A
D-C	29.67	29.67	7.42	0.00	411.47	0.072	29.60	0.1	0.1	9.426	A
C-D	20.68	20.68	5.17	0.00			20.68				
C-A	26.07	26.07	6.52	0.00			26.07				
C-B	89.00	89.00	22.25	0.00			89.00				
CD-AB	290.10	290.10	72.52	0.00	611.88	0.474	289.06	0.6	0.9	11.121	B
CD-A	31.34	31.34	7.83	0.00			31.34				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	264.24	264.24	66.06	0.00	687.44	0.384	263.55	0.4	0.6	8.478	A
B-A	55.05	55.05	13.76	0.00	367.19	0.150	54.85	0.1	0.2	11.519	B
A-B	70.47	70.47	17.62	0.00			70.47				
A-C	30.83	30.83	7.71	0.00			30.83				
A-D	16.52	16.52	4.13	0.00			16.52				
AB-CD	201.60	201.60	50.40	0.00	602.55	0.335	201.00	0.4	0.5	8.961	A
AB-C	109.29	109.29	27.32	0.00			109.29				
D-AB	253.23	253.23	63.31	0.00	665.16	0.381	252.55	0.4	0.6	8.709	A
D-C	36.33	36.33	9.08	0.00	380.43	0.096	36.22	0.1	0.1	10.455	B
C-D	25.32	25.32	6.33	0.00			25.32				
C-A	31.93	31.93	7.98	0.00			31.93				
C-B	109.00	109.00	27.25	0.00			109.00				
CD-AB	360.95	360.95	90.24	0.00	616.54	0.585	358.87	0.9	1.4	13.880	B
CD-A	32.53	32.53	8.13	0.00			32.53				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	264.24	264.24	66.06	0.00	687.21	0.385	264.23	0.6	0.6	8.511	A
B-A	55.05	55.05	13.76	0.00	366.13	0.150	55.04	0.2	0.2	11.571	B
A-B	70.47	70.47	17.62	0.00			70.47				
A-C	30.83	30.83	7.71	0.00			30.83				
A-D	16.52	16.52	4.13	0.00			16.52				
AB-CD	202.13	202.13	50.53	0.00	602.72	0.335	202.11	0.5	0.5	8.990	A
AB-C	109.44	109.44	27.36	0.00			109.44				
D-AB	253.23	253.23	63.31	0.00	665.08	0.381	253.22	0.6	0.6	8.740	A
D-C	36.33	36.33	9.08	0.00	379.90	0.096	36.33	0.1	0.1	10.477	B
C-D	25.32	25.32	6.33	0.00			25.32				
C-A	31.93	31.93	7.98	0.00			31.93				
C-B	109.00	109.00	27.25	0.00			109.00				
CD-AB	361.65	361.65	90.41	0.00	616.62	0.587	361.52	1.4	1.5	14.124	B
CD-A	32.50	32.50	8.13	0.00			32.50				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	215.76	215.76	53.94	0.00	699.72	0.308	216.43	0.6	0.5	7.461	A
B-A	44.95	44.95	11.24	0.00	401.77	0.112	45.14	0.2	0.1	10.099	B
A-B	57.53	57.53	14.38	0.00			57.53				
A-C	25.17	25.17	6.29	0.00			25.17				
A-D	13.48	13.48	3.37	0.00			13.48				
AB-CD	161.59	161.59	40.40	0.00	595.83	0.271	162.15	0.5	0.4	8.314	A
AB-C	93.50	93.50	23.37	0.00			93.50				
D-AB	206.77	206.77	51.69	0.00	677.20	0.305	207.43	0.6	0.4	7.676	A
D-C	29.67	29.67	7.42	0.00	410.70	0.072	29.77	0.1	0.1	9.454	A
C-D	20.68	20.68	5.17	0.00			20.68				
C-A	26.07	26.07	6.52	0.00			26.07				
C-B	89.00	89.00	22.25	0.00			89.00				
CD-AB	291.16	291.16	72.79	0.00	611.98	0.476	293.15	1.5	1.0	11.369	B
CD-A	31.33	31.33	7.83	0.00			31.33				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	180.68	180.68	45.17	0.00	707.70	0.255	181.10	0.5	0.3	6.843	A
B-A	37.64	37.64	9.41	0.00	426.71	0.088	37.76	0.1	0.1	9.258	A
A-B	48.18	48.18	12.05	0.00			48.18				
A-C	21.08	21.08	5.27	0.00			21.08				
A-D	11.29	11.29	2.82	0.00			11.29				
AB-CD	133.28	133.28	33.32	0.00	592.59	0.225	133.65	0.4	0.3	7.853	A
AB-C	80.19	80.19	20.05	0.00			80.19				
D-AB	173.16	173.16	43.29	0.00	685.57	0.253	173.57	0.4	0.3	7.036	A
D-C	24.84	24.84	6.21	0.00	431.40	0.058	24.91	0.1	0.1	8.857	A
C-D	17.32	17.32	4.33	0.00			17.32				
C-A	21.83	21.83	5.46	0.00			21.83				
C-B	74.53	74.53	18.63	0.00			74.53				
CD-AB	241.34	241.34	60.33	0.00	609.86	0.396	242.45	1.0	0.7	9.831	A
CD-A	28.60	28.60	7.15	0.00			28.60				

Do-Nothing - DN 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	7.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	723.253	-	-	-	-	-	0.280	0.280	0.111	-	-
1	D-C	523.956	-	0.152	0.345	0.152	0.345	0.241	0.241	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DN 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	86.00	100.000
B - Miller's Ln		ONE HOUR	✓	403.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	201.00	100.000
D - Shenick Rd		ONE HOUR	✓	186.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	42.000	31.000	13.000
	B - Miller's Ln	47.000	0.000	147.000	209.000
	C - Golf Links Rd (N)	47.000	118.000	0.000	36.000
	D - Shenick Rd	17.000	141.000	28.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.12	0.00	0.36	0.52
	C - Golf Links Rd (N)	0.23	0.59	0.00	0.18
	D - Shenick Rd	0.09	0.76	0.15	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.57	12.01	1.3	B	326.67	490.01
B-A	0.15	12.49	0.2	B	43.13	64.69
A-B					38.54	57.81
A-C					28.45	42.67
A-D					11.93	17.89
AB-CD	0.45	10.23	0.9	B	227.09	340.63
AB-C					139.55	209.33
D-AB	0.27	7.52	0.4	A	144.98	217.48
D-C	0.09	11.14	0.1	B	25.69	38.54
C-D					33.03	49.55
C-A					43.13	64.69
C-B					108.28	162.42
CD-AB	0.48	11.07	1.0	B	247.56	371.34
CD-A					48.68	73.03

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	268.02	268.02	67.00	0.00	710.76	0.377	265.63	0.0	0.6	8.046	A
B-A	35.38	35.38	8.85	0.00	427.47	0.083	35.03	0.0	0.1	9.165	A
A-B	31.62	31.62	7.90	0.00			31.62				
A-C	23.34	23.34	5.83	0.00			23.34				
A-D	9.79	9.79	2.45	0.00			9.79				
AB-CD	177.18	177.18	44.30	0.00	603.87	0.293	175.44	0.0	0.4	8.374	A
AB-C	121.57	121.57	30.39	0.00			121.57				
D-AB	118.95	118.95	29.74	0.00	676.43	0.176	118.10	0.0	0.2	6.439	A
D-C	21.08	21.08	5.27	0.00	411.50	0.051	20.87	0.0	0.1	9.211	A
C-D	27.10	27.10	6.78	0.00			27.10				
C-A	35.38	35.38	8.85	0.00			35.38				
C-B	88.84	88.84	22.21	0.00			88.84				
CD-AB	199.27	199.27	49.82	0.00	615.78	0.324	197.34	0.0	0.5	8.566	A
CD-A	43.06	43.06	10.76	0.00			43.06				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	320.04	320.04	80.01	0.00	703.33	0.455	319.14	0.6	0.8	9.347	A
B-A	42.25	42.25	10.56	0.00	394.40	0.107	42.13	0.1	0.1	10.216	B
A-B	37.76	37.76	9.44	0.00			37.76				
A-C	27.87	27.87	6.97	0.00			27.87				
A-D	11.69	11.69	2.92	0.00			11.69				
AB-CD	219.36	219.36	54.84	0.00	614.96	0.357	218.71	0.4	0.6	9.080	A
AB-C	139.34	139.34	34.83	0.00			139.34				
D-AB	142.04	142.04	35.51	0.00	666.54	0.213	141.81	0.2	0.3	6.857	A
D-C	25.17	25.17	6.29	0.00	387.48	0.065	25.11	0.1	0.1	9.933	A
C-D	32.36	32.36	8.09	0.00			32.36				
C-A	42.25	42.25	10.56	0.00			42.25				
C-B	106.08	106.08	26.52	0.00			106.08				
CD-AB	241.36	241.36	60.34	0.00	619.62	0.390	240.69	0.5	0.7	9.487	A
CD-A	48.78	48.78	12.20	0.00			48.78				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	391.96	391.96	97.99	0.00	691.64	0.567	390.16	0.8	1.3	11.866	B
B-A	51.75	51.75	12.94	0.00	341.41	0.152	51.52	0.1	0.2	12.408	B
A-B	46.24	46.24	11.56	0.00			46.24				
A-C	34.13	34.13	8.53	0.00			34.13				
A-D	14.31	14.31	3.58	0.00			14.31				
AB-CD	281.79	281.79	70.45	0.00	635.19	0.444	280.60	0.6	0.9	10.145	B
AB-C	156.81	156.81	39.20	0.00			156.81				
D-AB	173.96	173.96	43.49	0.00	652.39	0.267	173.60	0.3	0.4	7.519	A
D-C	30.83	30.83	7.71	0.00	354.67	0.087	30.73	0.1	0.1	11.109	B
C-D	39.64	39.64	9.91	0.00			39.64				
C-A	51.75	51.75	12.94	0.00			51.75				
C-B	129.92	129.92	32.48	0.00			129.92				
CD-AB	301.08	301.08	75.27	0.00	626.90	0.480	299.88	0.7	1.0	10.979	B
CD-A	54.18	54.18	13.55	0.00			54.18				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	391.96	391.96	97.99	0.00	691.42	0.567	391.89	1.3	1.3	12.011	B
B-A	51.75	51.75	12.94	0.00	340.03	0.152	51.74	0.2	0.2	12.486	B
A-B	46.24	46.24	11.56	0.00			46.24				
A-C	34.13	34.13	8.53	0.00			34.13				
A-D	14.31	14.31	3.58	0.00			14.31				
AB-CD	283.27	283.27	70.82	0.00	635.87	0.445	283.20	0.9	0.9	10.232	B
AB-C	157.06	157.06	39.27	0.00			157.06				
D-AB	173.96	173.96	43.49	0.00	652.28	0.267	173.95	0.4	0.4	7.525	A
D-C	30.83	30.83	7.71	0.00	353.82	0.087	30.83	0.1	0.1	11.145	B
C-D	39.64	39.64	9.91	0.00			39.64				
C-A	51.75	51.75	12.94	0.00			51.75				
C-B	129.92	129.92	32.48	0.00			129.92				
CD-AB	301.45	301.45	75.36	0.00	626.95	0.481	301.39	1.0	1.0	11.067	B
CD-A	54.17	54.17	13.54	0.00			54.17				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	320.04	320.04	80.01	0.00	703.06	0.455	321.79	1.3	0.9	9.485	A
B-A	42.25	42.25	10.56	0.00	392.65	0.108	42.48	0.2	0.1	10.288	B
A-B	37.76	37.76	9.44	0.00			37.76				
A-C	27.87	27.87	6.97	0.00			27.87				
A-D	11.69	11.69	2.92	0.00			11.69				
AB-CD	221.38	221.38	55.34	0.00	615.80	0.359	222.51	0.9	0.6	9.190	A
AB-C	139.97	139.97	34.99	0.00			139.97				
D-AB	142.04	142.04	35.51	0.00	666.40	0.213	142.39	0.4	0.3	6.876	A
D-C	25.17	25.17	6.29	0.00	386.16	0.065	25.27	0.1	0.1	9.977	A
C-D	32.36	32.36	8.09	0.00			32.36				
C-A	42.25	42.25	10.56	0.00			42.25				
C-B	106.08	106.08	26.52	0.00			106.08				
CD-AB	241.93	241.93	60.48	0.00	619.69	0.390	243.08	1.0	0.7	9.594	A
CD-A	48.80	48.80	12.20	0.00			48.80				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	268.02	268.02	67.00	0.00	710.45	0.377	268.96	0.9	0.6	8.171	A
B-A	35.38	35.38	8.85	0.00	425.39	0.083	35.51	0.1	0.1	9.237	A
A-B	31.62	31.62	7.90	0.00			31.62				
A-C	23.34	23.34	5.83	0.00			23.34				
A-D	9.79	9.79	2.45	0.00			9.79				
AB-CD	179.53	179.53	44.88	0.00	604.74	0.297	180.23	0.6	0.5	8.498	A
AB-C	122.55	122.55	30.64	0.00			122.55				
D-AB	118.95	118.95	29.74	0.00	676.23	0.176	119.18	0.3	0.2	6.467	A
D-C	21.08	21.08	5.27	0.00	409.79	0.051	21.14	0.1	0.1	9.265	A
C-D	27.10	27.10	6.78	0.00			27.10				
C-A	35.38	35.38	8.85	0.00			35.38				
C-B	88.84	88.84	22.21	0.00			88.84				
CD-AB	200.30	200.30	50.07	0.00	615.89	0.325	201.00	0.7	0.5	8.693	A
CD-A	43.11	43.11	10.78	0.00			43.11				

Do-Nothing - DN 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	8.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.167	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	520.170	-	0.151	0.342	0.151	0.342	0.239	0.239	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DN 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	150.00	100.000
B - Miller's Ln		ONE HOUR	✓	322.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	169.00	100.000
D - Shenick Rd		ONE HOUR	✓	289.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	90.000	39.000	21.000
	B - Miller's Ln	60.000	0.000	92.000	170.000
	C - Golf Links Rd (N)	36.000	108.000	0.000	25.000
	D - Shenick Rd	19.000	234.000	36.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	B - Miller's Ln	0.19	0.00	0.29	0.53
	C - Golf Links Rd (N)	0.21	0.64	0.00	0.15
	D - Shenick Rd	0.07	0.81	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.43	9.48	0.8	A	240.42	360.62
B-A	0.20	13.21	0.2	B	55.06	82.59
A-B					82.59	123.88
A-C					35.79	53.68
A-D					19.27	28.90
AB-CD	0.38	9.47	0.7	A	187.64	281.45
AB-C					107.57	161.36
D-AB	0.42	9.51	0.7	A	232.16	348.24
D-C	0.11	11.31	0.1	B	33.03	49.55
C-D					22.94	34.41
C-A					33.03	49.55
C-B					99.10	148.65
CD-AB	0.65	16.87	2.0	C	329.39	494.08
CD-A					34.64	51.97

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	197.25	197.25	49.31	0.00	697.73	0.283	195.69	0.0	0.4	7.149	A
B-A	45.17	45.17	11.29	0.00	412.87	0.109	44.69	0.0	0.1	9.765	A
A-B	67.76	67.76	16.94	0.00			67.76				
A-C	29.36	29.36	7.34	0.00			29.36				
A-D	15.81	15.81	3.95	0.00			15.81				
AB-CD	148.93	148.93	37.23	0.00	594.99	0.250	147.55	0.0	0.3	8.024	A
AB-C	91.93	91.93	22.98	0.00			91.93				
D-AB	190.47	190.47	47.62	0.00	680.98	0.280	188.94	0.0	0.4	7.295	A
D-C	27.10	27.10	6.78	0.00	420.10	0.065	26.83	0.0	0.1	9.147	A
C-D	18.82	18.82	4.71	0.00			18.82				
C-A	27.10	27.10	6.78	0.00			27.10				
C-B	81.31	81.31	20.33	0.00			81.31				
CD-AB	263.87	263.87	65.97	0.00	606.68	0.435	260.76	0.0	0.8	10.324	B
CD-A	33.48	33.48	8.37	0.00			33.48				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	235.53	235.53	58.88	0.00	686.58	0.343	235.03	0.4	0.5	7.963	A
B-A	53.94	53.94	13.48	0.00	383.03	0.141	53.78	0.1	0.2	10.927	B
A-B	80.91	80.91	20.23	0.00			80.91				
A-C	35.06	35.06	8.77	0.00			35.06				
A-D	18.88	18.88	4.72	0.00			18.88				
AB-CD	182.21	182.21	45.55	0.00	600.39	0.303	181.76	0.3	0.5	8.594	A
AB-C	106.76	106.76	26.69	0.00			106.76				
D-AB	227.44	227.44	56.86	0.00	671.33	0.339	226.95	0.4	0.5	8.092	A
D-C	32.36	32.36	8.09	0.00	395.40	0.082	32.28	0.1	0.1	9.911	A
C-D	22.47	22.47	5.62	0.00			22.47				
C-A	32.36	32.36	8.09	0.00			32.36				
C-B	97.09	97.09	24.27	0.00			97.09				
CD-AB	320.68	320.68	80.17	0.00	609.49	0.526	319.28	0.8	1.1	12.357	B
CD-A	35.73	35.73	8.93	0.00			35.73				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	288.47	288.47	72.12	0.00	668.52	0.432	287.55	0.5	0.7	9.425	A
B-A	66.06	66.06	16.52	0.00	340.05	0.194	65.76	0.2	0.2	13.110	B
A-B	99.09	99.09	24.77	0.00			99.09				
A-C	42.94	42.94	10.73	0.00			42.94				
A-D	23.12	23.12	5.78	0.00			23.12				
AB-CD	230.11	230.11	57.53	0.00	610.97	0.377	229.34	0.5	0.6	9.424	A
AB-C	123.50	123.50	30.87	0.00			123.50				
D-AB	278.56	278.56	69.64	0.00	657.27	0.424	277.69	0.5	0.7	9.462	A
D-C	39.64	39.64	9.91	0.00	358.67	0.111	39.50	0.1	0.1	11.274	B
C-D	27.53	27.53	6.88	0.00			27.53				
C-A	39.64	39.64	9.91	0.00			39.64				
C-B	118.91	118.91	29.73	0.00			118.91				
CD-AB	401.46	401.46	100.37	0.00	615.71	0.652	398.37	1.1	1.9	16.389	C
CD-A	34.77	34.77	8.69	0.00			34.77				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	288.47	288.47	72.12	0.00	668.09	0.432	288.44	0.7	0.8	9.480	A
B-A	66.06	66.06	16.52	0.00	338.53	0.195	66.05	0.2	0.2	13.211	B
A-B	99.09	99.09	24.77	0.00			99.09				
A-C	42.94	42.94	10.73	0.00			42.94				
A-D	23.12	23.12	5.78	0.00			23.12				
AB-CD	230.85	230.85	57.71	0.00	611.23	0.378	230.81	0.6	0.7	9.471	A
AB-C	123.65	123.65	30.91	0.00			123.65				
D-AB	278.56	278.56	69.64	0.00	657.15	0.424	278.53	0.7	0.7	9.506	A
D-C	39.64	39.64	9.91	0.00	357.97	0.111	39.63	0.1	0.1	11.308	B
C-D	27.53	27.53	6.88	0.00			27.53				
C-A	39.64	39.64	9.91	0.00			39.64				
C-B	118.91	118.91	29.73	0.00			118.91				
CD-AB	402.38	402.38	100.59	0.00	615.83	0.653	402.15	1.9	2.0	16.872	C
CD-A	34.70	34.70	8.68	0.00			34.70				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	235.53	235.53	58.88	0.00	686.10	0.343	236.43	0.8	0.5	8.023	A
B-A	53.94	53.94	13.48	0.00	380.77	0.142	54.23	0.2	0.2	11.036	B
A-B	80.91	80.91	20.23	0.00			80.91				
A-C	35.06	35.06	8.77	0.00			35.06				
A-D	18.88	18.88	4.72	0.00			18.88				
AB-CD	183.28	183.28	45.82	0.00	600.73	0.305	184.01	0.7	0.5	8.660	A
AB-C	107.09	107.09	26.77	0.00			107.09				
D-AB	227.44	227.44	56.86	0.00	671.18	0.339	228.28	0.7	0.5	8.145	A
D-C	32.36	32.36	8.09	0.00	394.38	0.082	32.50	0.1	0.1	9.953	A
C-D	22.47	22.47	5.62	0.00			22.47				
C-A	32.36	32.36	8.09	0.00			32.36				
C-B	97.09	97.09	24.27	0.00			97.09				
CD-AB	322.04	322.04	80.51	0.00	609.64	0.528	325.04	2.0	1.2	12.799	B
CD-A	35.69	35.69	8.92	0.00			35.69				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	197.25	197.25	49.31	0.00	697.23	0.283	197.77	0.5	0.4	7.214	A
B-A	45.17	45.17	11.29	0.00	410.26	0.110	45.34	0.2	0.1	9.869	A
A-B	67.76	67.76	16.94	0.00			67.76				
A-C	29.36	29.36	7.34	0.00			29.36				
A-D	15.81	15.81	3.95	0.00			15.81				
AB-CD	150.44	150.44	37.61	0.00	595.41	0.253	150.91	0.5	0.4	8.111	A
AB-C	92.50	92.50	23.12	0.00			92.50				
D-AB	190.47	190.47	47.62	0.00	680.76	0.280	190.98	0.5	0.4	7.357	A
D-C	27.10	27.10	6.78	0.00	418.67	0.065	27.18	0.1	0.1	9.199	A
C-D	18.82	18.82	4.71	0.00			18.82				
C-A	27.10	27.10	6.78	0.00			27.10				
C-B	81.31	81.31	20.33	0.00			81.31				
CD-AB	265.90	265.90	66.47	0.00	606.88	0.438	267.44	1.2	0.8	10.661	B
CD-A	33.49	33.49	8.37	0.00			33.49				

Do-Nothing - DN 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	8.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	723.520	-	-	-	-	-	0.280	0.280	0.111	-	-
1	D-C	523.428	-	0.152	0.344	0.152	0.344	0.241	0.241	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DN 2029	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	108.00	100.000
B - Miller's Ln		ONE HOUR	✓	450.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	237.00	100.000
D - Shenick Rd		ONE HOUR	✓	211.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	53.000	39.000	16.000
	B - Miller's Ln	61.000	0.000	161.000	228.000
	C - Golf Links Rd (N)	69.000	129.000	0.000	39.000
	D - Shenick Rd	25.000	155.000	31.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.14	0.00	0.36	0.51
	C - Golf Links Rd (N)	0.29	0.54	0.00	0.16
	D - Shenick Rd	0.12	0.73	0.15	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.64	14.73	1.7	B	356.95	535.43
B-A	0.22	15.49	0.3	C	55.97	83.96
A-B					48.63	72.95
A-C					35.79	53.68
A-D					14.68	22.02
AB-CD	0.50	11.09	1.2	B	256.62	384.94
AB-C					150.31	225.47
D-AB	0.31	8.17	0.4	A	165.17	247.76
D-C	0.10	12.22	0.1	B	28.45	42.67
C-D					35.79	53.68
C-A					63.32	94.97
C-B					118.37	177.56
CD-AB	0.53	12.01	1.2	B	278.48	417.71
CD-A					68.21	102.32

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	292.86	292.86	73.21	0.00	701.33	0.418	290.04	0.0	0.7	8.696	A
B-A	45.92	45.92	11.48	0.00	408.07	0.113	45.42	0.0	0.1	9.916	A
A-B	39.90	39.90	9.98	0.00			39.90				
A-C	29.36	29.36	7.34	0.00			29.36				
A-D	12.05	12.05	3.01	0.00			12.05				
AB-CD	197.91	197.91	49.48	0.00	607.24	0.326	195.85	0.0	0.5	8.715	A
AB-C	133.53	133.53	33.38	0.00			133.53				
D-AB	135.51	135.51	33.88	0.00	668.14	0.203	134.51	0.0	0.3	6.734	A
D-C	23.34	23.34	5.83	0.00	395.73	0.059	23.09	0.0	0.1	9.655	A
C-D	29.36	29.36	7.34	0.00			29.36				
C-A	51.95	51.95	12.99	0.00			51.95				
C-B	97.12	97.12	24.28	0.00			97.12				
CD-AB	221.95	221.95	55.49	0.00	621.49	0.357	219.67	0.0	0.6	8.915	A
CD-A	61.62	61.62	15.41	0.00			61.62				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	349.70	349.70	87.43	0.00	690.55	0.506	348.51	0.7	1.0	10.487	B
B-A	54.84	54.84	13.71	0.00	367.58	0.149	54.65	0.1	0.2	11.496	B
A-B	47.65	47.65	11.91	0.00			47.65				
A-C	35.06	35.06	8.77	0.00			35.06				
A-D	14.38	14.38	3.60	0.00			14.38				
AB-CD	246.94	246.94	61.73	0.00	621.71	0.397	246.10	0.5	0.7	9.577	A
AB-C	151.01	151.01	37.75	0.00			151.01				
D-AB	161.82	161.82	40.45	0.00	656.28	0.247	161.53	0.3	0.3	7.271	A
D-C	27.87	27.87	6.97	0.00	368.04	0.076	27.79	0.1	0.1	10.578	B
C-D	35.06	35.06	8.77	0.00			35.06				
C-A	62.03	62.03	15.51	0.00			62.03				
C-B	115.97	115.97	28.99	0.00			115.97				
CD-AB	270.72	270.72	67.68	0.00	628.86	0.430	269.85	0.6	0.8	10.012	B
CD-A	68.81	68.81	17.20	0.00			68.81				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	428.30	428.30	107.07	0.00	672.71	0.637	425.58	1.0	1.7	14.406	B
B-A	67.16	67.16	16.79	0.00	301.71	0.223	66.73	0.2	0.3	15.293	C
A-B	58.35	58.35	14.59	0.00			58.35				
A-C	42.94	42.94	10.73	0.00			42.94				
A-D	17.62	17.62	4.40	0.00			17.62				
AB-CD	320.77	320.77	80.19	0.00	647.84	0.495	319.13	0.7	1.1	10.941	B
AB-C	165.37	165.37	41.34	0.00			165.37				
D-AB	198.18	198.18	49.55	0.00	639.10	0.310	197.70	0.3	0.4	8.147	A
D-C	34.13	34.13	8.53	0.00	329.98	0.103	34.00	0.1	0.1	12.158	B
C-D	42.94	42.94	10.73	0.00			42.94				
C-A	75.97	75.97	18.99	0.00			75.97				
C-B	142.03	142.03	35.51	0.00			142.03				
CD-AB	341.52	341.52	85.38	0.00	642.29	0.532	339.85	0.8	1.2	11.865	B
CD-A	74.19	74.19	18.55	0.00			74.19				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	428.30	428.30	107.07	0.00	672.19	0.637	428.15	1.7	1.7	14.727	B
B-A	67.16	67.16	16.79	0.00	299.45	0.224	67.14	0.3	0.3	15.494	C
A-B	58.35	58.35	14.59	0.00			58.35				
A-C	42.94	42.94	10.73	0.00			42.94				
A-D	17.62	17.62	4.40	0.00			17.62				
AB-CD	323.15	323.15	80.79	0.00	648.98	0.498	323.02	1.1	1.2	11.085	B
AB-C	165.56	165.56	41.39	0.00			165.56				
D-AB	198.18	198.18	49.55	0.00	638.93	0.310	198.17	0.4	0.4	8.167	A
D-C	34.13	34.13	8.53	0.00	328.76	0.104	34.13	0.1	0.1	12.218	B
C-D	42.94	42.94	10.73	0.00			42.94				
C-A	75.97	75.97	18.99	0.00			75.97				
C-B	142.03	142.03	35.51	0.00			142.03				
CD-AB	342.02	342.02	85.50	0.00	642.40	0.532	341.93	1.2	1.2	12.005	B
CD-A	74.16	74.16	18.54	0.00			74.16				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	349.70	349.70	87.43	0.00	689.98	0.507	352.37	1.7	1.1	10.747	B
B-A	54.84	54.84	13.71	0.00	364.88	0.150	55.26	0.3	0.2	11.642	B
A-B	47.65	47.65	11.91	0.00			47.65				
A-C	35.06	35.06	8.77	0.00			35.06				
A-D	14.38	14.38	3.60	0.00			14.38				
AB-CD	250.05	250.05	62.51	0.00	623.09	0.401	251.61	1.2	0.8	9.752	A
AB-C	151.77	151.77	37.94	0.00			151.77				
D-AB	161.82	161.82	40.45	0.00	656.07	0.247	162.28	0.4	0.3	7.296	A
D-C	27.87	27.87	6.97	0.00	366.18	0.076	27.99	0.1	0.1	10.648	B
C-D	35.06	35.06	8.77	0.00			35.06				
C-A	62.03	62.03	15.51	0.00			62.03				
C-B	115.97	115.97	28.99	0.00			115.97				
CD-AB	271.46	271.46	67.87	0.00	629.00	0.432	273.06	1.2	0.8	10.172	B
CD-A	68.82	68.82	17.20	0.00			68.82				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	292.86	292.86	73.21	0.00	700.80	0.418	294.15	1.1	0.7	8.880	A
B-A	45.92	45.92	11.48	0.00	405.36	0.113	46.12	0.2	0.1	10.026	B
A-B	39.90	39.90	9.98	0.00			39.90				
A-C	29.36	29.36	7.34	0.00			29.36				
A-D	12.05	12.05	3.01	0.00			12.05				
AB-CD	200.93	200.93	50.23	0.00	608.44	0.330	201.85	0.8	0.5	8.883	A
AB-C	134.62	134.62	33.66	0.00			134.62				
D-AB	135.51	135.51	33.88	0.00	667.88	0.203	135.81	0.3	0.3	6.768	A
D-C	23.34	23.34	5.83	0.00	393.60	0.059	23.42	0.1	0.1	9.728	A
C-D	29.36	29.36	7.34	0.00			29.36				
C-A	51.95	51.95	12.99	0.00			51.95				
C-B	97.12	97.12	24.28	0.00			97.12				
CD-AB	223.19	223.19	55.80	0.00	621.69	0.359	224.11	0.8	0.6	9.080	A
CD-A	61.68	61.68	15.42	0.00			61.68				

Do-Nothing - DN 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	9.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.225	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	520.055	-	0.151	0.342	0.151	0.342	0.239	0.239	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DN 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	156.00	100.000
B - Miller's Ln		ONE HOUR	✓	342.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	180.00	100.000
D - Shenick Rd		ONE HOUR	✓	307.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	94.000	41.000	21.000
	B - Miller's Ln	63.000	0.000	98.000	181.000
	C - Golf Links Rd (N)	38.000	115.000	0.000	27.000
	D - Shenick Rd	20.000	249.000	38.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.13
	B - Miller's Ln	0.18	0.00	0.29	0.53
	C - Golf Links Rd (N)	0.21	0.64	0.00	0.15
	D - Shenick Rd	0.07	0.81	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.46	10.14	0.9	B	256.02	384.02
B-A	0.21	14.20	0.3	B	57.81	86.71
A-B					86.26	129.38
A-C					37.62	56.43
A-D					19.27	28.90
AB-CD	0.40	9.78	0.7	A	200.19	300.28
AB-C					112.43	168.64
D-AB	0.45	10.11	0.8	B	246.84	370.26
D-C	0.12	11.90	0.1	B	34.87	52.30
C-D					24.78	37.16
C-A					34.87	52.30
C-B					105.53	158.29
CD-AB	0.70	19.21	2.4	C	352.72	529.08
CD-A					34.23	51.35

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	210.05	210.05	52.51	0.00	695.26	0.302	208.33	0.0	0.4	7.369	A
B-A	47.43	47.43	11.86	0.00	404.35	0.117	46.90	0.0	0.1	10.058	B
A-B	70.77	70.77	17.69	0.00			70.77				
A-C	30.87	30.87	7.72	0.00			30.87				
A-D	15.81	15.81	3.95	0.00			15.81				
AB-CD	158.30	158.30	39.58	0.00	596.15	0.266	156.81	0.0	0.4	8.170	A
AB-C	96.71	96.71	24.18	0.00			96.71				
D-AB	202.52	202.52	50.63	0.00	678.10	0.299	200.83	0.0	0.4	7.518	A
D-C	28.61	28.61	7.15	0.00	412.85	0.069	28.31	0.0	0.1	9.355	A
C-D	20.33	20.33	5.08	0.00			20.33				
C-A	28.61	28.61	7.15	0.00			28.61				
C-B	86.58	86.58	21.64	0.00			86.58				
CD-AB	281.84	281.84	70.46	0.00	607.83	0.464	278.35	0.0	0.9	10.824	B
CD-A	34.18	34.18	8.54	0.00			34.18				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	250.82	250.82	62.70	0.00	683.01	0.367	250.24	0.4	0.6	8.305	A
B-A	56.64	56.64	14.16	0.00	371.85	0.152	56.45	0.1	0.2	11.406	B
A-B	84.50	84.50	21.13	0.00			84.50				
A-C	36.86	36.86	9.21	0.00			36.86				
A-D	18.88	18.88	4.72	0.00			18.88				
AB-CD	194.17	194.17	48.54	0.00	602.60	0.322	193.66	0.4	0.5	8.798	A
AB-C	111.80	111.80	27.95	0.00			111.80				
D-AB	241.83	241.83	60.46	0.00	667.67	0.362	241.27	0.4	0.6	8.431	A
D-C	34.16	34.16	8.54	0.00	385.79	0.089	34.07	0.1	0.1	10.233	B
C-D	24.27	24.27	6.07	0.00			24.27				
C-A	34.16	34.16	8.54	0.00			34.16				
C-B	103.38	103.38	25.85	0.00			103.38				
CD-AB	343.12	343.12	85.78	0.00	611.44	0.561	341.42	0.9	1.3	13.266	B
CD-A	35.69	35.69	8.92	0.00			35.69				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	307.18	307.18	76.80	0.00	662.71	0.464	306.09	0.6	0.8	10.061	B
B-A	69.36	69.36	17.34	0.00	324.70	0.214	69.01	0.2	0.3	14.059	B
A-B	103.50	103.50	25.87	0.00			103.50				
A-C	45.14	45.14	11.29	0.00			45.14				
A-D	23.12	23.12	5.78	0.00			23.12				
AB-CD	246.14	246.14	61.54	0.00	615.04	0.400	245.25	0.5	0.7	9.725	A
AB-C	128.21	128.21	32.05	0.00			128.21				
D-AB	296.17	296.17	74.04	0.00	652.35	0.454	295.15	0.6	0.8	10.049	B
D-C	41.84	41.84	10.46	0.00	345.20	0.121	41.68	0.1	0.1	11.854	B
C-D	29.73	29.73	7.43	0.00			29.73				
C-A	41.84	41.84	10.46	0.00			41.84				
C-B	126.62	126.62	31.65	0.00			126.62				
CD-AB	430.70	430.70	107.67	0.00	619.06	0.696	426.68	1.3	2.3	18.430	C
CD-A	32.91	32.91	8.23	0.00			32.91				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	307.18	307.18	76.80	0.00	662.11	0.464	307.15	0.8	0.9	10.137	B
B-A	69.36	69.36	17.34	0.00	322.78	0.215	69.35	0.3	0.3	14.202	B
A-B	103.50	103.50	25.87	0.00			103.50				
A-C	45.14	45.14	11.29	0.00			45.14				
A-D	23.12	23.12	5.78	0.00			23.12				
AB-CD	247.04	247.04	61.76	0.00	615.38	0.401	247.00	0.7	0.7	9.784	A
AB-C	128.37	128.37	32.09	0.00			128.37				
D-AB	296.17	296.17	74.04	0.00	652.20	0.454	296.14	0.8	0.8	10.109	B
D-C	41.84	41.84	10.46	0.00	344.33	0.122	41.83	0.1	0.1	11.900	B
C-D	29.73	29.73	7.43	0.00			29.73				
C-A	41.84	41.84	10.46	0.00			41.84				
C-B	126.62	126.62	31.65	0.00			126.62				
CD-AB	431.79	431.79	107.95	0.00	619.22	0.697	431.44	2.3	2.4	19.207	C
CD-A	32.81	32.81	8.20	0.00			32.81				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	250.82	250.82	62.70	0.00	682.38	0.368	251.88	0.9	0.6	8.382	A
B-A	56.64	56.64	14.16	0.00	369.01	0.153	56.98	0.3	0.2	11.552	B
A-B	84.50	84.50	21.13	0.00			84.50				
A-C	36.86	36.86	9.21	0.00			36.86				
A-D	18.88	18.88	4.72	0.00			18.88				
AB-CD	195.45	195.45	48.86	0.00	603.03	0.324	196.30	0.7	0.5	8.877	A
AB-C	112.17	112.17	28.04	0.00			112.17				
D-AB	241.83	241.83	60.46	0.00	667.49	0.362	242.81	0.8	0.6	8.498	A
D-C	34.16	34.16	8.54	0.00	384.57	0.089	34.32	0.1	0.1	10.282	B
C-D	24.27	24.27	6.07	0.00			24.27				
C-A	34.16	34.16	8.54	0.00			34.16				
C-B	103.38	103.38	25.85	0.00			103.38				
CD-AB	344.73	344.73	86.18	0.00	611.64	0.564	348.66	2.4	1.4	13.917	B
CD-A	35.63	35.63	8.91	0.00			35.63				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	210.05	210.05	52.51	0.00	694.66	0.302	210.65	0.6	0.4	7.446	A
B-A	47.43	47.43	11.86	0.00	401.35	0.118	47.62	0.2	0.1	10.184	B
A-B	70.77	70.77	17.69	0.00			70.77				
A-C	30.87	30.87	7.72	0.00			30.87				
A-D	15.81	15.81	3.95	0.00			15.81				
AB-CD	160.01	160.01	40.00	0.00	596.64	0.268	160.54	0.5	0.4	8.269	A
AB-C	97.32	97.32	24.33	0.00			97.32				
D-AB	202.52	202.52	50.63	0.00	677.84	0.299	203.10	0.6	0.4	7.591	A
D-C	28.61	28.61	7.15	0.00	411.22	0.070	28.70	0.1	0.1	9.413	A
C-D	20.33	20.33	5.08	0.00			20.33				
C-A	28.61	28.61	7.15	0.00			28.61				
C-B	86.58	86.58	21.64	0.00			86.58				
CD-AB	284.12	284.12	71.03	0.00	608.07	0.467	286.02	1.4	0.9	11.252	B
CD-A	34.17	34.17	8.54	0.00			34.17				

