

Technical Note

Project No: ITB13091
Project Title: Ford Airfield – The Landings
Title: Highway Safety and Network Capacity
Ref: ITB13091-030 TN
Date: 21 July 2020

SECTION 1 Introduction

- 1.1 Planning application F/4/20/OUT has been submitted to Arun District Council for consent for the development of up to 1,500 dwellings, 60-bed care home, up to 9,000sq of employment floorspace, local centre of up to 900sqm of retail commercial and 1,450sqm of community/leisure floorspace, land for a two-form entry primary school, public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including the demolition of existing buildings and part removal of existing run hardstanding.
- 1.2 The application was accompanied by a full Transport Assessment (ref: *ITB13091-003E R*) and Framework Travel Plan (ref: *ITB13091-009D R*). West Sussex County Council (WSCC), in their capacity as the local highway authority, has provided comments in relation to matters of highway and transport and a consultation response has also been received from Network Rail (NR) in relation to the impact of the development upon the operation of the level crossings; copies of the comments are provided at **Appendix A**.
- 1.3 The WSCC comments can be broadly broken down to the three key transport tests set out paragraph 108 of the National Planning Policy Framework (NPPF), namely whether:

"a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

1.4 This Technical Note (TN) focusses on matters relating the provision of safe and suitable access and matters of network impact raised through the WSCC response. For ease of cross reference, the matters have been addressed in the order set out in the WSCC response. Commentary in response to the points raised by Network Rail has been incorporated into this Note and included in the relevant rail related section. The remainder of this TN is structured as follows:

- Section 2 – Site Access
- Section 3 – Personal Injury Accident (PIA) Data
- Section 4 – Network Impact and Mitigation
- Section 5 – Level Crossings and Rail Line
- Section 6 – Summary

