SOCIAL HOUSING DEVELOPMENT

RATHELLEN, FINISKLIN, CO. SLIGO

Traffic and Transport Assessment

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Prepared for:

Sligo County Council

Contents

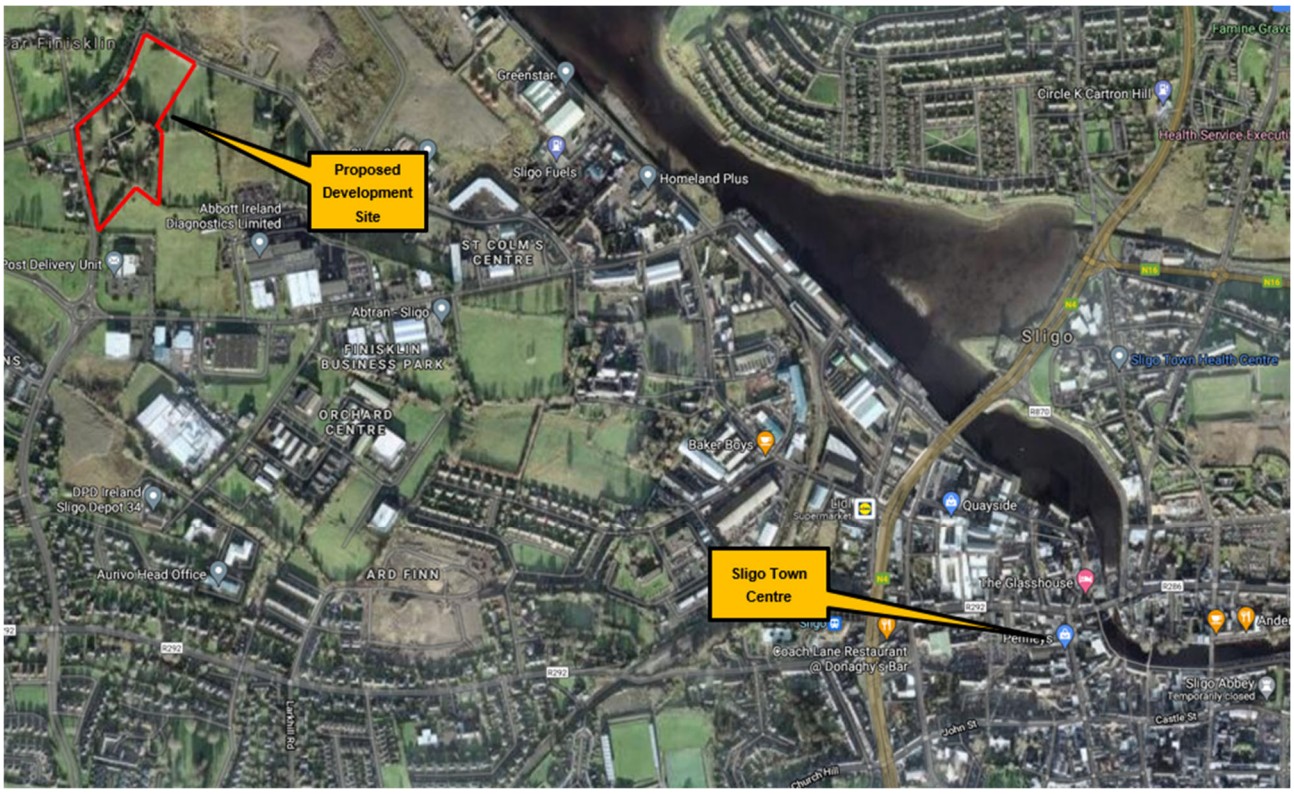
Appendices

1 INTRODUCTION

RPS are the appointed Civil and Structural Engineering advisors for the proposed residential development at Rathellen, Finisklin, Co. Sligo. This project will deliver 39 houses and 24 apartments to Sligo County Council.

The proposed site is located on the Sea Road, Finiskilin Co. Sligo, approximately 2.7km north west of Sligo Town Centre.

Figure 1- 1 Site Location



1.1 Objective

The objective of this TTA is to assess the likely impact of the proposed development on the surrounding road network.

1.2 Reference Documents

This TTA was prepared in accordance with and with cognisance of the following:

- Transport Infrastructure Ireland (TII) Traffic and Transport Assessment Guidelines (May 2014),
- Sligo County Development Plan 2017 - 2023
- TII Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections.

1.3 Methodology

1.3.1 Approach

This TTA includes the following;

- Relevant policy review,

- Establishment of existing and future traffic flows and development trip generation, and
- Appraisal of predicted traffic flows.

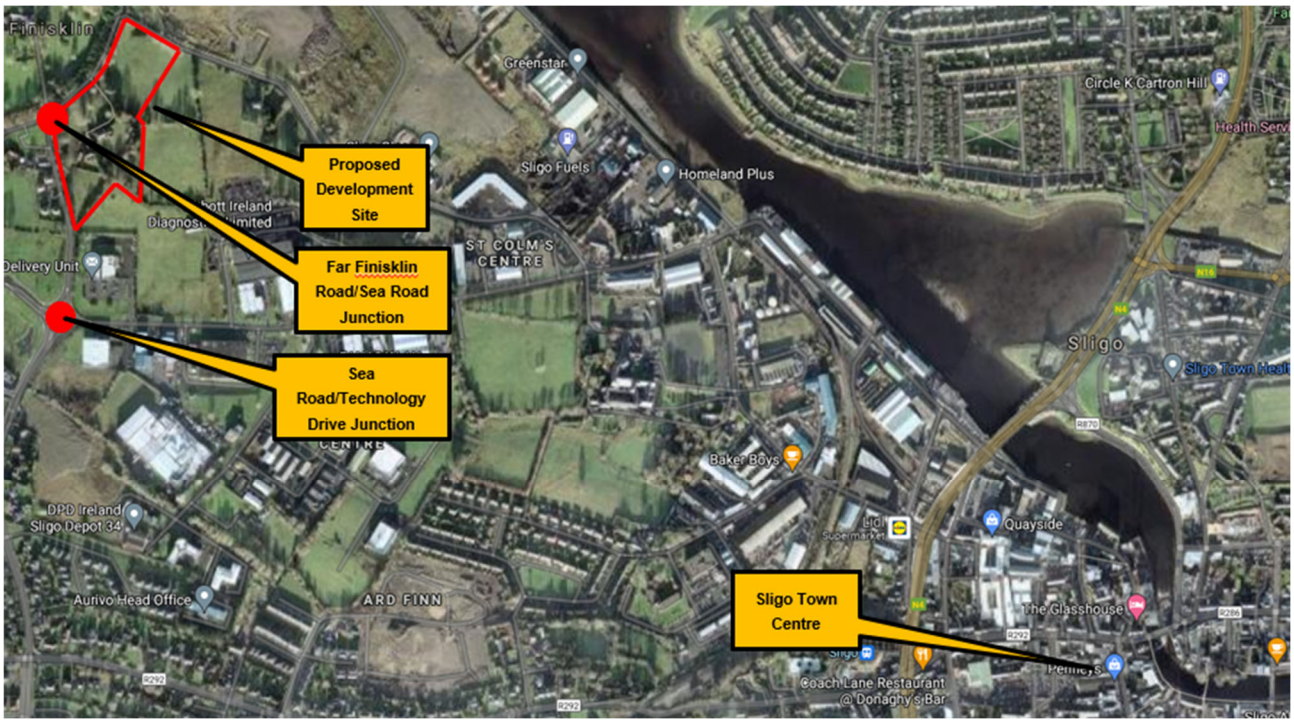
1.3.2 Traffic Analysis

Following consultation with Sligo County Council (SCC) Roads and Traffic Department the following junctions were identified as requiring capacity analysis:

- Far Finisklin Road/Sea Road Junction (priority junction)
- Sea Road/Technology Drive Junction (roundabout junction)

The locations of these junctions are shown in **Figure 1-2** below;

Figure 1-2 Locations of junctions to be analysed



1.3.3 Baseline Traffic Flows

Traffic counts were carried out at the junctions listed in Section **1.3.2** by Irish Traffic Surveys Ltd. on 15th June 2021. Whilst it is understood that these traffic counts were carried out during the Covid-19 Pandemic, which has influenced traffic behaviour and outside of the school calendar, it was agreed following discussions with SCC that these counts should be used to inform this report due to a lack of historical data.

1.3.4 Establishment of Development Traffic Flows

Traffic generated by the proposed development was calculated TRICS trip rate calculations. TRICS trip rates are calculated by using surveyed trips to and from similar developments and are explained on TRICS.org as being;

"Trip rates show the number of traffic/people movements in and out of a development (or an average of a number of developments within the same land use category), for a given trip rate parameter factor. For example, when trip rates are calculated by Gross Floor Area (GFA), they are shown per 100m² of GFA. Using this factor, users can apply trip rates to potential developments, and are encouraged to achieve a balance between their selection criteria and the size of their selected data sample to achieve this aim."

“Trip rates are calculated as follows: Mean average trip rates are calculated when there are at least 2 surveys included in a selected list (trip rates for an individual site can also be calculated). The calculation process consists of 3 parts, and these apply to every hour of the survey duration, for arrivals, departures and totals counts:””

1.3.5 Traffic Modelling

Priority junctions were analysed using the computer software programmes PICADY (Priority Intersection Capacity and Delay). Roundabout junction capacity was analysed using the computer software programme ARCADY (Assessment of Roundabout Capacity and Delay). PICADY and ARCADY are computer programmes for calculating estimates of the capacity of major /minor road junctions, where the minor road is controlled by a stop or yield sign and non-signalised roundabouts. The geometric details of the junction are applied to the programme, together with details of traffic flows and turning movements. The programmes analyse the junctions in relation to the various traffic flows and determine the capacity of each approach using the Ratio of Flow to Capacity (RFC). An RFC of 1.0 indicates that a junction is operating at its maximum capacity. An RFC of approximately 0.85 is considered to represent the maximum practical capacity of a junction/roundabout when queuing and delays will occur. A junction operating at more than its practical capacity will operate with reduced efficiency. The programmes also calculate the peak queue length on each approach.

2 RECEIVING ENVIRONMENT

The proposed development site is a greenfield site located to the west of Finisklin, County Sligo, approximately 2.4km north west of Sligo Town Centre. Access to the site from the town centre is via Finisklin Road that runs east-west through the neighbouring industrial estates. The site is bordered by Sea Road to the west and the Far Finisklin Road to the north. These roads meet at the northwest point of the site, at the junction with Gibraltar Road that goes east from the junction.

2.1 Local Road Network

Figure 2-1 shows the road network which surrounds the proposed development site. This network consists of the Far Finisklin Road and Finisklin Road to the north and south respectively, and Sea Road running along the north-south axis adjacent to the site. Sligo town lies directly east of Finisklin Road, with the primary access route to the town centre coming via Finisklin Road, through the Finisklin industrial estates and connecting with the N4 further along Finisklin Road.

Figure 2-1 Finisklin area west of Sligo, with surrounding road network and industrial parks

2.1.1 Sea Road

Sea Road is a local road connecting Finisklin Road and its industrial estates, to the neighbouring Far Finisklin Road and Gibraltar Road junction at its north end. It is approximately 300m in length and the speed limit is 50kph. The proposed development site is located to the east of Sea Road, at the north end of the road. The width of Sea Road at this junction is 5.3m.

The junction with Finisklin Road at the south end of Sea Road is a four-armed roundabout, with Finisklin Road being the eastward arm. The arm to the south, First Sea Road, is the most significant arm, having a wider cross section, bicycle lanes on either side, with it leading out toward the main junction of the N4 and Western Distributor Road 3km to the south of the site. The final arm to the west of the roundabout with Sea and Finisklin Road is the entrance to industrial estates. Sea Road has a width of 7m at this roundabout.

There are two housing estates located opposite the proposed site on the west side of Sea Road. The first is a small estate with four houses, whose entrance is located roughly 120m south of the junction with Gibraltar and Far Finisklin roads. The second housing estate, Carbury Cove, is comparatively larger with 16 dwellings. The entrance to this estate is 50m from the junction.

Image 2-1 and **Image 2-2** below show the southern part of Sea Road, facing southbound and northbound respectively. **Image 2-3** and **Image 2-4** display Sea Road from the junction with Far Finisklin Road and Gibraltar Road.

Image 2-1: Southbound, approaching roundabout

Image 2-2: Northbound from roundabout

Image 2-3: Northbound approaching junction

Image 2-4: Southbound from junction

2.1.2 Far Finisklin Road

Far Finisklin Road is a local road north of the proposed development site that runs from the junction with Gibraltar Road and Sea Road, to the east side of Finisklin Road. This road borders the development site for approximately 350m, with this section of the road having a rural characteristic, however there are shared surface cycle road markings and no overtaking road markings to increase safety for cyclists . Further east on the Far Finisklin Road there are numerous industrial estates before the T-junction with Finisklin Road. The speed limit is 50kph.

The road width at the junction is approximately 5.5m. This profile of road remains for roughly 200m northeast of the junction with Far Finisklin Road. The width expands here to accommodate road users' navigation of the turn. From this turn eastward toward the Finisklin Road junction and accompanying industrial estates, the road extends gradually from 5.6m to 7.4m.

Image 2-5: Far Finisklin Road Shared Surface Road Makings

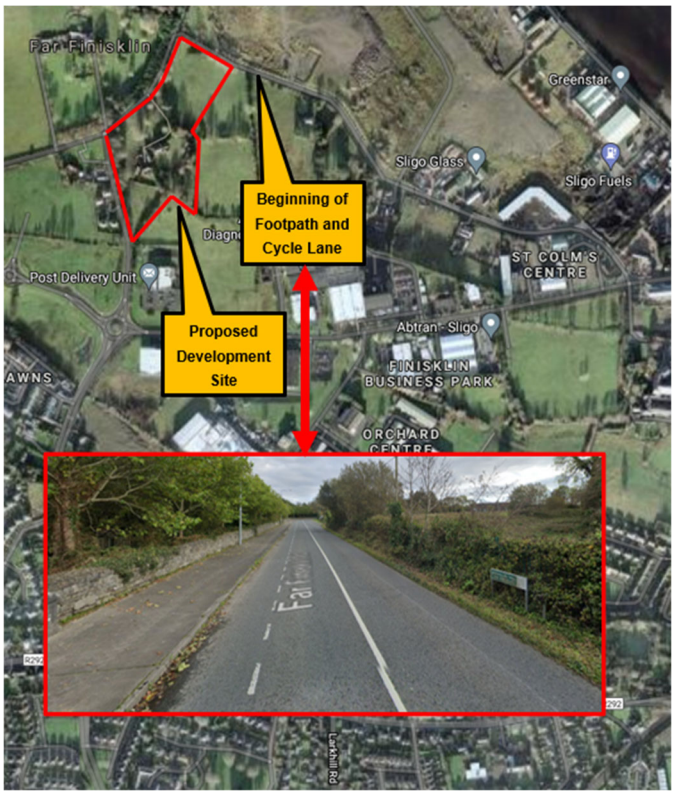


Image 2-6: Far Finisklin Road facing eastward

2.1.3 Far Finisklin Road – Sea Road – Gibraltar Road junction

The junction at the north east point of the proposed development site is a priority T-junction linking east-west roads, Far Finisklin Road and Gibraltar Road, with Sea Road that has a north-south primary axis. The housing estates on Sea Road use this junction as the primary access to Sligo Town Centre by way of Far Finisklin Road. It is a moderately wide junction with decent short distance visibility, although this is reduced on the Far Finisklin Road arm of this junction due to the bend in the road 100m northeast of the junction.

Gibraltar Road leads westward from the site, linking with Second Sea Road at a beach 700m to the west. Second Sea Road then leads back to the R292, a regional road south of the site, with housing estates further south on Second Sea Road.

There is also a private residence on this junction, directly north of the Sea Road arm, making this a four-way priority junction of sorts. Visibility from the entrance to this residence facing the Far Finisklin Road is rather limited, as seen in **Image 2-09** and **Image 2-10**.

Image 2-7: Approaching jct from Far Fin. Rd. **Image 2-8: Gibraltar Road**

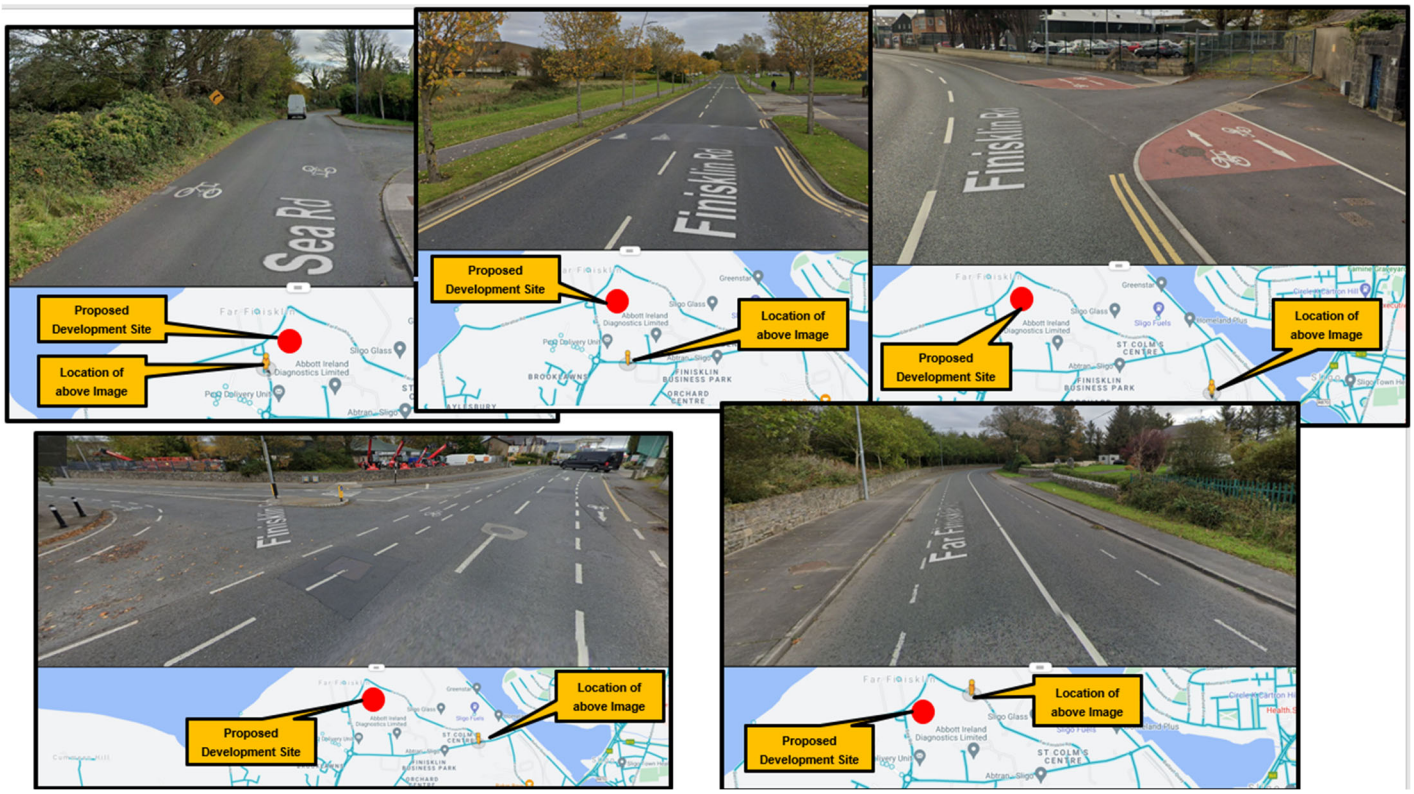
Image 2-9: Approaching jct from Sea Rd. **Image 2-10: Far Fin. Rd with residence (left)**

2.2 Existing Pedestrian and Cycle Facilities

Along Sea Road there is a footpath on the western side which connects to a network of footpaths to Sligo Town Centre. This walking route to Sligo Town Centre is approximately 2.5km in length.