Do-Nothing - DN 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	9.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	723.441	-	-	-	-	-	0.280	0.280	0.111	-	-
1	D-C	523.583	-	0.152	0.344	0.152	0.344	0.241	0.241	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DN 2039	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	113.00	100.000
B - Miller's Ln		ONE HOUR	✓	477.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	252.00	100.000
D - Shenick Rd		ONE HOUR	✓	223.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	55.000	41.000	17.000
	B - Miller's Ln	64.000	0.000	171.000	242.000
	C - Golf Links Rd (N)	72.000	138.000	0.000	42.000
	D - Shenick Rd	26.000	164.000	33.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.13	0.00	0.36	0.51
	C - Golf Links Rd (N)	0.29	0.55	0.00	0.17
	D - Shenick Rd	0.12	0.74	0.15	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.68	16.98	2.1	C	378.98	568.46
B-A	0.26	17.73	0.3	C	58.73	88.09
A-B					50.47	75.70
A-C					37.62	56.43
A-D					15.60	23.40
AB-CD	0.53	11.72	1.4	B	277.25	415.87
AB-C					154.41	231.61
D-AB	0.33	8.50	0.5	A	174.35	261.52
D-C	0.12	12.89	0.1	B	30.28	45.42
C-D					38.54	57.81
C-A					66.07	99.10
C-B					126.63	189.95
CD-AB	0.57	12.89	1.4	B	298.29	447.43
CD-A					68.57	102.86

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	310.93	310.93	77.73	0.00	698.74	0.445	307.78	0.0	0.8	9.137	A
B-A	48.18	48.18	12.05	0.00	396.85	0.121	47.64	0.0	0.1	10.294	B
A-B	41.41	41.41	10.35	0.00			41.41				
A-C	30.87	30.87	7.72	0.00			30.87				
A-D	12.80	12.80	3.20	0.00			12.80				
AB-CD	212.25	212.25	53.06	0.00	610.92	0.347	209.96	0.0	0.6	8.938	A
AB-C	139.19	139.19	34.80	0.00			139.19				
D-AB	143.04	143.04	35.76	0.00	664.38	0.215	141.96	0.0	0.3	6.877	A
D-C	24.84	24.84	6.21	0.00	387.69	0.064	24.57	0.0	0.1	9.907	A
C-D	31.62	31.62	7.90	0.00			31.62				
C-A	54.21	54.21	13.55	0.00			54.21				
C-B	103.89	103.89	25.97	0.00			103.89				
CD-AB	237.07	237.07	59.27	0.00	623.37	0.380	234.55	0.0	0.6	9.206	A
CD-A	62.98	62.98	15.75	0.00			62.98				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	371.28	371.28	92.82	0.00	686.81	0.541	369.84	0.8	1.1	11.304	B
B-A	57.53	57.53	14.38	0.00	351.32	0.164	57.31	0.1	0.2	12.225	B
A-B	49.44	49.44	12.36	0.00			49.44				
A-C	36.86	36.86	9.21	0.00			36.86				
A-D	15.28	15.28	3.82	0.00			15.28				
AB-CD	266.12	266.12	66.53	0.00	627.88	0.424	265.13	0.6	0.8	9.917	A
AB-C	155.86	155.86	38.96	0.00			155.86				
D-AB	170.81	170.81	42.70	0.00	651.59	0.262	170.49	0.3	0.4	7.478	A
D-C	29.67	29.67	7.42	0.00	358.01	0.083	29.58	0.1	0.1	10.959	B
C-D	37.76	37.76	9.44	0.00			37.76				
C-A	64.73	64.73	16.18	0.00			64.73				
C-B	124.06	124.06	31.01	0.00			124.06				
CD-AB	289.73	289.73	72.43	0.00	631.81	0.459	288.72	0.6	0.9	10.474	B
CD-A	69.54	69.54	17.38	0.00			69.54				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	454.72	454.72	113.68	0.00	666.60	0.682	451.17	1.1	2.0	16.434	C
B-A	70.47	70.47	17.62	0.00	276.52	0.255	69.90	0.2	0.3	17.369	C
A-B	60.56	60.56	15.14	0.00			60.56				
A-C	45.14	45.14	11.29	0.00			45.14				
A-D	18.72	18.72	4.68	0.00			18.72				
AB-CD	347.90	347.90	86.97	0.00	658.13	0.529	345.88	0.8	1.3	11.519	B
AB-C	167.13	167.13	41.78	0.00			167.13				
D-AB	209.19	209.19	52.30	0.00	632.86	0.331	208.65	0.4	0.5	8.475	A
D-C	36.33	36.33	9.08	0.00	317.11	0.115	36.18	0.1	0.1	12.808	B
C-D	46.24	46.24	11.56	0.00			46.24				
C-A	79.27	79.27	19.82	0.00			79.27				
C-B	151.94	151.94	37.99	0.00			151.94				
CD-AB	366.66	366.66	91.67	0.00	647.08	0.567	364.63	0.9	1.4	12.694	B
CD-A	73.21	73.21	18.30	0.00			73.21				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	454.72	454.72	113.68	0.00	665.86	0.683	454.49	2.0	2.1	16.982	C
B-A	70.47	70.47	17.62	0.00	273.37	0.258	70.43	0.3	0.3	17.733	C
A-B	60.56	60.56	15.14	0.00			60.56				
A-C	45.14	45.14	11.29	0.00			45.14				
A-D	18.72	18.72	4.68	0.00			18.72				
AB-CD	351.13	351.13	87.78	0.00	659.71	0.532	350.96	1.3	1.4	11.719	B
AB-C	167.22	167.22	41.81	0.00			167.22				
D-AB	209.19	209.19	52.30	0.00	632.64	0.331	209.18	0.5	0.5	8.501	A
D-C	36.33	36.33	9.08	0.00	315.56	0.115	36.33	0.1	0.1	12.892	B
C-D	46.24	46.24	11.56	0.00			46.24				
C-A	79.27	79.27	19.82	0.00			79.27				
C-B	151.94	151.94	37.99	0.00			151.94				
CD-AB	367.24	367.24	91.81	0.00	647.20	0.567	367.12	1.4	1.4	12.887	B
CD-A	73.16	73.16	18.29	0.00			73.16				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	371.28	371.28	92.82	0.00	686.03	0.541	374.80	2.1	1.2	11.693	B
B-A	57.53	57.53	14.38	0.00	347.69	0.165	58.10	0.3	0.2	12.454	B
A-B	49.44	49.44	12.36	0.00			49.44				
A-C	36.86	36.86	9.21	0.00			36.86				
A-D	15.28	15.28	3.82	0.00			15.28				
AB-CD	270.27	270.27	67.57	0.00	629.77	0.429	272.19	1.4	0.9	10.147	B
AB-C	156.67	156.67	39.17	0.00			156.67				
D-AB	170.81	170.81	42.70	0.00	651.32	0.262	171.33	0.5	0.4	7.507	A
D-C	29.67	29.67	7.42	0.00	355.67	0.083	29.81	0.1	0.1	11.052	B
C-D	37.76	37.76	9.44	0.00			37.76				
C-A	64.73	64.73	16.18	0.00			64.73				
C-B	124.06	124.06	31.01	0.00			124.06				
CD-AB	290.59	290.59	72.65	0.00	631.97	0.460	292.54	1.4	0.9	10.681	B
CD-A	69.53	69.53	17.38	0.00			69.53				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	310.93	310.93	77.73	0.00	698.12	0.445	312.50	1.2	0.8	9.373	A
B-A	48.18	48.18	12.05	0.00	393.63	0.122	48.42	0.2	0.1	10.435	B
A-B	41.41	41.41	10.35	0.00			41.41				
A-C	30.87	30.87	7.72	0.00			30.87				
A-D	12.80	12.80	3.20	0.00			12.80				
AB-CD	215.81	215.81	53.95	0.00	612.39	0.352	216.92	0.9	0.6	9.140	A
AB-C	140.35	140.35	35.09	0.00			140.35				
D-AB	143.04	143.04	35.76	0.00	664.09	0.215	143.37	0.4	0.3	6.919	A
D-C	24.84	24.84	6.21	0.00	385.25	0.064	24.93	0.1	0.1	9.993	A
C-D	31.62	31.62	7.90	0.00			31.62				
C-A	54.21	54.21	13.55	0.00			54.21				
C-B	103.89	103.89	25.97	0.00			103.89				
CD-AB	238.44	238.44	59.61	0.00	623.59	0.382	239.53	0.9	0.7	9.405	A
CD-A	63.03	63.03	15.76	0.00			63.03				

Do-Something - DS 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	7.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.170	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	520.165	-	0.151	0.342	0.151	0.342	0.239	0.239	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DS 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	140.00	100.000
B - Miller's Ln		ONE HOUR	✓	295.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	156.00	100.000
D - Shenick Rd		ONE HOUR	✓	265.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	84.000	37.000	19.000
	B - Miller's Ln	55.000	0.000	84.000	156.000
	C - Golf Links Rd (N)	34.000	99.000	0.000	23.000
	D - Shenick Rd	18.000	214.000	33.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	B - Miller's Ln	0.19	0.00	0.28	0.53
	C - Golf Links Rd (N)	0.22	0.63	0.00	0.15
	D - Shenick Rd	0.07	0.81	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.39	8.73	0.6	A	220.23	330.34
B-A	0.17	12.08	0.2	B	50.47	75.70
A-B					77.08	115.62
A-C					33.95	50.93
A-D					17.43	26.15
AB-CD	0.34	9.06	0.6	A	170.06	255.08
AB-C					101.32	151.99
D-AB	0.39	8.82	0.6	A	212.89	319.33
D-C	0.10	10.63	0.1	B	30.28	45.42
C-D					21.11	31.66
C-A					31.20	46.80
C-B					90.84	136.27
CD-AB	0.60	14.52	1.5	B	299.42	449.13
CD-A					35.28	52.92

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	180.68	180.68	45.17	0.00	701.59	0.258	179.31	0.0	0.3	6.875	A
B-A	41.41	41.41	10.35	0.00	423.99	0.098	40.98	0.0	0.1	9.389	A
A-B	63.24	63.24	15.81	0.00			63.24				
A-C	27.86	27.86	6.96	0.00			27.86				
A-D	14.30	14.30	3.58	0.00			14.30				
AB-CD	135.59	135.59	33.90	0.00	593.42	0.228	134.38	0.0	0.3	7.824	A
AB-C	85.88	85.88	21.47	0.00			85.88				
D-AB	174.66	174.66	43.67	0.00	684.70	0.255	173.31	0.0	0.3	7.021	A
D-C	24.84	24.84	6.21	0.00	429.36	0.058	24.60	0.0	0.1	8.887	A
C-D	17.32	17.32	4.33	0.00			17.32				
C-A	25.60	25.60	6.40	0.00			25.60				
C-B	74.53	74.53	18.63	0.00			74.53				
CD-AB	240.54	240.54	60.14	0.00	606.01	0.397	237.89	0.0	0.7	9.715	A
CD-A	32.89	32.89	8.22	0.00			32.89				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	215.76	215.76	53.94	0.00	691.92	0.312	215.34	0.3	0.4	7.547	A
B-A	49.44	49.44	12.36	0.00	397.49	0.124	49.31	0.1	0.1	10.331	B
A-B	75.51	75.51	18.88	0.00			75.51				
A-C	33.26	33.26	8.32	0.00			33.26				
A-D	17.08	17.08	4.27	0.00			17.08				
AB-CD	165.37	165.37	41.34	0.00	597.49	0.277	164.99	0.3	0.4	8.319	A
AB-C	100.31	100.31	25.08	0.00			100.31				
D-AB	208.56	208.56	52.14	0.00	676.00	0.309	208.16	0.3	0.4	7.687	A
D-C	29.67	29.67	7.42	0.00	407.57	0.073	29.60	0.1	0.1	9.524	A
C-D	20.68	20.68	5.17	0.00			20.68				
C-A	30.57	30.57	7.64	0.00			30.57				
C-B	89.00	89.00	22.25	0.00			89.00				
CD-AB	291.76	291.76	72.94	0.00	608.05	0.480	290.67	0.7	0.9	11.312	B
CD-A	35.96	35.96	8.99	0.00			35.96				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	264.24	264.24	66.06	0.00	676.72	0.390	263.51	0.4	0.6	8.696	A
B-A	60.56	60.56	15.14	0.00	359.69	0.168	60.32	0.1	0.2	12.015	B
A-B	92.49	92.49	23.12	0.00			92.49				
A-C	40.74	40.74	10.18	0.00			40.74				
A-D	20.92	20.92	5.23	0.00			20.92				
AB-CD	207.86	207.86	51.97	0.00	605.72	0.343	207.23	0.4	0.6	9.026	A
AB-C	117.31	117.31	29.33	0.00			117.31				
D-AB	255.44	255.44	63.86	0.00	663.48	0.385	254.73	0.4	0.6	8.793	A
D-C	36.33	36.33	9.08	0.00	375.53	0.097	36.22	0.1	0.1	10.606	B
C-D	25.32	25.32	6.33	0.00			25.32				
C-A	37.43	37.43	9.36	0.00			37.43				
C-B	109.00	109.00	27.25	0.00			109.00				
CD-AB	364.17	364.17	91.04	0.00	612.88	0.594	361.95	0.9	1.5	14.250	B
CD-A	37.00	37.00	9.25	0.00			37.00				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	264.24	264.24	66.06	0.00	676.44	0.391	264.22	0.6	0.6	8.733	A
B-A	60.56	60.56	15.14	0.00	358.57	0.169	60.55	0.2	0.2	12.079	B
A-B	92.49	92.49	23.12	0.00			92.49				
A-C	40.74	40.74	10.18	0.00			40.74				
A-D	20.92	20.92	5.23	0.00			20.92				
AB-CD	208.43	208.43	52.11	0.00	605.92	0.344	208.40	0.6	0.6	9.061	A
AB-C	117.45	117.45	29.36	0.00			117.45				
D-AB	255.44	255.44	63.86	0.00	663.39	0.385	255.42	0.6	0.6	8.824	A
D-C	36.33	36.33	9.08	0.00	374.98	0.097	36.33	0.1	0.1	10.629	B
C-D	25.32	25.32	6.33	0.00			25.32				
C-A	37.43	37.43	9.36	0.00			37.43				
C-B	109.00	109.00	27.25	0.00			109.00				
CD-AB	364.89	364.89	91.22	0.00	612.97	0.595	364.75	1.5	1.5	14.518	B
CD-A	36.96	36.96	9.24	0.00			36.96				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	215.76	215.76	53.94	0.00	691.59	0.312	216.46	0.6	0.5	7.590	A
B-A	49.44	49.44	12.36	0.00	395.80	0.125	49.67	0.2	0.1	10.409	B
A-B	75.51	75.51	18.88	0.00			75.51				
A-C	33.26	33.26	8.32	0.00			33.26				
A-D	17.08	17.08	4.27	0.00			17.08				
AB-CD	166.21	166.21	41.55	0.00	597.74	0.278	166.81	0.6	0.4	8.368	A
AB-C	100.59	100.59	25.15	0.00			100.59				
D-AB	208.56	208.56	52.14	0.00	675.89	0.309	209.24	0.6	0.5	7.725	A
D-C	29.67	29.67	7.42	0.00	406.76	0.073	29.77	0.1	0.1	9.553	A
C-D	20.68	20.68	5.17	0.00			20.68				
C-A	30.57	30.57	7.64	0.00			30.57				
C-B	89.00	89.00	22.25	0.00			89.00				
CD-AB	292.86	292.86	73.21	0.00	608.17	0.482	294.99	1.5	1.0	11.585	B
CD-A	35.95	35.95	8.99	0.00			35.95				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	180.68	180.68	45.17	0.00	701.19	0.258	181.12	0.5	0.4	6.929	A
B-A	41.41	41.41	10.35	0.00	421.83	0.098	41.54	0.1	0.1	9.469	A
A-B	63.24	63.24	15.81	0.00			63.24				
A-C	27.86	27.86	6.96	0.00			27.86				
A-D	14.30	14.30	3.58	0.00			14.30				
AB-CD	136.88	136.88	34.22	0.00	593.75	0.231	137.27	0.4	0.3	7.894	A
AB-C	86.40	86.40	21.60	0.00			86.40				
D-AB	174.66	174.66	43.67	0.00	684.51	0.255	175.08	0.5	0.3	7.074	A
D-C	24.84	24.84	6.21	0.00	428.15	0.058	24.91	0.1	0.1	8.930	A
C-D	17.32	17.32	4.33	0.00			17.32				
C-A	25.60	25.60	6.40	0.00			25.60				
C-B	74.53	74.53	18.63	0.00			74.53				
CD-AB	242.29	242.29	60.57	0.00	606.18	0.400	243.46	1.0	0.7	9.963	A
CD-A	32.92	32.92	8.23	0.00			32.92				

Do-Something - DS 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	7.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	723.600	-	-	-	-	-	0.280	0.280	0.111	-	-
1	D-C	523.270	-	0.152	0.344	0.152	0.344	0.241	0.241	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	100.00	100.000
B - Miller's Ln		ONE HOUR	✓	413.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	218.00	100.000
D - Shenick Rd		ONE HOUR	✓	192.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	49.000	36.000	15.000
	B - Miller's Ln	57.000	0.000	147.000	209.000
	C - Golf Links Rd (N)	64.000	118.000	0.000	36.000
	D - Shenick Rd	23.000	141.000	28.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.14	0.00	0.36	0.51
	C - Golf Links Rd (N)	0.29	0.54	0.00	0.17
	D - Shenick Rd	0.12	0.73	0.15	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.58	12.48	1.3	B	326.67	490.01
B-A	0.19	13.35	0.2	B	52.30	78.46
A-B					44.96	67.44
A-C					33.03	49.55
A-D					13.76	20.65
AB-CD	0.45	10.38	1.0	B	230.37	345.56
AB-C					142.68	214.02
D-AB	0.28	7.72	0.4	A	150.49	225.73
D-C	0.09	11.41	0.1	B	25.69	38.54
C-D					33.03	49.55
C-A					58.73	88.09
C-B					108.28	162.42
CD-AB	0.48	10.98	1.0	B	251.32	376.98
CD-A					66.03	99.04

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	268.02	268.02	67.00	0.00	704.76	0.380	265.60	0.0	0.6	8.154	A
B-A	42.91	42.91	10.73	0.00	422.85	0.101	42.47	0.0	0.1	9.454	A
A-B	36.89	36.89	9.22	0.00			36.89				
A-C	27.10	27.10	6.78	0.00			27.10				
A-D	11.29	11.29	2.82	0.00			11.29				
AB-CD	179.33	179.33	44.83	0.00	602.57	0.298	177.55	0.0	0.4	8.440	A
AB-C	124.66	124.66	31.16	0.00			124.66				
D-AB	123.47	123.47	30.87	0.00	673.09	0.183	122.58	0.0	0.2	6.528	A
D-C	21.08	21.08	5.27	0.00	406.55	0.052	20.86	0.0	0.1	9.329	A
C-D	27.10	27.10	6.78	0.00			27.10				
C-A	48.18	48.18	12.05	0.00			48.18				
C-B	88.84	88.84	22.21	0.00			88.84				
CD-AB	201.13	201.13	50.28	0.00	618.94	0.325	199.16	0.0	0.5	8.540	A
CD-A	58.47	58.47	14.62	0.00			58.47				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	320.04	320.04	80.01	0.00	695.40	0.460	319.11	0.6	0.8	9.543	A
B-A	51.24	51.24	12.81	0.00	388.67	0.132	51.09	0.1	0.1	10.659	B
A-B	44.05	44.05	11.01	0.00			44.05				
A-C	32.36	32.36	8.09	0.00			32.36				
A-D	13.48	13.48	3.37	0.00			13.48				
AB-CD	222.36	222.36	55.59	0.00	613.91	0.362	221.68	0.4	0.6	9.172	A
AB-C	142.60	142.60	35.65	0.00			142.60				
D-AB	147.43	147.43	36.86	0.00	662.45	0.223	147.19	0.2	0.3	6.983	A
D-C	25.17	25.17	6.29	0.00	381.55	0.066	25.11	0.1	0.1	10.099	B
C-D	32.36	32.36	8.09	0.00			32.36				
C-A	57.53	57.53	14.38	0.00			57.53				
C-B	106.08	106.08	26.52	0.00			106.08				
CD-AB	244.61	244.61	61.15	0.00	624.82	0.391	243.92	0.5	0.7	9.440	A
CD-A	66.20	66.20	16.55	0.00			66.20				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	391.96	391.96	97.99	0.00	680.34	0.576	390.04	0.8	1.3	12.317	B
B-A	62.76	62.76	15.69	0.00	333.82	0.188	62.45	0.1	0.2	13.251	B
A-B	53.95	53.95	13.49	0.00			53.95				
A-C	39.64	39.64	9.91	0.00			39.64				
A-D	16.52	16.52	4.13	0.00			16.52				
AB-CD	286.34	286.34	71.58	0.00	634.75	0.451	285.08	0.6	0.9	10.285	B
AB-C	159.85	159.85	39.96	0.00			159.85				
D-AB	180.57	180.57	45.14	0.00	647.21	0.279	180.17	0.3	0.4	7.702	A
D-C	30.83	30.83	7.71	0.00	347.30	0.089	30.72	0.1	0.1	11.368	B
C-D	39.64	39.64	9.91	0.00			39.64				
C-A	70.47	70.47	17.62	0.00			70.47				
C-B	129.92	129.92	32.48	0.00			129.92				
CD-AB	307.18	307.18	76.80	0.00	635.66	0.483	305.91	0.7	1.0	10.890	B
CD-A	73.38	73.38	18.34	0.00			73.38				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	391.96	391.96	97.99	0.00	680.01	0.576	391.88	1.3	1.3	12.485	B
B-A	62.76	62.76	15.69	0.00	332.34	0.189	62.75	0.2	0.2	13.353	B
A-B	53.95	53.95	13.49	0.00			53.95				
A-C	39.64	39.64	9.91	0.00			39.64				
A-D	16.52	16.52	4.13	0.00			16.52				
AB-CD	287.94	287.94	71.98	0.00	635.50	0.453	287.86	0.9	1.0	10.380	B
AB-C	160.10	160.10	40.02	0.00			160.10				
D-AB	180.57	180.57	45.14	0.00	647.10	0.279	180.56	0.4	0.4	7.716	A
D-C	30.83	30.83	7.71	0.00	346.40	0.089	30.83	0.1	0.1	11.407	B
C-D	39.64	39.64	9.91	0.00			39.64				
C-A	70.47	70.47	17.62	0.00			70.47				
C-B	129.92	129.92	32.48	0.00			129.92				
CD-AB	307.58	307.58	76.89	0.00	635.74	0.484	307.52	1.0	1.0	10.983	B
CD-A	73.37	73.37	18.34	0.00			73.37				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	320.04	320.04	80.01	0.00	695.02	0.460	321.91	1.3	0.9	9.698	A
B-A	51.24	51.24	12.81	0.00	386.82	0.132	51.54	0.2	0.2	10.748	B
A-B	44.05	44.05	11.01	0.00			44.05				
A-C	32.36	32.36	8.09	0.00			32.36				
A-D	13.48	13.48	3.37	0.00			13.48				
AB-CD	224.51	224.51	56.13	0.00	614.82	0.365	225.71	1.0	0.7	9.292	A
AB-C	143.25	143.25	35.81	0.00			143.25				
D-AB	147.43	147.43	36.86	0.00	662.30	0.223	147.82	0.4	0.3	7.001	A
D-C	25.17	25.17	6.29	0.00	380.15	0.066	25.27	0.1	0.1	10.146	B
C-D	32.36	32.36	8.09	0.00			32.36				
C-A	57.53	57.53	14.38	0.00			57.53				
C-B	106.08	106.08	26.52	0.00			106.08				
CD-AB	245.22	245.22	61.30	0.00	624.93	0.392	246.43	1.0	0.7	9.550	A
CD-A	66.21	66.21	16.55	0.00			66.21				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	268.02	268.02	67.00	0.00	704.34	0.381	269.00	0.9	0.6	8.288	A
B-A	42.91	42.91	10.73	0.00	420.73	0.102	43.07	0.2	0.1	9.538	A
A-B	36.89	36.89	9.22	0.00			36.89				
A-C	27.10	27.10	6.78	0.00			27.10				
A-D	11.29	11.29	2.82	0.00			11.29				
AB-CD	181.75	181.75	45.44	0.00	603.48	0.301	182.48	0.7	0.5	8.570	A
AB-C	125.65	125.65	31.41	0.00			125.65				
D-AB	123.47	123.47	30.87	0.00	672.89	0.183	123.72	0.3	0.2	6.560	A
D-C	21.08	21.08	5.27	0.00	404.78	0.052	21.14	0.1	0.1	9.386	A
C-D	27.10	27.10	6.78	0.00			27.10				
C-A	48.18	48.18	12.05	0.00			48.18				
C-B	88.84	88.84	22.21	0.00			88.84				
CD-AB	202.19	202.19	50.55	0.00	619.10	0.327	202.92	0.7	0.5	8.668	A
CD-A	58.54	58.54	14.64	0.00			58.54				

Do-Something - DS 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	8.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	538.517	0.098	0.248	0.248	-	-	0.156	0.354	-	0.156	0.354
1	B-CD	738.469	0.113	0.286	0.286	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.323	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	519.862	-	0.151	0.342	0.151	0.342	0.239	0.239	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	255.00	100.000
B - Miller's Ln		ONE HOUR	✓	336.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	185.00	100.000
D - Shenick Rd		ONE HOUR	✓	294.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	153.000	67.000	35.000
	B - Miller's Ln	74.000	0.000	92.000	170.000
	C - Golf Links Rd (N)	52.000	108.000	0.000	25.000
	D - Shenick Rd	24.000	234.000	36.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	B - Miller's Ln	0.22	0.00	0.27	0.51
	C - Golf Links Rd (N)	0.28	0.58	0.00	0.14
	D - Shenick Rd	0.08	0.80	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.46	10.53	0.8	B	240.42	360.62
B-A	0.26	15.43	0.3	C	67.90	101.86
A-B					140.40	210.59
A-C					61.48	92.22
A-D					32.12	48.17
AB-CD	0.41	9.76	0.8	A	205.70	308.55
AB-C					128.03	192.05
D-AB	0.44	9.80	0.8	A	236.75	355.12
D-C	0.12	11.90	0.1	B	33.03	49.55
C-D					22.94	34.41
C-A					47.72	71.57
C-B					99.10	148.65
CD-AB	0.69	18.97	2.3	C	337.40	506.11
CD-A					45.89	68.83

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	197.25	197.25	49.31	0.00	676.14	0.292	195.62	0.0	0.4	7.466	A
B-A	55.71	55.71	13.93	0.00	399.08	0.140	55.07	0.0	0.2	10.446	B
A-B	115.19	115.19	28.80	0.00			115.19				
A-C	50.44	50.44	12.61	0.00			50.44				
A-D	26.35	26.35	6.59	0.00			26.35				
AB-CD	161.96	161.96	40.49	0.00	599.81	0.270	160.42	0.0	0.4	8.168	A
AB-C	110.45	110.45	27.61	0.00			110.45				
D-AB	194.24	194.24	48.56	0.00	677.50	0.287	192.65	0.0	0.4	7.401	A
D-C	27.10	27.10	6.78	0.00	409.76	0.066	26.82	0.0	0.1	9.394	A
C-D	18.82	18.82	4.71	0.00			18.82				
C-A	39.15	39.15	9.79	0.00			39.15				
C-B	81.31	81.31	20.33	0.00			81.31				
CD-AB	267.55	267.55	66.89	0.00	595.51	0.449	264.23	0.0	0.8	10.772	B
CD-A	45.55	45.55	11.39	0.00			45.55				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	235.53	235.53	58.88	0.00	659.26	0.357	234.97	0.4	0.5	8.474	A
B-A	66.52	66.52	16.63	0.00	365.52	0.182	66.29	0.2	0.2	12.020	B
A-B	137.54	137.54	34.39	0.00			137.54				
A-C	60.23	60.23	15.06	0.00			60.23				
A-D	31.46	31.46	7.87	0.00			31.46				
AB-CD	199.25	199.25	49.81	0.00	608.13	0.328	198.71	0.4	0.5	8.789	A
AB-C	127.42	127.42	31.85	0.00			127.42				
D-AB	231.94	231.94	57.98	0.00	667.00	0.348	231.42	0.4	0.5	8.254	A
D-C	32.36	32.36	8.09	0.00	382.85	0.085	32.28	0.1	0.1	10.267	B
C-D	22.47	22.47	5.62	0.00			22.47				
C-A	46.75	46.75	11.69	0.00			46.75				
C-B	97.09	97.09	24.27	0.00			97.09				
CD-AB	327.43	327.43	81.86	0.00	598.34	0.547	325.78	0.8	1.2	13.152	B
CD-A	47.83	47.83	11.96	0.00			47.83				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	288.47	288.47	72.12	0.00	631.13	0.457	287.36	0.5	0.8	10.437	B
B-A	81.48	81.48	20.37	0.00	316.62	0.257	81.00	0.2	0.3	15.246	C
A-B	168.46	168.46	42.11	0.00			168.46				
A-C	73.77	73.77	18.44	0.00			73.77				
A-D	38.54	38.54	9.63	0.00			38.54				
AB-CD	253.94	253.94	63.48	0.00	623.78	0.407	252.99	0.5	0.8	9.701	A
AB-C	145.73	145.73	36.43	0.00			145.73				
D-AB	284.06	284.06	71.02	0.00	651.63	0.436	283.13	0.5	0.8	9.743	A
D-C	39.64	39.64	9.91	0.00	343.01	0.116	39.49	0.1	0.1	11.854	B
C-D	27.53	27.53	6.88	0.00			27.53				
C-A	57.25	57.25	14.31	0.00			57.25				
C-B	118.91	118.91	29.73	0.00			118.91				
CD-AB	414.90	414.90	103.72	0.00	605.92	0.685	410.91	1.2	2.2	18.219	C
CD-A	44.40	44.40	11.10	0.00			44.40				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	288.47	288.47	72.12	0.00	630.29	0.458	288.43	0.8	0.8	10.527	B
B-A	81.48	81.48	20.37	0.00	314.75	0.259	81.45	0.3	0.3	15.427	C
A-B	168.46	168.46	42.11	0.00			168.46				
A-C	73.77	73.77	18.44	0.00			73.77				
A-D	38.54	38.54	9.63	0.00			38.54				
AB-CD	254.87	254.87	63.72	0.00	624.15	0.408	254.82	0.8	0.8	9.761	A
AB-C	145.86	145.86	36.46	0.00			145.86				
D-AB	284.06	284.06	71.02	0.00	651.49	0.436	284.04	0.8	0.8	9.795	A
D-C	39.64	39.64	9.91	0.00	342.18	0.116	39.63	0.1	0.1	11.898	B
C-D	27.53	27.53	6.88	0.00			27.53				
C-A	57.25	57.25	14.31	0.00			57.25				
C-B	118.91	118.91	29.73	0.00			118.91				
CD-AB	415.93	415.93	103.98	0.00	606.11	0.686	415.59	2.2	2.3	18.969	C
CD-A	44.27	44.27	11.07	0.00			44.27				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	235.53	235.53	58.88	0.00	658.39	0.358	236.61	0.8	0.6	8.556	A
B-A	66.52	66.52	16.63	0.00	362.83	0.183	66.99	0.3	0.2	12.189	B
A-B	137.54	137.54	34.39	0.00			137.54				
A-C	60.23	60.23	15.06	0.00			60.23				
A-D	31.46	31.46	7.87	0.00			31.46				
AB-CD	200.55	200.55	50.14	0.00	608.59	0.330	201.46	0.8	0.5	8.870	A
AB-C	127.75	127.75	31.94	0.00			127.75				
D-AB	231.94	231.94	57.98	0.00	666.82	0.348	232.84	0.8	0.5	8.313	A
D-C	32.36	32.36	8.09	0.00	381.66	0.085	32.51	0.1	0.1	10.314	B
C-D	22.47	22.47	5.62	0.00			22.47				
C-A	46.75	46.75	11.69	0.00			46.75				
C-B	97.09	97.09	24.27	0.00			97.09				
CD-AB	328.92	328.92	82.23	0.00	598.57	0.550	332.84	2.3	1.3	13.776	B
CD-A	47.75	47.75	11.94	0.00			47.75				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	197.25	197.25	49.31	0.00	675.34	0.292	197.84	0.6	0.4	7.550	A
B-A	55.71	55.71	13.93	0.00	396.33	0.141	55.96	0.2	0.2	10.584	B
A-B	115.19	115.19	28.80	0.00			115.19				
A-C	50.44	50.44	12.61	0.00			50.44				
A-D	26.35	26.35	6.59	0.00			26.35				
AB-CD	163.63	163.63	40.91	0.00	600.33	0.273	164.19	0.5	0.4	8.268	A
AB-C	111.00	111.00	27.75	0.00			111.00				
D-AB	194.24	194.24	48.56	0.00	677.25	0.287	194.77	0.5	0.4	7.468	A
D-C	27.10	27.10	6.78	0.00	408.19	0.066	27.19	0.1	0.1	9.452	A
C-D	18.82	18.82	4.71	0.00			18.82				
C-A	39.15	39.15	9.79	0.00			39.15				
C-B	81.31	81.31	20.33	0.00			81.31				
CD-AB	269.70	269.70	67.42	0.00	595.79	0.453	271.55	1.3	0.9	11.175	B
CD-A	45.53	45.53	11.38	0.00			45.53				