SECTION 2 Site Access

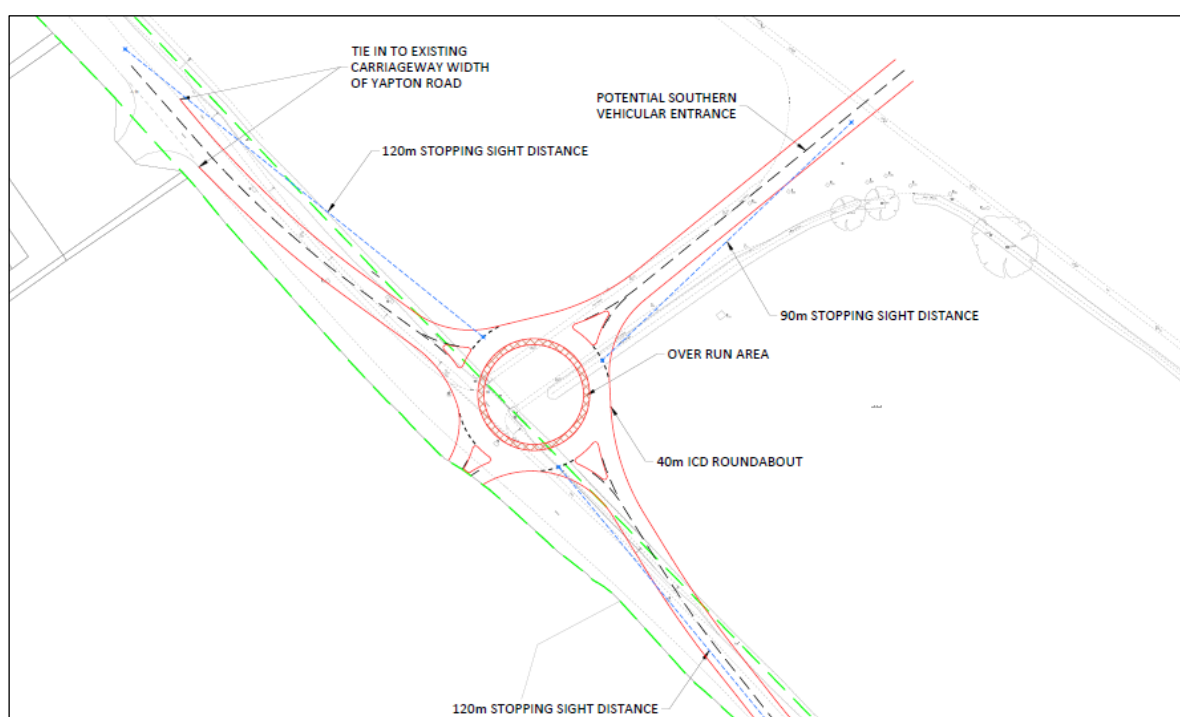
2.1 Yapton Road Roundabout

- 2.1.1 WSCC has sought clarification on the proposed site access roundabout onto Yapton Road, in particular, to confirm the dimension of the Inscribed Circle Diameter (ICD) and whether contact has been made with the landowner regarding the proposed access arrangements to the retained agricultural land west of the roundabout.
- 2.1.2 It can be confirmed that the landowner has been consulted on the proposed access arrangements. The land is owned by the Abbot Family, who also own the land upon which part of the proposed development is situated. The Abbot Family have been a key stakeholder in helping to inform the design of the proposed roundabout design to ensure that suitable operational access to the agricultural field is maintained.
- 2.1.3 A number of access arrangements have been explored, including a 28m ICD roundabout upon which the junction was originally modelled. Following input from the landowner regarding the vehicles used in their agricultural operations, the ICD of the roundabout was increased in order to accommodate turning manoeuvres associated with articulated farming vehicles (e.g. tractor with trailer).
- 2.1.4 A number of access arrangements have been explored, including a 28m ICD roundabout upon which the junction was originally modelled. Following input from the landowner regarding the vehicles used in their agricultural operations, the ICD of the roundabout was increased in order to accommodate turning manoeuvres associated with articulated farming vehicles (e.g. tractor with trailer).
- 2.1.5 In addition to the consideration of a smaller 28m ICD roundabout, consideration was given to providing the access to the agricultural field as a simple crossover arrangement. However, part of the design brief was to explore means of providing for an access that: enabled both north and southbound access and egress; ensured that vehicles accessing the field could leave the highway in order to open the field gate; upon leaving the field vehicles were able standing clear of the highway to close the gate without impeding the flow of traffic; and vehicles were able to pass one another at the access during periods of intensified movement (e.g. harvest).
- 2.1.6 Immediate clearance of the highway, without significant delay caused by the manoeuvre from the roundabout to the field, has also been a key consideration to reduce the risk associated with sudden stopping of a vehicle on a roundabout when drivers will likely be observing whether there are any

vehicles approaching from their right. Retaining the agricultural field access by incorporating it into the roundabout as a 4th arm achieves these objectives.

- 2.1.7 On this basis, it can be confirmed that the roundabout is to be provided as a 40m ICD 4-arm roundabout, as presented in **Drawing ITB13091-001 Rev E**, an extract of which is provided in **Image 2.1**. No further modelling of the roundabout has been undertaken, given that it has been satisfactorily demonstrated a smaller 28m ICD roundabout operates within capacity in all assessment scenarios; a larger roundabout will operate with greater capacity.

Image 2.1: Yapton Road Access Roundabout Extract



Source: ITB13091-GA-001 Rev E

- 2.1.8 It can also be confirmed that the landowner has been consulted through the design process and is satisfied that the proposed roundabout arrangement provides suitable and appropriate access to the retained agricultural land for vehicles associated with continuation of existing operations.

2.2 Ford Road Access

- 2.2.1 WSCC have requested that further modelling of the Ford Road access be provided for a 2031 assessment year. In addition, further assessment and commentary is required in respect of the impact upon the junction arising from the proposed alterations (planning ref: F/5/20) to the Ford Market and Carboot access arrangement.

2.2.2 Additional modelling has been undertaken using Junctions 9 to model both the regular operation of the junction in 2031 and to provide a sensitivity test of regular operation plus traffic associated with the Ford Carboot, assuming it is operating at full capacity; it should be noted that the Market does not operate on a Thursday. The modelling outputs are provided in full at **Appendix B** and are summarised in **Table 2.1**; it should be noted that Ford Carboot activities cease before the evening peak hour, so no assessment has been undertaken for this period.

Table 8.4: Existing Site Access to Ford Road Junction Assessment Results

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2031 with Grundon						
Access	<1	22	0.08	<1	20	0.07
Ford Road	0	8	0.02	0	7	0.02
2031 with Grundon + Development						
Access	<1	25	0.10	<1	28	0.26
Ford Road	<1	8	0.06	0	7	0.02
2031 with Grundon + Development						
Access	5	120	0.95			
Ford Road	3	33	0.76			

Source: Junctions 9

2.2.3 The assessment demonstrates that under typical operating conditions that the junction continues to operate within capacity without queuing or significant delay.