Cycling facilities are present from the proposed development site along the Sea Road and the Far Finiskilin Road routes to Sligo Town Centre. These facilities are in the form of shared surfaces, segregated cycle lanes and segregated contraflow cycle tracks as shown in the below **Figure 2-2**

Figure 2-2 Existing Pedestrian and Cycle Facilities



2.3 Existing Bus Facilities

The nearest a bus stop to the proposed development site is on Sea Road, 40m from the junction with Far Finisklin and Gibraltar Roads. Services from here are Rosshill to Strandhill via Sligo Town Centre and are operated by Bus Eireann at a 1 hour frequency throughout the day.

2.4 Existing Rail Facilities

Sligo Train Station is located approximately 2.4km (8 minute bus journey) from the proposed development site. Sligo Train Station includes parking facilities which allows commuters to park and use the train. Sligo Train Station links Sligo to Dublin Connolly with stops including, Carrick on Shannon, Mullingar, Maynooth and Drumconda along its route.

3 FUTURE CONDITIONS

3.1 Proposed Development

The proposed development will consist of 63 housing units, with a mix of one and two bed apartments and between one- and five-bed housing units. **Table 3.1** below highlights the distribution of development types for the proposed site.

Table 3.1 Development Type

Unit Type	1 Bed	2 Bed	3 Bed	4 Bed	5 Bed	Total
House	16	23	2	3	1	45
Apartment	8	10	-	-		18
					Total	63

The proposed development will front on to and be accessed via Sea Road to the western boundary of the site. The proposed development site will have four areas of housing units. Each block will be serviced via a network of internal access roads with a carriageway width ranging from 5.5m to 6.0m.

A footpath and cycle track will run offline from the road through the development site. This will assist the movement of pedestrians and cyclist in line with the desire lines and shorten the journey times for these modes of transport.

This is illustrated in the Proposed Site Plan Drawing in **Appendix A** and **Figure 3-1** below.

Figure 3-1 Proposed Site Plan

3.2 Future Road and Footpath Network

As stated previously in **Section 3.1**, the proposed development will include a new network of access roads that will junction with Sea Road at a single location to the north east of the proposed development site. These roads will be 5.5m – 6.0m in width and will include footpaths along the fronts of the housing units and green area and will connect to a proposed section of footpath along the western boundary of the proposed development site along Sea Road. Pedestrian crossings will be included in the form of uncontrolled crossings to guide pedestrians to the opposite side of Sea Road to connect to the existing footpath network that will guide pedestrians to Sligo Town. No other changes to the surrounding road network are proposed as part of this development.

3.3 Future Cycle and Bus Infrastructure

A new segregated cycle track is proposed along the northern and western boundaries terminating to the south west of the site boundary where cyclists will join the existing shared surface. This is illustrated on the Traffic Engineering Drawing in **Appendix A.**

A new bus stop with shelter is proposed on the western boundary of the proposed development site and will be serviced by the Bus Eireann S2 service to Sligo Town Centre. A new drop off bus stop will be located on the opposite side of the road and a crossing facility installed to guide pedestrians to the proposed development.

4 TRAFFIC ANALYSIS

4.1 Existing Traffic

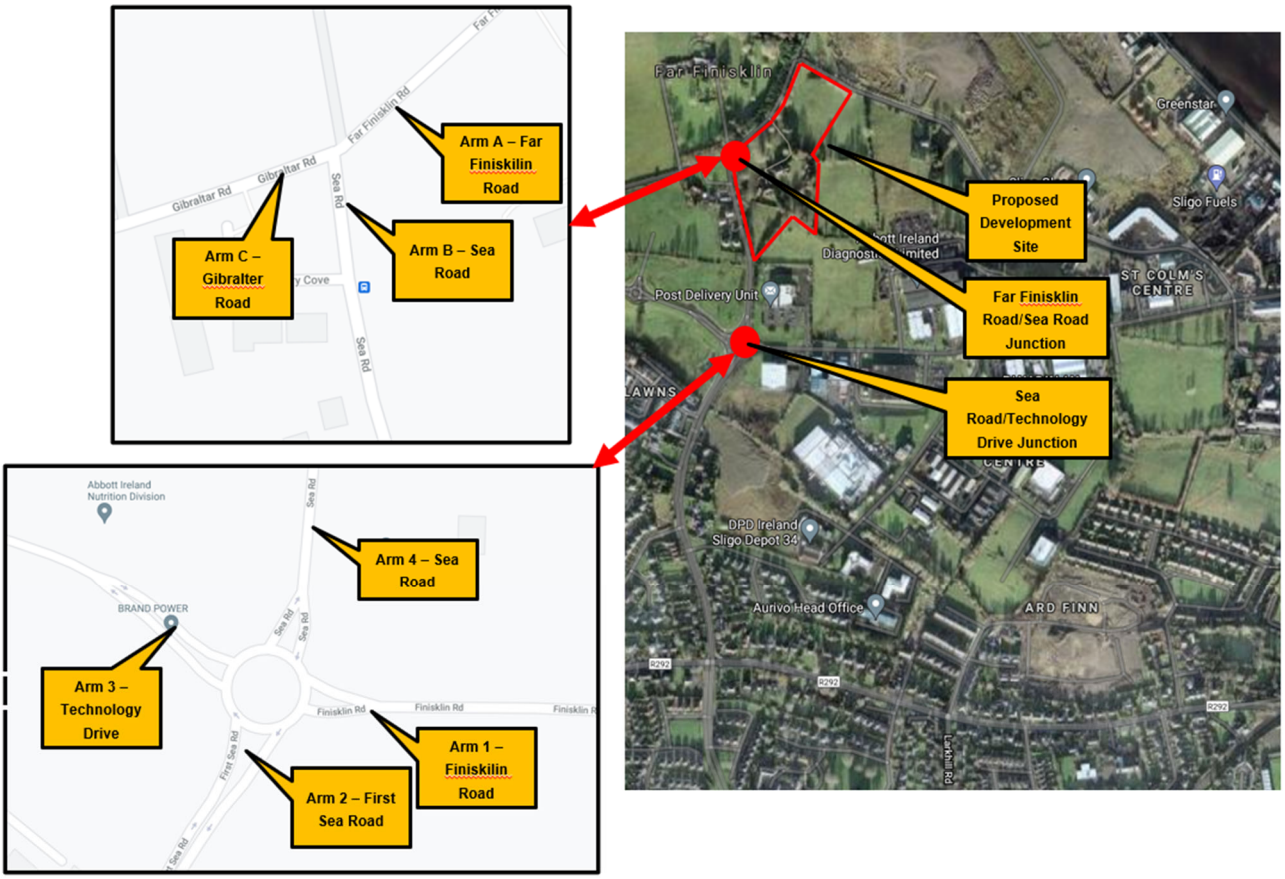
4.1.1 Junctions Analysed

As stated previously in **Section 1.3.2** the following junctions will be analysed in this assessment.

- Far Finisklin Road/Sea Road Junction (priority junction)
- Sea Road/Technology Drive Junction/Finisklin Road (roundabout junction)
- Sea Road/Proposed Development (priority junction)

The locations of these junctions and the Arm naming convention used in this analysis are shown below in **Figure 4-1**.

Figure 4-1 Junction Analysed and Arm Naming Convention Used



4.1.2 Time Periods Analysed

In addition to the existing junction geometrics, traffic volumes in the form of PCU values and turning movements during peak AM peak period of 08:00-09:15 and the PM peak period as identified from the traffic counts as being between 16:00 and 17:15, as opposed to the expected peak periods of 17:00-18:15 were input into the ARCADY and PICADY models. Traffic flows representing the existing, opening year 2025, 2027 and 2037. Future year traffic was calculated using the TII Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections.

4.1.3 Units

The existing traffic flows recorded as detailed in **Section 1.3.3** were converted to Passenger Car Unit's (PCU's) using the below conversion rates:

- Motorcycle, Car, LGV = 1PCU
- OGV1, OGV2 & PSV = 2PCU

PCU's can be described as the impact a mode of transport has on traffic variables such as headway, speed and density compared to a single car.

4.1.4 Existing Traffic Flows

Based on the above and the traffic count data described previously, the below peak hour traffic flows illustrated in the schematic in **Figure's 4-2** and **4-3**

Figure 4-2: Existing AM Peak Period Traffic Flows

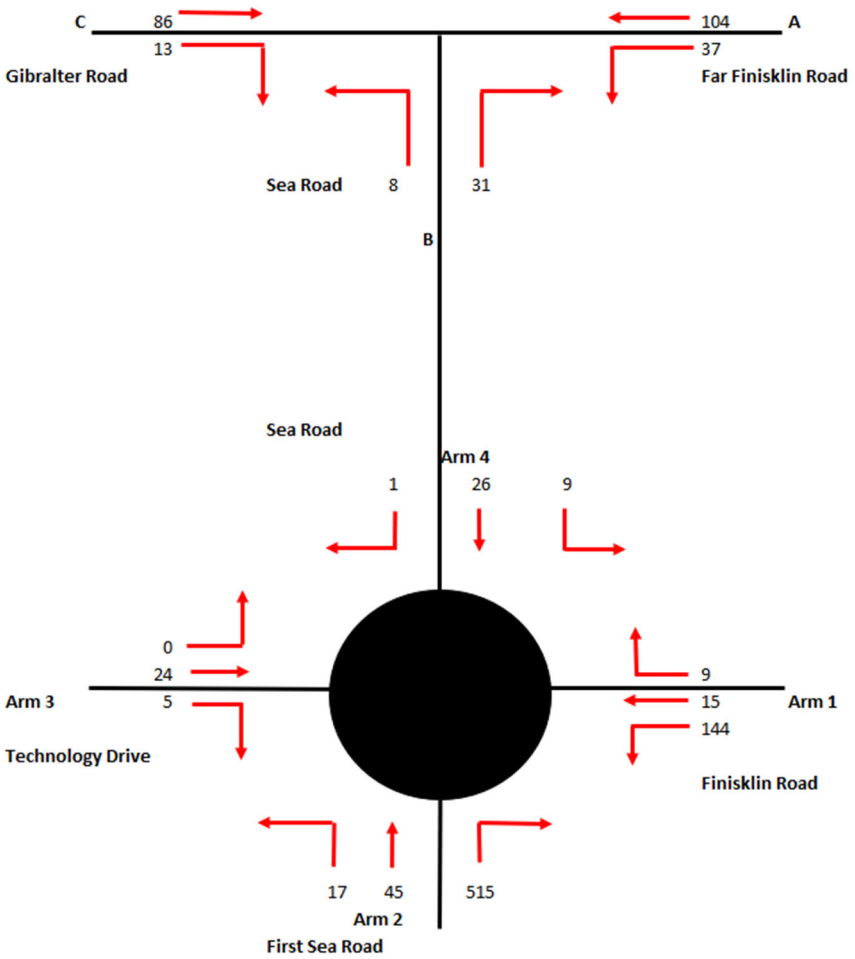
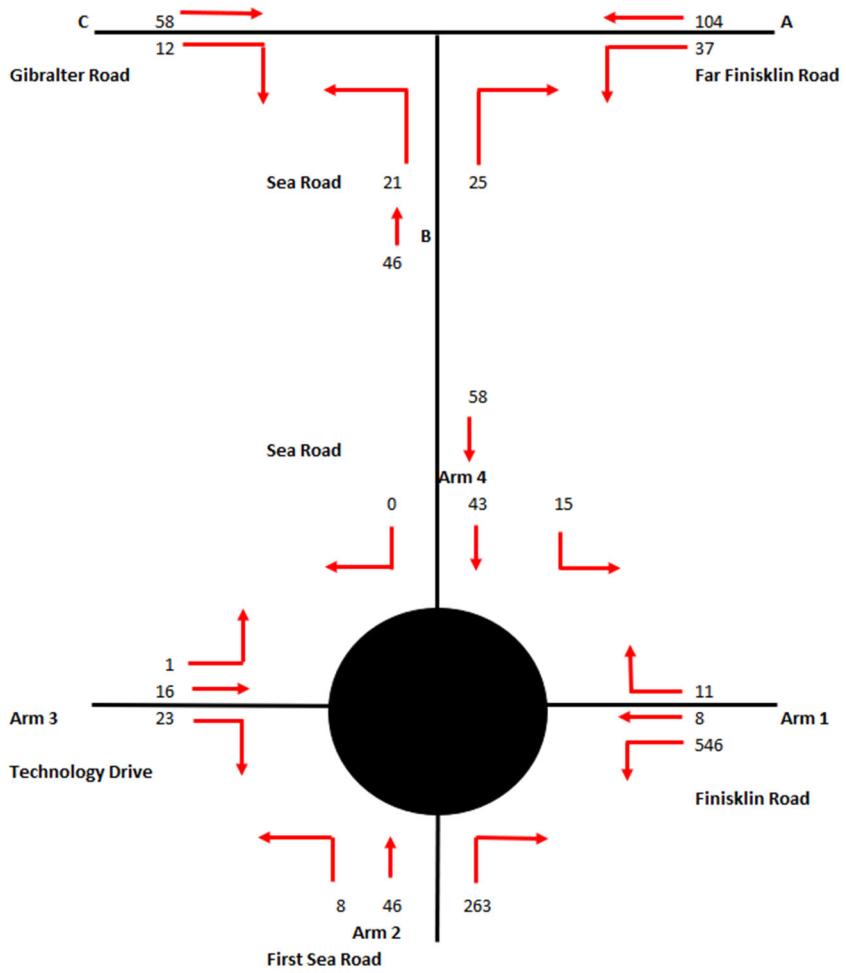


Figure 4-3: Existing PM Peak Period Traffic Flows



4.2 Future Traffic

4.2.1 Surrounding Road Network

The future years analysed are 2025 (opening year of the development), 2030, and 2040 based on the guidance in the TII Traffic and Transport Assessment Guidelines (May 2014), where it states opening year, 5 and 15 years post development opening should be analysed in a Traffic and Transport Assessment. As previously stated in Section 1, the TII Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections May 2019 was used to calculate future traffic volumes on the road network surrounding the proposed development site. These guidelines give growth factors to be applied to traffic volumes based on future year projections.

The growth factors used in this assessment are;

- 2021-2030 = 1.0114
- 2030-2040 = 1.0030

4.3 Travel Demand from the New Development

The development will consist of 63 housing units, with a mix of one, two, four and five bed housing units, as described in **Table 3.1** previously.

4.3.1 Trip Generation

As described in **Section 1.3.4**, trip rates were obtained using TRICS. This resulted in the following traffic volumes being generated by the development;

- AM Peak Period: 14 Departures, 6 Arrivals
- PM Peak Period: 11 Departures, 14 Arrivals

4.3.2 Trip Distribution

Existing traffic flows were established based on the traffic counts undertaken at the three junctions to be analysed, as described previously in **Section 1.3.4**. A directional flow for the traffic at each junction was established by calculating the percentage turning ratios at each junction. This is used to determine the directional flow at each junction and to establish a travel pattern for traffic generated by the proposed development based on the existing patterns.

The turning proportions of traffic flow generated from the proposed development site were based on the ratios derived from the two-way traffic flow along the Sea Road. This was used to determine the direction of traffic flow to and from the proposed development.

These traffic flow ratios are shown in the below **Figures 4-4** and **4-5**

Figure 4-4: Existing AM Peak Period Traffic Turning Ratios

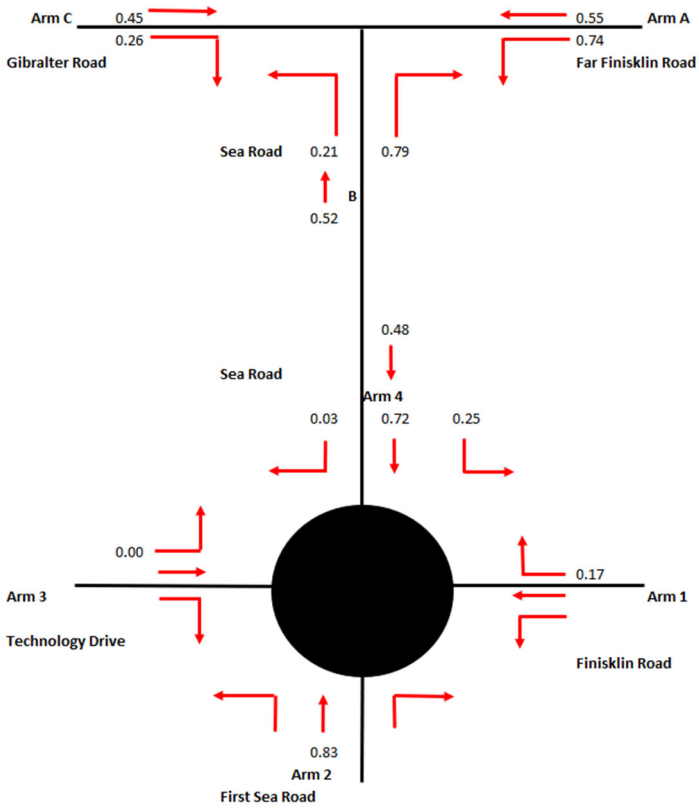
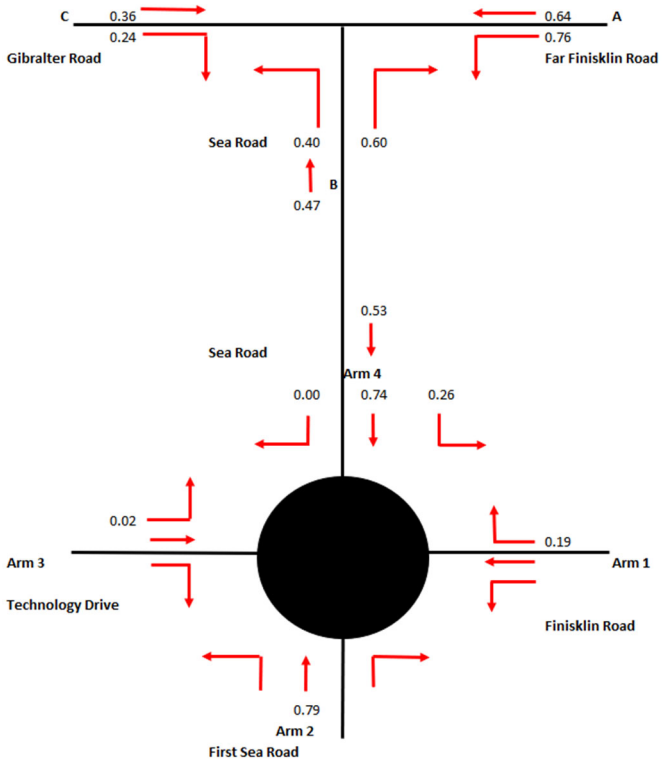


Figure 4-5: Existing PM Peak Period Traffic Turning Ratios



4.3.3 Trip Assignment

The future traffic generated by the proposed development was added to the future traffic volumes on the external road network at the three junctions to be analysed as previously noted. This resulted in the below traffic flows being generated on the surrounding road network;