Do-Something - DS 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	8.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	724.500	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	521.490	-	0.151	0.343	0.151	0.343	0.240	0.240	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2029	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	149.00	100.000
B - Miller's Ln		ONE HOUR	✓	481.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	295.00	100.000
D - Shenick Rd		ONE HOUR	✓	232.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	73.000	54.000	22.000
	B - Miller's Ln	92.000	0.000	161.000	228.000
	C - Golf Links Rd (N)	127.000	129.000	0.000	39.000
	D - Shenick Rd	46.000	155.000	31.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.19	0.00	0.33	0.47
	C - Golf Links Rd (N)	0.43	0.44	0.00	0.13
	D - Shenick Rd	0.20	0.67	0.13	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.69	18.19	2.1	C	356.95	535.43
B-A	0.38	21.34	0.6	C	84.42	126.63
A-B					66.99	100.48
A-C					49.55	74.33
A-D					20.19	30.28
AB-CD	0.52	11.72	1.3	B	268.22	402.32
AB-C					157.96	236.94
D-AB	0.36	9.01	0.5	A	184.44	276.66
D-C	0.11	13.38	0.1	B	28.45	42.67
C-D					35.79	53.68
C-A					116.54	174.81
C-B					118.37	177.56
CD-AB	0.54	11.61	1.4	B	294.72	442.08
CD-A					124.43	186.65

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	292.86	292.86	73.21	0.00	680.52	0.430	289.89	0.0	0.7	9.150	A
B-A	69.26	69.26	17.32	0.00	392.29	0.177	68.42	0.0	0.2	11.087	B
A-B	54.96	54.96	13.74	0.00			54.96				
A-C	40.65	40.65	10.16	0.00			40.65				
A-D	16.56	16.56	4.14	0.00			16.56				
AB-CD	205.05	205.05	51.26	0.00	603.01	0.340	202.83	0.0	0.6	8.957	A
AB-C	142.06	142.06	35.52	0.00			142.06				
D-AB	151.32	151.32	37.83	0.00	656.49	0.231	150.14	0.0	0.3	7.094	A
D-C	23.34	23.34	5.83	0.00	379.31	0.062	23.08	0.0	0.1	10.098	B
C-D	29.36	29.36	7.34	0.00			29.36				
C-A	95.61	95.61	23.90	0.00			95.61				
C-B	97.12	97.12	24.28	0.00			97.12				
CD-AB	229.88	229.88	57.47	0.00	635.89	0.362	227.48	0.0	0.6	8.772	A
CD-A	112.99	112.99	28.25	0.00			112.99				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	349.70	349.70	87.43	0.00	661.36	0.529	348.30	0.7	1.1	11.446	B
B-A	82.71	82.71	20.68	0.00	347.30	0.238	82.32	0.2	0.3	13.565	B
A-B	65.63	65.63	16.41	0.00			65.63				
A-C	48.54	48.54	12.14	0.00			48.54				
A-D	19.78	19.78	4.94	0.00			19.78				
AB-CD	257.26	257.26	64.31	0.00	618.52	0.416	256.29	0.6	0.8	9.931	A
AB-C	159.36	159.36	39.84	0.00			159.36				
D-AB	180.69	180.69	45.17	0.00	641.99	0.281	180.33	0.3	0.4	7.791	A
D-C	27.87	27.87	6.97	0.00	348.09	0.080	27.78	0.1	0.1	11.237	B
C-D	35.06	35.06	8.77	0.00			35.06				
C-A	114.17	114.17	28.54	0.00			114.17				
C-B	115.97	115.97	28.99	0.00			115.97				
CD-AB	284.70	284.70	71.18	0.00	651.62	0.437	283.72	0.6	0.8	9.776	A
CD-A	125.77	125.77	31.44	0.00			125.77				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	428.30	428.30	107.07	0.00	626.90	0.683	424.52	1.1	2.0	17.460	C
B-A	101.29	101.29	25.32	0.00	273.10	0.371	100.24	0.3	0.6	20.700	C
A-B	80.37	80.37	20.09	0.00			80.37				
A-C	59.46	59.46	14.86	0.00			59.46				
A-D	24.22	24.22	6.06	0.00			24.22				
AB-CD	336.77	336.77	84.19	0.00	646.93	0.521	334.81	0.8	1.3	11.530	B
AB-C	171.43	171.43	42.86	0.00			171.43				
D-AB	221.31	221.31	55.33	0.00	620.88	0.356	220.67	0.4	0.5	8.980	A
D-C	34.13	34.13	8.53	0.00	304.68	0.112	33.98	0.1	0.1	13.292	B
C-D	42.94	42.94	10.73	0.00			42.94				
C-A	139.83	139.83	34.96	0.00			139.83				
C-B	142.03	142.03	35.51	0.00			142.03				
CD-AB	368.01	368.01	92.00	0.00	679.59	0.542	366.03	0.8	1.3	11.460	B
CD-A	134.52	134.52	33.63	0.00			134.52				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	428.30	428.30	107.07	0.00	625.25	0.685	428.02	2.0	2.1	18.188	C
B-A	101.29	101.29	25.32	0.00	269.75	0.376	101.22	0.6	0.6	21.340	C
A-B	80.37	80.37	20.09	0.00			80.37				
A-C	59.46	59.46	14.86	0.00			59.46				
A-D	24.22	24.22	6.06	0.00			24.22				
AB-CD	340.18	340.18	85.05	0.00	648.61	0.524	340.01	1.3	1.3	11.724	B
AB-C	171.52	171.52	42.88	0.00			171.52				
D-AB	221.31	221.31	55.33	0.00	620.66	0.357	221.29	0.5	0.5	9.014	A
D-C	34.13	34.13	8.53	0.00	303.08	0.113	34.13	0.1	0.1	13.384	B
C-D	42.94	42.94	10.73	0.00			42.94				
C-A	139.83	139.83	34.96	0.00			139.83				
C-B	142.03	142.03	35.51	0.00			142.03				
CD-AB	368.70	368.70	92.18	0.00	679.83	0.542	368.59	1.3	1.4	11.614	B
CD-A	134.45	134.45	33.61	0.00			134.45				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	349.70	349.70	87.43	0.00	659.74	0.530	353.49	2.1	1.2	11.894	B
B-A	82.71	82.71	20.68	0.00	343.63	0.241	83.77	0.6	0.3	13.910	B
A-B	65.63	65.63	16.41	0.00			65.63				
A-C	48.54	48.54	12.14	0.00			48.54				
A-D	19.78	19.78	4.94	0.00			19.78				
AB-CD	261.60	261.60	65.40	0.00	620.51	0.422	263.47	1.3	0.9	10.160	B
AB-C	160.22	160.22	40.05	0.00			160.22				
D-AB	180.69	180.69	45.17	0.00	641.73	0.282	181.31	0.5	0.4	7.830	A
D-C	27.87	27.87	6.97	0.00	345.70	0.081	28.02	0.1	0.1	11.338	B
C-D	35.06	35.06	8.77	0.00			35.06				
C-A	114.17	114.17	28.54	0.00			114.17				
C-B	115.97	115.97	28.99	0.00			115.97				
CD-AB	285.67	285.67	71.42	0.00	651.92	0.438	287.58	1.4	0.9	9.954	A
CD-A	125.77	125.77	31.44	0.00			125.77				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	292.86	292.86	73.21	0.00	679.41	0.431	294.41	1.2	0.8	9.389	A
B-A	69.26	69.26	17.32	0.00	389.25	0.178	69.68	0.3	0.2	11.279	B
A-B	54.96	54.96	13.74	0.00			54.96				
A-C	40.65	40.65	10.16	0.00			40.65				
A-D	16.56	16.56	4.14	0.00			16.56				
AB-CD	208.45	208.45	52.11	0.00	604.43	0.345	209.53	0.9	0.6	9.153	A
AB-C	143.18	143.18	35.79	0.00			143.18				
D-AB	151.32	151.32	37.83	0.00	656.21	0.231	151.70	0.4	0.3	7.142	A
D-C	23.34	23.34	5.83	0.00	376.94	0.062	23.43	0.1	0.1	10.187	B
C-D	29.36	29.36	7.34	0.00			29.36				
C-A	95.61	95.61	23.90	0.00			95.61				
C-B	97.12	97.12	24.28	0.00			97.12				
CD-AB	231.33	231.33	57.83	0.00	636.28	0.364	232.38	0.9	0.6	8.946	A
CD-A	113.10	113.10	28.28	0.00			113.10				

Do-Something - DS 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	9.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	538.226	0.098	0.248	0.248	-	-	0.156	0.354	-	0.156	0.354
1	B-CD	738.617	0.113	0.286	0.286	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	725.371	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	519.766	-	0.151	0.342	0.151	0.342	0.239	0.239	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	262.00	100.000
B - Miller's Ln		ONE HOUR	✓	357.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	195.00	100.000
D - Shenick Rd		ONE HOUR	✓	312.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	157.000	69.000	36.000
	B - Miller's Ln	78.000	0.000	98.000	181.000
	C - Golf Links Rd (N)	53.000	115.000	0.000	27.000
	D - Shenick Rd	25.000	249.000	38.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	B - Miller's Ln	0.22	0.00	0.27	0.51
	C - Golf Links Rd (N)	0.27	0.59	0.00	0.14
	D - Shenick Rd	0.08	0.80	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.49	11.46	1.0	B	256.02	384.02
B-A	0.29	16.99	0.4	C	71.57	107.36
A-B					144.07	216.10
A-C					63.32	94.97
A-D					33.03	49.55
AB-CD	0.43	10.12	0.9	B	220.00	330.01
AB-C					132.05	198.08
D-AB	0.47	10.43	0.9	B	251.43	377.14
D-C	0.13	12.56	0.1	B	34.87	52.30
C-D					24.78	37.16
C-A					48.63	72.95
C-B					105.53	158.29
CD-AB	0.73	22.12	2.9	C	361.60	542.41
CD-A					43.69	65.53

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	210.05	210.05	52.51	0.00	672.83	0.312	208.25	0.0	0.4	7.721	A
B-A	58.72	58.72	14.68	0.00	390.11	0.151	58.02	0.0	0.2	10.818	B
A-B	118.20	118.20	29.55	0.00			118.20				
A-C	51.95	51.95	12.99	0.00			51.95				
A-D	27.10	27.10	6.78	0.00			27.10				
AB-CD	172.48	172.48	43.12	0.00	601.75	0.287	170.80	0.0	0.4	8.325	A
AB-C	114.82	114.82	28.70	0.00			114.82				
D-AB	206.28	206.28	51.57	0.00	674.78	0.306	204.54	0.0	0.4	7.628	A
D-C	28.61	28.61	7.15	0.00	402.41	0.071	28.31	0.0	0.1	9.615	A
C-D	20.33	20.33	5.08	0.00			20.33				
C-A	39.90	39.90	9.98	0.00			39.90				
C-B	86.58	86.58	21.64	0.00			86.58				
CD-AB	285.90	285.90	71.48	0.00	596.67	0.479	282.15	0.0	0.9	11.327	B
CD-A	45.12	45.12	11.28	0.00			45.12				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	250.82	250.82	62.70	0.00	654.23	0.383	250.16	0.4	0.6	8.893	A
B-A	70.12	70.12	17.53	0.00	353.69	0.198	69.85	0.2	0.2	12.669	B
A-B	141.14	141.14	35.28	0.00			141.14				
A-C	62.03	62.03	15.51	0.00			62.03				
A-D	32.36	32.36	8.09	0.00			32.36				
AB-CD	212.81	212.81	53.20	0.00	611.44	0.348	212.20	0.4	0.6	9.011	A
AB-C	131.74	131.74	32.94	0.00			131.74				
D-AB	246.32	246.32	61.58	0.00	663.52	0.371	245.73	0.4	0.6	8.604	A
D-C	34.16	34.16	8.54	0.00	373.10	0.092	34.07	0.1	0.1	10.616	B
C-D	24.27	24.27	6.07	0.00			24.27				
C-A	47.65	47.65	11.91	0.00			47.65				
C-B	103.38	103.38	25.85	0.00			103.38				
CD-AB	350.59	350.59	87.65	0.00	600.39	0.584	348.55	0.9	1.4	14.216	B
CD-A	46.18	46.18	11.54	0.00			46.18				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	307.18	307.18	76.80	0.00	622.28	0.494	305.83	0.6	1.0	11.326	B
B-A	85.88	85.88	21.47	0.00	300.14	0.286	85.29	0.2	0.4	16.710	C
A-B	172.86	172.86	43.22	0.00			172.86				
A-C	75.97	75.97	18.99	0.00			75.97				
A-D	39.64	39.64	9.91	0.00			39.64				
AB-CD	272.38	272.38	68.09	0.00	629.47	0.433	271.27	0.6	0.8	10.041	B
AB-C	149.05	149.05	37.26	0.00			149.05				
D-AB	301.68	301.68	75.42	0.00	646.87	0.466	300.58	0.6	0.9	10.361	B
D-C	41.84	41.84	10.46	0.00	329.36	0.127	41.66	0.1	0.1	12.505	B
C-D	29.73	29.73	7.43	0.00			29.73				
C-A	58.35	58.35	14.59	0.00			58.35				
C-B	126.62	126.62	31.65	0.00			126.62				
CD-AB	445.62	445.62	111.40	0.00	609.56	0.731	440.32	1.4	2.8	20.856	C
CD-A	39.94	39.94	9.98	0.00			39.94				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	307.18	307.18	76.80	0.00	621.06	0.495	307.13	1.0	1.0	11.462	B
B-A	85.88	85.88	21.47	0.00	297.69	0.288	85.85	0.4	0.4	16.987	C
A-B	172.86	172.86	43.22	0.00			172.86				
A-C	75.97	75.97	18.99	0.00			75.97				
A-D	39.64	39.64	9.91	0.00			39.64				
AB-CD	273.56	273.56	68.39	0.00	629.95	0.434	273.49	0.8	0.9	10.120	B
AB-C	149.18	149.18	37.30	0.00			149.18				
D-AB	301.68	301.68	75.42	0.00	646.69	0.467	301.64	0.9	0.9	10.429	B
D-C	41.84	41.84	10.46	0.00	328.35	0.127	41.83	0.1	0.1	12.564	B
C-D	29.73	29.73	7.43	0.00			29.73				
C-A	58.35	58.35	14.59	0.00			58.35				
C-B	126.62	126.62	31.65	0.00			126.62				
CD-AB	446.86	446.86	111.71	0.00	609.78	0.733	446.32	2.8	2.9	22.122	C
CD-A	39.76	39.76	9.94	0.00			39.76				

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	250.82	250.82	62.70	0.00	653.04	0.384	252.15	1.0	0.6	9.011	A
B-A	70.12	70.12	17.53	0.00	350.21	0.200	70.70	0.4	0.3	12.907	B
A-B	141.14	141.14	35.28	0.00			141.14				
A-C	62.03	62.03	15.51	0.00			62.03				
A-D	32.36	32.36	8.09	0.00			32.36				
AB-CD	214.43	214.43	53.61	0.00	612.03	0.350	215.48	0.9	0.6	9.113	A
AB-C	132.11	132.11	33.03	0.00			132.11				
D-AB	246.32	246.32	61.58	0.00	663.30	0.371	247.38	0.9	0.6	8.679	A
D-C	34.16	34.16	8.54	0.00	371.67	0.092	34.33	0.1	0.1	10.678	B
C-D	24.27	24.27	6.07	0.00			24.27				
C-A	47.65	47.65	11.91	0.00			47.65				
C-B	103.38	103.38	25.85	0.00			103.38				
CD-AB	352.36	352.36	88.09	0.00	600.67	0.587	357.63	2.9	1.6	15.172	C
CD-A	46.05	46.05	11.51	0.00			46.05				

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	210.05	210.05	52.51	0.00	671.86	0.313	210.74	0.6	0.5	7.820	A
B-A	58.72	58.72	14.68	0.00	386.89	0.152	59.02	0.3	0.2	10.991	B
A-B	118.20	118.20	29.55	0.00			118.20				
A-C	51.95	51.95	12.99	0.00			51.95				
A-D	27.10	27.10	6.78	0.00			27.10				
AB-CD	174.37	174.37	43.59	0.00	602.36	0.289	175.02	0.6	0.4	8.442	A
AB-C	115.41	115.41	28.85	0.00			115.41				
D-AB	206.28	206.28	51.57	0.00	674.50	0.306	206.90	0.6	0.4	7.710	A
D-C	28.61	28.61	7.15	0.00	400.63	0.071	28.71	0.1	0.1	9.683	A
C-D	20.33	20.33	5.08	0.00			20.33				
C-A	39.90	39.90	9.98	0.00			39.90				
C-B	86.58	86.58	21.64	0.00			86.58				
CD-AB	288.31	288.31	72.08	0.00	596.99	0.483	290.62	1.6	1.0	11.852	B
CD-A	45.07	45.07	11.27	0.00			45.07				

Do-Something - DS 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Shenick Rd / Golf Links Rd Junction	Miller's Ln / Shenick Rd / Golf Links Rd Junction	Left-Right Stagger	Two-way	10.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golf Links Rd (S)		Major
B	Miller's Ln		Minor
C	Golf Links Rd (N)		Major
D	Shenick Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Golf Links Rd (S)	6.00			45.0	✓	1.00
C - Golf Links Rd (N)	6.00			72.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Miller's Ln	One lane plus flare	10.00	6.30	3.90	3.30	3.00	✓	1.00	45	73
D - Shenick Rd	One lane plus flare	10.00	5.51	3.45	3.00	3.00	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	600.023	-	-	-	-	-	0.232	0.232	0.232	-	-
1	B-A	536.203	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	739.643	0.113	0.287	0.287	-	-	-	-	-	-	-
1	CD-B	615.659	0.239	0.239	0.239	-	-	-	-	-	-	-
1	D-AB	724.380	-	-	-	-	-	0.281	0.281	0.111	-	-
1	D-C	521.727	-	0.151	0.343	0.151	0.343	0.240	0.240	0.095	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Golf Links Rd (S)		ONE HOUR	✓	154.00	100.000
B - Miller's Ln		ONE HOUR	✓	508.00	100.000
C - Golf Links Rd (N)		ONE HOUR	✓	310.00	100.000
D - Shenick Rd		ONE HOUR	✓	244.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.000	75.000	56.000	23.000
	B - Miller's Ln	95.000	0.000	171.000	242.000
	C - Golf Links Rd (N)	130.000	138.000	0.000	42.000
	D - Shenick Rd	47.000	164.000	33.000	0.000

Proportions

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	B - Miller's Ln	0.19	0.00	0.34	0.48
	C - Golf Links Rd (N)	0.42	0.45	0.00	0.14
	D - Shenick Rd	0.19	0.67	0.14	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	0	0	0	0
	B - Miller's Ln	0	0	0	0
	C - Golf Links Rd (N)	0	0	0	0
	D - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		A - Golf Links Rd (S)	B - Miller's Ln	C - Golf Links Rd (N)	D - Shenick Rd
From	A - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	B - Miller's Ln	1.000	1.000	1.000	1.000
	C - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	D - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.74	22.27	2.7	C	378.98	568.46
B-A	0.43	26.24	0.7	D	87.17	130.76
A-B					68.82	103.23
A-C					51.39	77.08
A-D					21.11	31.66
AB-CD	0.56	12.46	1.6	B	289.79	434.68
AB-C					161.10	241.65
D-AB	0.38	9.43	0.6	A	193.62	290.43
D-C	0.13	14.23	0.1	B	30.28	45.42
C-D					38.54	57.81
C-A					119.29	178.94
C-B					126.63	189.95
CD-AB	0.58	12.47	1.6	B	316.76	475.14
CD-A					122.56	183.85

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	310.93	310.93	77.73	0.00	677.19	0.459	307.60	0.0	0.8	9.657	A
B-A	71.52	71.52	17.88	0.00	380.86	0.188	70.61	0.0	0.2	11.571	B
A-B	56.46	56.46	14.12	0.00			56.46				
A-C	42.16	42.16	10.54	0.00			42.16				
A-D	17.32	17.32	4.33	0.00			17.32				
AB-CD	219.77	219.77	54.94	0.00	607.13	0.362	217.30	0.0	0.6	9.189	A
AB-C	147.31	147.31	36.83	0.00			147.31				
D-AB	158.85	158.85	39.71	0.00	652.66	0.243	157.58	0.0	0.3	7.255	A
D-C	24.84	24.84	6.21	0.00	371.22	0.067	24.56	0.0	0.1	10.376	B
C-D	31.62	31.62	7.90	0.00			31.62				
C-A	97.87	97.87	24.47	0.00			97.87				
C-B	103.89	103.89	25.97	0.00			103.89				
CD-AB	246.08	246.08	61.52	0.00	639.20	0.385	243.41	0.0	0.7	9.046	A
CD-A	113.26	113.26	28.32	0.00			113.26				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	371.28	371.28	92.82	0.00	656.07	0.566	369.55	0.8	1.3	12.486	B
B-A	85.40	85.40	21.35	0.00	330.49	0.258	84.95	0.2	0.3	14.633	B
A-B	67.42	67.42	16.86	0.00			67.42				
A-C	50.34	50.34	12.59	0.00			50.34				
A-D	20.68	20.68	5.17	0.00			20.68				
AB-CD	277.16	277.16	69.29	0.00	625.36	0.443	276.02	0.6	0.9	10.297	B
AB-C	163.41	163.41	40.85	0.00			163.41				
D-AB	189.68	189.68	47.42	0.00	637.17	0.298	189.28	0.3	0.4	8.030	A
D-C	29.67	29.67	7.42	0.00	337.90	0.088	29.57	0.1	0.1	11.671	B
C-D	37.76	37.76	9.44	0.00			37.76				
C-A	116.87	116.87	29.22	0.00			116.87				
C-B	124.06	124.06	31.01	0.00			124.06				
CD-AB	305.63	305.63	76.41	0.00	656.65	0.465	304.48	0.7	1.0	10.211	B
CD-A	124.58	124.58	31.14	0.00			124.58				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	454.72	454.72	113.68	0.00	617.08	0.737	449.45	1.3	2.6	20.834	C
B-A	104.60	104.60	26.15	0.00	246.35	0.425	103.14	0.3	0.7	24.890	C
A-B	82.58	82.58	20.64	0.00			82.58				
A-C	61.66	61.66	15.41	0.00			61.66				
A-D	25.32	25.32	6.33	0.00			25.32				
AB-CD	364.84	364.84	91.21	0.00	658.04	0.554	362.43	0.9	1.5	12.172	B
AB-C	171.59	171.59	42.90	0.00			171.59				
D-AB	232.32	232.32	58.08	0.00	614.36	0.378	231.60	0.4	0.6	9.387	A
D-C	36.33	36.33	9.08	0.00	291.48	0.125	36.15	0.1	0.1	14.089	B
C-D	46.24	46.24	11.56	0.00			46.24				
C-A	143.13	143.13	35.78	0.00			143.13				
C-B	151.94	151.94	37.99	0.00			151.94				
CD-AB	396.80	396.80	99.20	0.00	687.58	0.577	394.36	1.0	1.6	12.251	B
CD-A	129.87	129.87	32.47	0.00			129.87				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	454.72	454.72	113.68	0.00	614.59	0.740	454.21	2.6	2.7	22.274	C
B-A	104.60	104.60	26.15	0.00	241.34	0.433	104.45	0.7	0.7	26.243	D
A-B	82.58	82.58	20.64	0.00			82.58				
A-C	61.66	61.66	15.41	0.00			61.66				
A-D	25.32	25.32	6.33	0.00			25.32				
AB-CD	369.72	369.72	92.43	0.00	660.47	0.560	369.47	1.5	1.6	12.459	B
AB-C	171.47	171.47	42.87	0.00			171.47				
D-AB	232.32	232.32	58.08	0.00	614.05	0.378	232.29	0.6	0.6	9.428	A
D-C	36.33	36.33	9.08	0.00	289.36	0.126	36.33	0.1	0.1	14.226	B
C-D	46.24	46.24	11.56	0.00			46.24				
C-A	143.13	143.13	35.78	0.00			143.13				
C-B	151.94	151.94	37.99	0.00			151.94				
CD-AB	397.60	397.60	99.40	0.00	687.86	0.578	397.46	1.6	1.6	12.467	B
CD-A	129.76	129.76	32.44	0.00			129.76				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	371.28	371.28	92.82	0.00	653.71	0.568	376.70	2.7	1.4	13.235	B
B-A	85.40	85.40	21.35	0.00	325.22	0.263	86.91	0.7	0.4	15.197	C
A-B	67.42	67.42	16.86	0.00			67.42				
A-C	50.34	50.34	12.59	0.00			50.34				
A-D	20.68	20.68	5.17	0.00			20.68				
AB-CD	283.38	283.38	70.84	0.00	628.29	0.451	285.66	1.6	1.0	10.612	B
AB-C	164.34	164.34	41.09	0.00			164.34				
D-AB	189.68	189.68	47.42	0.00	636.83	0.298	190.38	0.6	0.4	8.077	A
D-C	29.67	29.67	7.42	0.00	334.78	0.089	29.84	0.1	0.1	11.811	B
C-D	37.76	37.76	9.44	0.00			37.76				
C-A	116.87	116.87	29.22	0.00			116.87				
C-B	124.06	124.06	31.01	0.00			124.06				
CD-AB	306.75	306.75	76.69	0.00	657.00	0.467	309.09	1.6	1.0	10.445	B
CD-A	124.55	124.55	31.14	0.00			124.55				

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-CD	310.93	310.93	77.73	0.00	675.85	0.460	312.88	1.4	0.9	9.970	A
B-A	71.52	71.52	17.88	0.00	377.19	0.190	72.03	0.4	0.2	11.817	B
A-B	56.46	56.46	14.12	0.00			56.46				
A-C	42.16	42.16	10.54	0.00			42.16				
A-D	17.32	17.32	4.33	0.00			17.32				
AB-CD	223.86	223.86	55.96	0.00	608.89	0.368	225.18	1.0	0.7	9.429	A
AB-C	148.50	148.50	37.12	0.00			148.50				
D-AB	158.85	158.85	39.71	0.00	652.33	0.244	159.27	0.4	0.3	7.306	A
D-C	24.84	24.84	6.21	0.00	368.47	0.067	24.95	0.1	0.1	10.484	B
C-D	31.62	31.62	7.90	0.00			31.62				
C-A	97.87	97.87	24.47	0.00			97.87				
C-B	103.89	103.89	25.97	0.00			103.89				
CD-AB	247.68	247.68	61.92	0.00	639.64	0.387	248.94	1.0	0.7	9.254	A
CD-A	113.35	113.35	28.34	0.00			113.35				

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2022
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Filename: Junction 1 Mini Roundabout Option DS (Feb 2022 Update).j9

Path: G:\2019\p190170\calcs\arcady\LDA Feb 2022 Update

Report generation date: 07/02/2022 14:36:43

- »Do-Something - DS 2024, AM
- »Do-Something - DS 2024, PM
- »Do-Something - DS 2029, AM
- »Do-Something - DS 2029, PM
- »Do-Something - DS 2039, AM
- »Do-Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2024								
1 - Golf Links Rd (S)	0.3	7.25	0.24	A	0.2	6.10	0.16	A
2 - Miller's Ln	0.6	6.79	0.38	A	1.1	8.92	0.53	A
3 - Golf Links Rd (N)	0.3	5.77	0.22	A	0.5	6.96	0.32	A
4 - Shenick Rd	0.6	6.91	0.36	A	0.4	6.37	0.27	A
Do-Something - DS 2029								
1 - Golf Links Rd (S)	0.8	10.77	0.46	B	0.3	7.03	0.24	A
2 - Miller's Ln	0.8	8.00	0.45	A	1.7	11.72	0.63	B
3 - Golf Links Rd (N)	0.4	6.46	0.27	A	0.8	9.25	0.45	A
4 - Shenick Rd	0.7	7.89	0.42	A	0.6	8.17	0.37	A
Do-Something - DS 2039								
1 - Golf Links Rd (S)	0.9	11.73	0.48	B	0.3	7.33	0.26	A
2 - Miller's Ln	0.9	8.52	0.48	A	2.0	13.19	0.67	B
3 - Golf Links Rd (N)	0.4	6.73	0.29	A	0.9	10.03	0.49	B
4 - Shenick Rd	0.8	8.41	0.45	A	0.6	8.63	0.39	A

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

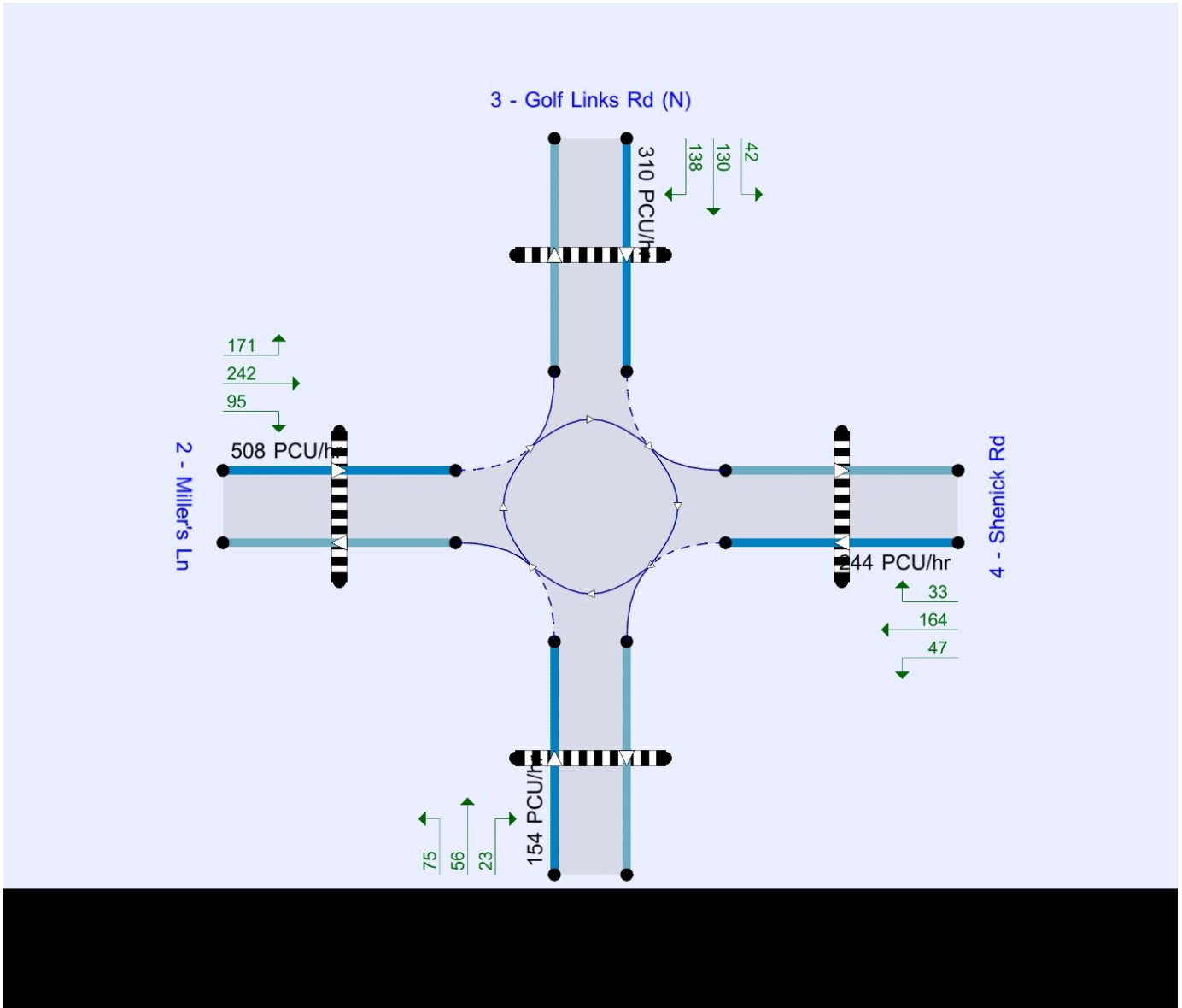
File summary

File Description

Title	Miller's Ln / Golf Links Rd / Shenick Rd (Roundabout Option)
Location	Hacketstown, Skerries
Site number	
Date	07/02/2022
Version	
Status	Proposed Works
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2024	AM	ONE HOUR	08:00	09:30	15	✓
DS 2024	PM	ONE HOUR	17:00	18:30	15	✓
DS 2029	AM	ONE HOUR	08:00	09:30	15	✓
DS 2029	PM	ONE HOUR	17:00	18:30	15	✓
DS 2039	AM	ONE HOUR	08:00	09:30	15	✓
DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Do-Something - DS 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	6.71	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Golf Links Rd (S)	
2	Miller's Ln	
3	Golf Links Rd (N)	
4	Shenick Rd	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Golf Links Rd (S)	0.00	99999.00		0.00
2 - Miller's Ln	0.00	99999.00		0.00
3 - Golf Links Rd (N)	0.00	99999.00		0.00
4 - Shenick Rd	0.00	99999.00		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Golf Links Rd (S)	3.44	3.44	3.56	0.6	11.04	8.15	0.0	
2 - Miller's Ln	3.49	3.49	4.69	0.8	11.62	7.04	0.0	
3 - Golf Links Rd (N)	3.15	3.15	3.54	7.1	12.42	9.70	0.0	
4 - Shenick Rd	3.15	3.15	4.46	1.7	10.05	5.54	0.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Golf Links Rd (S)	0.610	907.739
2 - Miller's Ln	0.617	919.469
3 - Golf Links Rd (N)	0.610	956.531
4 - Shenick Rd	0.610	940.304