2.2.4 The 2031 assessment with Ford Carboot activities does result in the junction approaching operating capacity, reflected with an RFC value of 0.95. However, it should be noted that the baseline surveys were undertaken on a Thursday in July, where car boot activities are typically at their busiest. No reduction of the baseline traffic flows was made to reflect this, so the additional traffic using the junction has considerable element of double counting; it is estimated that some 50% of the additional traffic included in the assessment in relation to the car boot sale activities will have already been recorded as part of the baseline survey.

2.2.5 In addition to this, the modelling assumes that all 2,000 car parking spaces associated with the car boot activities would be utilised and the site operating at maximum capacity. As demonstrated within the Transport Statement accompanying application F/5/20 such occurrences are infrequent, and peak operation tends to be limited to a period of 2-3 weeks during the shoulder seasons (e.g. April-May and September-October) when other competing sales are not in operation. Therefore, while there is potential for the junction to be occasionally approaching capacity, it is unlikely that the conditions

identified in Table 2.1 will be realised, and any potential impact would be limited to a small number of occurrences; in such circumstances, the operation of the car boot activities would be managed by the operators.

2.3 Road Safety Audits

- 2.3.1 All works within the highway, including site access, schemes of junction mitigation and pedestrian/cycle enhancements, have been sent to an Independent Road Safety Auditor for a comprehensive Stage 1 audit to be undertaken. The audits will be submitted, accompanied by a Designer Response to any matters raised, under a separate cover once the auditing process has been completed.

SECTION 3 Accident Review

3.1 Updated PIA Data

- 3.1.1 WSCC has requested that the accident analysis contained within the TA accompanying the application is updated to assess the most recently available data. Personal Injury Accident (PIA) data has been obtained for the period post 01/11/2018 up to 30/04/2020 from the Sussex Safer Roads Partnership.
- 3.1.2 The study area was extended to include the approaches to both the Yapton Road and Ford Road level crossings. However, no accidents were observed on the approach to the Yapton Road level crossing.
- 3.1.3 In the most recent period since 01/11/2018, a total of 25 collisions have been recorded within the study area. Of the collisions, one resulted in fatal injury, four resulted in serious injury and 20 resulted in slight injury. The location of the PIAs are shown in **Appendix C** along with the full collision report; The nature, cause and location of these PIAs are outlined in the following paragraphs.

Ford Road (North of Ford Lane)

- 3.1.4 One collision occurred along this section which resulted in slight injury. The collision involved a northbound vehicle which was on the wrong side of the carriageway and collided with a southbound vehicle. The causal factors suggest the driver was inexperienced in driving on the left-hand side.

Ford Road / Ford Lane

- 3.1.5 One collision occurred at this location which resulted in serious injury. The collision involved a vehicle which turned right out of Ford Lane across the path of a northbound vehicle.

Ford Road / Nelson Row

- 3.1.6 One serious injury collision occurred at this location. The collision involved a rear end shunt type collision due to the vehicle ahead braking suddenly. The causal factors suggest the road surface was slippery due to the weather conditions on the day.

A259 / Yapton Road

- 3.1.7 Three collisions occurred at this location, all of which resulted in slight injury. Two of the collisions involved a vehicle turning right out of Yapton Lane across the path of an eastbound vehicle on the A259. The third collision involved an eastbound vehicle which failed to slow in time and caused a rear end shunt type collision with a slowing vehicle ahead.

Yapton Road (North of A259)

- 3.1.8 One collision occurred along this section which resulted in slight injury. The collision involved a vehicle which reverse on Yapton Road and collided with a motorcyclist behind.

Yapton Road (South of Rollaston Park)

- 3.1.9 One slight injury collision occurred along this section of road. This involved a bus overtaking a horse and kart whilst travelling southbound which caused the horse and kart to lose control.

Yapton Road / Rollaston Park

- 3.1.10 One collision occurred at this location which resulted in fatal injury. The collision involved a vehicle which turned right into Rollaston Park across the path of a southbound motorcyclist. The causal factors suggest careless driving from both parties is possible.