Figure 4-6: AM Peak Period Traffic Opening Year 2025

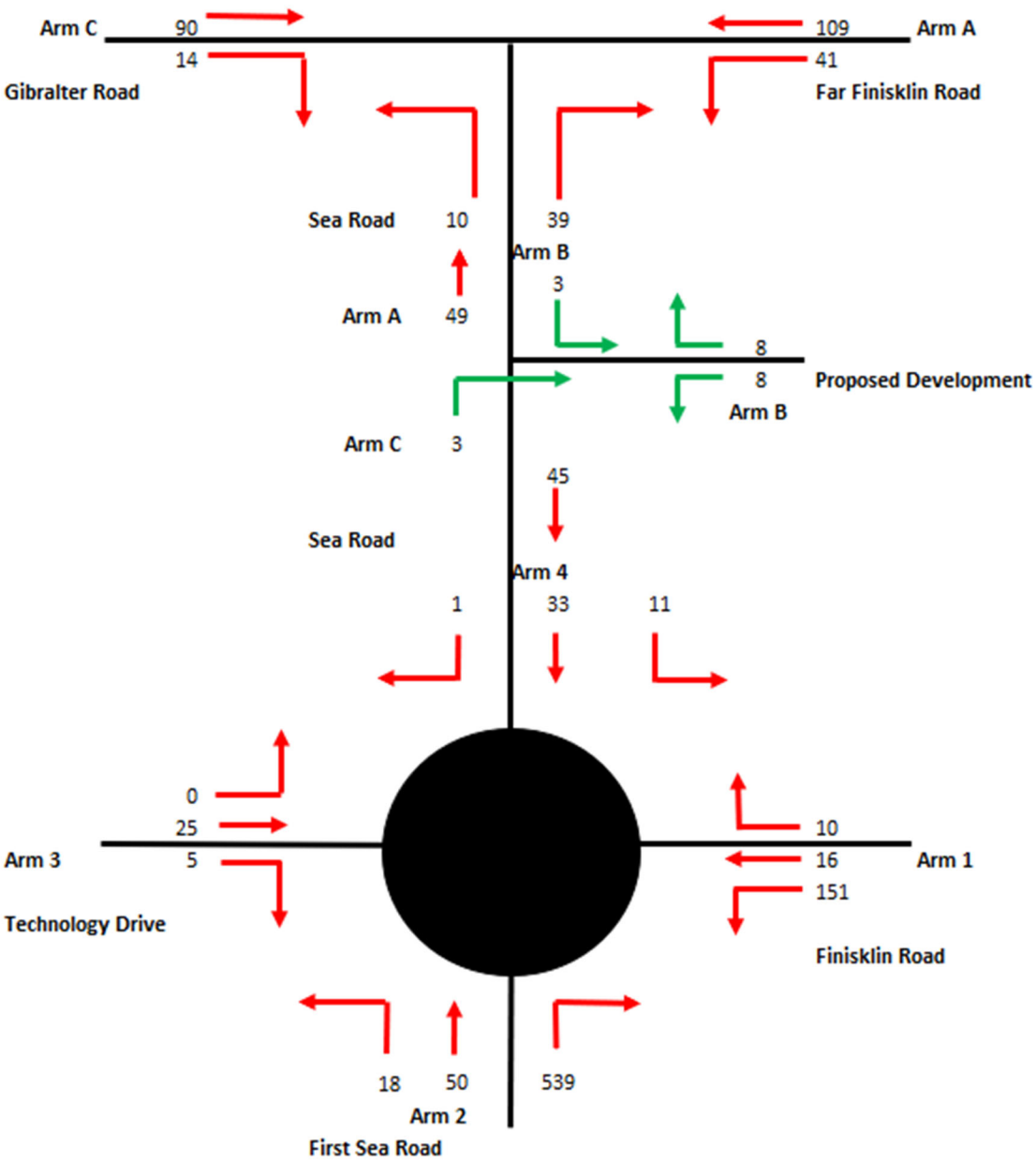


Figure 4-7: AM Peak Period Traffic Year 2030

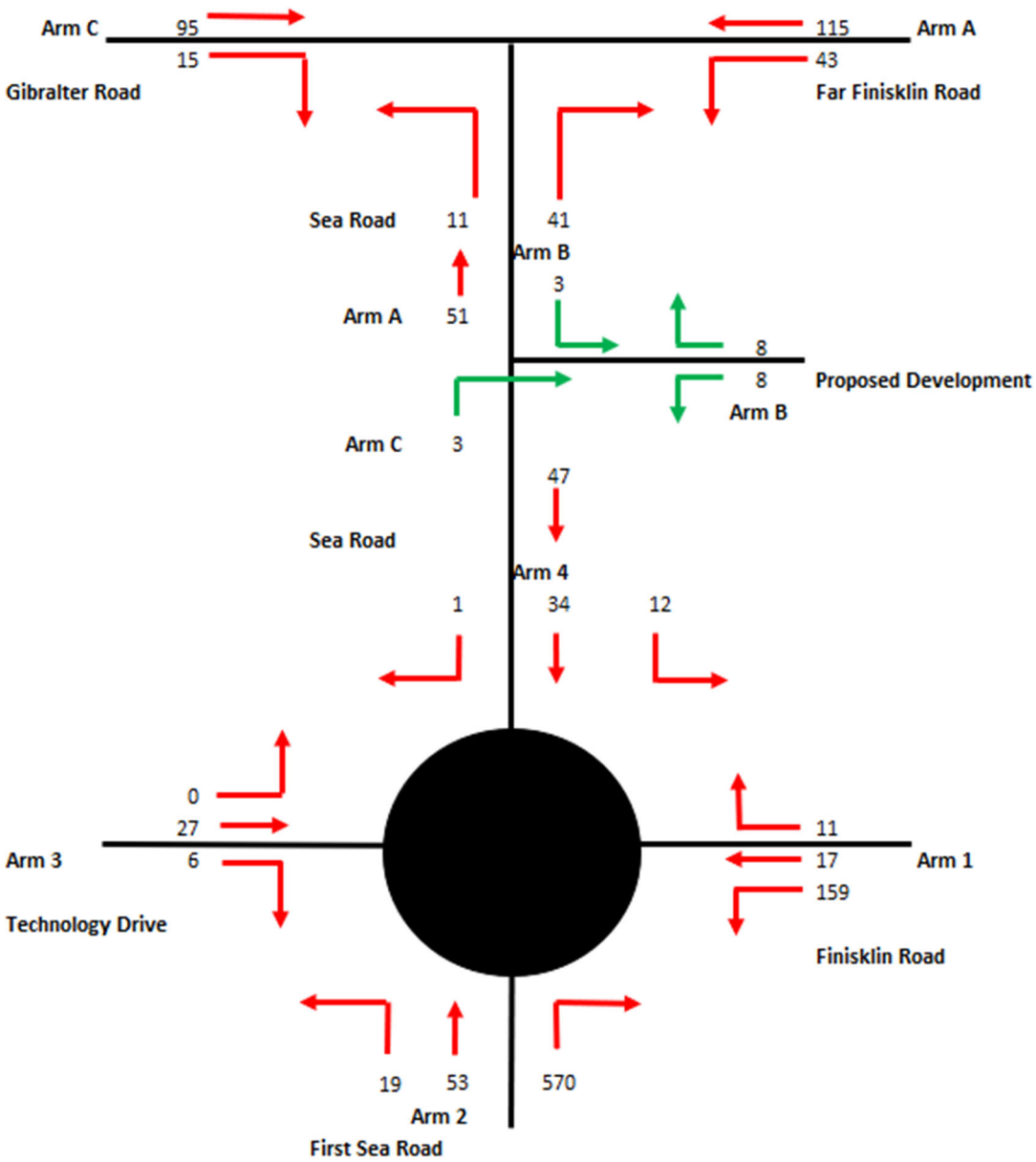


Figure 4-8: AM Peak Period Traffic Year 2040

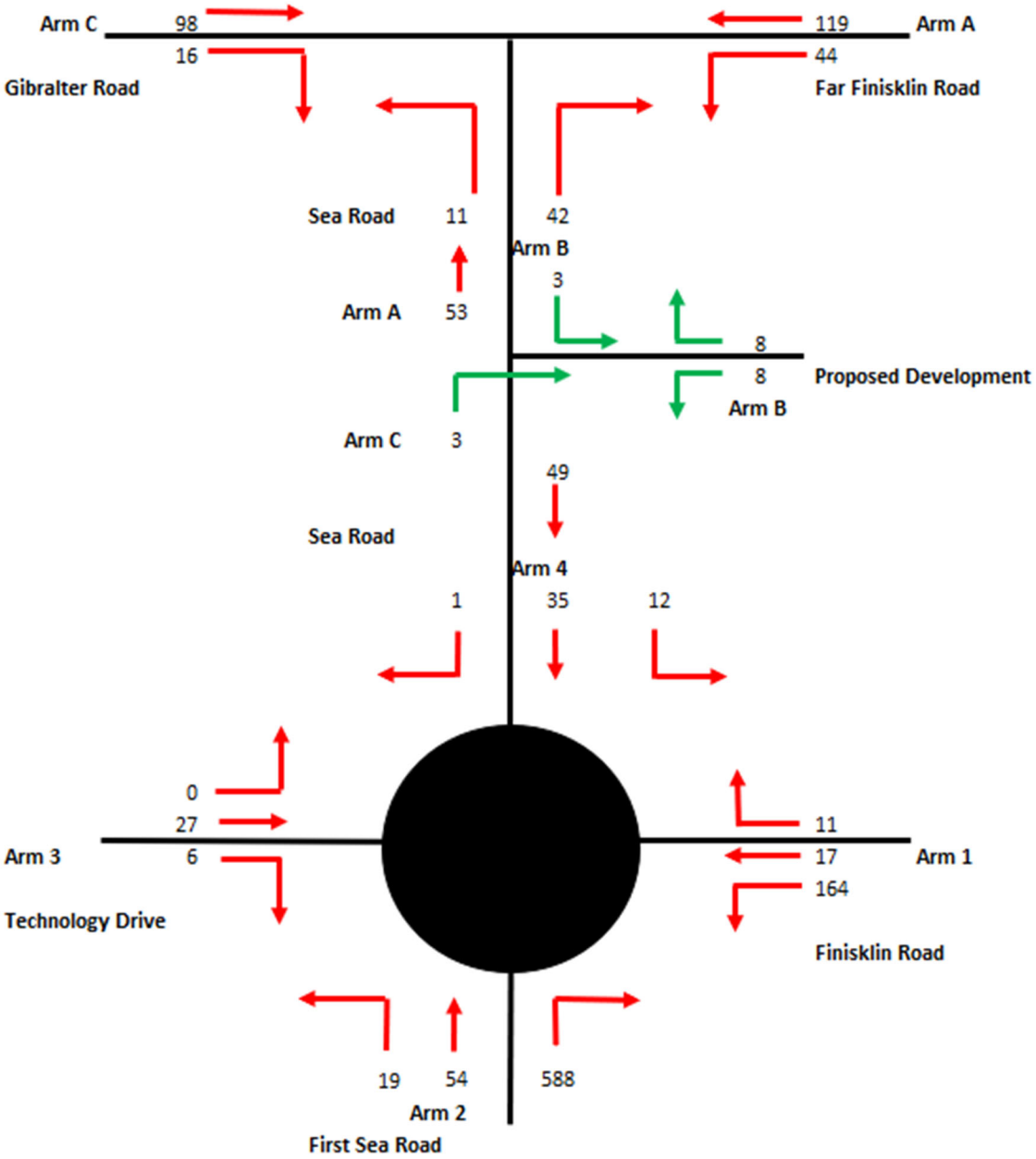


Figure 4-9: PM Peak Period Traffic Opening Year 2025

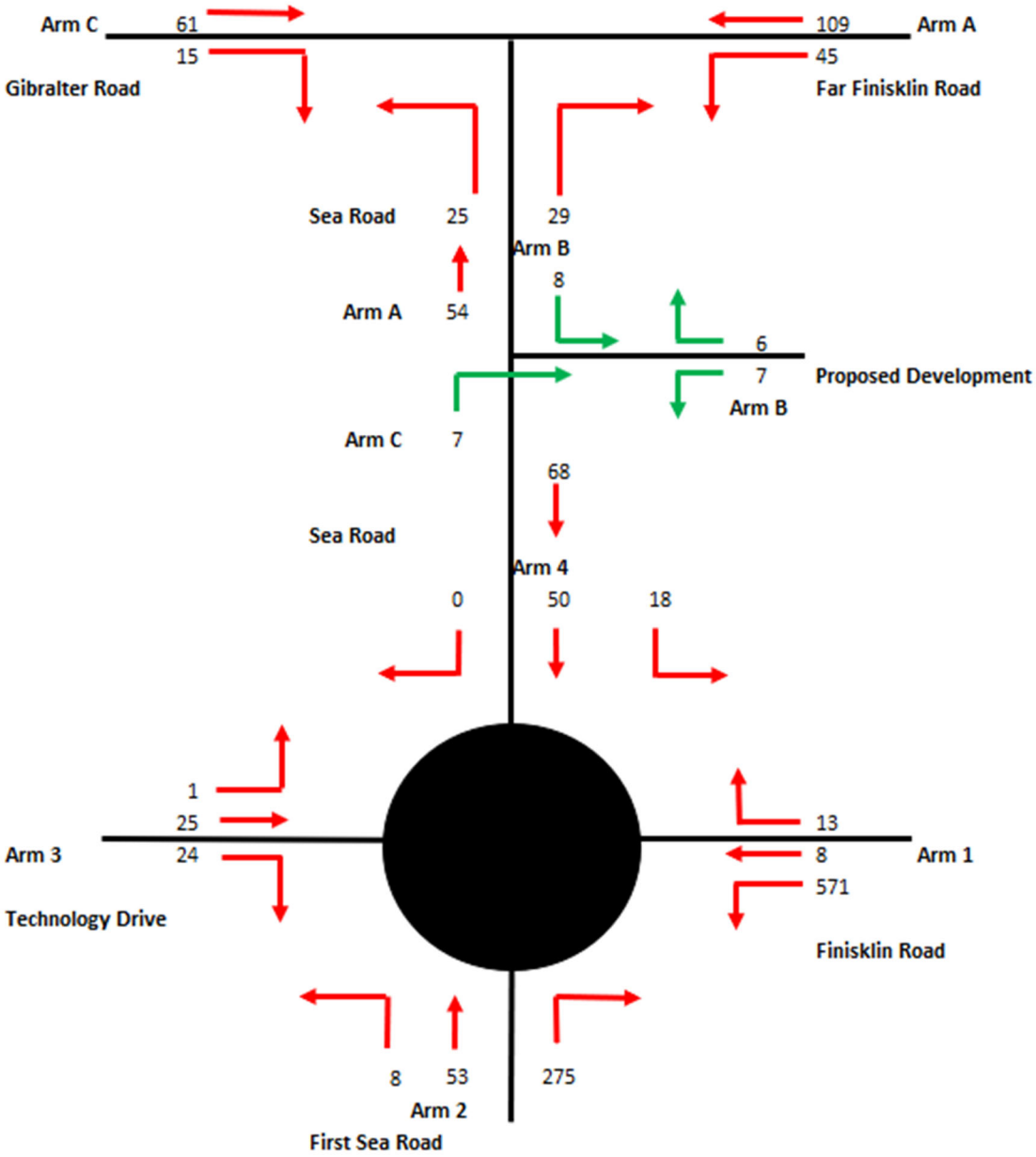


Figure 4-10 PM Peak Period Traffic Year 2030

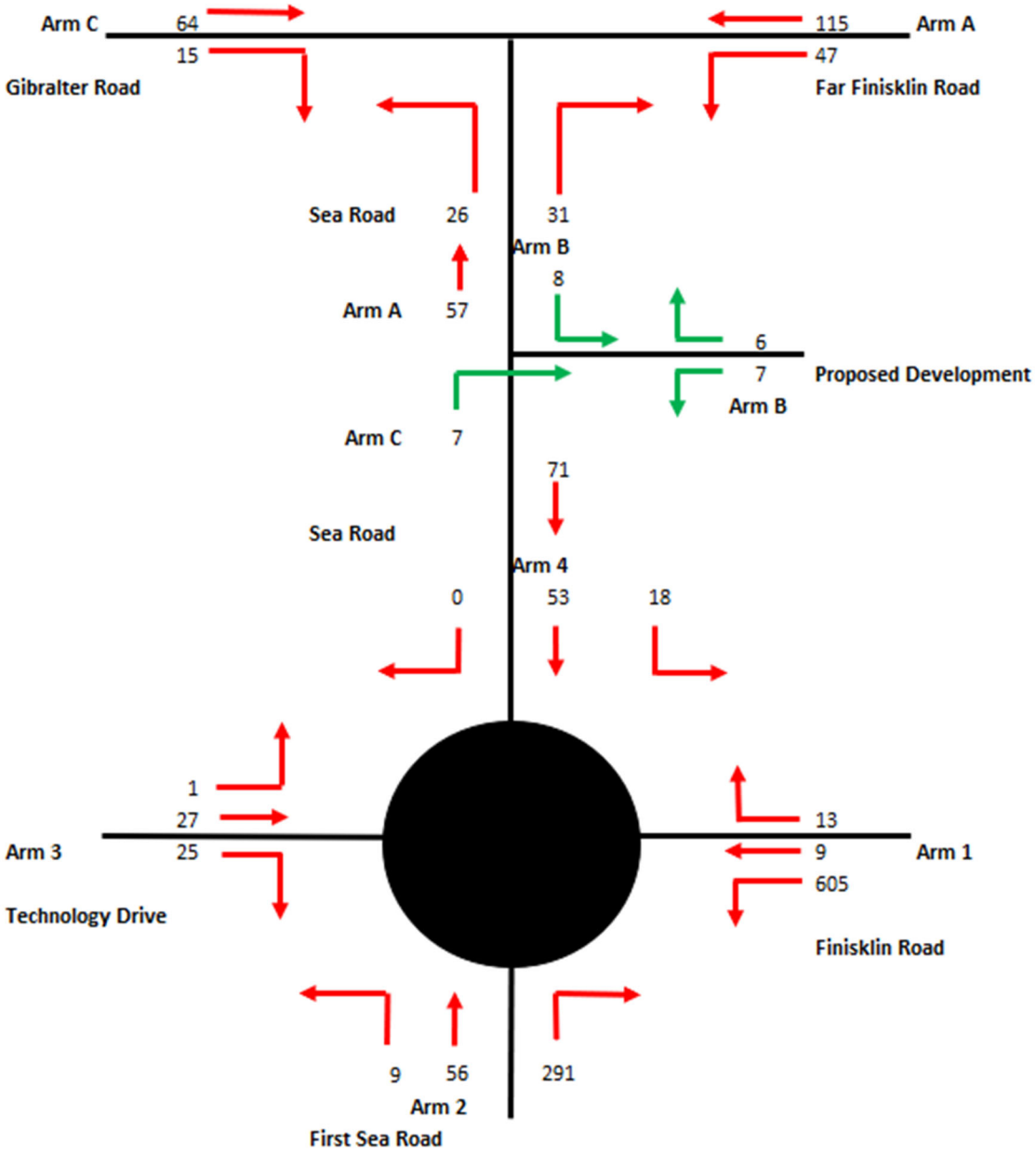
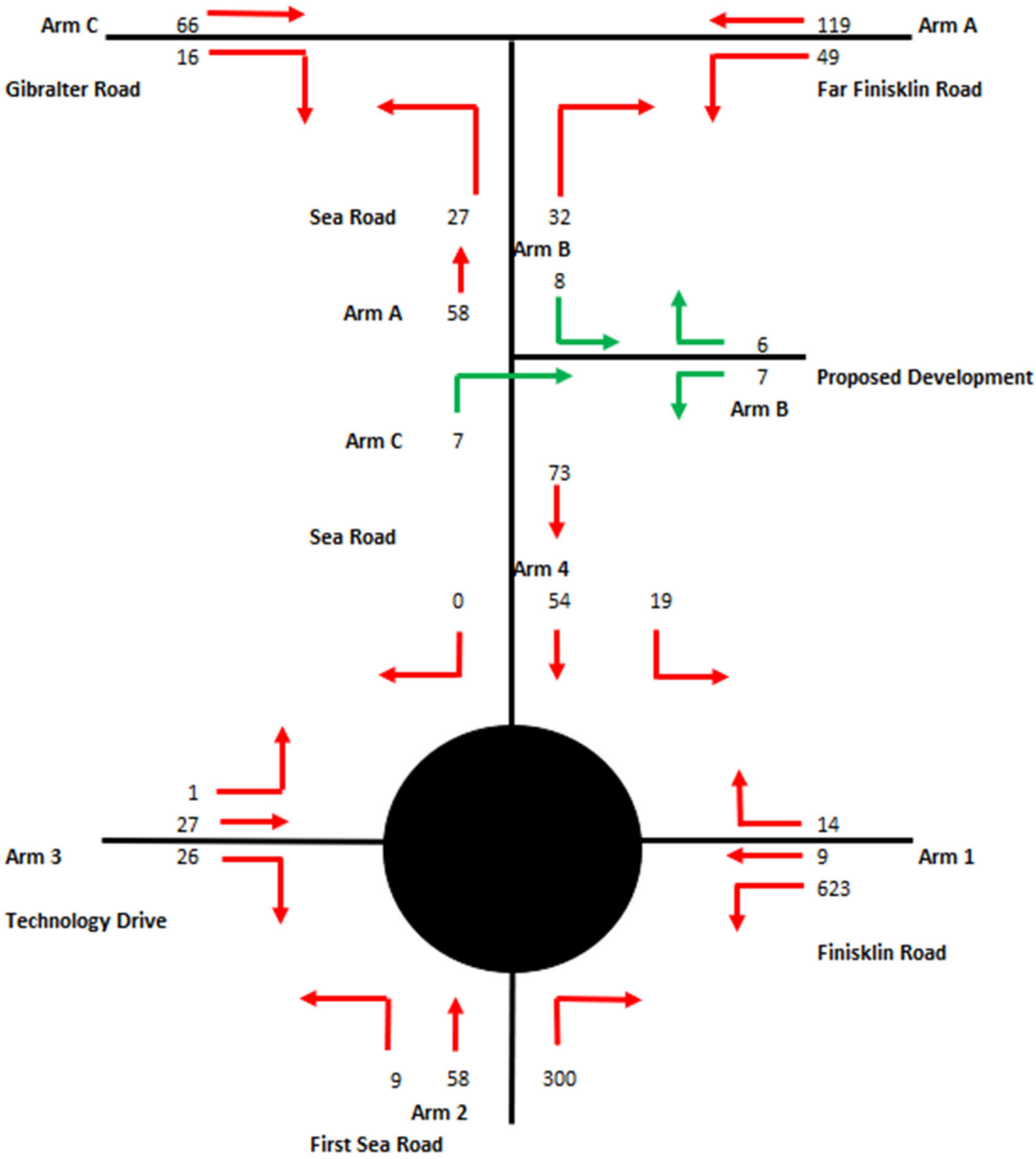