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	140.00	100.000
2 - Miller's Ln		ONE HOUR	✓	295.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	156.00	100.000
4 - Shenick Rd		ONE HOUR	✓	265.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	84.000	37.000	19.000
	2 - Miller's Ln	55.000	0.000	84.000	156.000
	3 - Golf Links Rd (N)	34.000	99.000	0.000	23.000
	4 - Shenick Rd	18.000	214.000	33.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	2 - Miller's Ln	0.19	0.00	0.28	0.53
	3 - Golf Links Rd (N)	0.22	0.63	0.00	0.15
	4 - Shenick Rd	0.07	0.81	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.24	7.25	0.3	A	128.47	192.70
2 - Miller's Ln	0.38	6.79	0.6	A	270.70	406.05
3 - Golf Links Rd (N)	0.22	5.77	0.3	A	143.15	214.72
4 - Shenick Rd	0.36	6.91	0.6	A	243.17	364.75

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	105.40	26.35	258.95	7.53	738.37	0.143	104.74	80.08	0.0	0.2	5.675	A
2 - Miller's Ln	222.09	55.52	66.59	7.53	876.76	0.253	220.75	297.10	0.0	0.3	5.476	A
3 - Golf Links Rd (N)	117.44	29.36	172.10	7.53	848.78	0.138	116.81	115.23	0.0	0.2	4.914	A
4 - Shenick Rd	199.51	49.88	140.74	7.53	853.67	0.234	198.30	148.17	0.0	0.3	5.483	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	125.86	31.46	310.59	8.99	701.85	0.179	125.65	96.05	0.2	0.2	6.246	A
2 - Miller's Ln	265.20	66.30	79.88	8.99	867.77	0.306	264.80	356.36	0.3	0.4	5.966	A
3 - Golf Links Rd (N)	140.24	35.06	206.45	8.99	826.55	0.170	140.07	138.23	0.2	0.2	5.242	A
4 - Shenick Rd	238.23	59.56	168.79	8.99	836.21	0.285	237.86	177.73	0.3	0.4	6.012	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	154.14	38.54	380.18	11.01	651.45	0.237	153.78	117.58	0.2	0.3	7.229	A
2 - Miller's Ln	324.80	81.20	97.77	11.01	855.40	0.380	324.13	436.20	0.4	0.6	6.768	A
3 - Golf Links Rd (N)	171.76	42.94	252.70	11.01	796.24	0.216	171.48	169.19	0.2	0.3	5.759	A
4 - Shenick Rd	291.77	72.94	206.63	11.01	812.56	0.359	291.13	217.55	0.4	0.6	6.895	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	154.14	38.54	380.94	11.01	650.89	0.237	154.14	117.80	0.3	0.3	7.246	A
2 - Miller's Ln	324.80	81.20	97.99	11.01	855.25	0.380	324.79	437.09	0.6	0.6	6.785	A
3 - Golf Links Rd (N)	171.76	42.94	253.22	11.01	795.89	0.216	171.75	169.55	0.3	0.3	5.767	A
4 - Shenick Rd	291.77	72.94	206.99	11.01	812.33	0.359	291.76	217.99	0.6	0.6	6.914	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	125.86	31.46	311.80	8.99	700.98	0.180	126.21	96.41	0.3	0.2	6.266	A
2 - Miller's Ln	265.20	66.30	80.23	8.99	867.54	0.306	265.86	357.78	0.6	0.4	5.991	A
3 - Golf Links Rd (N)	140.24	35.06	207.28	8.99	826.01	0.170	140.51	138.80	0.3	0.2	5.253	A
4 - Shenick Rd	238.23	59.56	169.36	8.99	835.85	0.285	238.85	178.43	0.6	0.4	6.035	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	105.40	26.35	260.95	7.53	736.97	0.143	105.61	80.70	0.2	0.2	5.703	A
2 - Miller's Ln	222.09	55.52	67.14	7.53	876.40	0.253	222.50	299.43	0.4	0.3	5.510	A
3 - Golf Links Rd (N)	117.44	29.36	173.48	7.53	847.90	0.139	117.62	116.16	0.2	0.2	4.930	A
4 - Shenick Rd	199.51	49.88	141.76	7.53	853.03	0.234	199.88	149.34	0.4	0.3	5.516	A

Do-Something - DS 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	7.62	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	100.00	100.000
2 - Miller's Ln		ONE HOUR	✓	413.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	218.00	100.000
4 - Shenick Rd		ONE HOUR	✓	192.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	49.000	36.000	15.000
	2 - Miller's Ln	57.000	0.000	147.000	209.000
	3 - Golf Links Rd (N)	64.000	118.000	0.000	36.000
	4 - Shenick Rd	23.000	141.000	28.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	2 - Miller's Ln	0.14	0.00	0.36	0.51
	3 - Golf Links Rd (N)	0.29	0.54	0.00	0.17
	4 - Shenick Rd	0.12	0.73	0.15	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.16	6.10	0.2	A	91.76	137.64
2 - Miller's Ln	0.53	8.92	1.1	A	378.98	568.46
3 - Golf Links Rd (N)	0.32	6.96	0.5	A	200.04	300.06
4 - Shenick Rd	0.27	6.37	0.4	A	176.18	264.27

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	75.29	18.82	214.80	7.53	769.96	0.098	74.85	107.72	0.0	0.1	5.175	A
2 - Miller's Ln	310.93	77.73	59.13	7.53	879.72	0.353	308.76	230.52	0.0	0.5	6.281	A
3 - Golf Links Rd (N)	164.12	41.03	210.09	7.53	823.48	0.199	163.13	157.80	0.0	0.2	5.444	A
4 - Shenick Rd	144.55	36.14	178.81	7.53	829.82	0.174	143.71	194.42	0.0	0.2	5.240	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	89.90	22.47	257.63	8.99	740.81	0.121	89.78	129.23	0.1	0.1	5.530	A
2 - Miller's Ln	371.28	92.82	70.92	8.99	870.84	0.426	370.51	276.48	0.5	0.7	7.182	A
3 - Golf Links Rd (N)	195.98	48.99	252.10	8.99	795.62	0.246	195.67	189.33	0.2	0.3	5.998	A
4 - Shenick Rd	172.60	43.15	214.49	8.99	807.43	0.214	172.36	233.28	0.2	0.3	5.669	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	110.10	27.53	315.35	11.01	700.72	0.157	109.91	158.14	0.1	0.2	6.092	A
2 - Miller's Ln	454.72	113.68	86.82	11.01	858.32	0.530	453.24	338.43	0.7	1.1	8.852	A
3 - Golf Links Rd (N)	240.02	60.01	308.40	11.01	757.66	0.317	239.48	231.66	0.3	0.5	6.940	A
4 - Shenick Rd	211.40	52.85	262.49	11.01	777.14	0.272	210.99	285.40	0.3	0.4	6.355	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	110.10	27.53	315.98	11.01	700.28	0.157	110.10	158.54	0.2	0.2	6.099	A
2 - Miller's Ln	454.72	113.68	86.98	11.01	858.18	0.530	454.68	339.10	1.1	1.1	8.918	A
3 - Golf Links Rd (N)	240.02	60.01	309.36	11.01	757.01	0.317	240.01	232.30	0.5	0.5	6.962	A
4 - Shenick Rd	211.40	52.85	263.13	11.01	776.74	0.272	211.39	286.24	0.4	0.4	6.367	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	89.90	22.47	258.64	8.99	740.12	0.121	90.08	129.85	0.2	0.1	5.541	A
2 - Miller's Ln	371.28	92.82	71.17	8.99	870.63	0.426	372.73	277.55	1.1	0.8	7.250	A
3 - Golf Links Rd (N)	195.98	48.99	253.57	8.99	794.64	0.247	196.50	190.32	0.5	0.3	6.023	A
4 - Shenick Rd	172.60	43.15	215.49	8.99	806.80	0.214	173.00	234.58	0.4	0.3	5.682	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	75.29	18.82	216.46	7.53	768.85	0.098	75.41	108.64	0.1	0.1	5.193	A
2 - Miller's Ln	310.93	77.73	59.57	7.53	879.39	0.354	311.73	232.29	0.8	0.6	6.350	A
3 - Golf Links Rd (N)	164.12	41.03	212.09	7.53	822.17	0.200	164.44	159.22	0.3	0.3	5.475	A
4 - Shenick Rd	144.55	36.14	180.31	7.53	828.89	0.174	144.79	196.22	0.3	0.2	5.265	A

Do-Something - DS 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	8.36	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	255.00	100.000
2 - Miller's Ln		ONE HOUR	✓	336.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	185.00	100.000
4 - Shenick Rd		ONE HOUR	✓	294.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	153.000	67.000	35.000
	2 - Miller's Ln	74.000	0.000	92.000	170.000
	3 - Golf Links Rd (N)	52.000	108.000	0.000	25.000
	4 - Shenick Rd	24.000	234.000	36.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	2 - Miller's Ln	0.22	0.00	0.27	0.51
	3 - Golf Links Rd (N)	0.28	0.58	0.00	0.14
	4 - Shenick Rd	0.08	0.80	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.46	10.77	0.8	B	233.99	350.99
2 - Miller's Ln	0.45	8.00	0.8	A	308.32	462.48
3 - Golf Links Rd (N)	0.27	6.46	0.4	A	169.76	254.64
4 - Shenick Rd	0.42	7.89	0.7	A	269.78	404.67

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	191.98	47.99	282.79	7.53	717.00	0.268	190.53	112.22	0.0	0.4	6.821	A
2 - Miller's Ln	252.96	63.24	103.14	7.53	853.20	0.296	251.29	370.18	0.0	0.4	5.962	A
3 - Golf Links Rd (N)	139.28	34.82	208.63	7.53	825.52	0.169	138.47	145.79	0.0	0.2	5.236	A
4 - Shenick Rd	221.34	55.33	175.10	7.53	831.96	0.266	219.90	172.00	0.0	0.4	5.869	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	229.24	57.31	339.23	8.99	674.60	0.340	228.66	134.62	0.4	0.5	8.062	A
2 - Miller's Ln	302.06	75.51	123.77	8.99	839.20	0.360	301.50	444.12	0.4	0.6	6.688	A
3 - Golf Links Rd (N)	166.31	41.58	250.33	8.99	798.38	0.208	166.07	174.94	0.2	0.3	5.693	A
4 - Shenick Rd	264.30	66.07	210.03	8.99	809.96	0.326	263.82	206.37	0.4	0.5	6.586	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	280.76	70.19	415.14	11.01	615.86	0.456	279.51	164.75	0.5	0.8	10.662	B
2 - Miller's Ln	369.94	92.49	151.33	11.01	820.07	0.451	368.93	543.32	0.6	0.8	7.961	A
3 - Golf Links Rd (N)	203.69	50.92	306.28	11.01	761.50	0.267	203.29	213.99	0.3	0.4	6.445	A
4 - Shenick Rd	323.70	80.93	257.07	11.01	780.16	0.415	322.82	252.50	0.5	0.7	7.859	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	280.76	70.19	416.16	11.01	615.01	0.457	280.72	165.14	0.8	0.8	10.765	B
2 - Miller's Ln	369.94	92.49	151.92	11.01	819.66	0.451	369.92	544.96	0.8	0.8	8.003	A
3 - Golf Links Rd (N)	203.69	50.92	307.16	11.01	760.92	0.268	203.68	214.68	0.4	0.4	6.459	A
4 - Shenick Rd	323.70	80.93	257.63	11.01	779.80	0.415	323.68	253.21	0.7	0.7	7.892	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	229.24	57.31	340.83	8.99	673.33	0.340	230.47	135.24	0.8	0.5	8.151	A
2 - Miller's Ln	302.06	75.51	124.66	8.99	838.60	0.360	303.04	446.64	0.8	0.6	6.736	A
3 - Golf Links Rd (N)	166.31	41.58	251.70	8.99	797.49	0.209	166.70	176.00	0.4	0.3	5.710	A
4 - Shenick Rd	264.30	66.07	210.92	8.99	809.40	0.327	265.16	207.49	0.7	0.5	6.626	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	191.98	47.99	285.18	7.53	715.20	0.268	192.59	113.16	0.5	0.4	6.895	A
2 - Miller's Ln	252.96	63.24	104.20	7.53	852.49	0.297	253.53	373.56	0.6	0.4	6.017	A
3 - Golf Links Rd (N)	139.28	34.82	210.55	7.53	824.29	0.169	139.52	147.18	0.3	0.2	5.258	A
4 - Shenick Rd	221.34	55.33	176.50	7.53	831.08	0.266	221.83	173.56	0.5	0.4	5.915	A

Do-Something - DS 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	9.77	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2029	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	149.00	100.000
2 - Miller's Ln		ONE HOUR	✓	481.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	295.00	100.000
4 - Shenick Rd		ONE HOUR	✓	232.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	73.000	54.000	22.000
	2 - Miller's Ln	92.000	0.000	161.000	228.000
	3 - Golf Links Rd (N)	127.000	129.000	0.000	39.000
	4 - Shenick Rd	46.000	155.000	31.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	2 - Miller's Ln	0.19	0.00	0.33	0.47
	3 - Golf Links Rd (N)	0.43	0.44	0.00	0.13
	4 - Shenick Rd	0.20	0.67	0.13	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.24	7.03	0.3	A	136.73	205.09
2 - Miller's Ln	0.63	11.72	1.7	B	441.37	662.06
3 - Golf Links Rd (N)	0.45	9.25	0.8	A	270.70	406.05
4 - Shenick Rd	0.37	8.17	0.6	A	212.89	319.33

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	112.18	28.04	235.55	7.53	754.88	0.149	111.48	198.07	0.0	0.2	5.589	A
2 - Miller's Ln	362.12	90.53	80.05	7.53	865.58	0.418	359.28	266.99	0.0	0.7	7.071	A
3 - Golf Links Rd (N)	222.09	55.52	255.48	7.53	794.72	0.279	220.55	183.85	0.0	0.4	6.254	A
4 - Shenick Rd	174.66	43.67	260.12	7.53	776.76	0.225	173.51	215.92	0.0	0.3	5.957	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	133.95	33.49	282.61	8.99	722.08	0.186	133.74	237.67	0.2	0.2	6.117	A
2 - Miller's Ln	432.41	108.10	96.03	8.99	853.52	0.507	431.21	320.32	0.7	1.0	8.500	A
3 - Golf Links Rd (N)	265.20	66.30	306.63	8.99	760.85	0.349	264.62	220.62	0.4	0.5	7.245	A
4 - Shenick Rd	208.56	52.14	312.11	8.99	742.90	0.281	208.17	259.13	0.3	0.4	6.728	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	164.05	41.01	345.73	11.01	677.06	0.242	163.69	290.62	0.2	0.3	7.008	A
2 - Miller's Ln	529.59	132.40	117.53	11.01	836.57	0.633	526.95	391.89	1.0	1.7	11.527	B
3 - Golf Links Rd (N)	324.80	81.20	374.74	11.01	715.09	0.454	323.65	269.74	0.5	0.8	9.169	A
4 - Shenick Rd	255.44	63.86	381.65	11.01	697.14	0.366	254.70	316.74	0.4	0.6	8.122	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	164.05	41.01	346.79	11.01	676.30	0.243	164.04	291.73	0.3	0.3	7.026	A
2 - Miller's Ln	529.59	132.40	117.80	11.01	836.30	0.633	529.48	393.03	1.7	1.7	11.720	B
3 - Golf Links Rd (N)	324.80	81.20	376.47	11.01	713.92	0.455	324.76	270.81	0.8	0.8	9.249	A
4 - Shenick Rd	255.44	63.86	383.10	11.01	696.18	0.367	255.42	318.14	0.6	0.6	8.167	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	133.95	33.49	284.25	8.99	720.93	0.186	134.30	239.36	0.3	0.2	6.142	A
2 - Miller's Ln	432.41	108.10	96.47	8.99	853.14	0.507	435.01	322.08	1.7	1.0	8.664	A
3 - Golf Links Rd (N)	265.20	66.30	309.23	8.99	759.12	0.349	266.33	222.24	0.8	0.5	7.323	A
4 - Shenick Rd	208.56	52.14	314.32	8.99	741.46	0.281	209.28	261.24	0.6	0.4	6.773	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	112.18	28.04	237.74	7.53	753.37	0.149	112.39	200.09	0.2	0.2	5.619	A
2 - Miller's Ln	362.12	90.53	80.72	7.53	865.06	0.419	363.39	269.41	1.0	0.7	7.196	A
3 - Golf Links Rd (N)	222.09	55.52	258.35	7.53	792.84	0.280	222.69	185.76	0.5	0.4	6.322	A
4 - Shenick Rd	174.66	43.67	262.76	7.53	775.04	0.225	175.07	218.29	0.4	0.3	6.003	A

Do-Something - DS 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	8.93	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	262.00	100.000
2 - Miller's Ln		ONE HOUR	✓	357.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	195.00	100.000
4 - Shenick Rd		ONE HOUR	✓	312.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	157.000	69.000	36.000
	2 - Miller's Ln	78.000	0.000	98.000	181.000
	3 - Golf Links Rd (N)	53.000	115.000	0.000	27.000
	4 - Shenick Rd	25.000	249.000	38.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.60	0.26	0.14
	2 - Miller's Ln	0.22	0.00	0.27	0.51
	3 - Golf Links Rd (N)	0.27	0.59	0.00	0.14
	4 - Shenick Rd	0.08	0.80	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.48	11.73	0.9	B	240.42	360.62
2 - Miller's Ln	0.48	8.52	0.9	A	327.59	491.38
3 - Golf Links Rd (N)	0.29	6.73	0.4	A	178.94	268.40
4 - Shenick Rd	0.45	8.41	0.8	A	286.30	429.44

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	197.25	49.31	300.69	7.53	704.18	0.280	195.71	116.68	0.0	0.4	7.059	A
2 - Miller's Ln	268.77	67.19	106.85	7.53	850.61	0.316	266.94	389.55	0.0	0.5	6.150	A
3 - Golf Links Rd (N)	146.81	36.70	220.55	7.53	817.77	0.180	145.94	153.24	0.0	0.2	5.352	A
4 - Shenick Rd	234.89	58.72	184.05	7.53	826.38	0.284	233.32	182.44	0.0	0.4	6.054	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	235.53	58.88	360.73	8.99	658.85	0.357	234.88	139.99	0.4	0.5	8.464	A
2 - Miller's Ln	320.94	80.23	128.22	8.99	836.00	0.384	320.30	467.38	0.5	0.6	6.972	A
3 - Golf Links Rd (N)	175.30	43.83	264.65	8.99	788.96	0.222	175.04	183.88	0.2	0.3	5.861	A
4 - Shenick Rd	280.48	70.12	220.78	8.99	803.23	0.349	279.93	218.90	0.4	0.5	6.872	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	288.47	72.12	441.39	11.01	596.21	0.484	287.00	171.29	0.5	0.9	11.587	B
2 - Miller's Ln	393.06	98.27	156.73	11.01	816.06	0.482	391.87	571.66	0.6	0.9	8.462	A
3 - Golf Links Rd (N)	214.70	53.67	323.74	11.01	749.84	0.286	214.24	224.87	0.3	0.4	6.715	A
4 - Shenick Rd	343.52	85.88	270.20	11.01	771.90	0.445	342.48	267.78	0.5	0.8	8.364	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	288.47	72.12	442.58	11.01	595.21	0.485	288.42	171.75	0.9	0.9	11.728	B
2 - Miller's Ln	393.06	98.27	157.42	11.01	815.58	0.482	393.03	573.57	0.9	0.9	8.518	A
3 - Golf Links Rd (N)	214.70	53.67	324.77	11.01	749.15	0.287	214.69	225.68	0.4	0.4	6.735	A
4 - Shenick Rd	343.52	85.88	270.84	11.01	771.49	0.445	343.49	268.62	0.8	0.8	8.409	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	235.53	58.88	362.58	8.99	657.37	0.358	236.98	140.70	0.9	0.6	8.592	A
2 - Miller's Ln	320.94	80.23	129.26	8.99	835.31	0.384	322.10	470.30	0.9	0.6	7.029	A
3 - Golf Links Rd (N)	175.30	43.83	266.24	8.99	787.92	0.222	175.75	185.11	0.4	0.3	5.886	A
4 - Shenick Rd	280.48	70.12	221.79	8.99	802.60	0.349	281.49	220.20	0.8	0.5	6.923	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	197.25	49.31	303.33	7.53	702.18	0.281	197.93	117.71	0.6	0.4	7.148	A
2 - Miller's Ln	268.77	67.19	108.00	7.53	849.83	0.316	269.43	393.26	0.6	0.5	6.211	A
3 - Golf Links Rd (N)	146.81	36.70	222.66	7.53	816.40	0.180	147.08	154.77	0.3	0.2	5.382	A
4 - Shenick Rd	234.89	58.72	185.58	7.53	825.42	0.285	235.46	184.16	0.5	0.4	6.109	A

Do-Something - DS 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Golf Links Rd / Shenick Rd Junction	Miller's Ln / Golf Links Rd / Shenick Rd Junction	Mini-roundabout	1,2,3,4	10.73	B

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Zebra	10.00
2 - Miller's Ln	Zebra	10.00
3 - Golf Links Rd (N)	Zebra	10.00
4 - Shenick Rd	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Golf Links Rd (S)	1.00	1.00		Distance	7.00	5.00
2 - Miller's Ln	1.00	1.00		Distance	7.00	5.00
3 - Golf Links Rd (N)	1.00	1.00		Distance	7.00	5.00
4 - Shenick Rd	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2039	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Golf Links Rd (S)		ONE HOUR	✓	154.00	100.000
2 - Miller's Ln		ONE HOUR	✓	508.00	100.000
3 - Golf Links Rd (N)		ONE HOUR	✓	310.00	100.000
4 - Shenick Rd		ONE HOUR	✓	244.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Golf Links Rd (S)	Global	10.00
2 - Miller's Ln	Global	10.00
3 - Golf Links Rd (N)	Global	10.00
4 - Shenick Rd	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.000	75.000	56.000	23.000
	2 - Miller's Ln	95.000	0.000	171.000	242.000
	3 - Golf Links Rd (N)	130.000	138.000	0.000	42.000
	4 - Shenick Rd	47.000	164.000	33.000	0.000

Proportions

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0.00	0.49	0.36	0.15
	2 - Miller's Ln	0.19	0.00	0.34	0.48
	3 - Golf Links Rd (N)	0.42	0.45	0.00	0.14
	4 - Shenick Rd	0.19	0.67	0.14	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	0	0	0	0
	2 - Miller's Ln	0	0	0	0
	3 - Golf Links Rd (N)	0	0	0	0
	4 - Shenick Rd	0	0	0	0

Average PCU Per Veh

		To			
		1 - Golf Links Rd (S)	2 - Miller's Ln	3 - Golf Links Rd (N)	4 - Shenick Rd
From	1 - Golf Links Rd (S)	1.000	1.000	1.000	1.000
	2 - Miller's Ln	1.000	1.000	1.000	1.000
	3 - Golf Links Rd (N)	1.000	1.000	1.000	1.000
	4 - Shenick Rd	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Golf Links Rd (S)	0.26	7.33	0.3	A	141.31	211.97
2 - Miller's Ln	0.67	13.19	2.0	B	466.15	699.22
3 - Golf Links Rd (N)	0.49	10.03	0.9	B	284.46	426.69
4 - Shenick Rd	0.39	8.63	0.6	A	223.90	335.85

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	115.94	28.98	250.46	7.53	744.73	0.156	115.21	203.25	0.0	0.2	5.713	A
2 - Miller's Ln	382.45	95.61	83.78	7.53	862.71	0.443	379.31	281.89	0.0	0.8	7.401	A
3 - Golf Links Rd (N)	233.38	58.35	268.84	7.53	785.79	0.297	231.71	194.25	0.0	0.4	6.477	A
4 - Shenick Rd	183.70	45.92	271.25	7.53	769.72	0.239	182.45	229.29	0.0	0.3	6.118	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	138.44	34.61	300.51	8.99	709.68	0.195	138.21	243.90	0.2	0.2	6.296	A
2 - Miller's Ln	456.68	114.17	100.51	8.99	849.90	0.537	455.27	338.21	0.8	1.1	9.088	A
3 - Golf Links Rd (N)	278.68	69.67	322.66	8.99	749.96	0.372	278.02	233.12	0.4	0.6	7.616	A
4 - Shenick Rd	219.35	54.84	325.49	8.99	734.41	0.299	218.91	275.19	0.3	0.4	6.977	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	169.56	42.39	367.55	11.01	661.63	0.256	169.15	298.12	0.2	0.3	7.303	A
2 - Miller's Ln	559.32	139.83	122.99	11.01	831.89	0.672	555.99	413.71	1.1	2.0	12.889	B
3 - Golf Links Rd (N)	341.32	85.33	394.10	11.01	701.68	0.486	339.94	284.88	0.6	0.9	9.913	A
4 - Shenick Rd	268.65	67.16	397.86	11.01	686.80	0.391	267.80	336.18	0.4	0.6	8.575	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	169.56	42.39	368.80	11.01	660.73	0.257	169.55	299.42	0.3	0.3	7.328	A
2 - Miller's Ln	559.32	139.83	123.31	11.01	831.58	0.673	559.16	415.04	2.0	2.0	13.193	B
3 - Golf Links Rd (N)	341.32	85.33	396.26	11.01	700.22	0.487	341.27	286.20	0.9	0.9	10.026	B
4 - Shenick Rd	268.65	67.16	399.60	11.01	685.65	0.392	268.62	337.93	0.6	0.6	8.631	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	138.44	34.61	302.43	8.99	708.33	0.195	138.84	245.86	0.3	0.2	6.325	A
2 - Miller's Ln	456.68	114.17	101.00	8.99	849.46	0.538	459.97	340.27	2.0	1.2	9.320	A
3 - Golf Links Rd (N)	278.68	69.67	325.87	8.99	747.82	0.373	280.04	235.10	0.9	0.6	7.719	A
4 - Shenick Rd	219.35	54.84	328.11	8.99	732.70	0.299	220.18	277.80	0.6	0.4	7.037	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Golf Links Rd (S)	115.94	28.98	252.88	7.53	743.06	0.156	116.17	205.44	0.2	0.2	5.746	A
2 - Miller's Ln	382.45	95.61	84.50	7.53	862.14	0.444	383.96	284.56	1.2	0.8	7.554	A
3 - Golf Links Rd (N)	233.38	58.35	272.07	7.53	783.66	0.298	234.08	196.40	0.6	0.4	6.560	A
4 - Shenick Rd	183.70	45.92	274.17	7.53	767.83	0.239	184.15	231.98	0.4	0.3	6.171	A

APPENDIX E

Dublin Rd-Skerries Rd-Miller's Ln Junction Output Files

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2022
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 2 Existing DN+DS (Feb 2022 Update).j9

Path: G:\2019\p190170\calcs\arcady\LDA Feb 2022 Update

Report generation date: 07/02/2022 15:34:31

-
- »Do-Nothing - DN 2024, AM
 - »Do-Nothing - DN 2024, PM
 - »Do-Nothing - DN 2029, AM
 - »Do-Nothing - DN 2029, PM
 - »Do-Nothing - DN 2039, AM
 - »Do-Nothing - DN 2039, PM
 - »Do-Something - DS 2024, AM
 - »Do-Something - DS 2024, PM
 - »Do-Something - DS 2029, AM
 - »Do-Something - DS 2029, PM
 - »Do-Something - DS 2039, AM
 - »Do-Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Nothing - DN 2024								
1 - Miller's Ln	0.4	3.44	0.30	A	0.3	2.75	0.21	A
3 - Skerries Rd (R127)	0.4	4.90	0.30	A	1.5	8.16	0.60	A
2 - Dublin Rd (R127)	0.5	2.61	0.32	A	0.3	2.46	0.24	A
Do-Nothing - DN 2029								
1 - Miller's Ln	0.5	3.75	0.35	A	0.3	2.87	0.23	A
3 - Skerries Rd (R127)	0.5	5.31	0.34	A	1.9	9.97	0.66	A
2 - Dublin Rd (R127)	0.5	2.74	0.35	A	0.4	2.58	0.27	A
Do-Nothing - DN 2039								
1 - Miller's Ln	0.6	3.96	0.38	A	0.3	2.94	0.25	A
3 - Skerries Rd (R127)	0.6	5.60	0.36	A	2.4	11.73	0.71	B
2 - Dublin Rd (R127)	0.6	2.85	0.37	A	0.4	2.66	0.29	A

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2024								
1 - Miller's Ln	0.5	3.51	0.32	A	0.3	2.77	0.21	A
3 - Skerries Rd (R127)	0.4	4.98	0.30	A	1.5	8.28	0.60	A
2 - Dublin Rd (R127)	0.5	2.62	0.32	A	0.3	2.48	0.24	A
Do-Something - DS 2029								
1 - Miller's Ln	0.7	4.04	0.40	A	0.3	2.92	0.25	A
3 - Skerries Rd (R127)	0.5	5.59	0.35	A	2.1	10.58	0.68	B
2 - Dublin Rd (R127)	0.5	2.77	0.35	A	0.4	2.64	0.28	A
Do-Something - DS 2039								
1 - Miller's Ln	0.7	4.29	0.43	A	0.4	3.00	0.26	A
3 - Skerries Rd (R127)	0.6	5.91	0.38	A	2.6	12.54	0.73	B
2 - Dublin Rd (R127)	0.6	2.88	0.38	A	0.4	2.72	0.30	A

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

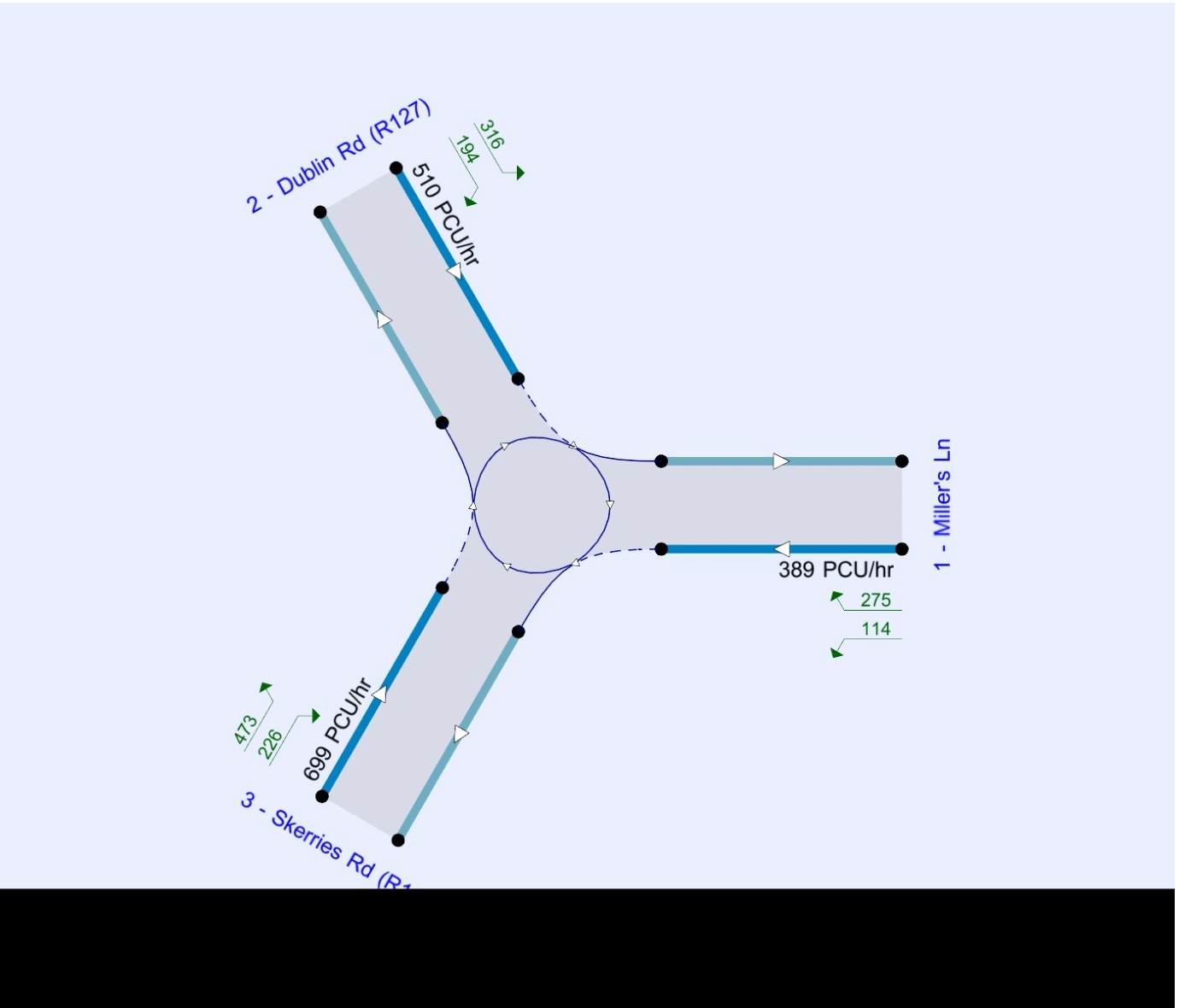
File summary

File Description

Title	Miller's Ln / Dublin Rd / Skerries Rd Junction
Location	Hacketstown, Skerries
Site number	
Date	07/02/2022
Version	
Status	Existing
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DN 2024	AM	ONE HOUR	08:00	09:30	15	✓
DN 2024	PM	ONE HOUR	17:00	18:30	15	✓
DN 2029	AM	ONE HOUR	08:00	09:30	15	✓
DN 2029	PM	ONE HOUR	17:00	18:30	15	✓
DN 2039	AM	ONE HOUR	08:00	09:30	15	✓
DN 2039	PM	ONE HOUR	17:00	18:30	15	✓
DS 2024	AM	ONE HOUR	08:00	09:30	15	✓
DS 2024	PM	ONE HOUR	17:00	18:30	15	✓
DS 2029	AM	ONE HOUR	08:00	09:30	15	✓
DS 2029	PM	ONE HOUR	17:00	18:30	15	✓
DS 2039	AM	ONE HOUR	08:00	09:30	15	✓
DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Do-Nothing - DN 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DN 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	415.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	285.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	577.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	128.000	287.000
	3 - Skerries Rd (R127)	70.000	0.000	215.000
	2 - Dublin Rd (R127)	220.000	357.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.25	0.00	0.75
	2 - Dublin Rd (R127)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.30	3.44	0.4	A	380.81	571.22
3 - Skerries Rd (R127)	0.30	4.90	0.4	A	261.52	392.28
2 - Dublin Rd (R127)	0.32	2.61	0.5	A	529.47	794.20