B2233 / B2132 Mini Roundabout

- 3.1.11 Three collisions occurred at this location, all of which resulted in slight injury. One collision involved a vehicle which turned right at the junction and failed to observe a pedestrian in the road. The second collision involved a vehicle which exited the mini-roundabout and collided with a pedestrian who was crossing the road. The third collision involved a pedestrian who ran out into the carriageway from behind a parked vehicle across the path of an eastbound vehicle.

A259 (West of Yapton Road)

- 3.1.12 Two collisions occurred along this section, both of which resulted in slight injury. One collision involved an eastbound vehicle which failed to slow in time and caused a rear end shunt type collision with a vehicle ahead. The second collision involved an eastbound vehicle which lost control and left the carriageway. The causal factors suggest the driver of the vehicle was impaired by alcohol.

A259 (East of B2312)

- 3.1.13 One slight injury collision occurred along this section which involved a westbound vehicle, which slowed as a vehicle ahead was performing a U-turn, and another westbound vehicle failed to slow in time and caused a rear end shunt type collision with the waiting vehicle.

A259 / B2132 (Northern Stagger)

- 3.1.14 Three collisions occurred at this location and all resulted in slight injury. One collision involved a vehicle which turned out of the junction across the path of an eastbound vehicle to travel west. The second collision involved an eastbound motorcyclist who performed an emergency stop as a vehicle entered

the A259 across its path. The third collision involved a southbound vehicle on the B2312 who failed to slow in time for the junction and entered the A259 across the path of an eastbound vehicle.

A259 / B2312 (Southern Stagger)

- 3.1.15 Three collisions occurred at this location. Two collisions involved a vehicle which turned right out of the junction across the path of a westbound vehicle, one resulted in serious injury and one resulted in slight injury. The third collision involved a vehicle which turned right at the junction and collided with another eastbound vehicle.

A259 / Worms Lane

- 3.1.16 One collision occurred at this location which resulted in slight injury. The collision involved a vehicle which turned out of the junction onto the A259 to travel west across the path of a westbound motorcyclist.

Summary

- 3.1.17 A review of the most recent PIA data indicates a similar level of frequency in occurrence of accidents on the network. A number of mitigation schemes have been identified for junctions with recorded accidents (e.g. B2233/Bilsham Road and B2233/North End Road mini roundabouts) while strategic intervention has been identified at the Oystercatcher and Comet Corner junctions.

SECTION 4 Network Impact and Mitigation

4.1 Waste Facility

- 4.1.1 WSCC has sought clarification as to whether traffic associated with the allocated Grundon/Viridor waste management facility at Ford Circular Technology Park has been included within the assessment as a committed development.
- 4.1.2 The site has been allocated in the West Sussex Waste Local Plan (adopted April 2014) as a strategic waste management site handling up to 250,000 tonnes of waste per annum. Grundon waste Management Ltd submitted a planning application in October 2013 for a waste treatment facility, comprising a Materials Recovery Facility and associated buildings and a Residual Waste Treatment facility creating energy from waste through gasification.
- 4.1.3 The access arrangements under the consented scheme proposed separate entry and exit points from Rollaston Park and Ford Road, creating a one-way circulatory route for vehicles using the site. While the Residual Waste Treatment Facility has not yet been constructed, the Materials Recovery Facility is operational and traffic associated with this operation, accessing via Rollaston Park and exiting via Ford Road, will have been captured as part of the baseline traffic data collection.
- 4.1.4 Planning application WSCC/027/18/F proposed alternative access arrangements to those originally consented, with all traffic to access the site to and from Ford Road. The application also sought to increase the number of HGV movements that were able to access the site on a daily basis, increasing from 120 two-way movements Monday-Friday and 120 two-way movements on Saturdays, to 240 two-way movements during weekdays and 120 two-way movements on Saturdays. Planning permission was granted on 15 August 2019.
- 4.1.5 The application was accompanied by a Transport Assessment that provided a breakdown of the traffic impact arising from the proposed alterations, including the number of vehicular movements during both the morning and evening peak hours and the distribution of the associated traffic. It is confirmed that these movements have been added directly to the junction modelling that accompanied the F/4/20 planning submission. In addition, the 240 daily movements were also taken into account as part of the environmental impact assessment contained within the Environment Statement.
- 4.1.6 In addition to this, no amendment to the baseline traffic surveys has been made to reflect the trips currently accessing the site via Rollaston Park and those trips already exiting the site via Ford Road. As such, there is a further element of double counting within the network impact assessment undertaken

as part of application F/4/20. For clarity, the staff trips included in the assessment (as derived from paragraph 4.2 of Callidus Transport Assessment TW/1093/501/DC) are summarised in **Table 4.1** and HGV movements are summarised in **Table 4.2**.