Figure 4-11 PM Peak Period Traffic Year 2040



5 TRAFFIC ANALYSIS RESULTS

5.1 Far Finisklin Road/Sea Road Junction (priority junction)

The results of the traffic modelling carried out on the Far Finisklin Road/Sea Road Junction are shown in **Table 5.1** and **5.2** below. Detailed reports from the traffic modelling carried out are included in **Appendix B**.

Table 5.1 Far Finisklin Road/Sea Road Junction Traffic Modelling Results

	2021 Baseline AM		2021 Baseline PM		2025 Opening Year AM		2025 Opening Year PM		2030 AM		2030 PM		2040 AM		2040 PM	
Stream	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**
B-AC	**0.08**	**0**	**0.09**	**0**	**0.10**	**0**	**0.11**	**0**	**0.11**	**0**	**0.11**	**0**	**0.11**	**0**	**0.12**	**0**
C-AB	**0.03**	**0**	**0.02**	**0**	**0.03**	**0**	**0.03**	**0**	**0.03**	**0**	**0.03**	**0**	**0.03**	**0**	**0.03**	**0**

Table 5.2 Far Finisklin Road/Sea Road Junction Traffic Modelling Results Without Proposed Development

	2021 Baseline AM		2021 Baseline PM		2025 Opening Year AM		2025 Opening Year PM		2030 AM		2030 PM		2040 AM		2040 PM	
Stream	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**
B-AC	0.08	0	0.09	0	0.08	0	0.09	0	0.09	0	0.10	0	0.09	0	0.10	0
C-AB	0.03	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0

The above traffic analysis results given by the traffic model indicates little difference in junction operation following the opening of the proposed development. No PCU was shown to be queuing following the opening of the proposed development in the AM and PM scenarios. The largest RFC observed was 0.12 in the 2040 PM scenario following the opening of the proposed development compared to 0.10 in the same scenarios without the proposed development. Both values are below the maximum practical capacity RFC of 0.85, therefore there is not considered to be a negative effect on this junction as a result of the proposed development.

5.2 Sea Road/Technology Drive Junction/ Finisklin Road (roundabout junction)

The results of the traffic modelling carried out on the Sea Road/Technology Drinve/ Finisklin Road Junction are shown in **Table 5.3** and **5.4** below. Detailed reports from the traffic modelling carried out are included in **Appendix B**.

Table 5.3 Far Finisklin Road/Sea Road Junction Traffic Modelling Results

	2021 Baseline AM		2021 Baseline PM		2025 Opening Year AM		2025 Opening Year PM		2030 AM		2030 PM		2040 AM		2040 PM	
Stream	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**
1	0.13	0	0.45	1	0.14	0	0.47	1	0.15	0	0.50	1	0.15	0	0.51	1
2	0.38	1	0.21	0	0.40	1	0.22	0	0.42	1	0.23	0	0.43	1	0.24	0
3	0.02	0	0.02	0	0.02	0	0.03	0	0.02	0	0.03	0	0.02	0	0.03	0
4	0.03	0	0.05	0	0.04	0	0.06	0	0.05	0	0.06	0	0.05	0	0.06	0

Table 5.4 Far Finisklin Road/Sea Road Junction Traffic Modelling Results Without Proposed Development

	2021 Baseline AM		2021 Baseline PM		2025 Opening Year AM		2025 Opening Year PM		2030 AM		2030 PM		2040 AM		2040 PM	
Stream	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**	**Max RFC**	**Max Queue**
1	0.13	0	0.45	1	0.14	0	0.47	1	0.15	0	0.49	1	0.15	0	0.51	1
2	0.38	1	0.21	0	0.40	1	0.22	0	0.42	1	0.22	0	0.43	1	0.24	0
3	0.02	0	0.02	0	0.02	0	0.03	0	0.02	0	0.03	0	0.02	0	0.03	0
4	0.03	0	0.05	0	0.04	0	0.05	0	0.04	0	0.06	0	0.04	0	0.06	0

The above traffic analysis results given by the traffic model indicates little difference in junction operation following the opening of the proposed development. No additional PCU was shown to be queuing following the opening of the proposed development in all scenarios. The largest RFC observed was 0.51 in the 2040 PM period and this remained the same when compared against the model without the proposed development which indicates there is no negative effect on traffic as a result of the proposed development in the worst case scenario of traffic volumes. This RFC is below the maximum practical capacity RFC of 0.85, therefore there is not considered to be a negative effect on this junction as a result of the proposed development.

6 ROAD LAYOUT, PARKING AND VISIBILITY

6.1 Future External Roads

As stated previously, works will be carried out on external roads to provide better access to sustainable modes of transport and encourage lesser car usage in the area. These works will include; new footpaths, cycle lanes and bus stops with enhanced pedestrian crossing points. These are illustrated in the Traffic Engineering Drawings in **Appendix A.**

6.2 Internal Roads

Footway, parking, roads and cycle infrastructure have all been designed to and are in accordance with the standards set in DMURS. The internal road network within the development will have a carriageway width of 5.5m and a minimum 1.8m footpath width in accordance with the guidance set out in DMURS. Corner radii will not be greater than 6m and will allow for the swept path of a 7.90m refuse truck and 8.68m fire engine.

6.3 Parking

Parking volume has been provided in accordance with Table 16C of the Sligo and Environs Development Plan 2010-2016 (SEDP) as referenced in the Sligo County Development Plan 2017-2023.

Table 16C provides the following standards:

- Residential dwelling with four or more bedrooms: 2 per dwelling
- Residential dwelling with three bedrooms or less: 1 per dwelling
- Apartment: these standards have been superseded by the Apartment design guidelines, although they align with a requirement of 1 space per unit.

This translates to the following requirements:

Table 6.2 Parking Required per Unit Type

Dwelling type	No of units	Standard	Requirement
1 bed house	**16**	**1 space**	**16**
2 bed house	23	1 space	23
3 bed house	2	1 space	2
4 bed house	3	2 spaces	6
5 bed house	1	2 spaces	2
Total for houses			**49**
Duplex/Apartment	18	1 space + 1 visitor space for every 3-4 units (in accordance with Apartment Guidelines)	**24**
Total for spaces required for Proposed Development			**73**

The total requirement for parking is a minimum of 73 spaces. The proposed development includes 100 spaces and therefore this development is considered to have more than sufficient parking.

6.4 Visibility

A visibility splay of 45m is required based on a speed limit of 50km/h in accordance with DMURS. Visibility splays are achieved from the proposed development access to the surrounding road network once site clearance has been completed as shown on the drawing in **Appendix A**.

6.5 Mobility Management

In order to promote sustainable travel habits and to assist a reduction in vehicular traffic volumes in Sligo, a **Mobility Management Plan** (MMP) has been developed for the proposed development. A commitment has been made to assign a mobility manager. This person will have the overall responsibility of the implementation of the action plan to achieve the targeted modal shift.

It is proposed the mobility manager will liaise with Sligo County Council and the National Transport Authority at agreed intervals. This is to ensure that the sustainable travel initiatives being implemented are consistent with the policies and objectives of these organisations.

The mobility manager will undertake a travel survey (questionnaire) within 6-months of occupation to review the preliminary baseline travel patterns and adjust the modal shift targets where required. The Mobility Management Plan should be reviewed annually to gauge the success of the plan in meeting the modal split targets. Where necessary, new / amended measures should be proposed and implemented.

This MMP has been prepared and is submitted under separate cover with this application,SHB3-FIN-CS-RPS-RP0004 Mobility Management Plan.

6.6 Road Safety Audit

The proposed design and its interaction with the surrounding road network has been audited by a team of Road Safety Auditors and amendments to the general arrangement based on this Road Safety Audit have been incorporated to the current proposed design.

7 CONCLUSION

The traffic impacts resulting from the proposed development was assessed in accordance with the TII Traffic and Transport Assessment Guidelines.

The traffic growth as a result of this development was calculated using TRICS and growth factors obtained from the TII Project Appraisal Guidelines Unit 5.5: Link Based Traffic Growth Forecasting were used to determine future traffic volumes on the surrounding road network.

The traffic impacts as a result of the proposed development are summarised as follows:

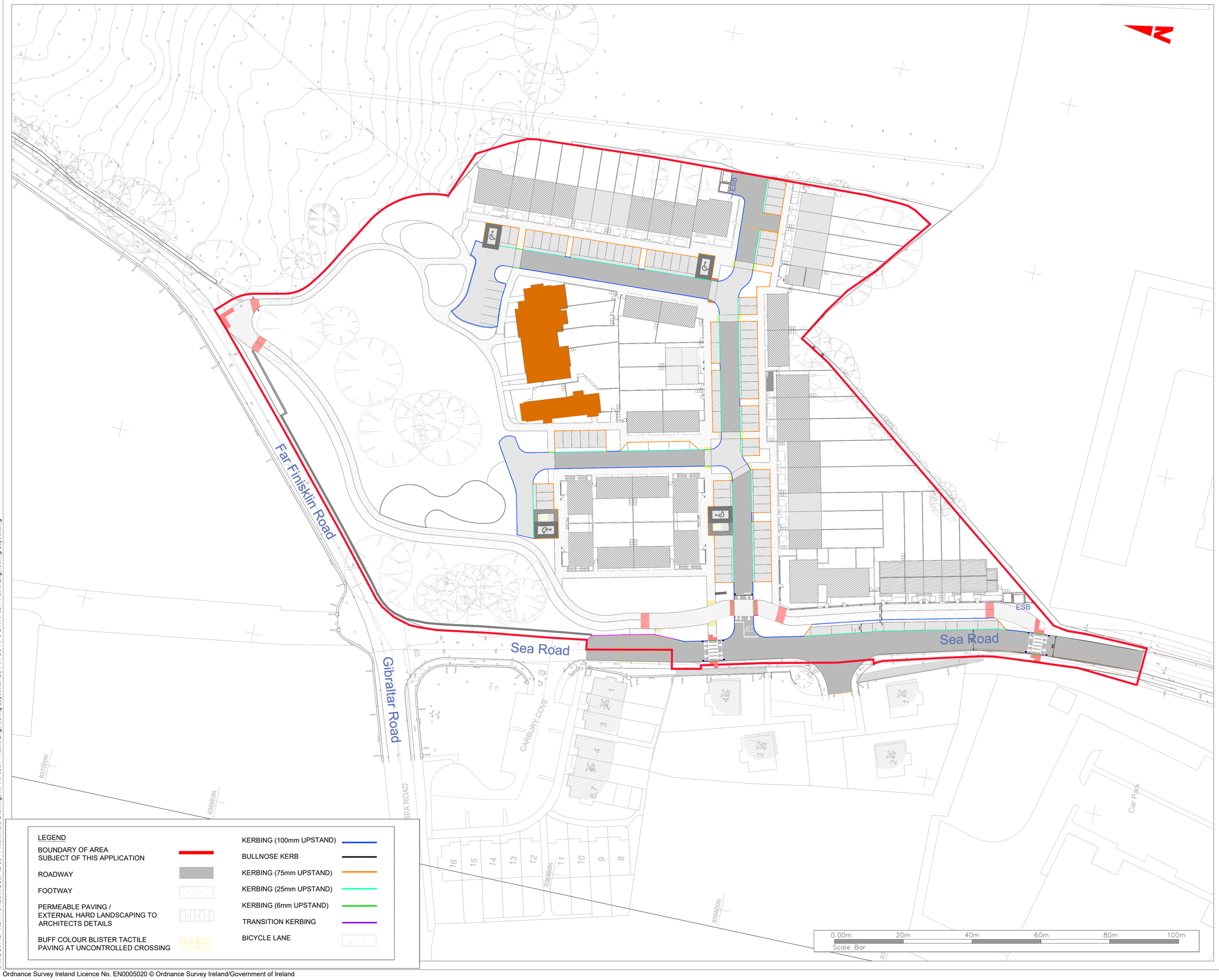
- The traffic impact at the junction of the Far Finisklin Road/Sea Road caused by the proposed development is minor and does not result in any increased queuing.
- The traffic impact at the junction of the Sea Road/Technology Drive caused by the proposed development is minor and does not result in any increased queuing.

There are good public transport links to Sligo and the proposed development will include for improved infrastructure to access this public transport. This is likely to encourage a modal shift to more sustainable transport methods which could lead to lower car ownership within the proposed development and could further reduce the traffic impact.

In conclusion and following this assessment, the construction of this proposed development will not have a negative impact on the surrounding road network.

Appendix A

Traffic Engineering Drawings



LEGEND

BOUNDARY OF AREA SUBJECT OF THIS APPLICATION	KERBING (100mm UPSTAND)
ROADWAY	BULLNOSE KERB
FOOTWAY	KERBING (75mm UPSTAND)
PERMEABLE PAVING / EXTERNAL HARD LANDSCAPING TO ARCHITECTS DETAILS	KERBING (25mm UPSTAND)
BUFF COLOUR BLISTER TACTILE PAVING AT UNCONTROLLED CROSSING	KERBING (6mm UPSTAND)
	TRANSITION KERBING
	BICYCLE LANE

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(v) All Levels refer to Ordnance Survey Datum, Malin Head.

Pavement Specification:

1. Surface Course - Section 5 of Series 900 - SMA 10 / Surf/ PMB 65/105-60 - 40mm.
2. Binder Course - Section 3 of Series 900 - AC 20 dense bin 40/60 - 60mm.
3. Sub-base - 804 - Granular Material Type B - 150mm.
4. Capping - 6F2 - 450mm (*600mm if CBR<4% 300mm Min if CBR>4%*).

General Notes:

1. Precast concrete kerbs to be as detailed to CC-SCD-01101 (RCD/1100/1).
2. Dropped kerbs at pedestrian crossings and pedestrian accesses are to be provided. At pedestrian crossings, the kerbs at dished crossing points are to be laid flush to the carriageway, or to a maximum upstand of 6mm.
3. At crossings at the entry ramps, the crossing is to ramp down to the entry ramp level and be flush with the level of the entry ramp.
4. Where the provision of kerbing starts or terminates along the road, the kerbing shall be ramped up to the required height at a desirable slope of 1:20, or a maximum slope of 1:12.
5. Concrete at footways shall be in accordance with Clause 1106 of TII Specification for Roadworks Series 1100, CC-SPW-01100. Concrete footways to receive a non-skid brush finish to the surface.
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8. All traffic signage and line marking shall be in accordance with the Traffic Signs Manual.
9. Cycle lane design and layout shall be in accordance with the National Cycle Manual.