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	312.43	78.11	268.10	1591.38	0.196	311.46	217.68	0.0	0.2	2.812	A
3 - Skerries Rd (R127)	214.56	53.64	215.40	1105.95	0.194	213.61	364.16	0.0	0.2	4.030	A
2 - Dublin Rd (R127)	434.40	108.60	52.46	2034.62	0.214	433.31	376.54	0.0	0.3	2.247	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	373.08	93.27	320.76	1554.72	0.240	372.79	260.53	0.2	0.3	3.045	A
3 - Skerries Rd (R127)	256.21	64.05	257.81	1081.63	0.237	255.93	435.74	0.2	0.3	4.359	A
2 - Dublin Rd (R127)	518.71	129.68	62.86	2026.67	0.256	518.42	450.88	0.3	0.3	2.386	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	456.92	114.23	392.78	1504.57	0.304	456.45	319.01	0.3	0.4	3.432	A
3 - Skerries Rd (R127)	313.79	78.45	315.66	1048.47	0.299	313.33	533.56	0.3	0.4	4.893	A
2 - Dublin Rd (R127)	635.29	158.82	76.96	2015.89	0.315	634.83	552.03	0.3	0.5	2.607	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	456.92	114.23	393.06	1504.38	0.304	456.92	319.29	0.4	0.4	3.436	A
3 - Skerries Rd (R127)	313.79	78.45	315.99	1048.29	0.299	313.78	533.99	0.4	0.4	4.900	A
2 - Dublin Rd (R127)	635.29	158.82	77.07	2015.80	0.315	635.28	552.70	0.5	0.5	2.607	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	373.08	93.27	321.22	1554.40	0.240	373.55	260.99	0.4	0.3	3.051	A
3 - Skerries Rd (R127)	256.21	64.05	258.33	1081.34	0.237	256.66	436.43	0.4	0.3	4.367	A
2 - Dublin Rd (R127)	518.71	129.68	63.04	2026.53	0.256	519.17	451.95	0.5	0.3	2.390	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	312.43	78.11	268.95	1590.79	0.196	312.72	218.51	0.3	0.2	2.818	A
3 - Skerries Rd (R127)	214.56	53.64	216.27	1105.45	0.194	214.84	365.40	0.3	0.2	4.044	A
2 - Dublin Rd (R127)	434.40	108.60	52.77	2034.39	0.214	434.69	378.34	0.3	0.3	2.250	A

Do-Nothing - DN 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	5.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DN 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	311.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	590.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	416.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	91.000	220.000
	3 - Skerries Rd (R127)	183.000	0.000	407.000
	2 - Dublin Rd (R127)	249.000	167.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.31	0.00	0.69
	2 - Dublin Rd (R127)	0.60	0.40	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0	0	0
	3 - Skerries Rd (R127)	0	0	0
	2 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	1.000	1.000	1.000
	3 - Skerries Rd (R127)	1.000	1.000	1.000
	2 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.21	2.75	0.3	A	285.38	428.07
3 - Skerries Rd (R127)	0.60	8.16	1.5	A	541.39	812.09
2 - Dublin Rd (R127)	0.24	2.46	0.3	A	381.73	572.59

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	234.14	58.53	125.42	1690.72	0.138	233.50	323.99	0.0	0.2	2.469	A
3 - Skerries Rd (R127)	444.18	111.05	165.17	1134.74	0.391	441.63	193.75	0.0	0.6	5.176	A
2 - Dublin Rd (R127)	313.19	78.30	136.98	1969.97	0.159	312.43	469.83	0.0	0.2	2.170	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	279.58	69.90	150.05	1673.57	0.167	279.42	387.92	0.2	0.2	2.582	A
3 - Skerries Rd (R127)	530.40	132.60	197.66	1116.11	0.475	529.37	231.81	0.6	0.9	6.124	A
2 - Dublin Rd (R127)	373.98	93.49	164.19	1949.15	0.192	373.78	562.84	0.2	0.2	2.285	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	342.42	85.60	183.75	1650.11	0.208	342.17	474.78	0.2	0.3	2.752	A
3 - Skerries Rd (R127)	649.60	162.40	242.05	1090.67	0.596	647.41	283.87	0.9	1.4	8.082	A
2 - Dublin Rd (R127)	458.02	114.51	200.81	1921.14	0.238	457.72	688.66	0.2	0.3	2.460	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	342.42	85.60	183.87	1650.03	0.208	342.42	475.62	0.3	0.3	2.752	A
3 - Skerries Rd (R127)	649.60	162.40	242.22	1090.57	0.596	649.54	284.06	1.4	1.5	8.160	A
2 - Dublin Rd (R127)	458.02	114.51	201.47	1920.64	0.238	458.02	690.30	0.3	0.3	2.460	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	279.58	69.90	150.25	1673.44	0.167	279.82	389.21	0.3	0.2	2.585	A
3 - Skerries Rd (R127)	530.40	132.60	197.95	1115.95	0.475	532.56	232.13	1.5	0.9	6.195	A
2 - Dublin Rd (R127)	373.98	93.49	165.18	1948.40	0.192	374.27	565.32	0.3	0.2	2.288	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	234.14	58.53	125.80	1690.46	0.139	234.30	325.68	0.2	0.2	2.472	A
3 - Skerries Rd (R127)	444.18	111.05	165.74	1134.41	0.392	445.25	194.36	0.9	0.6	5.233	A
2 - Dublin Rd (R127)	313.19	78.30	138.10	1969.11	0.159	313.38	472.89	0.2	0.2	2.175	A

Do-Nothing - DN 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DN 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	472.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	314.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	633.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	145.000	327.000
	3 - Skerries Rd (R127)	79.000	0.000	235.000
	2 - Dublin Rd (R127)	243.000	390.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.25	0.00	0.75
	2 - Dublin Rd (R127)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.35	3.75	0.5	A	433.12	649.67
3 - Skerries Rd (R127)	0.34	5.31	0.5	A	288.13	432.20
2 - Dublin Rd (R127)	0.35	2.74	0.5	A	580.85	871.28

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	355.35	88.84	292.86	1574.14	0.226	354.19	241.67	0.0	0.3	2.948	A
3 - Skerries Rd (R127)	236.40	59.10	245.38	1088.76	0.217	235.29	401.67	0.0	0.3	4.213	A
2 - Dublin Rd (R127)	476.56	119.14	59.20	2029.47	0.235	475.33	421.47	0.0	0.3	2.313	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	424.32	106.08	350.39	1534.08	0.277	423.96	289.26	0.3	0.4	3.243	A
3 - Skerries Rd (R127)	282.28	70.57	293.72	1061.05	0.266	281.94	480.63	0.3	0.4	4.618	A
2 - Dublin Rd (R127)	569.05	142.26	70.93	2020.49	0.282	568.72	504.72	0.3	0.4	2.479	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	519.68	129.92	429.06	1479.31	0.351	519.05	354.17	0.4	0.5	3.747	A
3 - Skerries Rd (R127)	345.72	86.43	359.60	1023.29	0.338	345.14	588.51	0.4	0.5	5.304	A
2 - Dublin Rd (R127)	696.95	174.24	86.83	2008.33	0.347	696.39	617.90	0.4	0.5	2.742	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	519.68	129.92	429.39	1479.08	0.351	519.67	354.52	0.5	0.5	3.751	A
3 - Skerries Rd (R127)	345.72	86.43	360.03	1023.04	0.338	345.71	589.04	0.5	0.5	5.314	A
2 - Dublin Rd (R127)	696.95	174.24	86.98	2008.22	0.347	696.94	618.76	0.5	0.5	2.744	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	424.32	106.08	350.94	1533.70	0.277	424.94	289.83	0.5	0.4	3.247	A
3 - Skerries Rd (R127)	282.28	70.57	294.40	1060.66	0.266	282.85	481.48	0.5	0.4	4.633	A
2 - Dublin Rd (R127)	569.05	142.26	71.16	2020.32	0.282	569.60	506.09	0.5	0.4	2.482	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	355.35	88.84	293.82	1573.47	0.226	355.71	242.64	0.4	0.3	2.956	A
3 - Skerries Rd (R127)	236.40	59.10	246.44	1088.16	0.217	236.74	403.10	0.4	0.3	4.231	A
2 - Dublin Rd (R127)	476.56	119.14	59.56	2029.19	0.235	476.90	423.61	0.4	0.3	2.321	A

Do-Nothing - DN 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	5.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DN 2029	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	348.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	648.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	462.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	102.000	246.000
	3 - Skerries Rd (R127)	203.000	0.000	445.000
	2 - Dublin Rd (R127)	279.000	183.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.31	0.00	0.69
	2 - Dublin Rd (R127)	0.60	0.40	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0	0	0
	3 - Skerries Rd (R127)	0	0	0
	2 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	1.000	1.000	1.000
	3 - Skerries Rd (R127)	1.000	1.000	1.000
	2 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.23	2.87	0.3	A	319.33	479.00
3 - Skerries Rd (R127)	0.66	9.97	1.9	A	594.62	891.92
2 - Dublin Rd (R127)	0.27	2.58	0.4	A	423.94	635.91

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	261.99	65.50	137.43	1682.36	0.156	261.26	361.40	0.0	0.2	2.532	A
3 - Skerries Rd (R127)	487.85	121.96	184.68	1123.55	0.434	484.81	214.01	0.0	0.8	5.611	A
2 - Dublin Rd (R127)	347.82	86.95	151.88	1958.57	0.178	346.96	517.62	0.0	0.2	2.232	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	312.84	78.21	164.42	1663.57	0.188	312.66	432.74	0.2	0.2	2.664	A
3 - Skerries Rd (R127)	582.54	145.63	221.02	1102.73	0.528	581.16	256.06	0.8	1.1	6.884	A
2 - Dublin Rd (R127)	415.33	103.83	182.06	1935.48	0.215	415.10	620.12	0.2	0.3	2.367	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	383.16	95.79	201.34	1637.86	0.234	382.86	529.45	0.2	0.3	2.868	A
3 - Skerries Rd (R127)	713.46	178.37	270.64	1074.28	0.664	710.20	313.56	1.1	1.9	9.799	A
2 - Dublin Rd (R127)	508.67	127.17	222.49	1904.56	0.267	508.31	758.36	0.3	0.4	2.578	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	383.16	95.79	201.49	1637.76	0.234	383.15	530.65	0.3	0.3	2.868	A
3 - Skerries Rd (R127)	713.46	178.37	270.85	1074.16	0.664	713.34	313.79	1.9	1.9	9.968	A
2 - Dublin Rd (R127)	508.67	127.17	223.47	1903.81	0.267	508.67	760.72	0.4	0.4	2.579	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	312.84	78.21	164.66	1663.41	0.188	313.13	434.54	0.3	0.2	2.668	A
3 - Skerries Rd (R127)	582.54	145.63	221.35	1102.53	0.528	585.77	256.44	1.9	1.1	7.008	A
2 - Dublin Rd (R127)	415.33	103.83	183.51	1934.38	0.215	415.69	623.62	0.4	0.3	2.370	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	261.99	65.50	137.86	1682.06	0.156	262.18	363.47	0.2	0.2	2.537	A
3 - Skerries Rd (R127)	487.85	121.96	185.34	1123.18	0.434	489.30	214.71	1.1	0.8	5.693	A
2 - Dublin Rd (R127)	347.82	86.95	153.28	1957.50	0.178	348.05	521.35	0.3	0.2	2.236	A

Do-Nothing - DN 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	3.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DN 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	501.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	334.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	674.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	154.000	347.000
	3 - Skerries Rd (R127)	84.000	0.000	250.000
	2 - Dublin Rd (R127)	259.000	415.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.25	0.00	0.75
	2 - Dublin Rd (R127)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0	0	0
	3 - Skerries Rd (R127)	0	0	0
	2 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

	To			
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	1.000	1.000	1.000
	3 - Skerries Rd (R127)	1.000	1.000	1.000
	2 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.38	3.96	0.6	A	459.73	689.59
3 - Skerries Rd (R127)	0.36	5.60	0.6	A	306.48	459.73
2 - Dublin Rd (R127)	0.37	2.85	0.6	A	618.47	927.71

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	377.18	94.29	311.61	1561.08	0.242	375.91	257.41	0.0	0.3	3.035	A
3 - Skerries Rd (R127)	251.45	62.86	260.36	1080.17	0.233	250.25	427.16	0.0	0.3	4.331	A
2 - Dublin Rd (R127)	507.42	126.86	62.94	2026.61	0.250	506.09	447.67	0.0	0.3	2.365	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	450.39	112.60	372.84	1518.45	0.297	449.98	308.11	0.3	0.4	3.369	A
3 - Skerries Rd (R127)	300.26	75.06	311.66	1050.77	0.286	299.88	511.16	0.3	0.4	4.792	A
2 - Dublin Rd (R127)	605.91	151.48	75.42	2017.06	0.300	605.53	536.12	0.3	0.4	2.550	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	551.61	137.90	456.54	1460.18	0.378	550.88	377.24	0.4	0.6	3.955	A
3 - Skerries Rd (R127)	367.74	91.94	381.55	1010.71	0.364	367.06	625.87	0.4	0.6	5.587	A
2 - Dublin Rd (R127)	742.09	185.52	92.32	2004.14	0.370	741.46	656.29	0.4	0.6	2.849	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	551.61	137.90	456.92	1459.91	0.378	551.60	377.64	0.6	0.6	3.963	A
3 - Skerries Rd (R127)	367.74	91.94	382.05	1010.42	0.364	367.73	626.47	0.6	0.6	5.600	A
2 - Dublin Rd (R127)	742.09	185.52	92.48	2004.01	0.370	742.08	657.29	0.6	0.6	2.852	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	450.39	112.60	373.46	1518.02	0.297	451.11	308.76	0.6	0.4	3.375	A
3 - Skerries Rd (R127)	300.26	75.06	312.45	1050.32	0.286	300.92	512.12	0.6	0.4	4.809	A
2 - Dublin Rd (R127)	605.91	151.48	75.68	2016.86	0.300	606.53	537.69	0.6	0.4	2.553	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	377.18	94.29	312.67	1560.35	0.242	377.59	258.47	0.4	0.3	3.046	A
3 - Skerries Rd (R127)	251.45	62.86	261.53	1079.50	0.233	251.84	428.74	0.4	0.3	4.351	A
2 - Dublin Rd (R127)	507.42	126.86	63.34	2026.30	0.250	507.81	450.03	0.4	0.3	2.370	A

Do-Nothing - DN 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	6.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DN 2039	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	369.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	689.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	490.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	108.000	261.000
	3 - Skerries Rd (R127)	216.000	0.000	473.000
	2 - Dublin Rd (R127)	296.000	194.000	0.000

Proportions

	To			
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.31	0.00	0.69
	2 - Dublin Rd (R127)	0.60	0.40	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.25	2.94	0.3	A	338.60	507.90
3 - Skerries Rd (R127)	0.71	11.73	2.4	B	632.24	948.36
2 - Dublin Rd (R127)	0.29	2.66	0.4	A	449.63	674.45

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	277.80	69.45	145.69	1676.61	0.166	277.01	383.83	0.0	0.2	2.571	A
3 - Skerries Rd (R127)	518.72	129.68	195.93	1117.10	0.464	515.29	226.76	0.0	0.9	5.949	A
2 - Dublin Rd (R127)	368.90	92.22	161.54	1951.18	0.189	367.97	549.68	0.0	0.2	2.273	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	331.72	82.93	174.30	1656.69	0.200	331.52	459.60	0.2	0.2	2.716	A
3 - Skerries Rd (R127)	619.40	154.85	234.49	1095.00	0.566	617.71	271.33	0.9	1.3	7.515	A
2 - Dublin Rd (R127)	440.50	110.12	193.65	1926.62	0.229	440.25	658.55	0.2	0.3	2.421	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	406.28	101.57	213.44	1629.44	0.249	405.95	562.10	0.2	0.3	2.942	A
3 - Skerries Rd (R127)	758.60	189.65	287.14	1064.82	0.712	754.21	332.25	1.3	2.4	11.427	B
2 - Dublin Rd (R127)	539.50	134.88	236.44	1893.88	0.285	539.09	804.91	0.3	0.4	2.657	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	406.28	101.57	213.60	1629.33	0.249	406.27	563.66	0.3	0.3	2.942	A
3 - Skerries Rd (R127)	758.60	189.65	287.36	1064.69	0.713	758.41	332.51	2.4	2.4	11.733	B
2 - Dublin Rd (R127)	539.50	134.88	237.76	1892.88	0.285	539.50	808.01	0.4	0.4	2.659	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	331.72	82.93	174.56	1656.51	0.200	332.04	461.90	0.3	0.3	2.718	A
3 - Skerries Rd (R127)	619.40	154.85	234.86	1094.79	0.566	623.79	271.74	2.4	1.3	7.712	A
2 - Dublin Rd (R127)	440.50	110.12	195.56	1925.16	0.229	440.90	663.09	0.4	0.3	2.425	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	277.80	69.45	146.15	1676.29	0.166	278.01	386.18	0.3	0.2	2.576	A
3 - Skerries Rd (R127)	518.72	129.68	196.64	1116.70	0.465	520.51	227.52	1.3	0.9	6.055	A
2 - Dublin Rd (R127)	368.90	92.22	163.18	1949.93	0.189	369.15	553.97	0.3	0.2	2.277	A

Do-Something - DS 2024, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DS 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	435.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	287.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	580.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	134.000	301.000
	3 - Skerries Rd (R127)	72.000	0.000	215.000
	2 - Dublin Rd (R127)	223.000	357.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.25	0.00	0.75
	2 - Dublin Rd (R127)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.32	3.51	0.5	A	399.16	598.75
3 - Skerries Rd (R127)	0.30	4.98	0.4	A	263.36	395.03
2 - Dublin Rd (R127)	0.32	2.62	0.5	A	532.22	798.33

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	327.49	81.87	268.10	1591.38	0.206	326.46	221.43	0.0	0.3	2.843	A
3 - Skerries Rd (R127)	216.07	54.02	225.89	1099.93	0.196	215.10	368.66	0.0	0.2	4.064	A
2 - Dublin Rd (R127)	436.65	109.16	53.96	2033.48	0.215	435.56	387.03	0.0	0.3	2.252	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	391.06	97.76	320.76	1554.72	0.252	390.75	265.02	0.3	0.3	3.092	A
3 - Skerries Rd (R127)	258.01	64.50	270.38	1074.43	0.240	257.72	441.13	0.2	0.3	4.407	A
2 - Dublin Rd (R127)	521.41	130.35	64.66	2025.30	0.257	521.12	463.45	0.3	0.3	2.393	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	478.94	119.74	392.78	1504.57	0.318	478.42	324.50	0.3	0.5	3.506	A
3 - Skerries Rd (R127)	315.99	79.00	331.05	1039.65	0.304	315.52	540.15	0.3	0.4	4.968	A
2 - Dublin Rd (R127)	638.59	159.65	79.15	2014.21	0.317	638.12	567.41	0.3	0.5	2.616	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	478.94	119.74	393.06	1504.38	0.318	478.94	324.80	0.5	0.5	3.509	A
3 - Skerries Rd (R127)	315.99	79.00	331.40	1039.45	0.304	315.99	540.60	0.4	0.4	4.975	A
2 - Dublin Rd (R127)	638.59	159.65	79.27	2014.12	0.317	638.59	568.12	0.5	0.5	2.616	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	391.06	97.76	321.22	1554.40	0.252	391.57	265.49	0.5	0.3	3.098	A
3 - Skerries Rd (R127)	258.01	64.50	270.95	1074.10	0.240	258.47	441.84	0.4	0.3	4.417	A
2 - Dublin Rd (R127)	521.41	130.35	64.84	2025.15	0.257	521.87	464.58	0.5	0.3	2.396	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	327.49	81.87	268.95	1590.79	0.206	327.80	222.28	0.3	0.3	2.852	A
3 - Skerries Rd (R127)	216.07	54.02	226.82	1099.40	0.197	216.36	369.93	0.3	0.2	4.077	A
2 - Dublin Rd (R127)	436.65	109.16	54.28	2033.24	0.215	436.95	388.90	0.3	0.3	2.255	A

Do-Something - DS 2024, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	5.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	318.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	593.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	422.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	93.000	225.000
	3 - Skerries Rd (R127)	186.000	0.000	407.000
	2 - Dublin Rd (R127)	255.000	167.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.31	0.00	0.69
	2 - Dublin Rd (R127)	0.60	0.40	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0	0	0
	3 - Skerries Rd (R127)	0	0	0
	2 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	1.000	1.000	1.000
	3 - Skerries Rd (R127)	1.000	1.000	1.000
	2 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.21	2.77	0.3	A	291.80	437.70
3 - Skerries Rd (R127)	0.60	8.28	1.5	A	544.15	816.22
2 - Dublin Rd (R127)	0.24	2.48	0.3	A	387.23	580.85

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	239.41	59.85	125.42	1690.72	0.142	238.75	330.74	0.0	0.2	2.478	A
3 - Skerries Rd (R127)	446.44	111.61	168.93	1132.59	0.394	443.86	195.25	0.0	0.6	5.209	A
2 - Dublin Rd (R127)	317.70	79.43	139.22	1968.26	0.161	316.94	473.57	0.0	0.2	2.179	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	285.88	71.47	150.05	1673.57	0.171	285.71	396.00	0.2	0.2	2.593	A
3 - Skerries Rd (R127)	533.09	133.27	202.15	1113.54	0.479	532.05	233.61	0.6	0.9	6.179	A
2 - Dublin Rd (R127)	379.37	94.84	166.88	1947.10	0.195	379.17	567.32	0.2	0.2	2.295	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	350.12	87.53	183.75	1650.11	0.212	349.87	484.66	0.2	0.3	2.768	A
3 - Skerries Rd (R127)	652.91	163.23	247.55	1087.52	0.600	650.65	286.07	0.9	1.5	8.197	A
2 - Dublin Rd (R127)	464.63	116.16	204.08	1918.64	0.242	464.32	694.12	0.2	0.3	2.475	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	350.12	87.53	183.87	1650.03	0.212	350.12	485.53	0.3	0.3	2.768	A
3 - Skerries Rd (R127)	652.91	163.23	247.73	1087.41	0.600	652.84	286.26	1.5	1.5	8.281	A
2 - Dublin Rd (R127)	464.63	116.16	204.77	1918.11	0.242	464.63	695.80	0.3	0.3	2.476	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	285.88	71.47	150.25	1673.44	0.171	286.12	397.33	0.3	0.2	2.594	A
3 - Skerries Rd (R127)	533.09	133.27	202.45	1113.37	0.479	535.32	233.93	1.5	0.9	6.250	A
2 - Dublin Rd (R127)	379.37	94.84	167.91	1946.31	0.195	379.67	569.86	0.3	0.2	2.299	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	239.41	59.85	125.81	1690.46	0.142	239.57	332.47	0.2	0.2	2.481	A
3 - Skerries Rd (R127)	446.44	111.61	169.51	1132.25	0.394	447.54	195.87	0.9	0.7	5.265	A
2 - Dublin Rd (R127)	317.70	79.43	140.37	1967.37	0.161	317.90	476.67	0.2	0.2	2.184	A

Do-Something - DS 2029, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	3.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	535.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	319.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	642.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	164.000	371.000
	3 - Skerries Rd (R127)	84.000	0.000	235.000
	2 - Dublin Rd (R127)	252.000	390.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.26	0.00	0.74
	2 - Dublin Rd (R127)	0.39	0.61	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0	0	0
	3 - Skerries Rd (R127)	0	0	0
	2 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	1.000	1.000	1.000
	3 - Skerries Rd (R127)	1.000	1.000	1.000
	2 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.40	4.04	0.7	A	490.93	736.39
3 - Skerries Rd (R127)	0.35	5.59	0.5	A	292.72	439.08
2 - Dublin Rd (R127)	0.35	2.77	0.5	A	589.11	883.67

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	402.78	100.69	292.85	1574.15	0.256	401.41	252.17	0.0	0.3	3.067	A
3 - Skerries Rd (R127)	240.16	60.04	278.36	1069.86	0.224	239.01	415.90	0.0	0.3	4.326	A
2 - Dublin Rd (R127)	483.33	120.83	62.94	2026.61	0.238	482.08	454.43	0.0	0.3	2.328	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	480.95	120.24	350.39	1534.09	0.314	480.51	301.82	0.3	0.5	3.414	A
3 - Skerries Rd (R127)	286.77	71.69	333.21	1038.41	0.276	286.41	497.69	0.3	0.4	4.785	A
2 - Dublin Rd (R127)	577.14	144.29	75.42	2017.06	0.286	576.80	544.20	0.3	0.4	2.499	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	589.05	147.26	429.05	1479.32	0.398	588.24	369.55	0.5	0.7	4.037	A
3 - Skerries Rd (R127)	351.23	87.81	407.92	995.59	0.353	350.58	609.37	0.4	0.5	5.575	A
2 - Dublin Rd (R127)	706.86	176.71	92.32	2004.14	0.353	706.28	666.18	0.4	0.5	2.772	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	589.05	147.26	429.39	1479.08	0.398	589.04	369.94	0.7	0.7	4.044	A
3 - Skerries Rd (R127)	351.23	87.81	408.47	995.27	0.353	351.21	609.96	0.5	0.5	5.589	A
2 - Dublin Rd (R127)	706.86	176.71	92.48	2004.01	0.353	706.85	667.20	0.5	0.5	2.774	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	480.95	120.24	350.95	1533.70	0.314	481.75	302.45	0.7	0.5	3.426	A
3 - Skerries Rd (R127)	286.77	71.69	334.08	1037.92	0.276	287.41	498.62	0.5	0.4	4.800	A
2 - Dublin Rd (R127)	577.14	144.29	75.68	2016.86	0.286	577.71	545.80	0.5	0.4	2.503	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	402.78	100.69	293.83	1573.47	0.256	403.23	253.19	0.5	0.3	3.079	A
3 - Skerries Rd (R127)	240.16	60.04	279.62	1069.13	0.225	240.53	417.43	0.4	0.3	4.346	A
2 - Dublin Rd (R127)	483.33	120.83	63.34	2026.30	0.239	483.68	456.82	0.4	0.3	2.333	A

Do-Something - DS 2029, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	6.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2029	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	367.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	659.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	482.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	107.000	260.000
	3 - Skerries Rd (R127)	214.000	0.000	445.000
	2 - Dublin Rd (R127)	299.000	183.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.32	0.00	0.68
	2 - Dublin Rd (R127)	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.25	2.92	0.3	A	336.77	505.15
3 - Skerries Rd (R127)	0.68	10.58	2.1	B	604.71	907.06
2 - Dublin Rd (R127)	0.28	2.64	0.4	A	442.29	663.44

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	276.30	69.07	137.43	1682.36	0.164	275.51	384.62	0.0	0.2	2.557	A
3 - Skerries Rd (R127)	496.13	124.03	195.19	1117.53	0.444	492.97	217.75	0.0	0.8	5.736	A
2 - Dublin Rd (R127)	362.87	90.72	160.09	1952.30	0.186	361.96	528.07	0.0	0.2	2.262	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	329.93	82.48	164.42	1663.57	0.198	329.72	460.55	0.2	0.2	2.698	A
3 - Skerries Rd (R127)	592.43	148.11	233.59	1095.52	0.541	590.95	260.55	0.8	1.2	7.112	A
2 - Dublin Rd (R127)	433.31	108.33	191.90	1927.96	0.225	433.06	632.64	0.2	0.3	2.408	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	404.07	101.02	201.34	1637.87	0.247	403.76	563.40	0.2	0.3	2.917	A
3 - Skerries Rd (R127)	725.57	181.39	286.04	1065.45	0.681	721.96	319.05	1.2	2.1	10.370	B
2 - Dublin Rd (R127)	530.69	132.67	234.44	1895.41	0.280	530.30	773.55	0.3	0.4	2.637	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	404.07	101.02	201.49	1637.76	0.247	404.07	564.78	0.3	0.3	2.917	A
3 - Skerries Rd (R127)	725.57	181.39	286.26	1065.33	0.681	725.43	319.29	2.1	2.1	10.578	B
2 - Dublin Rd (R127)	530.69	132.67	235.57	1894.55	0.280	530.69	776.12	0.4	0.4	2.639	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	329.93	82.48	164.66	1663.40	0.198	330.24	462.59	0.3	0.2	2.700	A
3 - Skerries Rd (R127)	592.43	148.11	233.96	1095.31	0.541	596.03	260.94	2.1	1.2	7.260	A
2 - Dublin Rd (R127)	433.31	108.33	193.55	1926.70	0.225	433.70	636.43	0.4	0.3	2.411	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	276.30	69.07	137.87	1682.06	0.164	276.50	386.87	0.2	0.2	2.561	A
3 - Skerries Rd (R127)	496.13	124.03	195.89	1117.13	0.444	497.69	218.48	1.2	0.8	5.825	A
2 - Dublin Rd (R127)	362.87	90.72	161.62	1951.12	0.186	363.12	531.96	0.3	0.2	2.268	A

Do-Something - DS 2039, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	4.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	564.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	339.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	682.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	173.000	391.000
	3 - Skerries Rd (R127)	89.000	0.000	250.000
	2 - Dublin Rd (R127)	267.000	415.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.31	0.69
	3 - Skerries Rd (R127)	0.26	0.00	0.74
	2 - Dublin Rd (R127)	0.39	0.61	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.43	4.29	0.7	A	517.54	776.30
3 - Skerries Rd (R127)	0.38	5.91	0.6	A	311.07	466.61
2 - Dublin Rd (R127)	0.38	2.88	0.6	A	625.82	938.72

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	424.61	106.15	311.61	1561.09	0.272	423.12	267.15	0.0	0.4	3.159	A
3 - Skerries Rd (R127)	255.22	63.80	293.33	1061.27	0.240	253.96	441.40	0.0	0.3	4.453	A
2 - Dublin Rd (R127)	513.45	128.36	66.67	2023.75	0.254	512.09	480.62	0.0	0.3	2.379	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	507.02	126.76	372.84	1518.46	0.334	506.52	319.78	0.4	0.5	3.555	A
3 - Skerries Rd (R127)	304.75	76.19	351.15	1028.13	0.296	304.34	528.21	0.3	0.4	4.972	A
2 - Dublin Rd (R127)	613.10	153.28	79.90	2013.63	0.304	612.72	575.59	0.3	0.4	2.569	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	620.98	155.24	456.53	1460.19	0.425	620.03	391.51	0.5	0.7	4.281	A
3 - Skerries Rd (R127)	373.25	93.31	429.85	983.02	0.380	372.49	646.72	0.4	0.6	5.889	A
2 - Dublin Rd (R127)	750.90	187.72	97.79	1999.95	0.375	750.25	704.55	0.4	0.6	2.879	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	620.98	155.24	456.92	1459.91	0.425	620.96	391.96	0.7	0.7	4.290	A
3 - Skerries Rd (R127)	373.25	93.31	430.49	982.65	0.380	373.23	647.39	0.6	0.6	5.906	A
2 - Dublin Rd (R127)	750.90	187.72	97.99	1999.80	0.375	750.89	705.74	0.6	0.6	2.881	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	507.02	126.76	373.47	1518.02	0.334	507.96	320.48	0.7	0.5	3.569	A
3 - Skerries Rd (R127)	304.75	76.19	352.15	1027.56	0.297	305.49	529.28	0.6	0.4	4.992	A
2 - Dublin Rd (R127)	613.10	153.28	80.20	2013.40	0.305	613.74	577.43	0.6	0.4	2.572	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	424.61	106.15	312.67	1560.35	0.272	425.12	268.28	0.5	0.4	3.171	A
3 - Skerries Rd (R127)	255.22	63.80	294.72	1060.48	0.241	255.64	443.07	0.4	0.3	4.476	A
2 - Dublin Rd (R127)	513.45	128.36	67.12	2023.42	0.254	513.84	483.25	0.4	0.3	2.386	A

Do-Something - DS 2039, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,3,2	7.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Ln	
3	Skerries Rd (R127)	
2	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Ln	0.00	99999.00		0.00
3 - Skerries Rd (R127)	0.00	99999.00		0.00
2 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Ln	3.87	7.27	10.0	72.3	28.2	21.0	
3 - Skerries Rd (R127)	2.33	7.17	7.6	26.6	28.2	24.0	
2 - Dublin Rd (R127)	4.50	7.86	12.0	21.5	28.2	4.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Ln	0.696	1778.049
3 - Skerries Rd (R127)	0.573	1229.420
2 - Dublin Rd (R127)	0.765	2074.756

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Ln		ONE HOUR	✓	389.00	100.000
3 - Skerries Rd (R127)		ONE HOUR	✓	699.00	100.000
2 - Dublin Rd (R127)		ONE HOUR	✓	510.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.000	114.000	275.000
	3 - Skerries Rd (R127)	226.000	0.000	473.000
	2 - Dublin Rd (R127)	316.000	194.000	0.000

Proportions

		To		
		1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)
From	1 - Miller's Ln	0.00	0.29	0.71
	3 - Skerries Rd (R127)	0.32	0.00	0.68
	2 - Dublin Rd (R127)	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	0	0	0	
3 - Skerries Rd (R127)	0	0	0	
2 - Dublin Rd (R127)	0	0	0	

Average PCU Per Veh

From	To			
	1 - Miller's Ln	3 - Skerries Rd (R127)	2 - Dublin Rd (R127)	
1 - Miller's Ln	1.000	1.000	1.000	
3 - Skerries Rd (R127)	1.000	1.000	1.000	
2 - Dublin Rd (R127)	1.000	1.000	1.000	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Ln	0.26	3.00	0.4	A	356.95	535.43
3 - Skerries Rd (R127)	0.73	12.54	2.6	B	641.41	962.12
2 - Dublin Rd (R127)	0.30	2.72	0.4	A	467.98	701.98

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	292.86	73.21	145.68	1676.62	0.175	292.02	406.29	0.0	0.2	2.599	A
3 - Skerries Rd (R127)	526.24	131.56	206.44	1111.08	0.474	522.69	231.26	0.0	0.9	6.082	A
2 - Dublin Rd (R127)	383.95	95.99	169.00	1945.48	0.197	382.97	560.13	0.0	0.2	2.303	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	349.70	87.43	174.30	1656.69	0.211	349.48	486.49	0.2	0.3	2.753	A
3 - Skerries Rd (R127)	628.39	157.10	247.06	1087.80	0.578	626.57	276.72	0.9	1.3	7.774	A
2 - Dublin Rd (R127)	458.48	114.62	202.58	1919.79	0.239	458.21	671.05	0.2	0.3	2.463	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	428.30	107.07	213.43	1629.45	0.263	427.94	594.90	0.3	0.4	2.996	A
3 - Skerries Rd (R127)	769.61	192.40	302.53	1056.00	0.729	764.72	338.84	1.3	2.6	12.154	B
2 - Dublin Rd (R127)	561.52	140.38	247.25	1885.62	0.298	561.08	820.00	0.3	0.4	2.718	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	428.30	107.07	213.60	1629.33	0.263	428.29	596.67	0.4	0.4	2.996	A
3 - Skerries Rd (R127)	769.61	192.40	302.78	1055.86	0.729	769.38	339.11	2.6	2.6	12.536	B
2 - Dublin Rd (R127)	561.52	140.38	248.75	1884.47	0.298	561.52	823.40	0.4	0.4	2.720	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	349.70	87.43	174.57	1656.51	0.211	350.05	489.10	0.4	0.3	2.755	A
3 - Skerries Rd (R127)	628.39	157.10	247.47	1087.56	0.578	633.30	277.15	2.6	1.4	8.009	A
2 - Dublin Rd (R127)	458.48	114.62	204.76	1918.12	0.239	458.91	676.00	0.4	0.3	2.467	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Ln	292.86	73.21	146.16	1676.29	0.175	293.08	408.84	0.3	0.2	2.602	A
3 - Skerries Rd (R127)	526.24	131.56	207.19	1110.65	0.474	528.18	232.05	1.4	0.9	6.202	A
2 - Dublin Rd (R127)	383.95	95.99	170.77	1944.12	0.198	384.23	564.60	0.3	0.2	2.309	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: Junction 2 Option 2 with Zebra Crossing (Feb 2022 Update).j9
Path: G:\2019\p190170\calcs\arcady\LDA Feb 2022 Update
Report generation date: 28/02/2022 14:49:09