Table 4.1: Staff Trips

Time Period	Arrivals	Departures	Two-Way Total
AM (08:00 – 09:00)	0	0	0
PM (17:00 – 18:00)	0	8	8
Daily	47	47	94

Source: Callidus TA – TW/1093/501/DC

Table 4.2: HGV Movements

Time Period	Arrivals	Departures	Two-Way Total
AM (08:00 – 09:00)	9	9	17
PM (17:00 – 18:00)	9	9	17
Daily	120	120	240

Source: Callidus TA – TW/1093/501/DC

4.1.7 The movements have been assigned to the network in accordance with the distribution set out in the Callidus TA. Some 10% of the employee journeys route to and from the north of the site via Ford Road, with the other 90% routing from the A259 to the south via Church Lane. At the A259, the Callidus TA forecasts that 50% of these movements will route from the east and the other 50% from the west.

4.1.8 The HGV movements are subject to a routing agreement secured via a Section 106 Agreement. The routing requires 100% of the HGV movements to route to and from the south, with 50% of the movements subsequently travelling east at the A259 with the remaining 50% travelling to the west.

4.2 Ford Lane/Ford Road Modelling Parameters

4.2.1 WSCC has requested that the modelling parameters used in the assessment of this junction be provided on a plan. The parameters are shown on **Drawing ITB13091-GA-006 Geom**.

4.2.2 The opportunity has been taken to update the junction modelling in light of the amendments to the proposed scheme of cycle improvements on Ford Road. The updated modelling outputs are presented in **Table 4.3**, with the full outputs provided at **Appendix D**.

Table 4.3: Ford Road/ Ford Lane Priority Junction Assessment Results

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2021 Baseline						
Ford Road	<1	7	0.06	<1	7	0.10
Ford Lane	1	15	0.40	1	18	0.58
2021 with Development						
Ford Road	<1	8	0.11	<1	8	0.19
Ford Lane	2	30	0.11	3	36	0.77
2031 Baseline						
Ford Road	<1	8	0.08	<1	7	0.12
Ford Lane	1	17	0.46	2	23	0.65
2031 with Development						
Ford Road	<1	8	0.11	<1	23	0.37
Ford Lane	2	31	0.69	3	40	0.79

Source: Junctions 9

- 4.2.3 The assessment demonstrates that the junction will continue to work within capacity in all testing scenarios.

4.3 North End Road/B2233 Mitigation

- 4.3.1 WSCC have noted that the modelling outputs of the North End Road/B2233 mitigation scheme did not include a 2031 assessment scenario. The modelling outputs have been updated to include the 2031 results and are presented in **Table 4.3**, with the full outputs provided at **Appendix E**.