Rev	Date	Drn / Chk	Amendment / Issue	App
P04	07.02.22	PMcB / DK	Issue for Part 10 planning	DK
P03	14.01.22	PMcB / DK	Issue for LA Review	DK
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Project
PPP SOCIAL HOUSING BUNDLE 3
FINISKLIN, CO. SILGO

Title
Traffic Engineering Layout

Model File Identifier
SHB3-FIN-CS-RPS-DR-KP001

File Identifier
SHB3-FIN-CS-RPS-DR-KP001-01

Created on	Sheets	
April 2021	01 of 02	
Scale	**Status**	**Rev**
1:250 @ A1 1:500 @ A3	S4	P04

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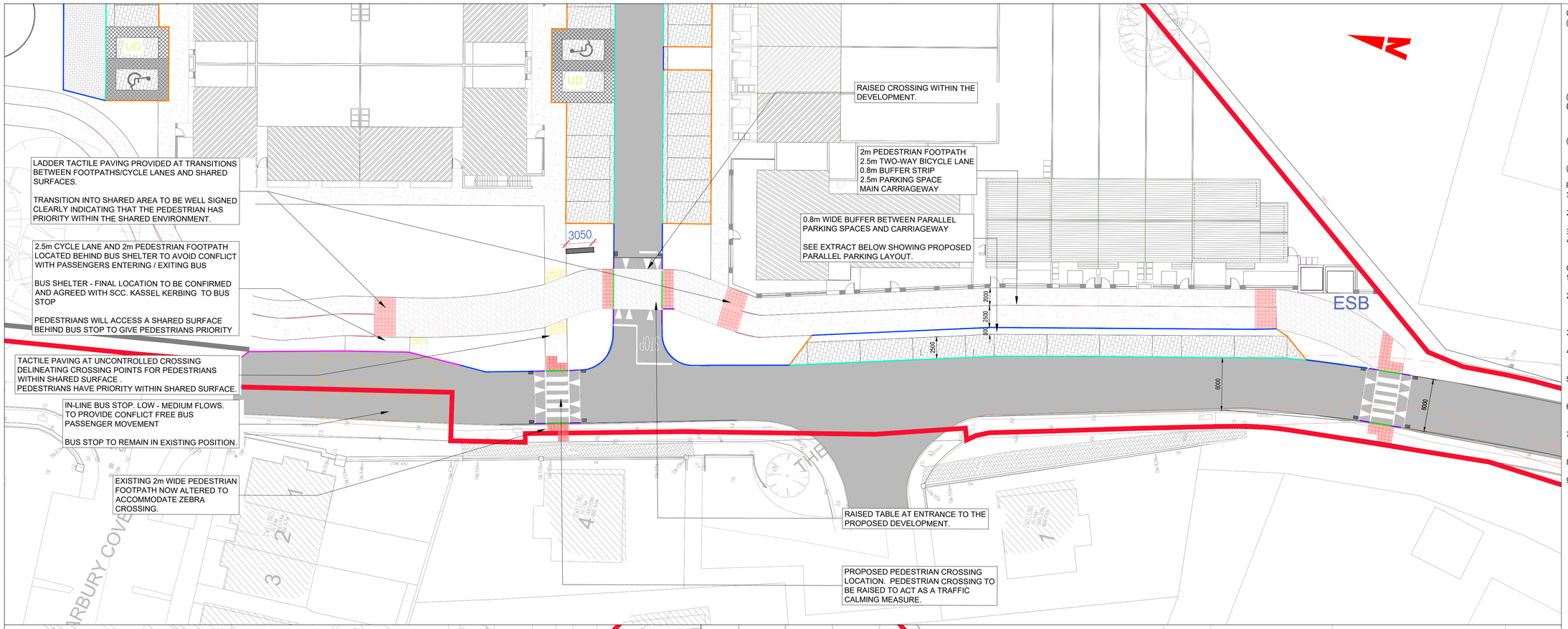

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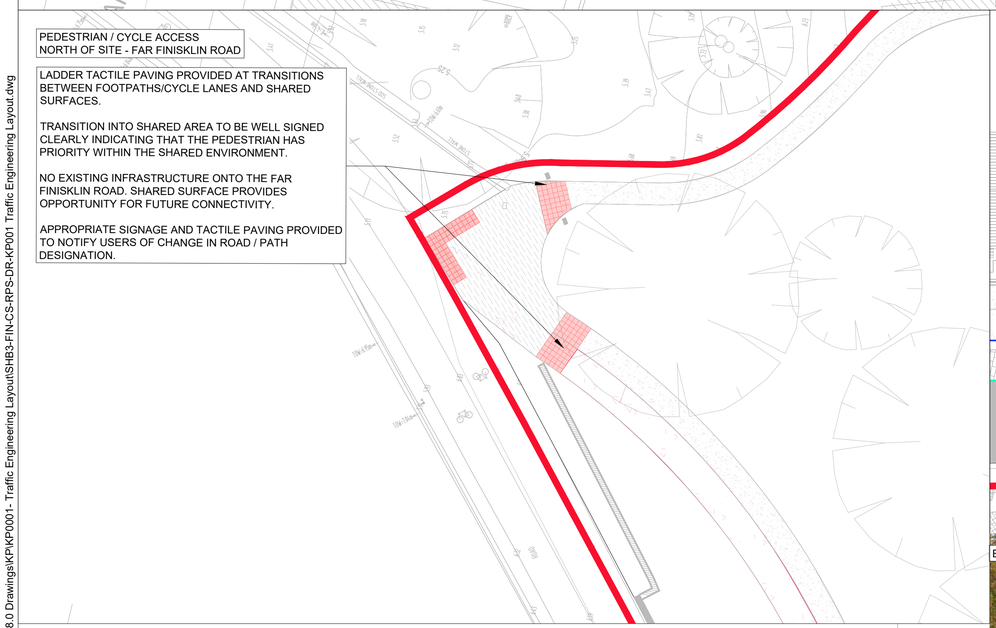
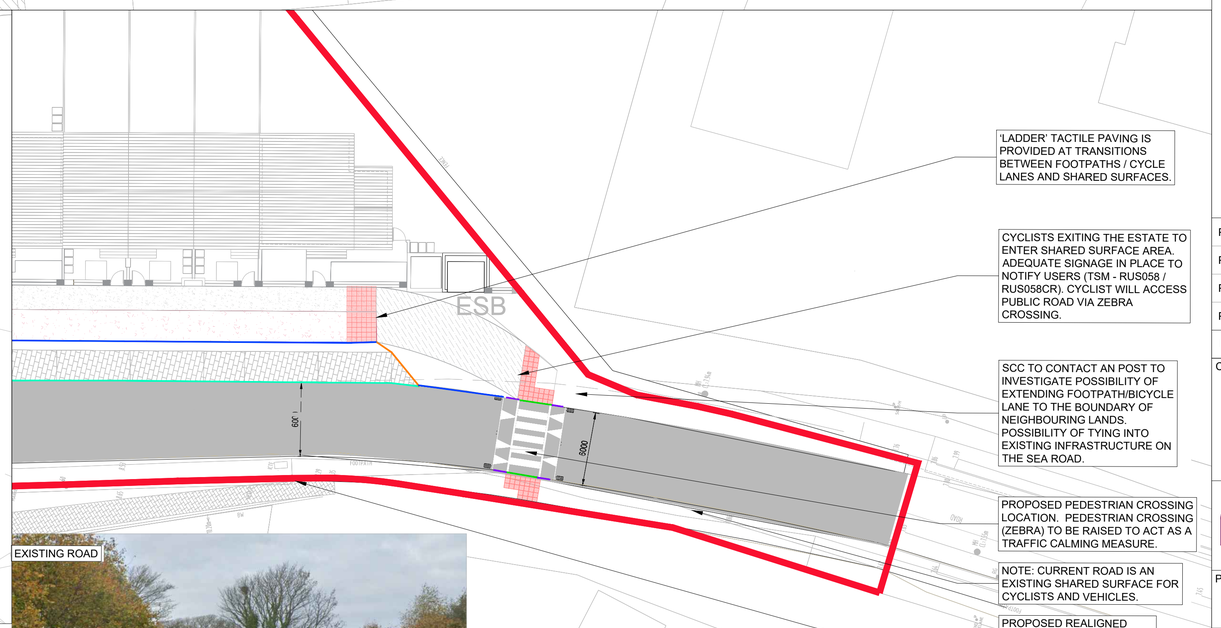
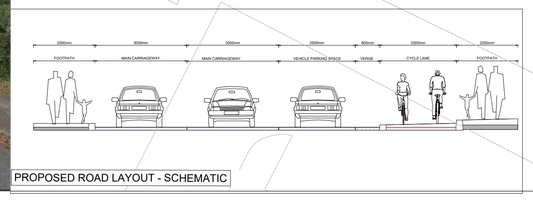
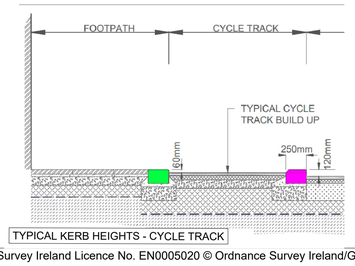






PROPOSED ROAD LAYOUT - SCHEMATIC



TYPICAL KERB HEIGHTS - CYCLE TRACK

TRAFFIC SIGNS USED WITHIN DEVELOPMENT

SIGNS.	DESCRIPTION	DOE TRAFFIC SIGNS MANUAL REFERENCE.
STOP	STOP SIGN	RUS027
	SEGREGATED TRACK FOR PEDAL CYCLES AND PEDESTRIAN	RUS058CR
	SHARED TRACK FOR PEDAL CYCLES AND PEDESTRIANS	RUS058

Rev	Date	Drn / Chk	Amendment / Issue	App
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Project
PPP SOCIAL HOUSING BUNDLE 3
FINISKLIN, CO. SILGO

Title
Traffic Engineering Layout

Model File Identifier
SHB3-FIN-CS-RPS-DR-KP001

File Identifier
SHB3-FIN-CS-RPS-DR-KP001-02

Created on: April 2021
Sheets: 02 of 02
Scale: 1:250 @ A1, 1:500 @ A3
Status: S4
Rev: P04

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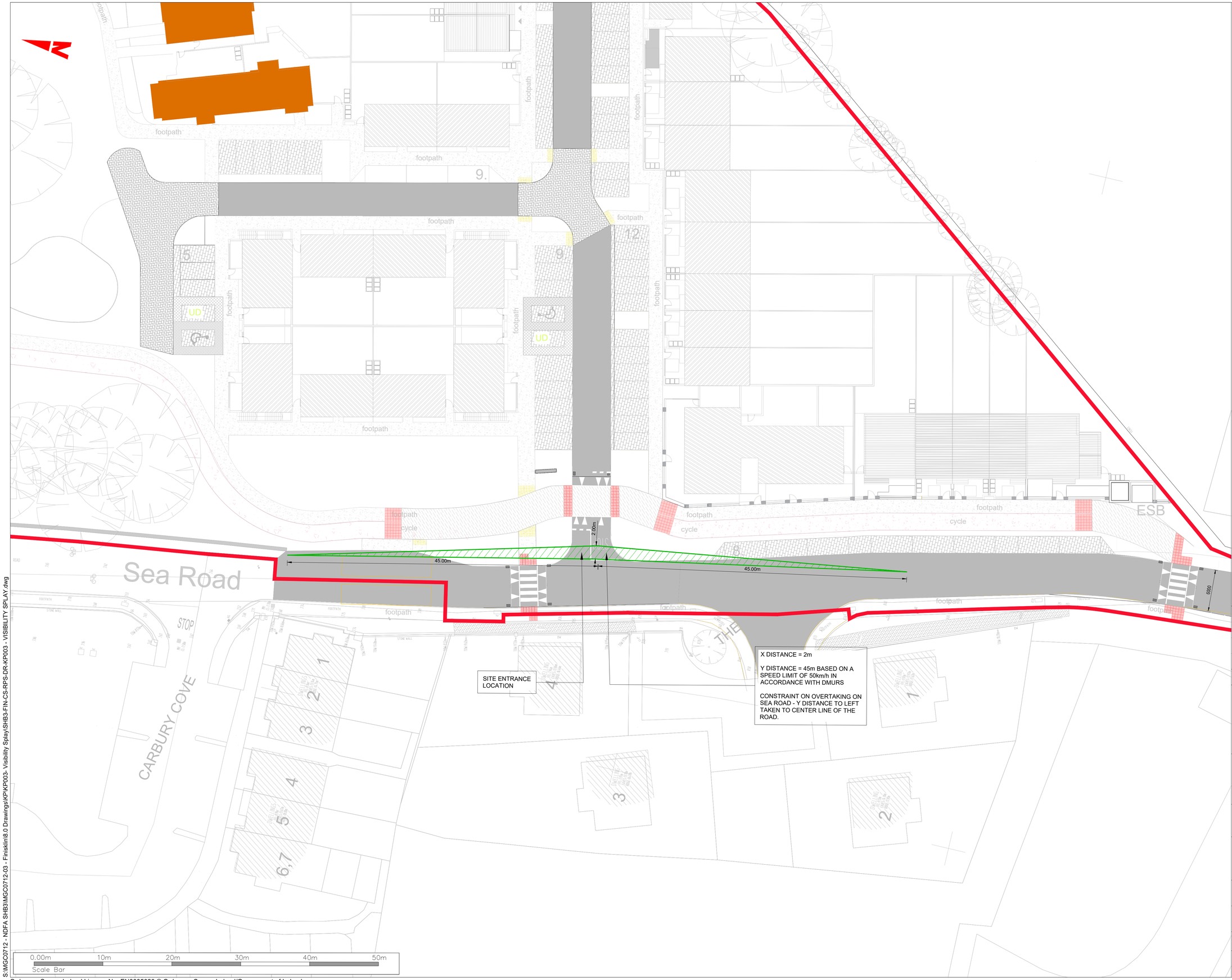

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Project
PPP SOCIAL HOUSING BUNDLE 3
FINISKLIN, CO. SILGO

Title
Visibility Splay

Model File Identifier
SHB3-FIN-CS-RPS-DR-KP003

File Identifier
SHB3-FIN-CS-RPS-DR-KP003-01

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APRIL 2021	01 OF 01	
Scale	Status	Rev
1:250 @ A1 1:500 @ A3	S4	P03

Appendix B

Traffic Modelling Reports

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-Existing AM.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 27/08/2021 09:01:06

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.09	7.45	0.08	A
Stream C-AB	0.03	5.64	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 27/08/2021 09:01:06

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	141.00	100.000
B	ONE HOUR	✓	39.00	100.000
C	ONE HOUR	✓	99.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	37.000	104.000
	B	31.000	0.000	8.000
	C	86.000	13.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.79	0.00	0.21
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	7.45	0.09	A
C-AB	0.03	5.64	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	29.36	29.13	0.00	541.96	0.054	0.06	7.016	A
C-AB	10.86	10.78	0.00	649.33	0.017	0.02	5.637	A
C-A	63.68	63.68	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	78.30	78.30	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	35.06	35.01	0.00	535.24	0.066	0.07	7.196	A
C-AB	13.24	13.22	0.00	652.91	0.020	0.02	5.627	A
C-A	75.76	75.76	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	93.49	93.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	42.94	42.87	0.00	525.96	0.082	0.09	7.452	A
C-AB	16.68	16.65	0.00	657.94	0.025	0.03	5.613	A
C-A	92.32	92.32	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	114.51	114.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	42.94	42.94	0.00	525.95	0.082	0.09	7.452	A
C-AB	16.69	16.69	0.00	657.94	0.025	0.03	5.613	A
C-A	92.31	92.31	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	114.51	114.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	35.06	35.13	0.00	535.22	0.066	0.07	7.201	A
C-AB	13.24	13.27	0.00	652.91	0.020	0.02	5.628	A
C-A	75.75	75.75	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	93.49	93.49	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	29.36	29.41	0.00	541.93	0.054	0.06	7.024	A
C-AB	10.87	10.89	0.00	649.34	0.017	0.02	5.640	A
C-A	63.67	63.67	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	78.30	78.30	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-Opening Year 2025 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:08:13

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.11	7.67	0.10	A
Stream C-AB	0.04	5.64	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:08:13

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.17	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	150.00	100.000
B	ONE HOUR	✓	49.00	100.000
C	ONE HOUR	✓	104.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	41.000	109.000
	B	39.000	0.000	10.000
	C	90.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.27	0.73
	B	0.80	0.00	0.20
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.67	0.11	A
C-AB	0.03	5.64	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.89	36.60	0.00	539.93	0.068	0.07	7.150	A
C-AB	11.75	11.66	0.00	649.76	0.018	0.02	5.641	A
C-A	66.55	66.55	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.05	43.98	0.00	532.83	0.083	0.09	7.364	A
C-AB	14.34	14.32	0.00	653.44	0.022	0.03	5.632	A
C-A	79.15	79.15	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	53.95	53.85	0.00	523.04	0.103	0.11	7.670	A
C-AB	18.10	18.07	0.00	658.62	0.027	0.03	5.619	A
C-A	96.41	96.41	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	53.95	53.95	0.00	523.03	0.103	0.11	7.673	A
C-AB	18.10	18.10	0.00	658.63	0.027	0.04	5.620	A
C-A	96.40	96.40	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.05	44.14	0.00	532.82	0.083	0.09	7.370	A
C-AB	14.35	14.38	0.00	653.45	0.022	0.03	5.633	A
C-A	79.14	79.14	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.89	36.96	0.00	539.89	0.068	0.07	7.158	A
C-AB	11.76	11.78	0.00	649.77	0.018	0.02	5.644	A
C-A	66.54	66.54	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-2030 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:11:32

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.12	7.76	0.11	A
Stream C-AB	0.04	5.64	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:11:32

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	158.00	100.000
B	ONE HOUR	✓	52.00	100.000
C	ONE HOUR	✓	110.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	43.000	115.000
	B	41.000	0.000	11.000
	C	95.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.27	0.73
	B	0.79	0.00	0.21
	C	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	7.76	0.12	A
C-AB	0.03	5.64	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	38.84	0.00	538.83	0.073	0.08	7.195	A
C-AB	12.67	12.57	0.00	650.86	0.019	0.02	5.640	A
C-A	70.15	70.15	0.00	-	-	-	-	-
A-B	32.37	32.37	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.68	0.00	531.35	0.088	0.10	7.427	A
C-AB	15.48	15.46	0.00	654.78	0.024	0.03	5.630	A
C-A	83.41	83.41	0.00	-	-	-	-	-
A-B	38.66	38.66	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.15	0.00	521.02	0.110	0.12	7.759	A
C-AB	19.57	19.53	0.00	660.30	0.030	0.04	5.618	A
C-A	101.54	101.54	0.00	-	-	-	-	-
A-B	47.34	47.34	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.25	0.00	521.01	0.110	0.12	7.762	A
C-AB	19.57	19.57	0.00	660.30	0.030	0.04	5.618	A
C-A	101.54	101.54	0.00	-	-	-	-	-
A-B	47.34	47.34	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.85	0.00	531.33	0.088	0.10	7.434	A
C-AB	15.49	15.52	0.00	654.79	0.024	0.03	5.633	A
C-A	83.40	83.40	0.00	-	-	-	-	-
A-B	38.66	38.66	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	39.22	0.00	538.80	0.073	0.08	7.209	A
C-AB	12.68	12.70	0.00	650.87	0.019	0.02	5.641	A
C-A	70.14	70.14	0.00	-	-	-	-	-
A-B	32.37	32.37	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-2040 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:20:04

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.13	7.82	0.11	A
Stream C-AB	0.04	5.64	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:20:04

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	161.00	100.000
B	ONE HOUR	✓	53.00	100.000
C	ONE HOUR	✓	114.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	42.000	119.000
	B	42.000	0.000	11.000
	C	98.000	16.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.79	0.00	0.21
	C	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	7.82	0.13	A
C-AB	0.03	5.64	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.58	0.00	537.09	0.074	0.08	7.231	A
C-AB	13.56	13.46	0.00	651.84	0.021	0.03	5.639	A
C-A	72.27	72.27	0.00	-	-	-	-	-
A-B	31.62	31.62	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.57	0.00	529.36	0.090	0.10	7.472	A
C-AB	16.59	16.56	0.00	655.95	0.025	0.03	5.629	A
C-A	85.90	85.90	0.00	-	-	-	-	-
A-B	37.76	37.76	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.24	0.00	518.69	0.113	0.13	7.817	A
C-AB	20.98	20.94	0.00	661.75	0.032	0.04	5.617	A
C-A	104.53	104.53	0.00	-	-	-	-	-
A-B	46.24	46.24	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.35	0.00	518.68	0.113	0.13	7.820	A
C-AB	20.99	20.99	0.00	661.76	0.032	0.04	5.620	A
C-A	104.53	104.53	0.00	-	-	-	-	-
A-B	46.24	46.24	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.75	0.00	529.34	0.090	0.10	7.475	A
C-AB	16.59	16.63	0.00	655.96	0.025	0.03	5.631	A
C-A	85.89	85.89	0.00	-	-	-	-	-
A-B	37.76	37.76	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.98	0.00	537.06	0.074	0.08	7.245	A
C-AB	13.57	13.60	0.00	651.85	0.021	0.03	5.642	A
C-A	72.25	72.25	0.00	-	-	-	-	-
A-B	31.62	31.62	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-2030 AM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 14:16:39

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.10	7.59	0.09	A
Stream C-AB	0.04	5.63	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 14:16:39

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.06	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	156.00	100.000
B	ONE HOUR	✓	43.00	100.000
C	ONE HOUR	✓	109.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	41.000	115.000
	B	34.000	0.000	9.000
	C	95.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.79	0.00	0.21
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	7.59	0.10	A
C-AB	0.03	5.63	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.37	32.12	0.00	538.93	0.060	0.06	7.100	A
C-AB	11.82	11.73	0.00	651.21	0.018	0.02	5.629	A
C-A	70.24	70.24	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	38.66	38.60	0.00	531.52	0.073	0.08	7.303	A
C-AB	14.45	14.43	0.00	655.19	0.022	0.03	5.617	A
C-A	83.54	83.54	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.34	47.26	0.00	521.29	0.091	0.10	7.594	A
C-AB	18.26	18.23	0.00	660.79	0.028	0.04	5.602	A
C-A	101.75	101.75	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.34	47.34	0.00	521.28	0.091	0.10	7.594	A
C-AB	18.27	18.27	0.00	660.80	0.028	0.04	5.604	A
C-A	101.75	101.75	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	38.66	38.74	0.00	531.51	0.073	0.08	7.308	A
C-AB	14.45	14.49	0.00	655.20	0.022	0.03	5.620	A
C-A	83.53	83.53	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.37	32.43	0.00	538.90	0.060	0.06	7.110	A
C-AB	11.83	11.85	0.00	651.22	0.018	0.02	5.630	A
C-A	70.23	70.23	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-Opening Year 2025 AM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 14:05:58