- »Do-Something - DS 2024, AM
- »Do-Something - DS 2024, PM
- »Do-Something - DS 2029, AM
- »Do-Something - DS 2029, PM
- »Do-Something - DS 2039, AM
- »Do-Something - DS 2039, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2024								
1 - Miller's Lane	0.4	3.21	0.30	A	0.2	2.56	0.20	A
2 - Skerries Rd (R127)	0.5	5.75	0.34	A	1.2	6.53	0.54	A
3 - Dublin Rd (R127)	0.6	3.30	0.37	A	0.4	2.91	0.27	A
Do-Something - DS 2029								
1 - Miller's Lane	0.6	3.66	0.37	A	0.3	2.69	0.23	A
2 - Skerries Rd (R127)	0.7	7.17	0.41	A	1.6	7.90	0.61	A
3 - Dublin Rd (R127)	0.7	3.61	0.42	A	0.5	3.13	0.32	A
Do-Something - DS 2039								
1 - Miller's Lane	0.7	3.87	0.40	A	0.3	2.76	0.25	A
2 - Skerries Rd (R127)	0.8	8.00	0.45	A	1.9	8.96	0.66	A
3 - Dublin Rd (R127)	0.8	3.83	0.44	A	0.5	3.25	0.34	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

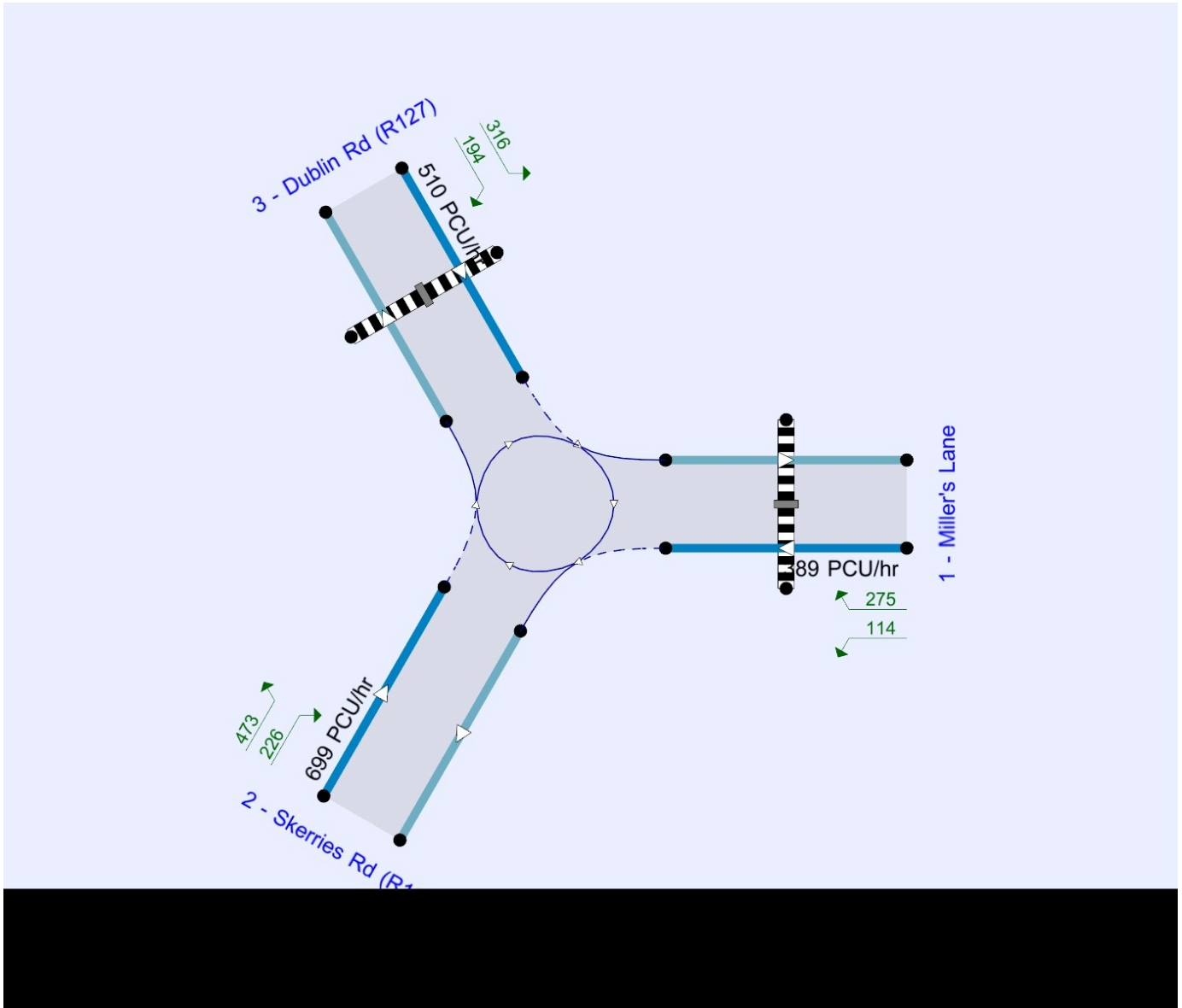
File summary

File Description

Title	Miller's Lane / Skerries Rd / Dublin Rd (Zebra Crossing Option)
Location	Hacketstown, Skerries
Site number	
Date	07/02/2022
Version	
Status	Proposed Works
Identifier	
Client	Land Development Agency
Jobnumber	190170
Enumerator	Daniel Gill
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2024	AM	ONE HOUR	08:00	09:30	15	✓
DS 2024	PM	ONE HOUR	17:00	18:30	15	✓
DS 2029	AM	ONE HOUR	08:00	09:30	15	✓
DS 2029	PM	ONE HOUR	17:00	18:30	15	✓
DS 2039	AM	ONE HOUR	08:00	09:30	15	✓
DS 2039	PM	ONE HOUR	17:00	18:30	15	✓

Do-Something - DS 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	3 - Dublin Rd (R127) - Capacity	Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	3.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Miller's Lane	
2	Skerries Rd (R127)	
3	Dublin Rd (R127)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Miller's Lane	0.00	99999.00		0.00
2 - Skerries Rd (R127)	0.00	99999.00		0.00
3 - Dublin Rd (R127)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Miller's Lane	3.75	7.80	11.2	56.0	22.4	8.0	
2 - Skerries Rd (R127)	2.23	7.86	10.0	25.1	22.4	17.0	
3 - Dublin Rd (R127)	3.97	7.79	9.0	21.5	22.4	4.5	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	10.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Miller's Lane	0.736	1888.899
2 - Skerries Rd (R127)	0.609	1355.300
3 - Dublin Rd (R127)	0.723	1849.377

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2024	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	435.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	287.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	580.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	10.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	134.000	301.000
	2 - Skerries Rd (R127)	72.000	0.000	215.000
	3 - Dublin Rd (R127)	223.000	357.000	0.000

Proportions

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.31	0.69
	2 - Skerries Rd (R127)	0.25	0.00	0.75
	3 - Dublin Rd (R127)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.30	3.21	0.4	A	399.16	598.75
2 - Skerries Rd (R127)	0.34	5.75	0.5	A	263.36	395.03
3 - Dublin Rd (R127)	0.37	3.30	0.6	A	532.22	798.33

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	327.49	81.87	267.97	7.53	1690.99	0.194	326.53	221.35	0.0	0.2	2.637	A
2 - Skerries Rd (R127)	216.07	54.02	225.95		1087.17	0.199	215.08	368.56	0.0	0.2	4.124	A
3 - Dublin Rd (R127)	436.65	109.16	53.96	7.53	1779.19	0.245	435.36	387.07	0.0	0.3	2.676	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	391.06	97.76	320.70	8.99	1651.96	0.237	390.78	264.97	0.2	0.3	2.854	A
2 - Skerries Rd (R127)	258.01	64.50	270.40		1026.61	0.251	257.66	441.08	0.2	0.3	4.679	A
3 - Dublin Rd (R127)	521.41	130.35	64.64	8.99	1759.20	0.296	521.03	463.42	0.3	0.4	2.907	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	478.94	119.74	392.66	11.01	1598.68	0.300	478.48	324.38	0.3	0.4	3.211	A
2 - Skerries Rd (R127)	315.99	79.00	331.08		942.79	0.335	315.33	540.06	0.3	0.5	5.731	A
3 - Dublin Rd (R127)	638.59	159.65	79.11	11.01	1729.02	0.369	637.94	567.31	0.4	0.6	3.298	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	478.94	119.74	393.06	11.01	1598.38	0.300	478.94	324.80	0.4	0.4	3.215	A
2 - Skerries Rd (R127)	315.99	79.00	331.40		942.21	0.335	315.98	540.60	0.5	0.5	5.748	A
3 - Dublin Rd (R127)	638.59	159.65	79.27	11.01	1728.76	0.369	638.58	568.12	0.6	0.6	3.301	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	391.06	97.76	321.33	8.99	1651.49	0.237	391.52	265.61	0.4	0.3	2.859	A
2 - Skerries Rd (R127)	258.01	64.50	270.91		1025.73	0.252	258.66	441.94	0.5	0.3	4.696	A
3 - Dublin Rd (R127)	521.41	130.35	64.89	8.99	1758.83	0.296	522.05	464.68	0.6	0.4	2.911	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	327.49	81.87	269.01	7.53	1690.22	0.194	327.77	222.33	0.3	0.2	2.644	A
2 - Skerries Rd (R127)	216.07	54.02	226.80		1085.84	0.199	216.42	369.98	0.3	0.2	4.142	A
3 - Dublin Rd (R127)	436.65	109.16	54.29	7.53	1778.71	0.245	437.04	388.93	0.4	0.3	2.685	A

Do-Something - DS 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Miller's Lane - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Dublin Rd (R127) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	4.44	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	0.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2024	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	318.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	593.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	422.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	0.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	93.000	225.000
	2 - Skerries Rd (R127)	186.000	0.000	407.000
	3 - Dublin Rd (R127)	255.000	167.000	0.000

Proportions

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.29	0.71
	2 - Skerries Rd (R127)	0.31	0.00	0.69
	3 - Dublin Rd (R127)	0.60	0.40	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.20	2.56	0.2	A	291.80	437.70
2 - Skerries Rd (R127)	0.54	6.53	1.2	A	544.15	816.22
3 - Dublin Rd (R127)	0.27	2.91	0.4	A	387.23	580.85

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	239.41	59.85	125.38	0.00	1796.61	0.133	238.79	330.78	0.0	0.2	2.309	A
2 - Skerries Rd (R127)	446.44	111.61	168.96		1252.32	0.356	444.24	195.21	0.0	0.5	4.444	A
3 - Dublin Rd (R127)	317.70	79.43	139.34	0.00	1748.64	0.182	316.82	473.86	0.0	0.2	2.513	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	285.88	71.47	150.04	0.00	1778.46	0.161	285.72	396.05	0.2	0.2	2.411	A
2 - Skerries Rd (R127)	533.09	133.27	202.16		1232.08	0.433	532.27	233.60	0.5	0.8	5.137	A
3 - Dublin Rd (R127)	379.37	94.84	166.95	0.00	1728.68	0.219	379.13	567.48	0.2	0.3	2.667	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	350.12	87.53	183.72	0.00	1753.67	0.200	349.89	484.81	0.2	0.2	2.564	A
2 - Skerries Rd (R127)	652.91	163.23	247.57		1204.41	0.542	651.26	286.05	0.8	1.2	6.488	A
3 - Dublin Rd (R127)	464.63	116.16	204.27	0.00	1701.70	0.273	464.26	694.55	0.3	0.4	2.909	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	350.12	87.53	183.87	0.00	1753.56	0.200	350.12	485.54	0.2	0.2	2.564	A
2 - Skerries Rd (R127)	652.91	163.23	247.73		1204.31	0.542	652.87	286.26	1.2	1.2	6.527	A
3 - Dublin Rd (R127)	464.63	116.16	204.78	0.00	1701.33	0.273	464.63	695.82	0.4	0.4	2.910	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	285.88	71.47	150.28	0.00	1778.29	0.161	286.10	397.18	0.2	0.2	2.412	A
2 - Skerries Rd (R127)	533.09	133.27	202.43		1231.92	0.433	534.71	233.95	1.2	0.8	5.174	A
3 - Dublin Rd (R127)	379.37	94.84	167.72	0.00	1728.13	0.220	379.74	569.43	0.4	0.3	2.670	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	239.41	59.85	125.82	0.00	1796.29	0.133	239.56	332.42	0.2	0.2	2.314	A
2 - Skerries Rd (R127)	446.44	111.61	169.50		1251.99	0.357	447.29	195.88	0.8	0.6	4.479	A
3 - Dublin Rd (R127)	317.70	79.43	140.30	0.00	1747.95	0.182	317.94	476.49	0.3	0.2	2.519	A

Do-Something - DS 2029, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	3 - Dublin Rd (R127) - Capacity	Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	4.39	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	10.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2029	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	535.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	319.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	642.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	10.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	164.000	371.000
	2 - Skerries Rd (R127)	84.000	0.000	235.000
	3 - Dublin Rd (R127)	252.000	390.000	0.000

Proportions

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.31	0.69
	2 - Skerries Rd (R127)	0.26	0.00	0.74
	3 - Dublin Rd (R127)	0.39	0.61	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.37	3.66	0.6	A	490.93	736.39
2 - Skerries Rd (R127)	0.41	7.17	0.7	A	292.72	439.08
3 - Dublin Rd (R127)	0.42	3.61	0.7	A	589.11	883.67

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	402.78	100.69	292.70	7.53	1672.80	0.241	401.51	252.05	0.0	0.3	2.829	A
2 - Skerries Rd (R127)	240.16	60.04	278.43		1027.15	0.234	238.95	415.78	0.0	0.3	4.561	A
3 - Dublin Rd (R127)	483.33	120.83	62.92	7.53	1764.61	0.274	481.83	454.46	0.0	0.4	2.804	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	480.95	120.24	350.31	8.99	1630.19	0.295	480.55	301.74	0.3	0.4	3.131	A
2 - Skerries Rd (R127)	286.77	71.69	333.24		954.22	0.301	286.28	497.62	0.3	0.4	5.386	A
3 - Dublin Rd (R127)	577.14	144.29	75.38	8.99	1740.13	0.332	576.67	544.14	0.4	0.5	3.092	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	589.05	147.26	428.89	11.01	1572.07	0.375	588.33	369.33	0.4	0.6	3.658	A
2 - Skerries Rd (R127)	351.23	87.81	407.98		854.33	0.411	350.17	609.23	0.4	0.7	7.126	A
3 - Dublin Rd (R127)	706.86	176.71	92.21	11.01	1703.15	0.415	706.01	665.95	0.5	0.7	3.606	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	589.05	147.26	429.39	11.01	1571.70	0.375	589.04	369.93	0.6	0.6	3.662	A
2 - Skerries Rd (R127)	351.23	87.81	408.47		853.44	0.412	351.20	609.96	0.7	0.7	7.167	A
3 - Dublin Rd (R127)	706.86	176.71	92.48	11.01	1702.72	0.415	706.84	667.20	0.7	0.7	3.614	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	480.95	120.24	351.11	8.99	1629.61	0.295	481.66	302.66	0.6	0.4	3.139	A
2 - Skerries Rd (R127)	286.77	71.69	334.01		952.88	0.301	287.82	498.76	0.7	0.4	5.422	A
3 - Dublin Rd (R127)	577.14	144.29	75.79	8.99	1739.54	0.332	577.98	546.04	0.7	0.5	3.103	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	402.78	100.69	293.90	7.53	1671.92	0.241	403.18	253.28	0.4	0.3	2.840	A
2 - Skerries Rd (R127)	240.16	60.04	279.59		1025.38	0.234	240.67	417.50	0.4	0.3	4.592	A
3 - Dublin Rd (R127)	483.33	120.83	63.37	7.53	1763.94	0.274	483.81	456.88	0.5	0.4	2.812	A

Do-Something - DS 2029, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Miller's Lane - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Dublin Rd (R127) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	5.11	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	0.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2029	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	367.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	659.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	482.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	0.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	107.000	260.000
	2 - Skerries Rd (R127)	214.000	0.000	445.000
	3 - Dublin Rd (R127)	299.000	183.000	0.000

Proportions

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.29	0.71
	2 - Skerries Rd (R127)	0.32	0.00	0.68
	3 - Dublin Rd (R127)	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.23	2.69	0.3	A	336.77	505.15
2 - Skerries Rd (R127)	0.61	7.90	1.6	A	604.71	907.06
3 - Dublin Rd (R127)	0.32	3.13	0.5	A	442.29	663.44

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	276.30	69.07	137.37	0.00	1787.78	0.155	275.57	384.70	0.0	0.2	2.379	A
2 - Skerries Rd (R127)	496.13	124.03	195.23		1236.31	0.401	493.47	217.71	0.0	0.7	4.829	A
3 - Dublin Rd (R127)	362.87	90.72	160.25	0.00	1733.53	0.209	361.82	528.45	0.0	0.3	2.623	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	329.93	82.48	164.40	0.00	1767.89	0.187	329.74	460.63	0.2	0.2	2.503	A
2 - Skerries Rd (R127)	592.43	148.11	233.60		1212.92	0.488	591.31	260.54	0.7	0.9	5.780	A
3 - Dublin Rd (R127)	433.31	108.33	192.02	0.00	1710.56	0.253	433.01	632.90	0.3	0.3	2.817	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	404.07	101.02	201.30	0.00	1740.73	0.232	403.78	563.72	0.2	0.3	2.692	A
2 - Skerries Rd (R127)	725.57	181.39	286.06		1180.95	0.614	723.11	319.03	0.9	1.6	7.820	A
3 - Dublin Rd (R127)	530.69	132.67	234.82	0.00	1679.61	0.316	530.20	774.35	0.3	0.5	3.130	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	404.07	101.02	201.48	0.00	1740.59	0.232	404.07	564.80	0.3	0.3	2.693	A
2 - Skerries Rd (R127)	725.57	181.39	286.26		1180.83	0.614	725.50	319.29	1.6	1.6	7.904	A
3 - Dublin Rd (R127)	530.69	132.67	235.60	0.00	1679.05	0.316	530.69	776.17	0.5	0.5	3.134	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	329.93	82.48	164.70	0.00	1767.67	0.187	330.21	462.27	0.3	0.2	2.506	A
2 - Skerries Rd (R127)	592.43	148.11	233.94		1212.72	0.489	594.86	260.97	1.6	1.0	5.851	A
3 - Dublin Rd (R127)	433.31	108.33	193.17	0.00	1709.72	0.253	433.79	635.63	0.5	0.3	2.824	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	276.30	69.07	137.89	0.00	1787.41	0.155	276.48	386.78	0.2	0.2	2.382	A
2 - Skerries Rd (R127)	496.13	124.03	195.87		1235.92	0.401	497.29	218.50	1.0	0.7	4.883	A
3 - Dublin Rd (R127)	362.87	90.72	161.49	0.00	1732.63	0.209	363.17	531.68	0.3	0.3	2.630	A

Do-Something - DS 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	3 - Dublin Rd (R127) - Capacity	Pedestrian Crossing causes blocking on previous arm due to traffic queing to leave the junction in 6 timesegment(s).

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	4.74	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	10.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	10.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2039	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	564.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	339.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	682.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	10.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	10.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	173.000	391.000
	2 - Skerries Rd (R127)	89.000	0.000	250.000
	3 - Dublin Rd (R127)	267.000	415.000	0.000

Proportions

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.31	0.69
	2 - Skerries Rd (R127)	0.26	0.00	0.74
	3 - Dublin Rd (R127)	0.39	0.61	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.40	3.87	0.7	A	517.54	776.30
2 - Skerries Rd (R127)	0.45	8.00	0.8	A	311.07	466.61
3 - Dublin Rd (R127)	0.44	3.83	0.8	A	625.82	938.72

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	424.61	106.15	311.43	7.53	1659.03	0.256	423.24	267.02	0.0	0.3	2.911	A
2 - Skerries Rd (R127)	255.22	63.80	293.42		1006.61	0.254	253.87	441.26	0.0	0.3	4.773	A
3 - Dublin Rd (R127)	513.45	128.36	66.65	7.53	1757.64	0.292	511.80	480.63	0.0	0.4	2.886	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	507.02	126.76	372.75	8.99	1613.71	0.314	506.57	319.67	0.3	0.5	3.249	A
2 - Skerries Rd (R127)	304.75	76.19	351.19		929.38	0.328	304.17	528.13	0.3	0.5	5.753	A
3 - Dublin Rd (R127)	613.10	153.28	79.86	8.99	1730.92	0.354	612.57	575.50	0.4	0.5	3.217	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	620.98	155.24	456.32	11.01	1551.92	0.400	620.15	391.23	0.5	0.7	3.860	A
2 - Skerries Rd (R127)	373.25	93.31	429.93		823.98	0.453	371.92	646.54	0.5	0.8	7.939	A
3 - Dublin Rd (R127)	750.90	187.72	97.64	11.01	1690.56	0.444	749.91	704.20	0.5	0.8	3.824	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	620.98	155.24	456.92	11.01	1551.48	0.400	620.97	391.95	0.7	0.7	3.868	A
2 - Skerries Rd (R127)	373.25	93.31	430.49		822.91	0.454	373.21	647.39	0.8	0.8	8.004	A
3 - Dublin Rd (R127)	750.90	187.72	97.98	11.01	1690.03	0.444	750.88	705.72	0.8	0.8	3.832	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	507.02	126.76	373.67	8.99	1613.03	0.314	507.84	320.77	0.7	0.5	3.259	A
2 - Skerries Rd (R127)	304.75	76.19	352.07		927.79	0.328	306.07	529.45	0.8	0.5	5.804	A
3 - Dublin Rd (R127)	613.10	153.28	80.35	8.99	1730.20	0.354	614.08	577.78	0.8	0.6	3.230	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	424.61	106.15	312.77	7.53	1658.05	0.256	425.07	268.39	0.5	0.3	2.922	A
2 - Skerries Rd (R127)	255.22	63.80	294.68		1004.63	0.254	255.82	443.15	0.5	0.3	4.811	A
3 - Dublin Rd (R127)	513.45	128.36	67.16	7.53	1756.87	0.292	513.99	483.34	0.6	0.4	2.899	A

Do-Something - DS 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Miller's Lane - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Dublin Rd (R127) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Miller's Ln / Skerries Rd / Dublin Rd	Miller's Ln / Skerries Rd / Dublin Rd	Standard Roundabout	1,2,3	5.63	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Zebra	0.00
2 - Skerries Rd (R127)	None	
3 - Dublin Rd (R127)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Miller's Lane	1.00	1.00	✓	Distance	6.36	4.54	4.55	3.25
3 - Dublin Rd (R127)	1.00	1.00	✓	Distance	7.13	5.09	6.71	4.79

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2039	FM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Miller's Lane		ONE HOUR	✓	389.00	100.000
2 - Skerries Rd (R127)		ONE HOUR	✓	699.00	100.000
3 - Dublin Rd (R127)		ONE HOUR	✓	510.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Miller's Lane	Global	0.00
2 - Skerries Rd (R127)		
3 - Dublin Rd (R127)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.000	114.000	275.000
	2 - Skerries Rd (R127)	226.000	0.000	473.000
	3 - Dublin Rd (R127)	316.000	194.000	0.000

Proportions

	To			
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0.00	0.29	0.71
	2 - Skerries Rd (R127)	0.32	0.00	0.68
	3 - Dublin Rd (R127)	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	0	0	0
	2 - Skerries Rd (R127)	0	0	0
	3 - Dublin Rd (R127)	0	0	0

Average PCU Per Veh

		To		
		1 - Miller's Lane	2 - Skerries Rd (R127)	3 - Dublin Rd (R127)
From	1 - Miller's Lane	1.000	1.000	1.000
	2 - Skerries Rd (R127)	1.000	1.000	1.000
	3 - Dublin Rd (R127)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Miller's Lane	0.25	2.76	0.3	A	356.95	535.43
2 - Skerries Rd (R127)	0.66	8.96	1.9	A	641.41	962.12
3 - Dublin Rd (R127)	0.34	3.25	0.5	A	467.98	701.98

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	292.86	73.21	145.62	0.00	1781.71	0.164	292.08	406.38	0.0	0.2	2.415	A
2 - Skerries Rd (R127)	526.24	131.56	206.48		1229.45	0.428	523.28	231.22	0.0	0.7	5.076	A
3 - Dublin Rd (R127)	383.95	95.99	169.19	0.00	1727.06	0.222	382.82	560.57	0.0	0.3	2.675	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	349.70	87.43	174.28	0.00	1760.62	0.199	349.50	486.61	0.2	0.2	2.551	A
2 - Skerries Rd (R127)	628.39	157.10	247.08		1204.71	0.522	627.05	276.70	0.7	1.1	6.212	A
3 - Dublin Rd (R127)	458.48	114.62	202.74	0.00	1702.81	0.269	458.15	671.39	0.3	0.4	2.892	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	428.30	107.07	213.39	0.00	1731.83	0.247	427.98	595.39	0.2	0.3	2.761	A
2 - Skerries Rd (R127)	769.61	192.40	302.55		1170.90	0.657	766.45	338.81	1.1	1.9	8.830	A
3 - Dublin Rd (R127)	561.52	140.38	247.81	0.00	1670.22	0.336	560.97	821.20	0.4	0.5	3.243	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	428.30	107.07	213.60	0.00	1731.68	0.247	428.29	596.72	0.3	0.3	2.761	A
2 - Skerries Rd (R127)	769.61	192.40	302.78		1170.76	0.657	769.51	339.11	1.9	1.9	8.965	A
3 - Dublin Rd (R127)	561.52	140.38	248.80	0.00	1669.51	0.336	561.51	823.49	0.5	0.5	3.248	A

Main results: (18:00-18:15)

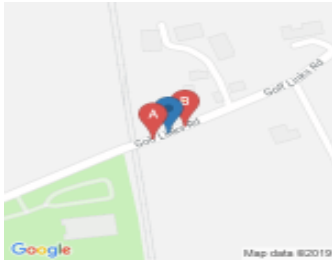
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	349.70	87.43	174.61	0.00	1760.38	0.199	350.02	488.60	0.3	0.2	2.554	A
2 - Skerries Rd (R127)	628.39	157.10	247.44		1204.49	0.522	631.53	277.18	1.9	1.1	6.318	A
3 - Dublin Rd (R127)	458.48	114.62	204.18	0.00	1701.76	0.269	459.02	674.79	0.5	0.4	2.897	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Miller's Lane	292.86	73.21	146.18	0.00	1781.30	0.164	293.07	408.71	0.2	0.2	2.420	A
2 - Skerries Rd (R127)	526.24	131.56	207.18		1229.03	0.428	527.64	232.07	1.1	0.8	5.144	A
3 - Dublin Rd (R127)	383.95	95.99	170.60	0.00	1726.04	0.222	384.29	564.23	0.4	0.3	2.683	A

APPENDIX F

IDASO Traffic Survey Data



IDASO

Survey Name: 214 19394 Skerries
Site: ATC 1
Location: Golf Links Rd, Hacketstown
Date: Fri 20 Sep 2019 — Thu 26 Sep 2019

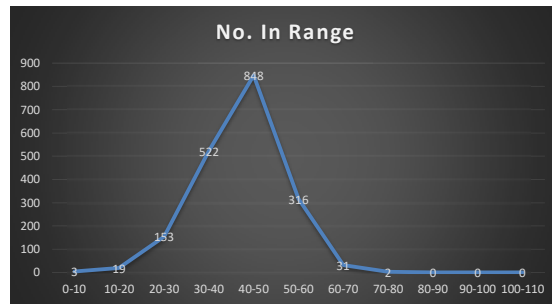
Speed Survey

Cummulative 85% Speed 53.76 KPH
 Cummulative Minimum Speed 8.93 KPH
 Cummulative Maximum Speed 78.7 KPH
 Cummulative Average Speed 44.18 KPH

Northbound (A => B)

No. of Vehicles 1894
 85% Speed 51.1 KPH
 Minimum Speed 8.93 KPH
 Maximum Speed 75.75 KPH
 Average Speed 42.43 KPH

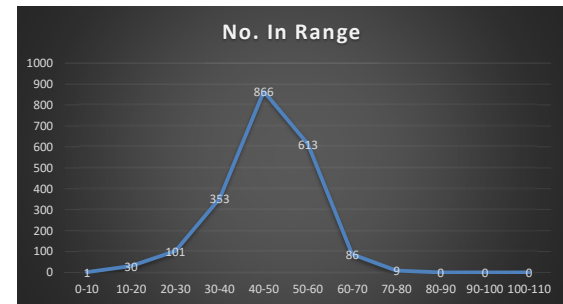
Speed KPH	No. In Range
0-10	3
10-20	19
20-30	153
30-40	522
40-50	848
50-60	316
60-70	31
70-80	2
80-90	0
90-100	0
100-110	0

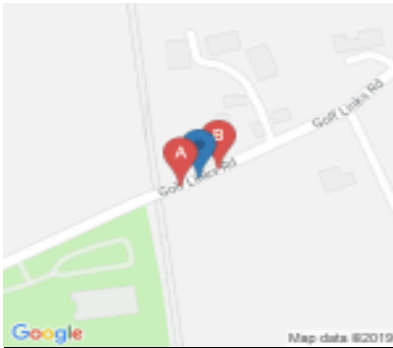


Southbound (B => A)

No. of Vehicles 2059
 85% Speed 55.32 KPH
 Minimum Speed 9.47 KPH
 Maximum Speed 78.7 KPH
 Average Speed 45.79 KPH

Speed KPH	No. In Range
0-10	1
10-20	30
20-30	101
30-40	353
40-50	866
50-60	613
60-70	86
70-80	9
80-90	0
90-100	0
100-110	0





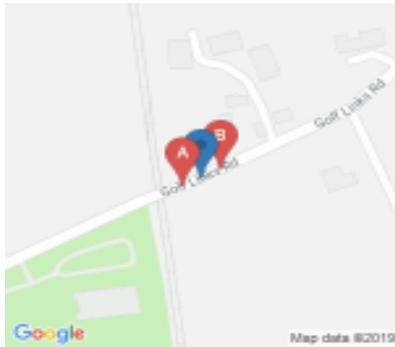
IDASO

Survey Name: 214 19394 Skerries
Site: ATC 1
Location: Golf Links Rd, Hacketstown
Date: Fri 20-Sep-2019

TIME	A => B							TOT	PCU	B => A							TOT	PCU
	M/C	CAR	LGV	OGV1	OGV2	PSV	M/C			CAR	LGV	OGV1	OGV2	PSV				
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00:45	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	1	0	0	0	0	1	1	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:45	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	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45	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	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:45	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	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	
05:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	
05:45	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	3	
H/TOT	0	0	0	0	0	0	0	0	0	4	0	0	0	1	5	6	6	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06:15	0	0	0	1	0	0	1	1.5	0	1	0	1	0	0	2	2.5	2.5	
06:30	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	3	
06:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	
H/TOT	0	0	0	1	0	0	1	1.5	0	5	0	1	0	0	6	6.5	6.5	
07:00	0	1	0	0	0	0	1	1	0	2	1	0	0	0	3	3	3	
07:15	0	2	0	0	0	0	2	2	0	4	0	0	0	0	4	4	4	
07:30	0	3	0	0	0	0	3	3	0	5	0	0	0	0	5	5	5	
07:45	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1	1	
H/TOT	0	7	0	0	0	0	7	7	0	12	1	0	0	0	13	13	13	
08:00	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2	2	
08:15	0	2	0	0	0	0	2	2	0	3	1	0	0	0	4	4	4	
08:30	0	2	0	0	0	0	2	2	0	4	1	0	0	0	5	5	5	
08:45	0	9	1	2	0	0	12	13	0	7	0	0	0	0	7	7	7	
H/TOT	0	14	1	2	0	0	17	18	0	16	2	0	0	0	18	18	18	
09:00	0	3	1	1	0	0	5	5.5	0	7	1	2	0	0	10	11	11	
09:15	0	1	1	0	0	0	2	2	0	6	1	1	0	0	8	8.5	8.5	

09:30	0	1	1	0	0	0	2	2	0	5	1	0	0	0	6	6
09:45	0	3	2	0	0	0	5	5	0	5	0	0	0	0	5	5
H/TOT	0	8	5	1	0	0	14	14.5	0	23	3	3	0	0	29	30.5
10:00	0	6	0	1	0	0	7	7.5	0	2	3	0	0	0	5	5
10:15	0	3	1	0	0	0	4	4	0	5	2	0	0	0	7	7
10:30	0	5	0	0	0	0	5	5	0	4	0	2	0	0	6	7
10:45	0	4	0	1	0	0	5	5.5	0	7	0	0	0	0	7	7
H/TOT	0	18	1	2	0	0	21	22	0	18	5	2	0	0	25	26
11:00	0	3	3	0	0	0	6	6	0	7	0	0	0	0	7	7
11:15	0	7	0	0	0	0	7	7	0	5	0	0	0	0	5	5
11:30	0	2	0	1	0	0	3	3.5	0	7	2	0	0	0	9	9
11:45	0	3	1	0	0	0	4	4	0	5	1	0	0	0	6	6
H/TOT	0	15	4	1	0	0	20	20.5	0	24	3	0	0	0	27	27
12:00	0	5	0	0	0	0	5	5	0	5	0	0	0	0	5	5
12:15	0	3	1	0	0	0	4	4	0	4	0	1	0	0	5	5.5
12:30	0	10	0	0	0	0	10	10	0	10	1	0	0	0	11	11
12:45	0	4	3	0	0	0	7	7	0	3	0	0	0	0	3	3
H/TOT	0	22	4	0	0	0	26	26	0	22	1	1	0	0	24	24.5
13:00	0	13	0	1	0	0	14	14.5	0	7	1	0	0	0	8	8
13:15	0	1	1	0	0	0	2	2	0	10	0	0	0	0	10	10
13:30	0	2	1	0	0	0	3	3	0	4	0	0	0	0	4	4
13:45	0	9	0	0	0	0	9	9	0	7	0	1	0	0	8	8.5
H/TOT	0	25	2	1	0	0	28	28.5	0	28	1	1	0	0	30	30.5
14:00	0	3	0	2	0	0	5	6	0	6	0	0	0	0	6	6
14:15	0	5	0	0	0	0	5	5	0	4	1	0	0	1	6	7
14:30	0	4	1	0	0	0	5	5	0	6	1	1	0	0	8	8.5
14:45	0	7	0	0	0	0	7	7	0	4	0	0	0	0	4	4
H/TOT	0	19	1	2	0	0	22	23	0	20	2	1	0	1	24	25.5
15:00	0	2	0	0	0	0	2	2	0	7	1	0	0	0	8	8
15:15	0	3	0	0	0	0	3	3	0	9	0	1	0	0	10	10.5
15:30	0	2	2	0	0	0	4	4	0	6	0	0	0	0	6	6
15:45	0	7	0	0	0	0	7	7	0	5	1	0	0	0	6	6
H/TOT	0	14	2	0	0	0	16	16	0	27	2	1	0	0	30	30.5
16:00	0	5	2	0	0	0	7	7	0	4	0	0	0	0	4	4
16:15	0	7	1	0	0	0	8	8	0	8	0	0	0	0	8	8
16:30	0	14	1	0	0	0	15	15	0	7	0	0	0	0	7	7
16:45	0	12	2	0	0	0	14	14	0	8	0	0	0	0	8	8
H/TOT	0	38	6	0	0	0	44	44	0	27	0	0	0	0	27	27
17:00	0	14	1	0	0	0	15	15	0	7	0	0	0	0	7	7
17:15	0	9	1	0	0	0	10	10	0	7	0	0	0	0	7	7
17:30	1	11	0	0	1	0	13	13.7	0	4	0	0	0	0	4	4
17:45	0	6	0	0	0	0	6	6	0	4	1	0	0	0	5	5
H/TOT	1	40	2	0	1	0	44	44.7	0	22	1	0	0	0	23	23
18:00	0	4	2	0	0	0	6	6	0	4	0	0	0	0	4	4
18:15	0	4	1	0	0	0	5	5	1	3	0	0	0	0	4	3.4
18:30	0	11	0	0	0	0	11	11	0	5	0	0	0	0	5	5
18:45	0	8	1	0	0	0	9	9	0	5	0	0	0	0	5	5
H/TOT	0	27	4	0	0	0	31	31	1	17	0	0	0	0	18	17.4
19:00	0	6	0	0	0	0	6	6	0	5	0	0	0	0	5	5
19:15	0	3	1	0	0	0	4	4	0	2	0	0	0	0	2	2
19:30	1	2	0	0	0	0	3	2.4	0	6	0	0	0	0	6	6
19:45	0	6	1	0	0	0	7	7	0	5	1	0	0	0	6	6
H/TOT	1	17	2	0	0	0	20	19.4	0	18	1	0	0	0	19	19
20:00	0	4	1	0	0	0	5	5	0	1	0	0	0	0	1	1
20:15	0	3	1	0	0	0	4	4	0	7	0	0	0	0	7	7
20:30	0	4	0	0	0	0	4	4	0	10	0	0	0	0	10	10
20:45	0	3	1	0	0	0	4	4	0	5	0	0	0	0	5	5
H/TOT	0	14	3	0	0	0	17	17	0	23	0	0	0	0	23	23
21:00	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
21:15	0	0	2	0	0	0	2	2	0	1	0	0	0	0	1	1

21:30	0	12	0	0	0	0	12	12	0	1	0	0	0	0	1	1
21:45	0	3	0	0	0	0	3	3	0	4	0	0	0	0	4	4
H/TOT	0	18	2	0	0	0	20	20	0	6	0	0	0	0	6	6
22:00	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
22:15	0	4	0	0	0	0	4	4	0	2	0	0	0	0	2	2
22:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	6	0	0	0	0	6	6	0	4	0	0	0	0	4	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
24 TOT	2	304	39	10	1	0	356	361.1	1	318	22	10	0	2	353	359.4



IDASO

Survey Name: 214 19394 Skerries
Site: ATC 1
Location: Golf Links Rd, Hacketstown
Date: Sat 21-Sep-2019

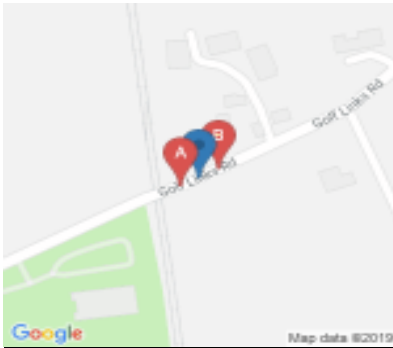
TIME	A => B							TOT	PCU	B => A							TOT	PCU	
	M/C	CAR	LGV	OGV1	OGV2	PSV	M/C			CAR	LGV	OGV1	OGV2	PSV					
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	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
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	2	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	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	2	0	0	0	0	2	2	2	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	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
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1
H/TOT	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	2	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	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	1	0	0	0	0	1	1	1	1	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1

06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
07:00	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
07:30	0	1	0	0	0	1	2	3	0	7	2	0	0	0	9	9
07:45	0	1	0	0	0	0	1	1	0	7	0	0	0	0	7	7
H/TOT	0	2	0	0	0	1	3	4	0	22	3	0	0	0	25	25
08:00	0	2	0	0	0	0	2	2	0	4	0	0	0	0	4	4
08:15	0	2	0	0	0	0	2	2	1	6	0	0	0	0	7	6.4
08:30	0	2	0	1	0	0	3	3.5	0	5	0	0	0	0	5	5
08:45	0	1	0	0	0	0	1	1	0	1	2	0	0	0	3	3
H/TOT	0	7	0	1	0	0	8	8.5	1	16	2	0	0	0	19	18.4
09:00	0	0	1	0	0	0	1	1	0	8	0	0	0	0	8	8
09:15	0	6	0	0	0	0	6	6	1	4	2	0	0	0	7	6.4
09:30	0	2	0	0	0	0	2	2	0	7	0	0	0	0	7	7
09:45	0	5	2	0	0	0	7	7	0	10	1	0	0	0	11	11
H/TOT	0	13	3	0	0	0	16	16	1	29	3	0	0	0	33	32.4
10:00	0	3	0	0	0	0	3	3	0	4	0	0	0	0	4	4
10:15	0	3	0	0	0	0	3	3	0	6	0	0	0	0	6	6
10:30	0	3	1	0	0	0	4	4	0	6	1	1	0	0	8	8.5
10:45	0	3	0	0	0	0	3	3	0	6	1	0	0	0	7	7
H/TOT	0	12	1	0	0	0	13	13	0	22	2	1	0	0	25	25.5
11:00	0	2	1	0	0	0	3	3	0	4	1	0	0	0	5	5
11:15	0	8	1	0	0	0	9	9	0	6	0	0	0	0	6	6
11:30	0	1	2	1	0	0	4	4.5	0	6	1	0	1	0	8	9.3
11:45	0	6	2	0	0	0	8	8	0	5	3	0	0	0	8	8
H/TOT	0	17	6	1	0	0	24	24.5	0	21	5	0	1	0	27	28.3
12:00	0	7	0	0	0	0	7	7	0	12	0	0	0	0	12	12
12:15	0	7	2	0	0	0	9	9	0	6	0	0	0	0	6	6
12:30	0	1	0	0	0	0	1	1	0	5	0	0	0	0	5	5
12:45	0	9	0	0	0	0	9	9	0	11	1	0	0	0	12	12
H/TOT	0	24	2	0	0	0	26	26	0	34	1	0	0	0	35	35
13:00	0	1	0	0	0	0	1	1	0	6	0	0	0	0	6	6
13:15	0	2	0	0	0	0	2	2	0	2	1	0	0	0	3	3
13:30	0	15	4	0	0	0	19	19	0	4	1	0	0	0	5	5
13:45	0	4	1	0	0	0	5	5	1	7	0	0	0	0	8	7.4
H/TOT	0	22	5	0	0	0	27	27	1	19	2	0	0	0	22	21.4
14:00	0	4	2	0	0	0	6	6	0	3	0	0	0	0	3	3
14:15	0	7	1	0	0	0	8	8	0	7	1	0	0	0	8	8
14:30	0	8	1	0	0	0	9	9	0	5	0	0	0	0	5	5
14:45	0	8	0	0	0	0	8	8	0	5	0	0	0	0	5	5
H/TOT	0	27	4	0	0	0	31	31	0	20	1	0	0	0	21	21
15:00	0	4	0	0	0	0	4	4	0	9	2	1	0	0	12	12.5
15:15	0	6	0	0	0	0	6	6	0	7	3	0	0	0	10	10
15:30	0	5	0	0	0	0	5	5	0	7	0	0	0	0	7	7
15:45	0	7	1	0	0	0	8	8	0	5	0	0	0	0	5	5
H/TOT	0	22	1	0	0	0	23	23	0	28	5	1	0	0	34	34.5
16:00	0	7	1	0	0	0	8	8	0	8	1	0	0	0	9	9
16:15	0	9	0	0	0	0	9	9	0	8	0	0	0	0	8	8
16:30	0	2	3	0	0	0	5	5	0	7	1	0	0	0	8	8
16:45	0	5	1	0	0	0	6	6	0	5	0	0	0	0	5	5
H/TOT	0	23	5	0	0	0	28	28	0	28	2	0	0	0	30	30
17:00	0	4	1	0	0	0	5	5	0	12	2	0	0	0	14	14
17:15	0	4	0	0	0	0	4	4	0	6	1	0	0	0	7	7
17:30	0	5	2	0	1	0	8	9.3	0	10	1	0	0	0	11	11
17:45	0	18	0	0	0	0	18	18	0	7	3	0	0	0	10	10
H/TOT	0	31	3	0	1	0	35	36.3	0	35	7	0	0	0	42	42
18:00	0	10	0	0	0	0	10	10	0	2	1	0	0	0	3	3
18:15	0	9	0	0	0	0	9	9	0	4	0	1	0	0	5	5.5

03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	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
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:45	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	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	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	3	0	0	0	0	3	3
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:00	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
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
H/TOT	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
08:00	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
08:15	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
08:30	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
08:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	6	0	0	0	0	6	6	0	4	0	0	0	0	4	4
09:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:15	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
09:30	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	2	0	0	0	0	2	2
H/TOT	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
10:00	0	3	0	0	0	0	3	3	0	1	1	0	0	0	2	2
10:15	0	2	1	0	0	0	3	3	0	2	0	0	0	0	2	2
10:30	0	2	0	0	0	0	2	2	0	2	0	0	0	0	2	2
10:45	1	7	0	0	0	0	8	7.4	0	3	0	0	0	0	3	3
H/TOT	1	14	1	0	0	0	16	15.4	0	8	1	0	0	0	9	9
11:00	0	5	1	0	0	0	6	6	0	5	0	0	0	0	5	5
11:15	0	1	1	1	0	0	3	3.5	0	4	1	0	0	0	5	5
11:30	0	1	0	0	0	0	1	1	0	7	0	0	0	0	7	7
11:45	0	2	1	0	0	0	3	3	0	3	0	0	0	0	3	3
H/TOT	0	9	3	1	0	0	13	13.5	0	19	1	0	0	0	20	20
12:00	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
12:15	0	5	0	0	0	0	5	5	0	4	1	0	0	0	5	5
12:30	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
12:45	0	5	1	0	0	0	6	6	0	7	0	0	0	0	7	7
H/TOT	0	12	1	0	0	0	13	13	0	17	2	0	0	0	19	19
13:00	0	3	0	0	0	0	3	3	0	5	0	0	0	0	5	5
13:15	0	4	1	0	0	0	5	5	0	5	2	0	0	0	7	7
13:30	0	1	1	0	0	0	2	2	0	4	1	0	0	0	5	5
13:45	0	6	1	0	0	0	7	7	0	6	0	0	0	0	6	6
H/TOT	0	14	3	0	0	0	17	17	0	20	3	0	0	0	23	23
14:00	0	4	0	0	0	0	4	4	0	4	0	0	0	0	4	4
14:15	0	2	1	1	0	0	4	4.5	0	2	0	0	0	0	2	2
14:30	0	6	0	0	0	0	6	6	0	2	1	0	0	0	3	3
14:45	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	6
H/TOT	0	12	1	1	0	0	14	14.5	0	12	3	0	0	0	15	15
15:00	0	3	1	0	0	0	4	4	0	6	1	0	0	0	7	7
15:15	0	1	0	0	0	0	1	1	0	3	0	0	0	0	3	3

00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	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
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	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
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	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
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	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
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3	4
05:30	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	1	1	0	2	0	0	0	1	3	4
06:00	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	1	0	0	1	1.5	0	0	0	1	0	0	1	1.5
H/TOT	0	1	0	1	0	0	2	2.5	0	4	0	1	0	0	5	5.5
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
07:30	0	2	0	0	0	0	2	2	0	2	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	2	0	0	0	0	2	2	0	4	3	0	0	0	7	7
08:00	0	3	1	1	0	0	5	5.5	0	2	0	0	0	0	2	2
08:15	0	2	1	0	0	0	3	3	0	1	0	0	0	0	1	1
08:30	0	4	0	0	0	0	4	4	0	7	0	0	0	0	7	7
08:45	0	2	0	1	0	0	3	3.5	0	6	0	0	0	0	6	6
H/TOT	0	11	2	2	0	0	15	16	0	16	0	0	0	0	16	16
09:00	0	1	0	0	0	0	1	1	0	1	0	1	0	0	2	2.5
09:15	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
09:30	0	2	2	0	0	0	4	4	0	5	0	0	0	0	5	5
09:45	0	2	1	0	0	0	3	3	0	2	1	0	0	0	3	3
H/TOT	0	5	3	0	0	0	8	8	0	11	2	1	0	0	14	14.5
10:00	0	1	0	0	0	0	1	1	0	3	1	0	0	0	4	4
10:15	0	1	1	1	0	0	3	3.5	0	6	0	0	0	0	6	6
10:30	0	4	0	0	0	0	4	4	0	3	0	0	0	0	3	3
10:45	0	1	0	1	0	0	2	2.5	0	2	2	0	0	0	4	4
H/TOT	0	7	1	2	0	0	10	11	0	14	3	0	0	0	17	17
11:00	0	2	0	0	0	0	2	2	0	1	1	1	0	0	3	3.5
11:15	0	3	1	0	0	0	4	4	0	3	0	0	0	0	3	3
11:30	0	7	0	0	0	0	7	7	0	4	1	0	0	0	5	5
11:45	0	2	1	1	0	0	4	4.5	0	1	0	0	0	0	1	1
H/TOT	0	14	2	1	0	0	17	17.5	0	9	2	1	0	0	12	12.5
12:00	0	2	0	1	0	0	3	3.5	1	5	0	1	0	0	7	6.9
12:15	0	1	1	0	0	0	2	2	0	1	0	1	0	0	2	2.5

12:30	0	5	0	0	0	0	5	5	0	2	0	0	0	0	2	2
12:45	0	4	2	0	0	0	6	6	0	2	1	1	0	0	4	4.5
H/TOT	0	12	3	1	0	0	16	16.5	1	10	1	3	0	0	15	15.9
13:00	0	4	2	2	0	1	9	11	0	3	1	0	0	0	4	4
13:15	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
13:30	0	7	1	0	0	0	8	8	0	8	0	0	0	0	8	8
13:45	0	2	0	0	0	0	2	2	0	2	0	1	0	0	3	3.5
H/TOT	0	15	3	2	0	1	21	23	0	16	1	1	0	0	18	18.5
14:00	0	3	0	0	0	0	3	3	0	5	1	0	0	0	6	6
14:15	0	3	1	1	0	0	5	5.5	0	1	0	0	0	0	1	1
14:30	0	4	1	0	0	0	5	5	0	4	0	0	0	0	4	4
14:45	0	2	1	0	0	0	3	3	0	3	0	1	0	0	4	4.5
H/TOT	0	12	3	1	0	0	16	16.5	0	13	1	1	0	0	15	15.5
15:00	0	4	0	0	0	0	4	4	0	4	2	0	0	0	6	6
15:15	0	4	0	1	0	0	5	5.5	0	1	1	0	0	0	2	2
15:30	0	0	1	0	0	0	1	1	0	2	1	0	0	0	3	3
15:45	0	4	0	0	0	0	4	4	0	4	0	0	0	0	4	4
H/TOT	0	12	1	1	0	0	14	14.5	0	11	4	0	0	0	15	15
16:00	0	7	1	0	0	0	8	8	0	3	0	0	0	0	3	3
16:15	0	5	2	1	0	0	8	8.5	0	7	0	0	0	0	7	7
16:30	0	3	0	1	0	0	4	4.5	0	1	4	0	0	0	5	5
16:45	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
H/TOT	0	17	3	2	0	0	22	23	0	11	4	0	0	0	15	15
17:00	0	3	0	0	0	0	3	3	0	2	0	0	0	0	2	2
17:15	0	5	1	0	0	0	6	6	0	3	0	0	0	0	3	3
17:30	0	5	0	0	0	0	5	5	0	1	0	0	0	0	1	1
17:45	0	2	0	0	0	0	2	2	0	5	0	0	0	0	5	5
H/TOT	0	15	1	0	0	0	16	16	0	11	0	0	0	0	11	11
18:00	0	4	1	0	0	0	5	5	0	3	1	0	0	0	4	4
18:15	0	1	0	0	0	0	1	1	0	5	0	0	0	0	5	5
18:30	0	6	1	0	0	0	7	7	0	2	2	0	0	0	4	4
18:45	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
H/TOT	0	12	2	0	0	0	14	14	0	11	3	0	0	0	14	14
19:00	0	3	1	0	0	0	4	4	0	3	0	0	0	0	3	3
19:15	0	2	0	0	0	0	2	2	0	2	0	0	0	0	2	2
19:30	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0
19:45	0	3	0	0	0	0	3	3	0	1	0	0	0	0	1	1
H/TOT	0	11	2	0	0	0	13	13	0	6	0	0	0	0	6	6
20:00	0	2	0	0	0	0	2	2	0	1	0	0	0	0	1	1
20:15	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2
20:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
20:45	0	1	0	0	0	0	1	1	0	0	1	0	0	0	1	1
H/TOT	0	4	0	0	0	0	4	4	0	5	1	0	0	0	6	6
21:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
21:15	0	1	0	0	0	0	1	1	0	3	1	0	0	0	4	4
21:30	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2
21:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	2	0	0	0	0	2	2	0	7	1	0	0	0	8	8
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
22:30	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
22:45	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2
H/TOT	0	3	0	0	0	0	3	3	0	4	0	0	0	0	4	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
24 TOT	0	158	26	13	0	1	198	205.5	1	165	26	8	0	1	201	205.4



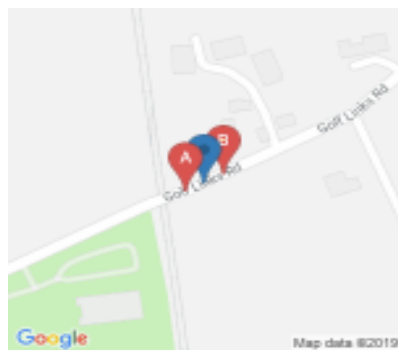
IDASO

Survey Name: 214 19394 Skerries
Site: ATC 1
Location: Golf Links Rd, Hacketstown
Date: Tue 24-Sep-2019

TIME	A => B							TOT	PCU	B => A							TOT	PCU
	M/C	CAR	LGV	OGV1	OGV2	PSV	M/C			CAR	LGV	OGV1	OGV2	PSV				
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00:15	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1	0	
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1	0	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:45	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	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45	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	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:45	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	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
05:45	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	
H/TOT	0	1	0	0	0	0	1	1	0	1	1	0	0	0	2	2	0	
06:00	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
06:15	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	1	0	0	0	1	1	0	4	0	0	0	0	4	4	0	
07:00	0	0	0	1	0	0	1	1.5	0	1	2	0	0	0	3	3	0	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30	0	1	1	0	0	0	2	2	0	1	1	0	0	0	2	2	0	
07:45	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	
H/TOT	0	1	1	1	0	0	3	3.5	0	6	3	0	0	0	9	9	0	
08:00	1	3	0	1	0	0	5	4.9	0	0	0	2	0	0	2	3	0	
08:15	0	1	1	0	0	0	2	2	0	1	0	0	0	0	1	1	0	
08:30	0	4	0	0	0	0	4	4	0	12	0	0	0	0	12	12	0	
08:45	0	3	0	0	0	0	3	3	0	9	0	1	0	0	10	10.5	0	
H/TOT	1	11	1	1	0	0	14	13.9	0	22	0	3	0	0	25	26.5	0	
09:00	0	2	0	1	0	0	3	3.5	0	7	1	1	0	0	9	9.5	0	
09:15	0	3	1	0	0	0	4	4	0	11	1	0	0	0	12	12	0	

09:30	0	2	0	0	0	0	2	2	0	4	0	1	0	0	5	5.5
09:45	0	1	0	1	0	0	2	2.5	0	5	0	0	0	0	5	5
H/TOT	0	8	1	2	0	0	11	12	0	27	2	2	0	0	31	32
10:00	0	1	1	0	0	0	2	2	0	8	1	0	0	0	9	9
10:15	0	6	1	1	1	0	9	10.8	0	2	0	0	0	0	2	2
10:30	0	2	0	0	0	0	2	2	0	3	3	0	0	0	6	6
10:45	0	3	4	0	0	0	7	7	0	8	1	1	0	0	10	10.5
H/TOT	0	12	6	1	1	0	20	21.8	0	21	5	1	0	0	27	27.5
11:00	0	3	1	1	0	0	5	5.5	1	3	1	0	1	0	6	6.7
11:15	0	2	0	1	0	0	3	3.5	0	3	1	1	0	0	5	5.5
11:30	0	4	1	0	0	0	5	5	0	5	0	1	0	0	6	6.5
11:45	0	4	2	1	0	0	7	7.5	0	11	1	1	0	0	13	13.5
H/TOT	0	13	4	3	0	0	20	21.5	1	22	3	3	1	0	30	32.2
12:00	0	2	0	0	0	0	2	2	0	7	1	1	0	0	9	9.5
12:15	0	2	1	0	0	0	3	3	0	3	1	0	0	0	4	4
12:30	0	3	0	1	0	0	4	4.5	0	7	0	1	0	0	8	8.5
12:45	0	3	2	0	0	0	5	5	0	3	0	2	0	0	5	6
H/TOT	0	10	3	1	0	0	14	14.5	0	20	2	4	0	0	26	28
13:00	0	7	1	1	0	0	9	9.5	0	6	1	2	0	0	9	10
13:15	0	4	0	0	0	0	4	4	0	1	2	0	0	0	3	3
13:30	0	9	0	0	0	0	9	9	0	8	0	0	0	0	8	8
13:45	0	6	1	0	0	0	7	7	0	4	1	0	0	0	5	5
H/TOT	0	26	2	1	0	0	29	29.5	0	19	4	2	0	0	25	26
14:00	0	11	0	0	0	0	11	11	0	5	2	1	0	0	8	8.5
14:15	0	4	0	1	0	0	5	5.5	0	9	1	1	0	0	11	11.5
14:30	0	6	0	0	0	0	6	6	0	3	0	1	0	0	4	4.5
14:45	0	8	0	0	0	0	8	8	0	4	0	0	0	0	4	4
H/TOT	0	29	0	1	0	0	30	30.5	0	21	3	3	0	0	27	28.5
15:00	0	3	0	0	0	0	3	3	0	12	1	0	0	0	13	13
15:15	0	11	0	1	0	0	12	12.5	0	4	0	0	0	0	4	4
15:30	0	3	1	0	0	0	4	4	0	2	0	0	0	0	2	2
15:45	0	8	2	0	0	0	10	10	0	3	2	0	0	0	5	5
H/TOT	0	25	3	1	0	0	29	29.5	0	21	3	0	0	0	24	24
16:00	0	7	1	0	0	0	8	8	0	4	0	0	0	0	4	4
16:15	1	2	2	0	0	0	5	4.4	0	5	1	0	0	0	6	6
16:30	0	8	1	0	0	0	9	9	0	6	1	1	0	0	8	8.5
16:45	0	4	1	0	0	0	5	5	0	6	0	0	0	0	6	6
H/TOT	1	21	5	0	0	0	27	26.4	0	21	2	1	0	0	24	24.5
17:00	0	11	0	0	0	0	11	11	0	4	0	1	0	0	5	5.5
17:15	0	9	2	0	0	0	11	11	0	1	1	0	0	0	2	2
17:30	0	8	0	0	0	0	8	8	0	6	0	0	0	0	6	6
17:45	0	6	2	1	0	0	9	9.5	0	5	0	0	0	0	5	5
H/TOT	0	34	4	1	0	0	39	39.5	0	16	1	1	0	0	18	18.5
18:00	0	5	1	0	0	0	6	6	0	4	1	0	0	0	5	5
18:15	0	8	0	0	0	0	8	8	0	10	1	0	0	0	11	11
18:30	0	4	1	0	0	0	5	5	0	14	2	0	0	0	16	16
18:45	0	3	1	1	0	0	5	5.5	0	3	0	0	0	0	3	3
H/TOT	0	20	3	1	0	0	24	24.5	0	31	4	0	0	0	35	35
19:00	0	4	0	0	0	0	4	4	0	6	0	0	0	0	6	6
19:15	0	1	1	0	0	0	2	2	0	2	1	0	0	0	3	3
19:30	0	5	0	0	0	0	5	5	0	3	0	0	0	0	3	3
19:45	0	5	1	0	0	0	6	6	0	3	0	0	0	0	3	3
H/TOT	0	15	2	0	0	0	17	17	0	14	1	0	0	0	15	15
20:00	0	3	1	0	0	0	4	4	0	2	0	0	0	0	2	2
20:15	0	4	0	0	0	0	4	4	0	2	0	0	0	0	2	2
20:30	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
20:45	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
H/TOT	0	8	1	0	0	0	9	9	0	9	0	0	0	0	9	9
21:00	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
21:15	0	15	0	0	0	0	15	15	0	1	1	0	0	0	2	2

21:30	0	10	1	0	0	0	11	11	0	3	2	0	0	0	5	5
21:45	0	3	0	0	0	0	3	3	0	3	0	0	0	0	3	3
H/TOT	0	28	1	0	0	0	29	29	0	9	4	0	0	0	13	13
22:00	0	2	0	0	0	0	2	2	0	1	0	0	0	0	1	1
22:15	0	2	0	0	0	0	2	2	1	1	0	0	0	0	2	1.4
22:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	4	0	0	0	0	4	4	1	3	0	0	0	0	4	3.4
23:00	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
23:30	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
24 TOT	2	269	38	14	1	0	324	331.1	2	292	38	20	1	0	353	363.1



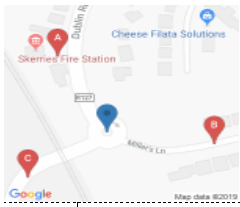
IDASO

Survey Name: 214 19394 Skerries
Site: ATC 1
Location: Golf Links Rd, Hacketstown
Date: Wed 25-Sep-2019

TIME	A => B							TOT	PCU	B => A							TOT	PCU
	M/C	CAR	LGV	OGV1	OGV2	PSV	M/C			CAR	LGV	OGV1	OGV2	PSV				
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	1	0	0	0	0	1	1	0	0	2	0	0	0	2	2	2	2
00:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	1	1	0	1	2	0	0	0	3	3	3	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1
01:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	1.5	1.5
01:45	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	1	1	0	0	2	2.5	2.5	2.5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1
02:45	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	1	0	0	0	0	1	1	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
03:45	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	1	1.5	0	1	0	0	0	0	1	1	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	1	1.5	0	1	0	0	0	0	1	1	1	1
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	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	1	0	0	0	1	1	1	1
06:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1
06:15	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	5	5

03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	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
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	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	1	0	0	0	0	1	1
06:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
07:00	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:30	0	1	1	0	0	0	2	2	0	2	0	0	0	0	2	2
07:45	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
H/TOT	0	3	1	0	0	0	4	4	0	6	0	0	0	0	6	6
08:00	0	2	1	0	0	0	3	3	0	1	0	0	0	0	1	1
08:15	0	2	0	0	0	0	2	2	0	4	0	0	0	0	4	4
08:30	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0
08:45	0	6	0	1	0	0	7	7.5	0	4	2	0	0	0	6	6
H/TOT	0	16	1	1	0	0	18	18.5	0	9	2	0	0	0	11	11
09:00	0	0	0	1	0	0	1	1.5	0	4	2	1	0	0	7	7.5
09:15	0	0	1	0	0	0	1	1	0	6	1	0	0	0	7	7
09:30	0	3	2	1	0	0	6	6.5	0	1	2	0	0	0	3	3
09:45	0	1	0	0	0	0	1	1	0	4	0	1	0	0	5	5.5
H/TOT	0	4	3	2	0	0	9	10	0	15	5	2	0	0	22	23
10:00	0	1	1	0	0	0	2	2	0	2	1	0	0	0	3	3
10:15	0	4	0	1	0	0	5	5.5	0	7	3	0	0	0	10	10
10:30	0	5	0	1	0	0	6	6.5	0	2	0	0	0	0	2	2
10:45	0	2	0	0	0	0	2	2	0	7	1	1	0	0	9	9.5
H/TOT	0	12	1	2	0	0	15	16	0	18	5	1	0	0	24	24.5
11:00	0	5	1	1	0	0	7	7.5	0	8	1	1	0	0	10	10.5
11:15	0	4	1	0	0	0	5	5	0	2	0	0	0	0	2	2
11:30	0	5	0	0	0	0	5	5	0	2	0	1	0	0	3	3.5
11:45	0	2	1	0	0	0	3	3	0	3	1	0	0	0	4	4
H/TOT	0	16	3	1	0	0	20	20.5	0	15	2	2	0	0	19	20
12:00	0	1	1	0	0	0	2	2	0	2	0	0	0	0	2	2
12:15	0	5	1	0	0	1	7	8	0	0	0	0	0	1	1	2
12:30	0	4	3	1	0	0	8	8.5	0	3	0	1	0	0	4	4.5
12:45	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
H/TOT	0	10	5	1	0	1	17	18.5	0	8	1	1	0	1	11	12.5
13:00	0	6	1	1	0	0	8	8.5	0	5	0	0	0	0	5	5
13:15	0	5	0	0	0	1	6	7	0	3	0	1	0	1	5	6.5
13:30	0	5	1	0	0	0	6	6	0	6	0	0	0	0	6	6
13:45	0	2	0	0	0	0	2	2	0	3	0	2	0	0	5	6
H/TOT	0	18	2	1	0	1	22	23.5	0	17	0	3	0	1	21	23.5
14:00	0	5	0	0	0	0	5	5	0	3	1	0	0	0	4	4
14:15	0	2	0	1	0	0	3	3.5	0	1	0	0	0	0	1	1
14:30	0	8	1	0	0	0	9	9	0	1	1	1	0	0	3	3.5
14:45	0	5	0	0	0	0	5	5	0	3	0	0	0	0	3	3
H/TOT	0	20	1	1	0	0	22	22.5	0	8	2	1	0	0	11	11.5
15:00	0	2	0	0	0	0	2	2	0	6	0	1	0	0	7	7.5
15:15	0	6	0	0	0	0	6	6	0	2	1	1	0	0	4	4.5

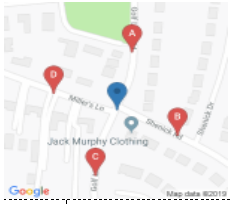
15:30	0	3	0	1	0	0	4	4.5	0	3	1	0	0	0	4	4
15:45	0	6	1	0	0	0	7	7	0	4	0	0	0	0	4	4
H/TOT	0	17	1	1	0	0	19	19.5	0	15	2	2	0	0	19	20
16:00	0	2	0	1	0	0	3	3.5	0	6	1	0	0	0	7	7
16:15	0	1	2	0	0	0	3	3	0	2	0	1	0	0	3	3.5
16:30	0	4	1	1	0	0	6	6.5	0	4	4	0	0	0	8	8
16:45	0	7	0	0	0	0	7	7	0	3	0	0	0	0	3	3
H/TOT	0	14	3	2	0	0	19	20	0	15	5	1	0	0	21	21.5
17:00	0	5	1	1	0	0	7	7.5	0	3	1	1	0	0	5	5.5
17:15	0	3	1	0	0	0	4	4	0	4	1	0	0	0	5	5
17:30	0	3	1	0	0	0	4	4	0	2	0	0	0	0	2	2
17:45	0	2	0	0	0	0	2	2	0	4	1	0	0	0	5	5
H/TOT	0	13	3	1	0	0	17	17.5	0	13	3	1	0	0	17	17.5
18:00	0	2	0	0	0	0	2	2	0	2	1	0	0	0	3	3
18:15	0	5	1	0	0	0	6	6	0	1	1	0	0	0	2	2
18:30	0	2	0	0	0	0	2	2	0	3	0	0	0	0	3	3
18:45	0	3	0	0	0	0	3	3	0	2	0	0	0	0	2	2
H/TOT	0	12	1	0	0	0	13	13	0	8	2	0	0	0	10	10
19:00	0	8	3	0	0	0	11	11	0	4	0	0	0	0	4	4
19:15	0	5	0	0	0	0	5	5	0	2	0	0	0	0	2	2
19:30	0	1	0	0	0	0	1	1	0	3	0	0	0	0	3	3
19:45	0	3	0	0	0	0	3	3	0	1	1	0	0	0	2	2
H/TOT	0	17	3	0	0	0	20	20	0	10	1	0	0	0	11	11
20:00	0	2	1	0	0	0	3	3	0	1	0	0	0	0	1	1
20:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
20:30	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2
20:45	0	3	0	0	0	0	3	3	0	1	1	0	0	0	2	2
H/TOT	0	6	1	0	0	0	7	7	0	6	1	0	0	0	7	7
21:00	0	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
21:15	0	2	0	0	0	0	2	2	0	2	0	0	0	0	2	2
21:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
21:45	0	0	1	0	0	0	1	1	0	1	0	0	0	0	1	1
H/TOT	0	3	1	0	0	0	4	4	0	4	1	0	0	0	5	5
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	1	0	0	0	1	1	0	1	0	0	0	0	1	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	0	1	1	0	0	0	2	2	0	1	0	0	0	0	1	1
23:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	1	0	0	0	0	1	1	0	2	0	0	0	0	2	2
24 TOT	0	184	31	14	0	2	231	240	0	179	34	14	0	2	229	238



IDASO

Survey Name: 214 19394 Skerries
Site: Site 1
Location: Dublin Road/Miller's Lane/Skerries Road
Date: Tue 24-Sep-2019