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.09	7.52	0.08	A
Stream C-AB	0.04	5.64	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 14:05:58

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.98	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	148.00	100.000
B	ONE HOUR	✓	40.00	100.000
C	ONE HOUR	✓	104.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	39.000	109.000
	B	32.000	0.000	8.000
	C	90.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.80	0.00	0.20
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	7.52	0.09	A
C-AB	0.03	5.64	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.11	29.88	0.00	539.56	0.056	0.06	7.060	A
C-AB	11.75	11.66	0.00	650.10	0.018	0.02	5.638	A
C-A	66.55	66.55	0.00	-	-	-	-	-
A-B	29.36	29.36	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	35.96	35.91	0.00	532.49	0.068	0.07	7.249	A
C-AB	14.34	14.32	0.00	653.85	0.022	0.03	5.628	A
C-A	79.15	79.15	0.00	-	-	-	-	-
A-B	35.06	35.06	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.04	43.96	0.00	522.73	0.084	0.09	7.519	A
C-AB	18.10	18.06	0.00	659.12	0.027	0.03	5.615	A
C-A	96.41	96.41	0.00	-	-	-	-	-
A-B	42.94	42.94	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.04	44.04	0.00	522.72	0.084	0.09	7.519	A
C-AB	18.10	18.10	0.00	659.13	0.027	0.04	5.618	A
C-A	96.40	96.40	0.00	-	-	-	-	-
A-B	42.94	42.94	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	35.96	36.03	0.00	532.47	0.068	0.07	7.251	A
C-AB	14.35	14.38	0.00	653.86	0.022	0.03	5.631	A
C-A	79.15	79.15	0.00	-	-	-	-	-
A-B	35.06	35.06	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.11	30.17	0.00	539.53	0.056	0.06	7.070	A
C-AB	11.76	11.78	0.00	650.11	0.018	0.02	5.641	A
C-A	66.54	66.54	0.00	-	-	-	-	-
A-B	29.36	29.36	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-Existing PM.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 27/08/2021 09:33:30

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.10	7.01	0.09	A
Stream C-AB	0.03	5.78	0.02	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 27/08/2021 09:33:30

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	141.00	100.000
B	ONE HOUR	✓	46.00	100.000
C	ONE HOUR	✓	70.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	37.000	104.000
	B	25.000	0.000	21.000
	C	58.000	12.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.54	0.00	0.46
	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	7.01	0.10	A
C-AB	0.02	5.78	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.38	0.00	578.02	0.060	0.06	6.619	A
C-AB	9.69	9.63	0.00	635.39	0.015	0.02	5.752	A
C-A	43.00	43.00	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	78.30	78.30	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.30	0.00	572.24	0.072	0.08	6.780	A
C-AB	11.75	11.73	0.00	636.21	0.018	0.02	5.764	A
C-A	51.18	51.18	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	93.49	93.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.56	0.00	564.26	0.090	0.10	7.008	A
C-AB	14.67	14.65	0.00	637.41	0.023	0.03	5.780	A
C-A	62.40	62.40	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	114.51	114.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	0.00	564.26	0.090	0.10	7.008	A
C-AB	14.67	14.67	0.00	637.41	0.023	0.03	5.780	A
C-A	62.40	62.40	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	114.51	114.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.43	0.00	572.23	0.072	0.08	6.782	A
C-AB	11.75	11.77	0.00	636.21	0.018	0.02	5.767	A
C-A	51.18	51.18	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	93.49	93.49	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.69	0.00	578.00	0.060	0.06	6.628	A
C-AB	9.70	9.72	0.00	635.39	0.015	0.02	5.753	A
C-A	43.00	43.00	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	78.30	78.30	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Far Finisklin Road-Sea Road Junction-Opening Year 2025 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:30:09

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.12	7.17	0.11	A
Stream C-AB	0.04	5.83	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:30:09

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	154.00	100.000
B	ONE HOUR	✓	54.00	100.000
C	ONE HOUR	✓	76.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	45.000	109.000
	B	29.000	0.000	25.000
	C	61.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.29	0.71
	B	0.54	0.00	0.46
	C	0.80	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	7.17	0.12	A
C-AB	0.03	5.83	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.35	0.00	576.57	0.071	0.08	6.711	A
C-AB	12.17	12.07	0.00	634.60	0.019	0.02	5.783	A
C-A	45.05	45.05	0.00	-	-	-	-	-
A-B	33.88	33.88	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.48	0.00	570.34	0.085	0.09	6.898	A
C-AB	14.75	14.73	0.00	635.29	0.023	0.03	5.800	A
C-A	53.57	53.57	0.00	-	-	-	-	-
A-B	40.45	40.45	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.35	0.00	561.73	0.106	0.12	7.163	A
C-AB	18.45	18.42	0.00	636.31	0.029	0.04	5.825	A
C-A	65.23	65.23	0.00	-	-	-	-	-
A-B	49.55	49.55	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.45	0.00	561.72	0.106	0.12	7.166	A
C-AB	18.45	18.45	0.00	636.32	0.029	0.04	5.826	A
C-A	65.23	65.23	0.00	-	-	-	-	-
A-B	49.55	49.55	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.64	0.00	570.33	0.085	0.09	6.903	A
C-AB	14.76	14.79	0.00	635.29	0.023	0.03	5.801	A
C-A	53.57	53.57	0.00	-	-	-	-	-
A-B	40.45	40.45	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.72	0.00	576.54	0.071	0.08	6.718	A
C-AB	12.17	12.20	0.00	634.61	0.019	0.02	5.786	A
C-A	45.04	45.04	0.00	-	-	-	-	-
A-B	33.88	33.88	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

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Filename: Far Finisklin Road-Sea Road Junction-2030 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:37:45

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.13	7.26	0.11	A
Stream C-AB	0.04	5.83	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:37:45

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	162.00	100.000
B	ONE HOUR	✓	57.00	100.000
C	ONE HOUR	✓	79.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	47.000	115.000
	B	31.000	0.000	26.000
	C	64.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.29	0.71
	B	0.54	0.00	0.46
	C	0.81	0.19	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	7.26	0.13	A
C-AB	0.03	5.83	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	42.91	42.59	0.00	574.06	0.075	0.08	6.768	A
C-AB	12.21	12.12	0.00	634.69	0.019	0.02	5.782	A
C-A	47.26	47.26	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.24	51.17	0.00	567.52	0.090	0.10	6.972	A
C-AB	14.82	14.80	0.00	635.41	0.023	0.03	5.800	A
C-A	56.20	56.20	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.76	62.65	0.00	558.47	0.112	0.13	7.258	A
C-AB	18.55	18.52	0.00	636.50	0.029	0.04	5.825	A
C-A	68.43	68.43	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.76	62.76	0.00	558.46	0.112	0.13	7.261	A
C-AB	18.56	18.56	0.00	636.50	0.029	0.04	5.827	A
C-A	68.42	68.42	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.24	51.35	0.00	567.50	0.090	0.10	6.977	A
C-AB	14.82	14.86	0.00	635.42	0.023	0.03	5.803	A
C-A	56.20	56.20	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	42.91	42.99	0.00	574.04	0.075	0.08	6.779	A
C-AB	12.22	12.24	0.00	634.70	0.019	0.02	5.783	A
C-A	47.26	47.26	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Far Finisklin Road-Sea Road Junction-2040 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:39:05

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.13	7.32	0.12	A
Stream C-AB	0.04	5.84	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:39:05

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.98	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	168.00	100.000
B	ONE HOUR	✓	59.00	100.000
C	ONE HOUR	✓	82.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	49.000	119.000
	B	32.000	0.000	27.000
	C	66.000	16.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.29	0.71
	B	0.54	0.00	0.46
	C	0.80	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	7.32	0.13	A
C-AB	0.03	5.84	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.42	44.08	0.00	573.01	0.078	0.08	6.801	A
C-AB	13.06	12.96	0.00	634.64	0.021	0.02	5.791	A
C-A	48.68	48.68	0.00	-	-	-	-	-
A-B	36.89	36.89	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	53.04	52.96	0.00	566.21	0.094	0.10	7.014	A
C-AB	15.86	15.83	0.00	635.36	0.025	0.03	5.810	A
C-A	57.86	57.86	0.00	-	-	-	-	-
A-B	44.05	44.05	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	64.96	64.85	0.00	556.82	0.117	0.13	7.315	A
C-AB	19.87	19.83	0.00	636.45	0.031	0.04	5.837	A
C-A	70.42	70.42	0.00	-	-	-	-	-
A-B	53.95	53.95	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	64.96	64.96	0.00	556.82	0.117	0.13	7.318	A
C-AB	19.87	19.87	0.00	636.46	0.031	0.04	5.838	A
C-A	70.41	70.41	0.00	-	-	-	-	-
A-B	53.95	53.95	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	53.04	53.15	0.00	566.20	0.094	0.10	7.017	A
C-AB	15.86	15.90	0.00	635.37	0.025	0.03	5.813	A
C-A	57.86	57.86	0.00	-	-	-	-	-
A-B	44.05	44.05	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	44.42	44.50	0.00	572.98	0.078	0.08	6.814	A
C-AB	13.07	13.09	0.00	634.65	0.021	0.03	5.794	A
C-A	48.67	48.67	0.00	-	-	-	-	-
A-B	36.89	36.89	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Far Finisklin Road-Sea Road Junction-Opening Year 2025 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 14:49:15

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.10	7.07	0.09	A
Stream C-AB	0.03	5.79	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 13/09/2021 14:49:15

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	148.00	100.000
B	ONE HOUR	✓	48.00	100.000
C	ONE HOUR	✓	74.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	39.000	109.000
	B	26.000	0.000	22.000
	C	61.000	13.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.54	0.00	0.46
	C	0.82	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	7.07	0.10	A
C-AB	0.03	5.79	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.14	35.87	0.00	576.74	0.063	0.07	6.653	A
C-AB	10.54	10.47	0.00	635.65	0.017	0.02	5.758	A
C-A	45.17	45.17	0.00	-	-	-	-	-
A-B	29.36	29.36	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	43.15	43.09	0.00	570.66	0.076	0.08	6.823	A
C-AB	12.78	12.76	0.00	636.54	0.020	0.02	5.770	A
C-A	53.74	53.74	0.00	-	-	-	-	-
A-B	35.06	35.06	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	52.85	52.76	0.00	562.26	0.094	0.10	7.066	A
C-AB	15.98	15.96	0.00	637.84	0.025	0.03	5.788	A
C-A	65.49	65.49	0.00	-	-	-	-	-
A-B	42.94	42.94	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	52.85	52.85	0.00	562.26	0.094	0.10	7.066	A
C-AB	15.99	15.99	0.00	637.84	0.025	0.03	5.788	A
C-A	65.49	65.49	0.00	-	-	-	-	-
A-B	42.94	42.94	0.00	-	-	-	-	-
A-C	120.01	120.01	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	43.15	43.23	0.00	570.65	0.076	0.08	6.828	A
C-AB	12.79	12.81	0.00	636.54	0.020	0.02	5.771	A
C-A	53.74	53.74	0.00	-	-	-	-	-
A-B	35.06	35.06	0.00	-	-	-	-	-
A-C	97.99	97.99	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.14	36.20	0.00	576.72	0.063	0.07	6.660	A
C-AB	10.55	10.57	0.00	635.66	0.017	0.02	5.761	A
C-A	45.16	45.16	0.00	-	-	-	-	-
A-B	29.36	29.36	0.00	-	-	-	-	-
A-C	82.06	82.06	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Far Finisklin Road-Sea Road Junction-2030 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 14:52:31

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.11	7.16	0.10	A
Stream C-AB	0.03	5.79	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 13/09/2021 14:52:31

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	156.00	100.000
B	ONE HOUR	✓	51.00	100.000
C	ONE HOUR	✓	77.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	41.000	115.000
	B	28.000	0.000	23.000
	C	64.000	13.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.55	0.00	0.45
	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.16	0.11	A
C-AB	0.03	5.79	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	38.40	38.11	0.00	574.16	0.067	0.07	6.713	A
C-AB	10.58	10.50	0.00	635.75	0.017	0.02	5.757	A
C-A	47.39	47.39	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	45.85	45.78	0.00	567.77	0.081	0.09	6.896	A
C-AB	12.84	12.82	0.00	636.66	0.020	0.02	5.770	A
C-A	56.38	56.38	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	56.15	56.06	0.00	558.94	0.100	0.11	7.159	A
C-AB	16.07	16.05	0.00	638.01	0.025	0.03	5.787	A
C-A	68.70	68.70	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	56.15	56.15	0.00	558.93	0.100	0.11	7.159	A
C-AB	16.08	16.08	0.00	638.02	0.025	0.03	5.790	A
C-A	68.70	68.70	0.00	-	-	-	-	-
A-B	45.14	45.14	0.00	-	-	-	-	-
A-C	126.62	126.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	45.85	45.94	0.00	567.76	0.081	0.09	6.899	A
C-AB	12.84	12.87	0.00	636.67	0.020	0.02	5.771	A
C-A	56.38	56.38	0.00	-	-	-	-	-
A-B	36.86	36.86	0.00	-	-	-	-	-
A-C	103.38	103.38	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	38.40	38.46	0.00	574.14	0.067	0.07	6.723	A
C-AB	10.59	10.61	0.00	635.75	0.017	0.02	5.760	A
C-A	47.38	47.38	0.00	-	-	-	-	-
A-B	30.87	30.87	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Far Finisklin Road-Sea Road Junction-2040 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 14:53:59

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Stream B-AC	0.12	7.21	0.10	A
Stream C-AB	0.03	5.80	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - Scenario 1, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 13/09/2021 14:53:59

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, PM	Scenario 1	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.89	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Far Finisklin Road		Major
B	B	Sea Road		Minor
C	C	Gibralter Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	100.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	3.50										75	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	553.151	0.099	0.249	0.157	0.356
1	B-C	688.222	0.103	0.261	-	-
1	C-B	631.874	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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	161.00	100.000
B	ONE HOUR	✓	53.00	100.000
C	ONE HOUR	✓	80.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	42.000	119.000
	B	29.000	0.000	24.000
	C	66.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.55	0.00	0.45
	C	0.83	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.21	0.12	A
C-AB	0.03	5.80	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.60	0.00	573.23	0.070	0.07	6.743	A
C-AB	11.42	11.34	0.00	635.87	0.018	0.02	5.764	A
C-A	48.80	48.80	0.00	-	-	-	-	-
A-B	31.62	31.62	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.58	0.00	566.61	0.084	0.09	6.936	A
C-AB	13.87	13.85	0.00	636.82	0.022	0.03	5.778	A
C-A	58.05	58.05	0.00	-	-	-	-	-
A-B	37.76	37.76	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.25	0.00	557.45	0.105	0.12	7.209	A
C-AB	17.38	17.34	0.00	638.22	0.027	0.03	5.797	A
C-A	70.71	70.71	0.00	-	-	-	-	-
A-B	46.24	46.24	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.35	0.00	557.44	0.105	0.12	7.212	A
C-AB	17.38	17.38	0.00	638.23	0.027	0.03	5.798	A
C-A	70.70	70.70	0.00	-	-	-	-	-
A-B	46.24	46.24	0.00	-	-	-	-	-
A-C	131.02	131.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.74	0.00	566.59	0.084	0.09	6.938	A
C-AB	13.88	13.91	0.00	636.83	0.022	0.03	5.781	A
C-A	58.04	58.04	0.00	-	-	-	-	-
A-B	37.76	37.76	0.00	-	-	-	-	-
A-C	106.98	106.98	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.97	0.00	573.21	0.070	0.08	6.751	A
C-AB	11.43	11.45	0.00	635.87	0.018	0.02	5.767	A
C-A	48.80	48.80	0.00	-	-	-	-	-
A-B	31.62	31.62	0.00	-	-	-	-	-
A-C	89.59	89.59	0.00	-	-	-	-	-

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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Filename: (new file)
Path:
Report generation date: 27/08/2021 09:57:44

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.15	2.92	0.13	A
Arm 2	0.60	3.43	0.38	A
Arm 3	0.02	2.05	0.02	A
Arm 4	0.04	3.21	0.03	A

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

"D1 - Scenario 1, AM " model duration: 08:00 - 09:30

Run using Junctions 8.0.4.487 at 27/08/2021 09:57:43

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	168.00	100.000
2	ONE HOUR	✓	577.00	100.000
3	ONE HOUR	✓	29.00	100.000
4	ONE HOUR	✓	36.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	144.000	15.000	9.000
	2	515.000	0.000	17.000	45.000
	3	24.000	5.000	0.000	0.000
	4	9.000	26.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.86	0.09	0.05
	2	0.89	0.00	0.03	0.08
	3	0.83	0.17	0.00	0.00
	4	0.25	0.72	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.13	2.92	0.15	A
2	0.38	3.43	0.60	A
3	0.02	2.05	0.02	A
4	0.03	3.21	0.04	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	126.48	126.09	24.02	0.00	1424.97	0.089	0.10	2.771	A
2	434.40	433.02	18.76	0.00	1689.87	0.257	0.34	2.862	A
3	21.83	21.79	427.01	0.00	1928.89	0.011	0.01	1.886	A
4	27.10	27.02	408.28	0.00	1270.50	0.021	0.02	2.894	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	151.03	150.94	28.75	0.00	1422.26	0.106	0.12	2.831	A
2	518.71	518.32	22.46	0.00	1687.57	0.307	0.44	3.079	A
3	26.07	26.06	511.14	0.00	1868.08	0.014	0.01	1.954	A
4	32.36	32.34	488.69	0.00	1223.50	0.026	0.03	3.021	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	184.97	184.85	35.21	0.00	1418.58	0.130	0.15	2.917	A
2	635.29	634.65	27.51	0.00	1684.44	0.377	0.60	3.427	A
3	31.93	31.91	625.85	0.00	1785.17	0.018	0.02	2.053	A
4	39.64	39.60	598.37	0.00	1159.40	0.034	0.04	3.214	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	184.97	184.97	35.23	0.00	1418.56	0.130	0.15	2.917	A
2	635.29	635.28	27.53	0.00	1684.42	0.377	0.60	3.430	A
3	31.93	31.93	626.47	0.00	1784.72	0.018	0.02	2.053	A
4	39.64	39.64	598.95	0.00	1159.06	0.034	0.04	3.215	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	151.03	151.15	28.79	0.00	1422.24	0.106	0.12	2.834	A
2	518.71	519.34	22.49	0.00	1687.55	0.307	0.45	3.085	A
3	26.07	26.09	512.14	0.00	1867.36	0.014	0.01	1.956	A
4	32.36	32.40	489.62	0.00	1222.95	0.026	0.03	3.025	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	126.48	126.57	24.11	0.00	1424.91	0.089	0.10	2.772	A
2	434.40	434.79	18.83	0.00	1689.82	0.257	0.35	2.870	A
3	21.83	21.84	428.76	0.00	1927.62	0.011	0.01	1.888	A
4	27.10	27.12	409.91	0.00	1269.54	0.021	0.02	2.897	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-Opening Year 2025 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:46:33

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.16	2.95	0.14	A
Arm 2	0.66	3.55	0.40	A
Arm 3	0.02	2.08	0.02	A
Arm 4	0.05	3.29	0.04	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:46:33