TIME	A => A										A => B										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	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	10	10	0	2	58	1	5	1	0	0	67	66.3	0	0	18	0	1	0	0	19	19	0	0	1	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	28.5	0	1	77	1	5	0	0	0	84	83.4	0	0	31	0	4	1	0	0	36	36.5	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23.5	1	1	71	1	4	3	0	0	81	81.1	1	1	37	0	5	0	0	0	44	42.6	0	0	0
07:45	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	23	23	0	0	80	0	7	1	0	0	88	88.5	0	0	38	1	1	0	0	0	40	40	0	0	0
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	66	1	15	2	0	0	84	85	1	4	286	3	21	5	0	0	320	319.3	1	1	124	1	11	1	0	0	139	138.1	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	18	0	8	1	0	0	27	27.5	0	1	69	0	11	0	1	0	82	82.7	1	0	36	0	0	0	0	0	37	36.2	0	0	0
08:15	0	0	0	0	0	0	0	0	0	2	0	28	0	4	1	0	0	0	35	33.9	2	1	78	0	6	2	0	0	89	87.8	0	0	53	2	2	1	0	0	58	58.5	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	34	0	8	1	0	0	0	43	43.5	0	0	57	3	7	1	0	0	68	68.5	1	0	69	0	1	0	0	0	71	70.2	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	69	1	3	0	0	0	0	73	73	1	0	82	1	6	0	0	0	90	89.2	1	0	77	0	1	0	0	0	79	78.2	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	2	0	149	1	23	3	0	0	0	178	177.9	3	2	286	4	30	3	1	0	329	328.2	3	0	235	2	4	1	0	0	245	243.1	0	0	0
09:00	0	0	1	0	0	0	0	0	1	1	1	0	47	0	1	1	0	0	50	49.7	0	0	68	3	6	0	0	0	77	77	0	0	45	2	3	1	0	0	51	51.5	0	0	0
09:15	0	0	1	0	0	0	0	0	1	1	0	35	0	1	1	0	0	0	37	37.5	0	0	34	0	8	1	0	0	43	43.5	0	0	44	1	2	2	0	0	49	50	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	16	0	6	1	1	0	0	24	25.8	0	0	57	2	8	0	0	0	67	67	0	0	21	0	1	0	0	0	22	22	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	25	1	6	0	0	0	0	32	32	0	0	35	1	4	1	0	0	41	41.5	1	0	26	0	6	0	0	0	33	32.2	0	0	0
H/TOT	0	0	2	0	0	0	0	0	2	2	1	0	123	1	14	3	1	0	143	145	0	0	194	6	26	2	0	0	228	229	1	0	136	3	12	3	0	0	155	155.7	0	0	0
10:00	0	0	0	0	1	0	0	0	1	1	0	31	0	3	0	0	0	0	34	34	0	0	39	0	5	0	0	0	44	44	1	0	16	0	4	0	1	0	22	22.5	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	26	0	1	1	0	1	29	30.5	0	0	35	2	4	0	0	0	41	41	1	0	16	0	3	1	0	2	23	24.7	0	0	0	
10:30	0	0	0	0	0	0	0	0	0	0	0	24	1	7	0	0	0	0	32	32	1	0	30	0	6	0	0	0	37	36.2	0	0	23	0	0	0	2	0	25	27.6	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	27	0	4	1	0	0	0	32	32.5	0	0	33	1	2	1	0	0	37	37.5	0	0	21	0	0	1	0	1	23	24.5	0	0	0
H/TOT	0	0	0	0	1	0	0	0	1	1	0	108	1	15	2	0	0	1	127	129	1	0	137	3	17	1	0	0	159	158.7	2	0	76	0	7	2	3	3	93	99.3	0	0	0
11:00	0	0	0	0	0	0	0	0	0	2	0	22	0	1	0	1	0	0	26	25.7	0	0	33	0	3	0	0	0	36	36	1	0	22	0	2	0	0	0	25	24.2	0	0	0
11:15	0	0	0	0	1	0	0	0	1	1	2	0	26	0	6	1	0	0	35	33.9	0	1	34	2	2	0	0	0	39	38.4	0	0	25	0	3	0	0	0	28	28	0	0	0
11:30	0	0	0	0	0	0	0	0	0	1	0	36	0	3	0	0	0	0	40	39.2	0	0	30	1	7	0	0	1	39	40	0	0	27	0	1	0	0	0	28	28	0	0	0
11:45	0	0	1	0	0	0	0	0	1	1	0	22	3	6	0	0	0	0	31	31	1	0	30	2	2	0	0	0	35	34.2	0	0	20	1	5	0	0	1	27	28	0	0	0
H/TOT	0	0	1	0	1	0	0	0	2	2	5	0	106	3	16	1	1	0	132	129.8	1	1	127	5	14	0	0	1	149	148.6	1	0	94	1	11	0	0	1	108	108.2	0	0	0
12:00	0	0	1	0	0	0	0	0	1	1	0	17	0	5	0	0	0	0	22	22	0	0	51	4	8	0	0	0	63	63	1	0	33	0	5	0	0	0	39	38.2	0	0	0
12:15	0	0	1	0	0	0	0	0	1	1	2	0	28	2	2	1	0	0	35	33.9	1	0	28	0	3	0	0	0	32	31.2	0	0	30	1	2	1	0	0	34	34.5	0	0	0
12:30	0	0	1	0	0	0	0	0	1	1	0	41	0	2	1	1	0	0	45	46.8	0	0	36	1	6	1	0	0	44	44.5	0	0	31	0	4	1	0	0	36	36.5	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	1	0	28	1	0	0	0	0	30	29.2	0	1	27	1	7	0	0	0	36	35.4	0	0	33	1	4	1	0	0	39	39.5	0	0	0
H/TOT	0	0	3	0	0	0	0	0	3	3	3	0	114	3	9	2	1	0	132	131.9	1	1	142	6	24	1	0	0	175	174.1	1	0	127	2	15	3	0	0	148	148.7	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	35	3	2	0	0	0	0	40	40	0	0	41	1	7	0	0	0	49	49	1	0	46	1	7	0	0	0	55	54.2	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	41	0	1	0	0	0	0	42	42	0	0	43	0	6	0	0	0	49	49	0	0	36	2	5	0	0	0	43	43	0	0	1
13:30	0	0	1	0	0	0	0	0	1	1	1	37	0	1	2	0	0	0	41	41.2	1	1	47	0	5	0	0	0	54	52.6	2	0	22	1	2	2	0	0	29	28.4	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	31	2	3	0	0	0	0	36	36	0	0	35	0	4	1	0	0	40	40.5	1	0	45	1	1	0	1	0	49	49.5	0	0	0
H/TOT	0	0	1	0	0	0	0	0	1	1	1	144	5	7	2	0	0	0	159	159.2	1	1	166	1	22	1	0	0	192	191.1	4	0	149	5	15	2	1	0	176	175.1	0	0	1
14:00	0	0	1	0	0	0	0	0	1	1	0	28	0	3	1	0	0	0	32	32.5	0	0	45	1	7	0	0	1	54	55	1	0	37	1	4	1	0	0	44	43.7	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	51	1	7	0	0	0	0	59	59	0	0	48	1	4	1	0	0	54	54.5	0	0	36	1	3	0	0	0	40	40	0	0	1
14:30	0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	0	0	0	42	42	1	1	51	0	2	1	0	1	57	57.1	0	0	28	2	1	0	0	1	32	33	0	0	0
14:45	0	0	1	0	0	0	0	0	1	1	0	46	0	5	0	0	0	0	51	51	0	0	36	1	5	0	0	0	42	42	0	0	29	2	1	1	0	0	33	33.5	0	0	0
H/TOT	0	0	2	0	0	0	0	0	2	2	0	166	2	15	1	0	0	0	184	184.5	1	1	180	3	18	2	0	0	207	208.6	1	0	130	6	9	2	0	1	149	150.2	0	0	1
15:00	0	0	0	0	0	0	0	0	0	0	0	31	1	1	1	0	0	0	34	34.5	0	0	44	1	2	2	0	0	49	50	0	0	33	0	2	3	0	0	38	39.5	0	0	0



IDASO

Survey Name: 214 19394 Skerries
 Site: Site 2
 Location: Golf Links Road/Shenick Dr/Miller's Lane
 Date: Tue 24-Sep-2019

TIME	A => A										A => B										A => C										A => D										B => 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	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU		P/C	M/C
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	4	0	0	0	0	0	4	4	0	0	17	0	0	0	0	17	17	0	0	1	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2	0	0	10	0	1	0	0	11	11	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	0	0	2	0	0	0	0	2	2	0	0	12	0	1	0	0	13	13	0	0	1	0	
07:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2	0	0	13	0	0	0	0	13	13	0	0	5	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	10	0	0	0	0	10	10	0	0	52	0	2	0	0	54	54	0	0	7	0	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13	0	0	0	0		
08:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	2	0	5	0	0	0	0	7	5.4	0	0	14	1	2	3	0	20	21.5	0	0	3	0	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	0	0	18	0	3	0	0	21	21	0	0	6	0	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	0	0	5	0	0	0	0	5	5	0	0	22	0	1	0	0	23	23	0	0	10	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	10	10	2	0	17	0	1	0	0	20	18.4	0	0	67	1	6	3	0	77	78.5	0	0	19	0	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	0	0	6	0	0	0	0	6	6	0	0	22	1	1	0	0	24	24	0	0	5	0	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	0	7	7.5	1	0	4	0	0	0	0	5	4.2	0	0	16	1	1	1	0	19	19.5	0	0	5	0	
09:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1	0	0	12	0	3	1	0	16	16.5	0	0	3	0	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	0	0	1	0	0	0	0	1	1	0	0	10	0	3	0	0	13	13	0	0	7	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	30	0	1	1	0	0	32	32.5	1	0	12	0	0	0	0	13	12.2	0	0	60	2	8	2	0	72	73	0	0	20	0	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	3	0	0	0	0	3	3	0	0	3	0	1	0	0	4	4	0	0	4	0	
10:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	0	7	7.5	0	0	3	0	0	0	0	3	3	0	0	6	0	3	0	0	9	9	0	0	5	0	
10:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	0	0	2	0	1	1	0	4	4.5	0	0	20	0	1	0	1	0	22	23.3	0	0	3	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	0	0	3	0	1	0	0	4	4	0	0	10	0	1	1	0	12	12.5	0	0	1	1	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	23	0	2	1	0	0	26	26.5	0	0	11	0	2	1	0	14	14.5	0	0	39	0	6	1	1	0	47	48.8	0	0	13	1
11:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9	0	0	4	1	0	0	0	5	5	0	0	7	0	1	0	0	8	8	0	0	6	0	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	0	4	0	1	0	0	6	5.2	0	0	15	0	0	0	0	15	15	0	0	5	0	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	0	0	3	0	0	0	0	3	3	0	0	16	1	2	0	0	19	19	0	0	6	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9	9	0	0	6	1	1	0	0	1	9	10	0	0	15	0	1	0	0	16	16	0	0	9	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	29	0	2	0	0	0	31	31	1	0	17	2	2	0	1	23	23.2	0	0	53	1	4	0	0	58	59	0	0	26	0	
12:00	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	8	7.2	0	0	4	0	0	1	0	5	5.5	0	0	12	0	2	0	0	14	14	0	0	1	0	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	0	0	5	0	0	0	0	5	5	0	0	9	1	0	0	0	10	10	0	0	8	0	
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	0	28	0	1	1	0	32	30.9	0	0	18	0	1	2	0	21	22	0	0	54	1	5	0	0	60	60	0	0	23	1
13:00	0	0	0	0	0	0	0	0	0	0	0	0	13	0	3	0	0	0	16	16	0	0	7	0	0	0	0	7	7	0	0	16	0	2	1	0	19	19.5	0	0	6	0	
13:15	0	0	0	0	0	0	0	0	0	0	0	0	9	0	3	0	0	0	12	12	0	0	7	0	0	0	0	7	7	1	0	17	1	4	0	0	23	22.2	0	0	7	0	
13:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	0	8	0	0	1	0	10	9.7	0	0	23	1	1	0	0	25	25	1	0	3	0	
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	33	0	6	0	0	0	39	39	1	0	26	0	1	2	0	30	30.2	1	0	75	2	8	1	0	87	86.7	1	0	17	0	
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	7	3	1	0	0	13	11.4	0	0	3	0	
14:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	13	0	1	1	0	15	15.5	0	0	12	0	2	1	0	15	15.5	0	0	7	0	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	10	10	0	0	7	0	1	0	0	8	8	1	0	14	0	1	0	0	16	15.2	0	0	8	0	
14:45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	5	0	0	0	0	5	5	0	0	15	0	2	0	0	18	18	0	0	4	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	20	0	1	0	0	0	21	21	0	0	27	0	2	1	0	30	30.5	3	0	49	3	6	1	0	62	60.1	0	0	22	0	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	2	0	0	0	10	10	0	0	12	0	1	0	0	13	13	0	0	17	0	0	0	0	19	20	1	0	6	1	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	5	0	0	0	0	5	5	0	0	13	0	2	0	0	15	15	0	0	4	1	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	10	9.2	0	0	2	0	0	0	0	2	2	0	0	15	0	0	0	0							

> B					D => C										D => D											
LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	
0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	31	31.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	17	17.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	20	20	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0
10	2	0	0	76	77	0	0	9	0	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0
7	1	0	0	19	19.5	0	0	2	0	2	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	20	20.5	0	0	7	0	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0
9	1	0	0	38	37.7	0	0	13	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	52	52	0	0	12	1	0	0	1	0	14	15.3	0	0	0	0	0	0	0	0	0	0	0
22	3	0	0	129	129.7	0	0	34	1	4	0	1	0	40	41.3	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	33	32.2	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	21	20.2	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0
6	0	2	0	24	26.6	0	0	4	0	3	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	29	29	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
14	0	2	0	107	108	0	0	26	0	4	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0
2	0	1	0	23	24.3	1	0	4	0	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	24	24.5	0	0	4	0	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	18	18	0	0	11	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	29	29.5	0	0	8	0	2	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0
11	2	1	0	94	96.3	1	0	27	0	3	1	0	0	32	31.7	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	27	25.9	1	0	2	0	1	0	1	0	5	5.5	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	26	25.7	1	0	6	0	1	0	0	0	8	7.2	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	38	37.7	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	27	27	0	0	4	2	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0
15	2	0	0	118	116.3	2	0	17	2	3	0	1	0	25	24.7	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	21	21	0	0	6	0	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	23	22.7	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	33	34.3	0	0	10	1	0	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	23	23	2	0	1	0	0	0	0	0	3	1.4	0	0	0	0	0	0	0	0	0	0	0
11	1	1	0	100	101	2	0	25	1	2	1	0	0	31	29.9	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	33	33	0	0	8	0	1	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	35	35	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	33	31.1	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	29	28.7	1	0	9	0	0	0	0	0	10	9.2	0	0	0	0	0	0	0	0	0	0	0
3	2	0	0	130	127.8	1	0	30	0	2	1	0	0	34	33.7	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	23	23	0	0	7	1	2	1	0	0	11	11.5	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	43	43	0	0	10	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	41	37.8	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	38	38	1	0	11	0	0	0	0	0	12	11.2	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	145	141.8	1	0	30	1	2	1	0	0	35	34.7	0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	29	29.2	0	0	9	0	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	34	33.2	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	34	32.9	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	27	27	0	0	6	0	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0
5	2	1	0	124	122.3	0	0	24	0	3	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	30	30	1	0	9	0	1	0	0	0	11	10.2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	2	37	39	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	41	41	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	34	34	0	0	11	0	0	0	0	0	11	11	0	0	1	0	0	0	0	0	1	1	1
7	0	0	0	142	144	1	0	33	0	2	0	0	0	36	35.7	0	0	1	0	0	0	0	0	1	1	1
3	1	0	0	42	42.5	0	0	14	0	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	43	43	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	52	52	0	0	7	0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	46	45.2	0	0	1	12	0	0	0	0	13	12.4	0	0	0	0	0	0	0	0	0	0	0
10	1	0	0	183	182.7	0	0	39	0	2	0	0	0	42	41.4	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	50	49.4	0	0	14	0	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	44	43.2	1	0	17	0	0	0	0	0	18	17.2	0	0	0	0	0	0	0	0	0	0	0
2	0	0	1	43	44	0	0	10	0	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	42	40.4	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0
6	0	0	1	179	177	1	0	49	0	1	0	0	0	51	50.2	0	0	0	0	0	0	0	0	0	0	0
134	16	5	3	1527	1523.9	9	1	343	5	29	4	2	0	393	389.8	0	0	1	0	0	0	0	0	1	1	1



IDASO

Survey Name: 214 19394 Skerries
Site: Site 3
Location: Holmpatrick/Shenick Road
Date: Tue 24-Sep-2019

TIME	A => A									TOT	PCU	A => B									TOT	PCU	A => C								
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C			M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C	M/C			CAR	TAXI	LGV	OGV1	OGV2	PSV			
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	5	7	0	0	1	0	0	0	0	0	0	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	1	1	3	12	16.8	0	0	2	0	0	1	0	0		
07:30	0	0	1	0	0	0	0	0	1	1	0	0	6	0	1	0	0	3	10	13	0	0	1	0	0	1	0	0	0		
07:45	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	1	6	7	0	0	0	0	1	0	0	0	0		
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	19	1	2	1	1	9	33	43.8	0	0	4	0	1	2	0	0	0		
08:00	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	2	11	13	0	1	3	0	0	0	0	0	0		
08:15	0	0	0	0	0	0	0	0	0	0	0	0	10	0	4	0	0	2	16	18	0	0	1	0	0	0	0	0	0		
08:30	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	1	0	0	13	13.5	0	0	4	0	1	0	0	0	0		
08:45	0	0	0	0	0	0	0	0	0	0	0	0	21	0	2	0	0	1	24	25	0	0	2	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	51	0	7	1	0	5	64	69.5	0	1	10	0	1	0	0	0	0		
09:00	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	1	14	15	0	0	12	0	0	0	0	0	0		
09:15	0	0	0	0	0	0	0	0	0	0	0	0	10	2	4	0	0	0	16	16	0	0	4	0	0	0	0	0	0		
09:30	0	0	0	0	0	0	0	0	0	0	0	0	11	0	3	2	0	1	17	19	0	0	3	0	0	0	0	0	0		
09:45	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	1	0	2	21	23.5	0	0	3	0	0	1	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	51	2	8	3	0	4	68	73.5	0	0	22	0	0	1	0	0	0		
3 TOT	0	0	1	0	0	0	0	0	1	1	0	0	121	3	17	5	1	18	165	186.8	0	1	36	0	2	3	0	0	0		

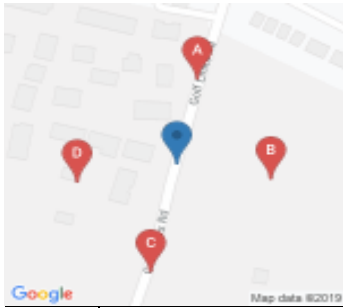
TIME	A => A									TOT	PCU	A => B									TOT	PCU	A => C								
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C			M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C	M/C			CAR	TAXI	LGV	OGV1	OGV2	PSV			
16:00	0	0	0	0	0	0	0	0	0	0	0	0	18	0	1	1	0	1	21	22.5	0	0	9	1	0	0	0	0	0		
16:15	0	0	0	0	0	0	0	0	0	0	0	0	20	0	1	1	0	3	25	28.5	0	0	7	0	0	0	0	0	0		
16:30	0	0	0	0	0	0	0	0	0	0	0	1	14	0	2	0	0	1	18	18.4	0	0	6	0	2	0	0	0	1		
16:45	0	0	0	0	0	0	0	0	0	0	1	0	27	1	1	1	0	0	31	30.7	0	0	10	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1	79	1	5	3	0	5	95	100.1	0	0	32	1	2	0	0	1			
17:00	0	0	0	0	0	0	0	0	0	0	0	0	25	0	5	1	0	1	32	33.5	0	0	5	0	1	0	0	0	0		
17:15	0	0	0	0	0	0	0	0	0	0	0	0	17	0	3	0	0	0	20	20	0	0	5	0	0	0	0	0	0		
17:30	0	0	0	0	0	0	0	0	0	0	1	0	31	0	3	0	0	1	36	36.2	0	0	5	0	1	0	0	0	0		
17:45	0	0	0	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	21	21	0	0	6	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	92	2	11	1	0	2	109	110.7	0	0	21	0	2	0	0	0	0		
18:00	0	0	0	0	0	0	0	0	0	0	0	0	26	1	1	0	0	1	29	30	0	0	8	0	0	0	0	0	0		
18:15	0	0	0	0	0	0	0	0	0	0	0	0	17	0	2	0	0	0	19	19	1	0	3	0	0	1	0	0	0		
18:30	0	0	0	0	0	0	0	0	0	0	0	0	18	0	4	1	0	1	24	25.5	0	0	8	0	0	0	0	0	0		
18:45	0	0	0	0	0	0	0	0	0	0	2	0	10	0	3	1	0	0	16	14.9	1	0	7	0	0	0	0	0	0		
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	71	1	10	2	0	2	88	89.4	2	0	26	0	0	1	0	0	0		
3 TOT	0	0	0	0	0	0	0	0	0	0	4	1	242	4	26	6	0	9	292	300.2	2	0	79	1	4	1	0	1	1		

B => A										B => B										B => C								
TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2
1	1	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	10	0	3	0	0	
3	3.5	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	16	0	1	0	0	
2	2.5	0	0	5	0	2	0	0	1	8	9	0	0	0	0	0	0	0	0	0	0	2	22	0	1	0	0	
1	1	0	0	7	0	4	1	0	1	13	14.5	0	0	0	0	0	0	0	0	0	0	0	14	1	0	1	0	
7	8	0	0	19	0	7	1	0	2	29	31.5	0	0	0	0	0	0	0	0	0	0	2	62	1	5	1	0	
4	3.4	0	0	9	0	2	1	0	1	13	14.5	0	0	0	0	0	0	0	0	0	0	0	26	0	1	0	0	
1	1	0	0	15	0	1	0	0	2	18	20	0	0	0	0	0	0	0	0	0	0	0	26	2	1	1	0	
5	5	0	0	24	0	3	0	0	2	29	31	0	0	0	0	0	0	0	0	0	0	0	49	0	2	1	1	
2	2	0	0	28	0	1	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0	0	34	0	3	1	0	
12	11.4	0	0	76	0	7	1	0	5	89	94.5	0	0	0	0	0	0	0	0	0	0	0	135	2	7	3	1	
12	12	0	0	24	1	0	2	0	1	28	30	0	0	0	0	0	0	0	0	0	0	0	26	0	1	1	0	
4	4	0	0	20	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	14	1	2	0	0	
3	3	0	0	24	0	7	0	1	2	34	37.3	0	0	0	0	0	0	0	0	0	0	0	18	0	1	0	1	
4	4.5	0	0	27	0	1	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	1	14	0	3	0	0	
23	23.5	0	0	95	1	8	2	1	3	110	115.3	0	0	0	0	0	0	0	0	0	0	1	0	72	1	7	1	1
42	42.9	0	0	190	1	22	4	1	10	228	241.3	0	0	0	0	0	0	0	0	0	0	1	2	269	4	19	5	2

B => A										B => B										B => C								
TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2
10	10	0	0	23	0	1	2	0	0	26	27	0	0	0	0	0	0	0	0	0	0	0	25	2	4	0	0	
7	7	1	0	18	0	3	0	0	1	23	23.2	0	0	0	0	0	0	0	0	0	0	0	18	0	2	0	0	
9	10	1	0	21	0	3	0	0	0	25	24.2	0	0	0	0	0	0	0	0	0	0	0	21	0	3	0	0	
10	10	0	0	14	0	3	0	0	2	19	21	0	0	0	0	0	0	0	0	0	0	0	19	0	3	0	0	
36	37	2	0	76	0	10	2	0	3	93	95.4	0	0	0	0	0	0	0	0	0	0	0	83	2	12	0	0	
6	6	0	0	13	0	1	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0	0	2	0	18	0	2	0	0
5	5	0	0	13	0	2	0	0	2	17	19	0	0	0	0	0	0	0	0	0	0	1	0	26	0	2	0	0
6	6	0	0	21	1	3	0	0	1	26	27	0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	
6	6	0	0	19	0	1	0	0	1	21	22	0	0	0	0	0	0	0	0	0	0	0	14	0	1	0	0	
23	23	0	0	66	1	7	1	0	4	79	83.5	0	0	0	0	0	0	0	0	0	0	3	0	80	1	6	0	0
8	8	0	0	17	0	0	1	0	2	20	22.5	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	
5	4.7	0	0	20	0	1	0	0	1	22	23	0	0	0	0	0	0	0	0	0	0	0	26	0	0	1	0	
8	8	1	0	21	0	2	0	0	3	27	29.2	0	0	0	0	0	0	0	0	0	0	0	22	0	4	0	0	
8	7.2	0	0	30	1	6	0	0	1	38	39	0	0	0	0	0	0	0	0	0	0	0	29	1	2	0	0	
29	27.9	1	0	88	1	9	1	0	7	107	113.7	0	0	0	0	0	0	0	0	0	0	0	103	1	6	1	0	
88	87.9	3	0	230	2	26	4	0	14	279	292.6	0	0	0	0	0	0	0	0	0	0	3	0	266	4	24	1	0

PSV	TOT	PCU	C => A								TOT	PCU	C => B								TOT	PCU	C => C					
			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1
0	13	13	0	0	4	0	0	0	0	0	4	4	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0
0	17	17	0	0	3	0	0	0	0	0	3	3	0	0	13	0	5	0	0	0	18	18	0	0	0	0	0	0
0	25	23.8	0	0	2	0	1	1	0	0	4	4.5	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0
0	16	16.5	0	0	2	0	0	0	0	0	2	2	0	0	14	1	4	1	0	0	20	20.5	0	0	0	0	0	0
0	71	70.3	0	0	11	0	1	1	0	0	13	13.5	0	0	40	1	10	1	0	0	52	52.5	0	0	0	0	0	0
0	27	27	0	0	2	0	0	0	0	0	2	2	0	0	6	0	3	2	0	0	11	12	0	0	0	0	0	0
0	30	30.5	0	0	3	0	0	0	0	0	3	3	0	0	12	0	1	0	0	0	13	13	0	0	0	0	0	0
0	53	54.8	0	0	6	0	1	0	0	0	7	7	1	0	23	0	4	1	0	0	29	28.7	0	0	0	0	0	0
0	38	38.5	0	0	14	0	1	0	0	0	15	15	0	0	30	1	1	0	0	0	32	32	0	0	0	0	0	0
0	148	150.8	0	0	25	0	2	0	0	0	27	27	1	0	71	1	9	3	0	0	85	85.7	0	0	0	0	0	0
0	28	28.5	0	0	6	0	1	0	0	0	7	7	0	0	26	0	2	0	0	0	28	28	0	0	0	0	0	0
0	17	17	0	0	10	0	0	0	0	0	10	10	1	0	9	0	1	0	0	0	11	10.2	0	0	0	0	0	0
0	20	21.3	0	0	7	0	1	0	0	0	8	8	0	0	11	0	5	0	1	0	17	18.3	0	0	0	0	0	0
0	18	17.2	0	0	10	0	0	0	0	0	10	10	0	0	9	1	5	0	1	0	16	17.3	0	0	0	0	0	0
0	83	84	0	0	33	0	2	0	0	0	35	35	1	0	55	1	13	0	2	0	72	73.8	0	0	0	0	0	0
0	302	305.1	0	0	69	0	5	1	0	0	75	75.5	2	0	166	3	32	4	2	0	209	212	0	0	0	0	0	0

PSV	TOT	PCU	C => A								TOT	PCU	C => B								TOT	PCU	C => C					
			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV			P/C	M/C	CAR	TAXI	LGV	OGV1
0	31	31	0	0	11	0	0	0	0	0	11	11	0	0	21	0	1	0	0	0	22	22	0	0	0	0	0	0
0	20	20	0	0	8	1	0	0	0	0	9	9	0	0	20	0	3	0	0	2	25	27	0	0	0	0	0	0
0	24	24	0	0	5	1	0	0	0	0	6	6	0	0	26	0	2	0	0	0	28	28	0	0	0	0	0	0
0	22	22	0	0	12	0	1	0	0	0	13	13	0	0	17	0	2	0	0	0	19	19	0	0	0	0	0	0
0	97	97	0	0	36	2	1	0	0	0	39	39	0	0	84	0	8	0	0	2	94	96	0	0	0	0	0	0
0	22	20.4	0	0	9	0	0	0	0	0	9	9	0	0	19	0	3	1	0	0	23	23.5	0	0	0	0	0	0
0	29	28.2	0	0	9	0	1	0	0	0	10	10	0	0	21	1	2	0	0	0	24	24	0	0	0	0	0	0
0	24	24	0	0	10	0	0	0	0	0	10	10	0	0	32	0	0	0	0	0	32	32	0	0	0	0	0	0
0	15	15	0	0	12	0	0	0	0	0	12	12	0	0	23	0	2	0	0	0	25	25	0	0	0	0	0	0
0	90	87.6	0	0	40	0	1	0	0	0	41	41	0	0	95	1	7	1	0	0	104	104.5	0	0	0	0	0	0
0	26	26	0	0	12	0	0	0	0	0	12	12	0	0	29	0	3	0	0	0	32	32	0	0	0	0	0	0
0	27	27.5	1	0	9	0	0	0	0	0	10	9.2	0	0	28	0	1	0	0	0	29	29	0	0	0	0	0	0
0	26	26	0	0	10	0	0	0	0	0	10	10	0	0	22	0	0	0	0	1	23	24	0	0	0	0	0	0
0	32	32	0	0	11	0	0	0	0	0	11	11	0	0	22	1	1	0	0	0	24	24	0	0	0	0	0	0
0	111	111.5	1	0	42	0	0	0	0	0	43	42.2	0	0	101	1	5	0	0	1	108	109	0	0	0	0	0	0
0	298	296.1	1	0	118	2	2	0	0	0	123	122.2	0	0	280	2	20	1	0	3	306	309.5	0	0	0	0	0	0



IDASO

Survey Name: 214 19394 Skerries
Site: Site 4
Location: Golf Links Road/Unnamed Road
Date: Tue 24-Sep-2019

TIME	A => A									TOT	PCU	A => B									TOT	PCU	A => C								
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C			M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C	M/C			CAR	TAXI	LGV	OGV1	OGV2	PSV			
07:00	0	0	0	0	0	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	0	0	0	0	0					
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
07:45	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0					
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
08:15	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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	0	0	0	0	0	0	0					
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1.5	0	0	10	0	0	0	0				
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	13	0	1	0					
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0					
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	5	0	1	0					
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2.5	1	0	32	0	4	0					
3 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	3.5	1	0	75	1	6	1					

TIME	A => A									TOT	PCU	A => B									TOT	PCU	A => C								
	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C			M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	P/C	M/C			CAR	TAXI	LGV	OGV1	OGV2	PSV			
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	7	0	2	0					
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	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	0	0	4	1	1	0					
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0					
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	25	1	4	0					
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0					
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0					
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	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	0	0	5	0	0	0					
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1	1	0					
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	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	0	0	16	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	0	0	14	0	1	0					
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0					
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	1	0					
3 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	83	2	6	0				

		B => C										B => D										C => A							
PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	12	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	2	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	5	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	30	3	6	2

		B => C										B => D										C => A							
PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0	5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0	27	0	3	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	2	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	4	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	1	1	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0	90	1	8	1

		C => B										C => C										C => D							
OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	
0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	4	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	17	15.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	20.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1	0	45	44.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

		C => B										C => C										C => D							
OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	
0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	5.4	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	32	30.4	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0
0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	2	0	0
0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	6	6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	30	30.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	102	100.9	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1	1	0	0	3	0	0

024 22046 Land Development Agency (Hackettstown/Skerries)

Survey Date: 02/02/2022

Skerries Railway Station

Skerries to Dublin

	Train type	No. Carriages	Total Passenger(s)	Total Number Seats	Est. Vacant Seats
06:25	29000 Class	8	158	370	212
06:51	29000 Class	4	110	185	75
07:05	22000 Class	4	106	262	156
07:18	29000 Class	8	155	370	215
07:28	29000 Class	8	105	370	265
07:44	22000 Class	8	165	262	97
08:01	29000 Class	8	204	370	166
08:21	29000 Class	8	192	370	178
08:52	29000 Class	8	168	370	202
09:22	29000 Class	4	87	185	98
10:02	22000 Class	7	117	452	335

024 22046 Land Development Agency (Hackettstown/Skerries)

Survey Date: 02/02/2022

Skerries Railway Station

	Entering Station	Exiting Station
06:00	4	0
06:15	9	2
06:30	9	0
06:45	20	2
Sub tot:	42	4
07:00	28	4
07:15	51	5
07:30	42	4
07:45	61	5
Sub tot:	182	18
08:00	48	3
08:15	52	8
08:30	31	11
08:45	34	4
Sub tot:	165	26
09:00	18	2
09:15	11	1
09:30	5	4
09:45	26	3
Sub tot:	60	10
Total	449	58

Skerries to Dundalk

	Train type	No. Carriages	Total Passenger(s)	Total Number Seats	Est. Vacant Seats
07:44	29000 Class	8	77	370	293
08:25	29000 Class	4	52	185	133
08:41	29000 Class	4	187	185	-2
09:29	29000 Class	4	52	185	133
09:37	22000 Class	4	11	262	251

024 22046 Land Development Agency (Hackettstown/Skerries)

Survey Date: 02/02/2022

Stop 3824 (Holmpatrick - Opposite Shennick Road)

Skerries to Dublin

Bus Number	Time	Bus Type	Boarders	Alighters	Total Passenger(s)	Vacant Seats
33a - Dub Airport	06:34	DD	0	0	1	94
33x	06:40	DD	0	0	3	92
33 - Dublin	06:51	DD	0	0	8	87
33x	07:00	DD	0	0	1	94
33 - Dublin	07:08	DD	1	0	7	88
533 - Dublin	07:18	SD	0	0	1	36
33x	07:20	DD	0	0	0	95
33 - Dublin	07:33	No Bus Arrived				
33a - Dub Airport	07:34	SD	0	0	8	29
33x	07:36	DD	0	0	2	93
33 - Dublin	07:43	DD	0	0	2	93
33x	07:45	DD	0	0	18	77
33x	08:01	DD	0	0	4	91
33 - Dublin	08:02	DD	0	1	10	85
33a - Dub Airport	08:05	SD	0	0	2	35
33 - Dublin	08:22	DD	2	1	19	76
33a - Dub Airport	09:01	SD	0	0	7	30
33 - Dublin	09:08	DD	1	0	7	88
33a - Dub Airport	09:30	SD	2	0	6	31
33 - Dublin	09:59	DD	0	0	4	91

From Dublin to Skerries

Bus Number	Time	Bus Type	Boarders	Alighters	Total Passenger(s)	Vacant Seats
33 - Dublin	06:51	DD	0	0	4	91
33a - Dub Airport	07:43	SD	0	0	7	30
33a - Dub Airport	08:16	SD	0	0	18	19
33 - Dublin	08:37	DD	0	0	11	84
33-Dublin	08:40	DD	0	0	15	80
33a - Dub Airport	09:08	SD	0	0	1	36
33 - Dublin	09:33	DD	0	0	5	90
33a - Dub Airport	09:46	DD	0	0	21	74
33 - Dublin	10:09	DD	0	0	2	93

*DD = Doubledecker Bus, SD = Single Decker Bus

**There was no 33N service throughout the survey

*** Where there were 0 boarders or alighters the bus did not stop

https://en.wikipedia.org/wiki/IE_22000_Class

Iarnród Éireann 22000 Class

22004 at Enghelista Maibhíle in 2013

In service: 19 December 2007 – present
 Manufacturer: Hyundai Rotem (Thailand)
 Family name: CR
 Replaced: 201 Class, 301 Class, 131 Class, 141 Class, 181 Class, Mark 2, Mark 3
 Constructed: 2007 – 2011, 2016 –
 Number built: 63 trains
 Formation: 3, 4 and 5-car trains
 Fleet numbers: 22001 – 22063
 Capacity: 180 seated (3-car), 262 seated (4-car), 264 seated (5-car)
 Operator(s): Commuter
 Depot(s): Drogheda Depot, Limerick Traincare Depot
 Train length: 78 m (256 ft) (3-car set), 93 m (306 ft) (4-car set), 117 m (384 ft) (5-car set)
 Width: 2.84 m (9.3 ft)
 Height: 4 m (13 ft)
 Maximum speed: 160 km/h (99 mph)

https://en.wikipedia.org/wiki/IE_29000_Class

Iarnród Éireann 29000 Class

29028 departing from platform 2 at Dublin Connolly in July 2016

In service: 30 June 2005 – present
 Manufacturer: CAF
 Family name: Evik
 Constructed: 2002 – 2005
 Number built: 28 trains
 Formation: 4 cars per trainset
 Fleet numbers: 29001–29029
 Capacity: 185 seated, 634 standing
 Operator(s): Commuter
 Depot(s): Drogheda Depot
 Line(s) served: Connolly – O'Neills, Connolly (Liverpool) – Connolly, Connolly – Longford
Specifications
 Train length: 81.46 m (267.3 ft)
 Width: 2.9 m (9.5 ft)
 Height: 3.888 m (12.77 ft)
 Maximum speed: 130 km/h (81 mph)
 Weight: 43,528 kg (95,92 lb)