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.36	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	177.00	100.000
2	ONE HOUR	✓	607.00	100.000
3	ONE HOUR	✓	30.00	100.000
4	ONE HOUR	✓	45.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	151.000	16.000	10.000
	2	539.000	0.000	18.000	50.000
	3	25.000	5.000	0.000	0.000
	4	11.000	33.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.85	0.09	0.06
	2	0.89	0.00	0.03	0.08
	3	0.83	0.17	0.00	0.00
	4	0.24	0.73	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.14	2.95	0.16	A
2	0.40	3.55	0.66	A
3	0.02	2.08	0.02	A
4	0.04	3.29	0.05	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.25	132.84	29.27	0.00	1421.97	0.094	0.10	2.792	A
2	456.98	455.50	20.26	0.00	1688.93	0.271	0.37	2.914	A
3	22.59	22.54	449.50	0.00	1912.63	0.012	0.01	1.903	A
4	33.88	33.77	427.01	0.00	1259.54	0.027	0.03	2.936	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.12	159.03	35.04	0.00	1418.67	0.112	0.13	2.857	A
2	545.68	545.25	24.26	0.00	1686.45	0.324	0.48	3.155	A
3	26.97	26.96	538.07	0.00	1848.62	0.015	0.01	1.975	A
4	40.45	40.43	511.13	0.00	1210.39	0.033	0.03	3.076	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.88	194.75	42.90	0.00	1414.18	0.138	0.16	2.951	A
2	668.32	667.61	29.71	0.00	1683.07	0.397	0.65	3.544	A
3	33.03	33.01	658.81	0.00	1761.34	0.019	0.02	2.082	A
4	49.55	49.50	625.83	0.00	1143.35	0.043	0.05	3.290	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.88	194.88	42.94	0.00	1414.16	0.138	0.16	2.951	A
2	668.32	668.31	29.73	0.00	1683.06	0.397	0.66	3.546	A
3	33.03	33.03	659.50	0.00	1760.84	0.019	0.02	2.083	A
4	49.55	49.55	626.47	0.00	1142.97	0.043	0.05	3.291	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.12	159.25	35.09	0.00	1418.64	0.112	0.13	2.860	A
2	545.68	546.38	24.29	0.00	1686.43	0.324	0.48	3.161	A
3	26.97	26.99	539.18	0.00	1847.81	0.015	0.01	1.976	A
4	40.45	40.50	512.16	0.00	1209.78	0.033	0.03	3.078	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.25	133.35	29.38	0.00	1421.90	0.094	0.10	2.795	A
2	456.98	457.41	20.34	0.00	1688.89	0.271	0.37	2.926	A
3	22.59	22.60	451.38	0.00	1911.27	0.012	0.01	1.905	A
4	33.88	33.91	428.77	0.00	1258.52	0.027	0.03	2.939	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-2030 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:50:55

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.17	2.98	0.15	A
Arm 2	0.72	3.69	0.42	A
Arm 3	0.02	2.12	0.02	A
Arm 4	0.05	3.37	0.05	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:50:55

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.47	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	187.00	100.000
2	ONE HOUR	✓	642.00	100.000
3	ONE HOUR	✓	33.00	100.000
4	ONE HOUR	✓	47.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	159.000	17.000	11.000
	2	570.000	0.000	19.000	53.000
	3	27.000	6.000	0.000	0.000
	4	12.000	34.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.85	0.09	0.06
	2	0.89	0.00	0.03	0.08
	3	0.82	0.18	0.00	0.00
	4	0.26	0.72	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.15	2.98	0.17	A
2	0.42	3.69	0.72	A
3	0.02	2.12	0.02	A
4	0.05	3.37	0.05	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	140.78	140.35	30.77	0.00	1421.11	0.099	0.11	2.811	A
2	483.33	481.73	21.76	0.00	1688.00	0.286	0.40	2.980	A
3	24.84	24.79	475.73	0.00	1893.67	0.013	0.01	1.926	A
4	35.38	35.27	452.50	0.00	1244.65	0.028	0.03	2.976	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	168.11	168.01	36.83	0.00	1417.65	0.119	0.13	2.880	A
2	577.14	576.67	26.06	0.00	1685.34	0.342	0.52	3.245	A
3	29.67	29.65	569.49	0.00	1825.91	0.016	0.02	2.003	A
4	42.25	42.22	541.65	0.00	1192.55	0.035	0.04	3.128	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	205.89	205.75	45.10	0.00	1412.92	0.146	0.17	2.981	A
2	706.86	706.05	31.91	0.00	1681.70	0.420	0.72	3.686	A
3	36.33	36.31	697.25	0.00	1733.56	0.021	0.02	2.120	A
4	51.75	51.70	663.18	0.00	1121.52	0.046	0.05	3.364	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	205.89	205.89	45.14	0.00	1412.90	0.146	0.17	2.981	A
2	706.86	706.85	31.93	0.00	1681.69	0.420	0.72	3.691	A
3	36.33	36.33	698.04	0.00	1732.99	0.021	0.02	2.121	A
4	51.75	51.75	663.91	0.00	1121.10	0.046	0.05	3.365	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	168.11	168.25	36.90	0.00	1417.61	0.119	0.14	2.881	A
2	577.14	577.94	26.09	0.00	1685.31	0.342	0.52	3.252	A
3	29.67	29.69	570.73	0.00	1825.01	0.016	0.02	2.004	A
4	42.25	42.30	542.81	0.00	1191.87	0.035	0.04	3.133	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	140.78	140.88	30.89	0.00	1421.04	0.099	0.11	2.811	A
2	483.33	483.81	21.85	0.00	1687.95	0.286	0.40	2.990	A
3	24.84	24.86	477.78	0.00	1892.19	0.013	0.01	1.927	A
4	35.38	35.41	454.41	0.00	1243.53	0.028	0.03	2.981	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-2040 AM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:52:31

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.18	3.00	0.15	A
Arm 2	0.76	3.77	0.43	A
Arm 3	0.02	2.14	0.02	A
Arm 4	0.05	3.41	0.05	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:52:31

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	192.00	100.000
2	ONE HOUR	✓	661.00	100.000
3	ONE HOUR	✓	33.00	100.000
4	ONE HOUR	✓	48.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	164.000	17.000	11.000
	2	588.000	0.000	19.000	54.000
	3	27.000	6.000	0.000	0.000
	4	12.000	35.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.85	0.09	0.06
	2	0.89	0.00	0.03	0.08
	3	0.82	0.18	0.00	0.00
	4	0.25	0.73	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.15	3.00	0.18	A
2	0.43	3.77	0.76	A
3	0.02	2.14	0.02	A
4	0.05	3.41	0.05	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	144.55	144.10	31.52	0.00	1420.68	0.102	0.11	2.820	A
2	497.64	495.97	21.76	0.00	1688.00	0.295	0.42	3.016	A
3	24.84	24.79	489.97	0.00	1883.38	0.013	0.01	1.936	A
4	36.14	36.02	465.99	0.00	1236.77	0.029	0.03	2.997	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	172.60	172.50	37.73	0.00	1417.13	0.122	0.14	2.892	A
2	594.23	593.72	26.05	0.00	1685.34	0.353	0.54	3.296	A
3	29.67	29.65	586.54	0.00	1813.58	0.016	0.02	2.017	A
4	43.15	43.12	557.81	0.00	1183.11	0.036	0.04	3.157	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	211.40	211.25	46.20	0.00	1412.30	0.150	0.18	2.997	A
2	727.77	726.91	31.91	0.00	1681.70	0.433	0.76	3.767	A
3	36.33	36.31	718.12	0.00	1718.48	0.021	0.02	2.139	A
4	52.85	52.80	682.95	0.00	1109.97	0.048	0.05	3.404	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	211.40	211.39	46.24	0.00	1412.27	0.150	0.18	2.997	A
2	727.77	727.76	31.93	0.00	1681.69	0.433	0.76	3.772	A
3	36.33	36.33	718.96	0.00	1717.87	0.021	0.02	2.140	A
4	52.85	52.85	683.72	0.00	1109.52	0.048	0.05	3.406	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	172.60	172.75	37.80	0.00	1417.10	0.122	0.14	2.895	A
2	594.23	595.08	26.09	0.00	1685.31	0.353	0.55	3.306	A
3	29.67	29.69	587.87	0.00	1812.62	0.016	0.02	2.018	A
4	43.15	43.20	559.04	0.00	1182.38	0.036	0.04	3.159	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	144.55	144.65	31.65	0.00	1420.61	0.102	0.11	2.821	A
2	497.64	498.15	21.85	0.00	1687.95	0.295	0.42	3.026	A
3	24.84	24.86	492.11	0.00	1881.83	0.013	0.01	1.939	A
4	36.14	36.17	467.99	0.00	1235.60	0.029	0.03	3.000	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Sea Road-Technology Drive Junction-Opening Year 2025 AM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:15:46

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.16	2.94	0.14	A
Arm 2	0.65	3.53	0.40	A
Arm 3	0.02	2.08	0.02	A
Arm 4	0.04	3.26	0.04	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:15:45

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	177.00	100.000
2	ONE HOUR	✓	604.00	100.000
3	ONE HOUR	✓	30.00	100.000
4	ONE HOUR	✓	37.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	151.000	16.000	10.000
	2	539.000	0.000	18.000	47.000
	3	25.000	5.000	0.000	0.000
	4	9.000	27.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.85	0.09	0.06
	2	0.89	0.00	0.03	0.08
	3	0.83	0.17	0.00	0.00
	4	0.24	0.73	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.14	2.94	0.16	A
2	0.40	3.53	0.65	A
3	0.02	2.08	0.02	A
4	0.04	3.26	0.04	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.25	132.84	24.77	0.00	1424.54	0.094	0.10	2.787	A
2	454.72	453.26	20.26	0.00	1688.93	0.269	0.37	2.909	A
3	22.59	22.54	447.25	0.00	1914.26	0.012	0.01	1.902	A
4	27.86	27.77	427.02	0.00	1259.54	0.022	0.02	2.922	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.12	159.03	29.65	0.00	1421.75	0.112	0.13	2.850	A
2	542.98	542.56	24.26	0.00	1686.45	0.322	0.47	3.147	A
3	26.97	26.96	535.38	0.00	1850.56	0.015	0.01	1.973	A
4	33.26	33.24	511.13	0.00	1210.38	0.027	0.03	3.057	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.88	194.75	36.30	0.00	1417.95	0.137	0.16	2.942	A
2	665.02	664.31	29.71	0.00	1683.07	0.395	0.65	3.532	A
3	33.03	33.01	655.52	0.00	1763.73	0.019	0.02	2.079	A
4	40.74	40.70	625.83	0.00	1143.35	0.036	0.04	3.264	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.88	194.88	36.33	0.00	1417.93	0.137	0.16	2.942	A
2	665.02	665.01	29.73	0.00	1683.06	0.395	0.65	3.535	A
3	33.03	33.03	656.20	0.00	1763.23	0.019	0.02	2.080	A
4	40.74	40.74	626.47	0.00	1142.97	0.036	0.04	3.265	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.12	159.25	29.69	0.00	1421.72	0.112	0.13	2.853	A
2	542.98	543.68	24.29	0.00	1686.43	0.322	0.48	3.153	A
3	26.97	26.99	536.47	0.00	1849.77	0.015	0.01	1.976	A
4	33.26	33.30	512.16	0.00	1209.78	0.027	0.03	3.061	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.25	133.35	24.86	0.00	1424.48	0.094	0.10	2.790	A
2	454.72	455.15	20.34	0.00	1688.89	0.269	0.37	2.918	A
3	22.59	22.60	449.12	0.00	1912.91	0.012	0.01	1.903	A
4	27.86	27.88	428.77	0.00	1258.52	0.022	0.02	2.927	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Sea Road-Technology Drive Junction-2040 AM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:32:20

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.17	2.99	0.15	A
Arm 2	0.75	3.76	0.43	A
Arm 3	0.02	2.14	0.02	A
Arm 4	0.04	3.38	0.04	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:32:20

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	191.00	100.000
2	ONE HOUR	✓	658.00	100.000
3	ONE HOUR	✓	33.00	100.000
4	ONE HOUR	✓	41.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	164.000	17.000	10.000
	2	588.000	0.000	19.000	51.000
	3	27.000	6.000	0.000	0.000
	4	10.000	30.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.86	0.09	0.05
	2	0.89	0.00	0.03	0.08
	3	0.82	0.18	0.00	0.00
	4	0.24	0.73	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.15	2.99	0.17	A
2	0.43	3.76	0.75	A
3	0.02	2.14	0.02	A
4	0.04	3.38	0.04	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	143.79	143.35	27.77	0.00	1422.82	0.101	0.11	2.814	A
2	495.38	493.72	21.01	0.00	1688.47	0.293	0.41	3.009	A
3	24.84	24.79	486.97	0.00	1885.55	0.013	0.01	1.934	A
4	30.87	30.76	465.99	0.00	1236.77	0.025	0.03	2.984	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	171.71	171.60	33.24	0.00	1419.70	0.121	0.14	2.884	A
2	591.53	591.03	25.16	0.00	1685.90	0.351	0.54	3.286	A
3	29.67	29.65	582.95	0.00	1816.18	0.016	0.02	2.014	A
4	36.86	36.83	557.81	0.00	1183.10	0.031	0.03	3.139	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.29	210.15	40.70	0.00	1415.44	0.149	0.17	2.986	A
2	724.47	723.62	30.81	0.00	1682.39	0.431	0.75	3.751	A
3	36.33	36.31	713.73	0.00	1721.65	0.021	0.02	2.135	A
4	45.14	45.10	682.95	0.00	1109.97	0.041	0.04	3.380	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.29	210.29	40.74	0.00	1415.42	0.149	0.17	2.986	A
2	724.47	724.46	30.83	0.00	1682.37	0.431	0.75	3.757	A
3	36.33	36.33	714.55	0.00	1721.05	0.021	0.02	2.136	A
4	45.14	45.14	683.72	0.00	1109.52	0.041	0.04	3.381	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	171.71	171.85	33.30	0.00	1419.67	0.121	0.14	2.887	A
2	591.53	592.37	25.19	0.00	1685.87	0.351	0.54	3.293	A
3	29.67	29.69	584.26	0.00	1815.23	0.016	0.02	2.015	A
4	36.86	36.90	559.04	0.00	1182.39	0.031	0.03	3.142	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	143.79	143.90	27.88	0.00	1422.76	0.101	0.11	2.814	A
2	495.38	495.88	21.09	0.00	1688.42	0.293	0.42	3.021	A
3	24.84	24.86	489.10	0.00	1884.01	0.013	0.01	1.937	A
4	30.87	30.89	467.99	0.00	1235.60	0.025	0.03	2.990	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Sea Road-Technology Drive Junction-2030 AM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:26:39

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.17	2.97	0.14	A
Arm 2	0.72	3.68	0.42	A
Arm 3	0.02	2.12	0.02	A
Arm 4	0.04	3.34	0.04	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:26:39

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	186.00	100.000
2	ONE HOUR	✓	639.00	100.000
3	ONE HOUR	✓	33.00	100.000
4	ONE HOUR	✓	40.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	159.000	17.000	10.000
	2	570.000	0.000	19.000	50.000
	3	27.000	6.000	0.000	0.000
	4	10.000	29.000	1.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.85	0.09	0.05
	2	0.89	0.00	0.03	0.08
	3	0.82	0.18	0.00	0.00
	4	0.25	0.73	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.14	2.97	0.17	A
2	0.42	3.68	0.72	A
3	0.02	2.12	0.02	A
4	0.04	3.34	0.04	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	140.03	139.60	27.02	0.00	1423.25	0.098	0.11	2.804	A
2	481.07	479.49	21.01	0.00	1688.47	0.285	0.40	2.973	A
3	24.84	24.79	472.73	0.00	1895.84	0.013	0.01	1.923	A
4	30.11	30.02	452.50	0.00	1244.65	0.024	0.02	2.963	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.21	167.11	32.34	0.00	1420.21	0.118	0.13	2.872	A
2	574.45	573.98	25.16	0.00	1685.90	0.341	0.51	3.235	A
3	29.67	29.65	565.90	0.00	1828.50	0.016	0.02	2.001	A
4	35.96	35.93	541.65	0.00	1192.55	0.030	0.03	3.111	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	204.79	204.65	39.60	0.00	1416.07	0.145	0.17	2.971	A
2	703.55	702.75	30.81	0.00	1682.39	0.418	0.71	3.671	A
3	36.33	36.31	692.86	0.00	1736.73	0.021	0.02	2.116	A
4	44.04	44.00	663.18	0.00	1121.52	0.039	0.04	3.340	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	204.79	204.79	39.64	0.00	1416.05	0.145	0.17	2.971	A
2	703.55	703.54	30.83	0.00	1682.37	0.418	0.72	3.676	A
3	36.33	36.33	693.63	0.00	1736.17	0.021	0.02	2.117	A
4	44.04	44.04	663.91	0.00	1121.10	0.039	0.04	3.341	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.21	167.35	32.40	0.00	1420.18	0.118	0.13	2.873	A
2	574.45	575.23	25.19	0.00	1685.87	0.341	0.52	3.242	A
3	29.67	29.69	567.13	0.00	1827.61	0.016	0.02	2.003	A
4	35.96	36.00	542.81	0.00	1191.87	0.030	0.03	3.116	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	140.03	140.13	27.12	0.00	1423.19	0.098	0.11	2.807	A
2	481.07	481.55	21.09	0.00	1688.42	0.285	0.40	2.983	A
3	24.84	24.86	474.77	0.00	1894.37	0.013	0.01	1.925	A
4	30.11	30.14	454.41	0.00	1243.53	0.024	0.02	2.966	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-Existing PM.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 27/08/2021 10:09:03

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.80	4.64	0.45	A
Arm 2	0.26	2.69	0.21	A
Arm 3	0.02	1.86	0.02	A
Arm 4	0.05	2.88	0.05	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 27/08/2021 10:09:02

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	565.00	100.000
2	ONE HOUR	✓	317.00	100.000
3	ONE HOUR	✓	40.00	100.000
4	ONE HOUR	✓	58.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	546.000	8.000	11.000
	2	263.000	0.000	8.000	46.000
	3	16.000	23.000	0.000	1.000
	4	15.000	43.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.97	0.01	0.02
	2	0.83	0.00	0.03	0.15
	3	0.40	0.58	0.00	0.03
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.45	4.64	0.80	A
2	0.21	2.69	0.26	A
3	0.02	1.86	0.02	A
4	0.05	2.88	0.05	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	425.36	423.64	49.56	0.00	1410.38	0.302	0.43	3.642	A
2	238.65	238.00	14.25	0.00	1692.67	0.141	0.16	2.473	A
3	30.11	30.05	240.24	0.00	2063.89	0.015	0.01	1.769	A
4	43.67	43.53	226.76	0.00	1376.58	0.032	0.03	2.700	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	507.92	507.39	59.30	0.00	1404.82	0.362	0.56	4.008	A
2	284.98	284.82	17.06	0.00	1690.92	0.169	0.20	2.560	A
3	35.96	35.95	287.51	0.00	2029.72	0.018	0.02	1.804	A
4	52.14	52.11	271.35	0.00	1350.52	0.039	0.04	2.772	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	622.08	621.15	72.62	0.00	1397.21	0.445	0.80	4.633	A
2	349.02	348.79	20.89	0.00	1688.55	0.207	0.26	2.686	A
3	44.04	44.02	352.08	0.00	1983.05	0.022	0.02	1.855	A
4	63.86	63.82	332.30	0.00	1314.90	0.049	0.05	2.876	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	622.08	622.06	72.67	0.00	1397.18	0.445	0.80	4.644	A
2	349.02	349.02	20.92	0.00	1688.53	0.207	0.26	2.687	A
3	44.04	44.04	352.32	0.00	1982.87	0.022	0.02	1.855	A
4	63.86	63.86	332.51	0.00	1314.78	0.049	0.05	2.877	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	507.92	508.84	59.37	0.00	1404.78	0.362	0.57	4.023	A
2	284.98	285.20	17.11	0.00	1690.89	0.169	0.20	2.560	A
3	35.96	35.98	287.91	0.00	2029.43	0.018	0.02	1.807	A
4	52.14	52.18	271.70	0.00	1350.32	0.039	0.04	2.772	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	425.36	425.91	49.72	0.00	1410.29	0.302	0.43	3.658	A
2	238.65	238.81	14.32	0.00	1692.62	0.141	0.16	2.477	A
3	30.11	30.13	241.07	0.00	2063.28	0.015	0.01	1.769	A
4	43.67	43.70	227.50	0.00	1376.15	0.032	0.03	2.701	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-Opening Year 2025 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 09:59:44

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.88	4.86	0.47	A
Arm 2	0.28	2.73	0.22	A
Arm 3	0.03	1.88	0.03	A
Arm 4	0.06	2.94	0.06	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 09:59:43

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	592.00	100.000
2	ONE HOUR	✓	336.00	100.000
3	ONE HOUR	✓	50.00	100.000
4	ONE HOUR	✓	68.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	571.000	8.000	13.000
	2	275.000	0.000	8.000	53.000
	3	25.000	24.000	0.000	1.000
	4	18.000	50.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.96	0.01	0.02
	2	0.82	0.00	0.02	0.16
	3	0.50	0.48	0.00	0.02
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	4.86	0.88	A
2	0.22	2.73	0.28	A
3	0.03	1.88	0.03	A
4	0.06	2.94	0.06	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.69	443.85	55.56	0.00	1406.95	0.317	0.46	3.732	A
2	252.96	252.26	15.74	0.00	1691.74	0.150	0.18	2.499	A
3	37.64	37.57	256.00	0.00	2052.50	0.018	0.02	1.785	A
4	51.19	51.04	243.28	0.00	1366.93	0.037	0.04	2.735	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	532.20	531.61	66.49	0.00	1400.71	0.380	0.61	4.139	A
2	302.06	301.89	18.86	0.00	1689.81	0.179	0.22	2.593	A
3	44.95	44.93	306.38	0.00	2016.08	0.022	0.02	1.825	A
4	61.13	61.10	291.12	0.00	1338.97	0.046	0.05	2.816	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	651.80	650.75	81.43	0.00	1392.18	0.468	0.87	4.848	A
2	369.94	369.69	23.08	0.00	1687.18	0.219	0.28	2.732	A
3	55.05	55.03	375.18	0.00	1966.35	0.028	0.03	1.882	A
4	74.87	74.82	356.50	0.00	1300.75	0.058	0.06	2.936	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	651.80	651.79	81.48	0.00	1392.16	0.468	0.88	4.862	A
2	369.94	369.94	23.12	0.00	1687.16	0.219	0.28	2.732	A
3	55.05	55.05	375.45	0.00	1966.16	0.028	0.03	1.882	A
4	74.87	74.87	356.73	0.00	1300.62	0.058	0.06	2.936	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	532.20	533.23	66.57	0.00	1400.66	0.380	0.62	4.154	A
2	302.06	302.30	18.92	0.00	1689.77	0.179	0.22	2.594	A
3	44.95	44.97	306.82	0.00	2015.77	0.022	0.02	1.825	A
4	61.13	61.18	291.50	0.00	1338.75	0.046	0.05	2.817	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.69	446.29	55.75	0.00	1406.85	0.317	0.47	3.752	A
2	252.96	253.13	15.83	0.00	1691.69	0.150	0.18	2.502	A
3	37.64	37.66	256.90	0.00	2051.84	0.018	0.02	1.789	A
4	51.19	51.23	244.08	0.00	1366.46	0.037	0.04	2.738	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-2030 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 10:01:34

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.98	5.15	0.50	A
Arm 2	0.30	2.78	0.23	A
Arm 3	0.03	1.90	0.03	A
Arm 4	0.06	2.97	0.06	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 10:01:33

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			4.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	627.00	100.000
2	ONE HOUR	✓	356.00	100.000
3	ONE HOUR	✓	53.00	100.000
4	ONE HOUR	✓	71.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	605.000	9.000	13.000
	2	291.000	0.000	9.000	56.000
	3	27.000	25.000	0.000	1.000
	4	18.000	53.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.96	0.01	0.02
	2	0.82	0.00	0.03	0.16
	3	0.51	0.47	0.00	0.02
	4	0.25	0.75	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.50	5.15	0.98	A
2	0.23	2.78	0.30	A
3	0.03	1.90	0.03	A
4	0.06	2.97	0.06	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	472.04	470.03	58.56	0.00	1405.24	0.336	0.50	3.842	A
2	268.02	267.26	16.49	0.00	1691.28	0.158	0.19	2.526	A
3	39.90	39.82	270.25	0.00	2042.19	0.020	0.02	1.797	A
4	53.45	53.29	257.54	0.00	1358.59	0.039	0.04	2.757	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	563.66	562.99	70.08	0.00	1398.66	0.403	0.67	4.304	A
2	320.04	319.86	19.75	0.00	1689.25	0.189	0.23	2.628	A
3	47.65	47.63	323.44	0.00	2003.75	0.024	0.02	1.839	A
4	63.83	63.79	308.18	0.00	1328.99	0.048	0.05	2.844	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	690.34	689.11	85.83	0.00	1389.67	0.497	0.98	5.129	A
2	391.96	391.69	24.18	0.00	1686.50	0.232	0.30	2.780	A
3	58.35	58.33	396.07	0.00	1951.25	0.030	0.03	1.900	A
4	78.17	78.12	377.40	0.00	1288.54	0.061	0.06	2.973	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	690.34	690.32	85.88	0.00	1389.64	0.497	0.98	5.147	A
2	391.96	391.96	24.22	0.00	1686.48	0.232	0.30	2.780	A
3	58.35	58.35	396.36	0.00	1951.04	0.030	0.03	1.901	A
4	78.17	78.17	377.65	0.00	1288.40	0.061	0.06	2.974	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	563.66	564.87	70.17	0.00	1398.61	0.403	0.68	4.323	A
2	320.04	320.31	19.82	0.00	1689.21	0.189	0.23	2.631	A
3	47.65	47.67	323.92	0.00	2003.40	0.024	0.02	1.839	A
4	63.83	63.88	308.60	0.00	1328.75	0.048	0.05	2.847	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	472.04	472.72	58.76	0.00	1405.13	0.336	0.51	3.865	A
2	268.02	268.20	16.59	0.00	1691.22	0.158	0.19	2.529	A
3	39.90	39.92	271.22	0.00	2041.50	0.020	0.02	1.797	A
4	53.45	53.49	258.40	0.00	1358.09	0.039	0.04	2.761	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

Filename: Sea Road-Technology Drive Junction-2040 PM.arc8
Path: S:\MGC0712 - NDFA SHB3\MGC0712-03 - Finisklin\5.0 Reports\Reports\SHB3-FIN-CS-RPS-RP-002 Traffic and Transport Assessment\Traffic Models
Report generation date: 08/02/2022 10:04:59

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	1.04	5.32	0.51	A
Arm 2	0.31	2.81	0.24	A
Arm 3	0.03	1.91	0.03	A
Arm 4	0.07	2.99	0.06	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/02/2022 10:04:59

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			4.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	646.00	100.000
2	ONE HOUR	✓	367.00	100.000
3	ONE HOUR	✓	54.00	100.000
4	ONE HOUR	✓	73.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	623.000	9.000	14.000
	2	300.000	0.000	9.000	58.000
	3	27.000	26.000	0.000	1.000
	4	19.000	54.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.96	0.01	0.02
	2	0.82	0.00	0.02	0.16
	3	0.50	0.48	0.00	0.02
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	5.32	1.04	A
2	0.24	2.81	0.31	A
3	0.03	1.91	0.03	A
4	0.06	2.99	0.07	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.34	484.24	60.06	0.00	1404.38	0.346	0.53	3.904	A
2	276.30	275.52	17.24	0.00	1690.81	0.163	0.19	2.542	A
3	40.65	40.57	279.26	0.00	2035.69	0.020	0.02	1.803	A
4	54.96	54.79	265.04	0.00	1354.21	0.041	0.04	2.770	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	580.74	580.03	71.88	0.00	1397.63	0.416	0.71	4.399	A
2	329.93	329.74	20.65	0.00	1688.69	0.195	0.24	2.648	A
3	48.54	48.53	334.22	0.00	1995.96	0.024	0.02	1.847	A
4	65.63	65.59	317.17	0.00	1323.74	0.050	0.05	2.860	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	711.26	709.93	88.03	0.00	1388.41	0.512	1.04	5.295	A
2	404.07	403.79	25.28	0.00	1685.82	0.240	0.31	2.808	A
3	59.46	59.43	409.27	0.00	1941.71	0.031	0.03	1.911	A
4	80.37	80.32	388.40	0.00	1282.11	0.063	0.07	2.994	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	711.26	711.24	88.08	0.00	1388.38	0.512	1.04	5.316	A
2	404.07	404.07	25.32	0.00	1685.79	0.240	0.31	2.808	A
3	59.46	59.45	409.58	0.00	1941.49	0.031	0.03	1.911	A
4	80.37	80.37	388.66	0.00	1281.96	0.063	0.07	2.995	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	580.74	582.05	71.97	0.00	1397.58	0.416	0.72	4.422	A
2	329.93	330.21	20.72	0.00	1688.65	0.195	0.24	2.650	A
3	48.54	48.57	334.73	0.00	1995.59	0.024	0.02	1.850	A
4	65.63	65.68	317.60	0.00	1323.49	0.050	0.05	2.863	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.34	487.08	60.27	0.00	1404.27	0.346	0.53	3.929	A
2	276.30	276.49	17.34	0.00	1690.75	0.163	0.20	2.545	A
3	40.65	40.67	280.26	0.00	2034.96	0.020	0.02	1.804	A
4	54.96	55.00	265.93	0.00	1353.69	0.041	0.04	2.771	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Sea Road-Technology Drive Junction-Opening Year 2025 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:20:03

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.87	4.83	0.47	A
Arm 2	0.27	2.72	0.22	A
Arm 3	0.03	1.88	0.03	A
Arm 4	0.05	2.92	0.05	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:20:03

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			3.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	591.00	100.000
2	ONE HOUR	✓	331.00	100.000
3	ONE HOUR	✓	50.00	100.000
4	ONE HOUR	✓	61.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	571.000	8.000	12.000
	2	275.000	0.000	8.000	48.000
	3	25.000	24.000	0.000	1.000
	4	16.000	45.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.97	0.01	0.02
	2	0.83	0.00	0.02	0.15
	3	0.50	0.48	0.00	0.02
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	4.83	0.87	A
2	0.22	2.72	0.27	A
3	0.03	1.88	0.03	A
4	0.05	2.92	0.05	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	444.94	443.10	51.81	0.00	1409.10	0.316	0.46	3.721	A
2	249.19	248.51	14.99	0.00	1692.21	0.147	0.17	2.492	A
3	37.64	37.57	251.50	0.00	2055.75	0.018	0.02	1.782	A
4	45.92	45.79	243.28	0.00	1366.92	0.034	0.03	2.724	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	531.30	530.71	62.00	0.00	1403.28	0.379	0.60	4.123	A
2	297.56	297.40	17.96	0.00	1690.36	0.176	0.21	2.584	A
3	44.95	44.93	300.99	0.00	2019.98	0.022	0.02	1.821	A
4	54.84	54.81	291.12	0.00	1338.97	0.041	0.04	2.802	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	650.70	649.66	75.92	0.00	1395.32	0.466	0.87	4.821	A
2	364.44	364.19	21.99	0.00	1687.86	0.216	0.27	2.719	A
3	55.05	55.03	368.58	0.00	1971.12	0.028	0.03	1.877	A
4	67.16	67.12	356.50	0.00	1300.75	0.052	0.05	2.917	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	650.70	650.69	75.97	0.00	1395.30	0.466	0.87	4.834	A
2	364.44	364.44	22.02	0.00	1687.84	0.216	0.27	2.719	A
3	55.05	55.05	368.84	0.00	1970.93	0.028	0.03	1.878	A
4	67.16	67.16	356.73	0.00	1300.62	0.052	0.05	2.917	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	531.30	532.32	62.07	0.00	1403.23	0.379	0.61	4.139	A
2	297.56	297.80	18.01	0.00	1690.33	0.176	0.21	2.585	A
3	44.95	44.97	301.41	0.00	2019.67	0.022	0.02	1.822	A
4	54.84	54.88	291.49	0.00	1338.75	0.041	0.04	2.805	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	444.94	445.53	51.98	0.00	1409.00	0.316	0.46	3.737	A
2	249.19	249.36	15.08	0.00	1692.15	0.147	0.17	2.496	A
3	37.64	37.66	252.38	0.00	2055.11	0.018	0.02	1.783	A
4	45.92	45.96	244.08	0.00	1366.46	0.034	0.03	2.727	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Sea Road-Technology Drive Junction-2040 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:42:26

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	1.04	5.28	0.51	A
Arm 2	0.31	2.79	0.24	A
Arm 3	0.03	1.91	0.03	A
Arm 4	0.06	2.98	0.06	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:42:26

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			4.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	645.00	100.000
2	ONE HOUR	✓	361.00	100.000
3	ONE HOUR	✓	54.00	100.000
4	ONE HOUR	✓	66.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	623.000	9.000	13.000
	2	300.000	0.000	9.000	52.000
	3	27.000	26.000	0.000	1.000
	4	17.000	49.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.97	0.01	0.02
	2	0.83	0.00	0.02	0.14
	3	0.50	0.48	0.00	0.02
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	5.28	1.04	A
2	0.24	2.79	0.31	A
3	0.03	1.91	0.03	A
4	0.06	2.98	0.06	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	485.59	483.49	56.31	0.00	1406.52	0.345	0.52	3.892	A
2	271.78	271.02	16.49	0.00	1691.28	0.161	0.19	2.533	A
3	40.65	40.57	274.00	0.00	2039.48	0.020	0.02	1.800	A
4	49.69	49.54	265.04	0.00	1354.21	0.037	0.04	2.759	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	579.84	579.13	67.39	0.00	1400.20	0.414	0.70	4.381	A
2	324.53	324.35	19.75	0.00	1689.25	0.192	0.24	2.637	A
3	48.54	48.53	327.93	0.00	2000.50	0.024	0.02	1.843	A
4	59.33	59.30	317.17	0.00	1323.74	0.045	0.05	2.846	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	710.16	708.84	82.52	0.00	1391.56	0.510	1.03	5.265	A
2	397.47	397.19	24.18	0.00	1686.50	0.236	0.31	2.792	A
3	59.46	59.43	401.57	0.00	1947.28	0.031	0.03	1.905	A
4	72.67	72.61	388.40	0.00	1282.11	0.057	0.06	2.975	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	710.16	710.13	82.58	0.00	1391.53	0.510	1.04	5.282	A
2	397.47	397.47	24.22	0.00	1686.48	0.236	0.31	2.792	A
3	59.46	59.45	401.87	0.00	1947.06	0.031	0.03	1.906	A
4	72.67	72.67	388.66	0.00	1281.96	0.057	0.06	2.976	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	579.84	581.14	67.47	0.00	1400.15	0.414	0.71	4.402	A
2	324.53	324.81	19.82	0.00	1689.21	0.192	0.24	2.640	A
3	48.54	48.57	328.42	0.00	2000.15	0.024	0.02	1.846	A
4	59.33	59.38	317.60	0.00	1323.49	0.045	0.05	2.847	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	485.59	486.32	56.50	0.00	1406.42	0.345	0.53	3.915	A
2	271.78	271.97	16.59	0.00	1691.22	0.161	0.19	2.538	A
3	40.65	40.67	274.99	0.00	2038.77	0.020	0.02	1.803	A
4	49.69	49.72	265.93	0.00	1353.69	0.037	0.04	2.762	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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Filename: Sea Road-Technology Drive Junction-2030 PM WO Dev.arc8
Path: C:\Users\mark.finnegan\Desktop
Report generation date: 13/09/2021 15:36:46

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Scenario 1			
Arm 1	0.97	5.12	0.49	A
Arm 2	0.30	2.77	0.23	A
Arm 3	0.03	1.90	0.03	A
Arm 4	0.06	2.96	0.06	A

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

"D1 - Scenario 1, AM " model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 13/09/2021 15:36:46

File summary

Title	(untitled)
Location	
Site Number	
Date	27/08/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mark.finnegan
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1, AM	Scenario 1	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Sea Road/Technology Drive Junction	Roundabout	1,2,3,4			4.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Finisklin Road	
2	2	First Sea Road	
3	3	Technology Drive	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	5.70	10.00	20.00	49.50	20.00	
2	3.60	8.00	10.00	20.00	49.50	20.00	
3	6.50	7.30	10.00	20.00	49.50	20.00	
4	3.80	5.30	10.00	20.00	49.50	20.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.571	1438.681
2		(calculated)	(calculated)	0.621	1701.517
3		(calculated)	(calculated)	0.723	2237.532
4		(calculated)	(calculated)	0.584	1509.104

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	626.00	100.000
2	ONE HOUR	✓	351.00	100.000
3	ONE HOUR	✓	53.00	100.000
4	ONE HOUR	✓	65.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	605.000	9.000	12.000
	2	291.000	0.000	9.000	51.000
	3	27.000	25.000	0.000	1.000
	4	17.000	48.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.97	0.01	0.02
	2	0.83	0.00	0.03	0.15
	3	0.51	0.47	0.00	0.02
	4	0.26	0.74	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	5.12	0.97	A
2	0.23	2.77	0.30	A
3	0.03	1.90	0.03	A
4	0.06	2.96	0.06	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	471.29	469.28	54.81	0.00	1407.38	0.335	0.50	3.830	A
2	264.25	263.51	15.74	0.00	1691.74	0.156	0.18	2.519	A
3	39.90	39.82	265.75	0.00	2045.45	0.020	0.02	1.794	A
4	48.94	48.79	257.54	0.00	1358.59	0.036	0.04	2.748	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	562.76	562.10	65.59	0.00	1401.23	0.402	0.67	4.286	A
2	315.54	315.36	18.86	0.00	1689.81	0.187	0.23	2.619	A
3	47.65	47.63	318.05	0.00	2007.64	0.024	0.02	1.835	A
4	58.43	58.40	308.19	0.00	1328.99	0.044	0.05	2.832	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	689.24	688.03	80.32	0.00	1392.81	0.495	0.97	5.100	A
2	386.46	386.19	23.08	0.00	1687.18	0.229	0.30	2.767	A
3	58.35	58.33	389.48	0.00	1956.02	0.030	0.03	1.896	A
4	71.57	71.52	377.40	0.00	1288.54	0.056	0.06	2.957	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	689.24	689.22	80.37	0.00	1392.78	0.495	0.97	5.116	A
2	386.46	386.46	23.12	0.00	1687.16	0.229	0.30	2.767	A
3	58.35	58.35	389.76	0.00	1955.81	0.030	0.03	1.896	A
4	71.57	71.57	377.65	0.00	1288.40	0.056	0.06	2.957	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	562.76	563.95	65.67	0.00	1401.18	0.402	0.68	4.305	A
2	315.54	315.81	18.92	0.00	1689.77	0.187	0.23	2.622	A
3	47.65	47.67	318.52	0.00	2007.31	0.024	0.02	1.839	A
4	58.43	58.48	308.59	0.00	1328.75	0.044	0.05	2.835	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	471.29	471.96	54.99	0.00	1407.28	0.335	0.51	3.851	A
2	264.25	264.43	15.83	0.00	1691.69	0.156	0.19	2.522	A
3	39.90	39.92	266.70	0.00	2044.76	0.020	0.02	1.794	A
4	48.94	48.97	258.39	0.00	1358.09	0.036	0.04	2.749	A