Table 4.3: North End Road/B2233 Modelling Outputs

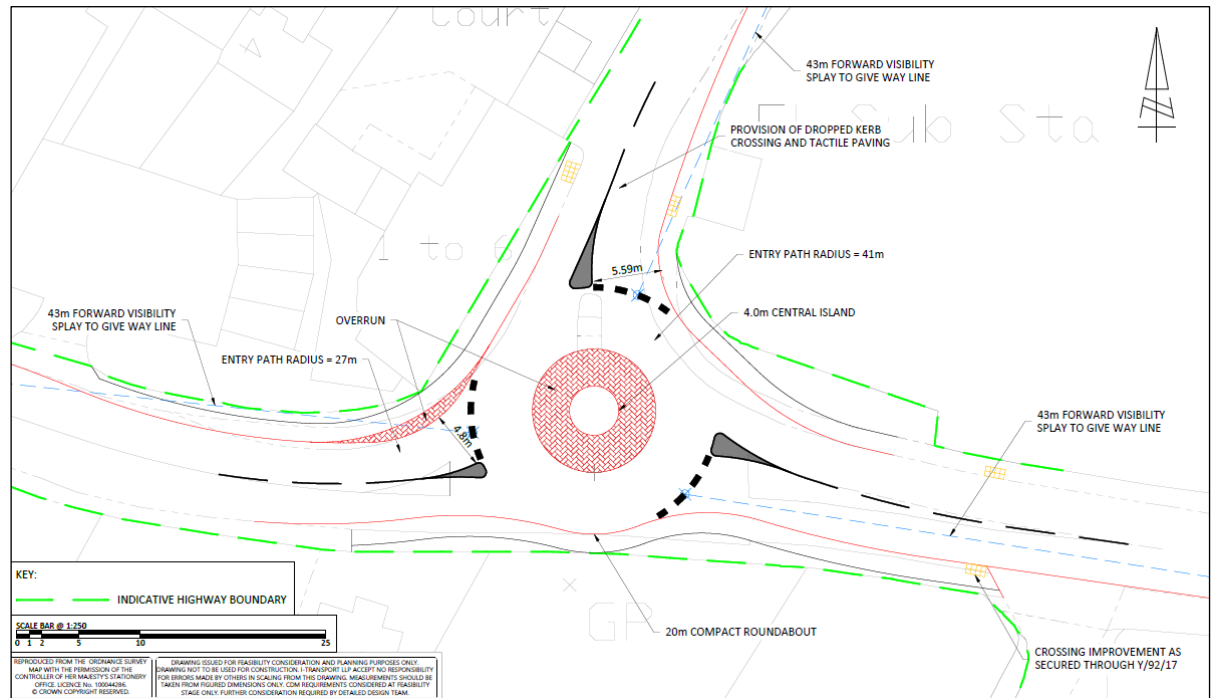
	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2021 without Development						
North End Road	1	10	0.35	6	45	0.87
B2233 East	10	41	0.93	1	7	0.47
B2233 West	2	13	0.62	1	9	0.55
2021 with Development + Mitigation Scheme						
North End Road	<1	3	0.21	1	4	0.41
B2233 East	4	14	0.81	1	5	0.43
B2233 West	1	7	0.48	1	6	0.48
2031 without Development						
North End Road	1	10	0.36	6	49	0.89
B2233 East	12	48	0.95	1	7	0.48
B2233 West	2	14	0.63	9	1	0.56
2031 with Development + Mitigation						
North End Road	<1	3	0.21	1	5	0.42
B2233 East	4	15	0.82	1	5	0.44
B2233 West	1	7	0.49	1	6	0.49

Source: Junctions 9

- 4.3.2** The assessment demonstrates that the proposed mitigation has the effect of improving capacity at the junction beyond that in a ‘without development’ scenario. The proposed development therefore has an overall ‘net positive’ impact at the junction.
- 4.3.3** WSCC also requested that consideration be given to the impact of a pedestrian improvement secured via planning consent Y/91/17 has on the proposed mitigation of the North End Road/B2233 Mini-Roundabout. Through further correspondence with WSCC, it has been confirmed that the improvements were secured via consent Y/92/17 and not Y/91/17 as informed. A copy of the secured improvements is provided at **Appendix F**.
- 4.3.4** The secured improvement comprises a dropped kerb and tactile paving crossing immediately to the west of Footpath 157 where it emerges onto Main Road. At this location, minor realignment of the carriageway is proposed as part of the proposed roundabout mitigation. Therefore, the secured improvement does not have an impact on deliverability of the proposed mitigation, but it may need to incorporate any changes to the tactile paving and dropped kerbs if the secured improvement is constructed prior to implementation of the mitigation. On that basis, the secured dropped kerb and

tactile paving has been incorporated into the mitigation drawing. The revised arrangement is presented in **Drawing ITB13091-GA-026 Rev A**, an extract of which is shown in **Image 4.1**:

Image 4.1: Extract of North End Road/B2233 Mitigation Scheme Revision



Source: ITB13091-GA-026 Rev A

4.3.5 A Cost Estimate for the delivery of the identified improvements has been prepared and is provided at **Appendix G**. No allowance has been made for detailed design, traffic management, diversions or stats at this stage, given that the design is at a preliminary phase only. However, in accordance with Table 1 of the Governments Supplementary Green Book Guidance, the costing includes the upper 44% optimism bias appropriate for standard civil engineering projects as well as a contingency inclusion, both of which would be refined further as the design develops from Preliminary to the Detailed and Construction Design phases.

4.4 Bilsham Road/Burndell Road Mitigation

4.4.1 WSCC have noted that the modelling outputs of the North End Road/B2233 mitigation scheme did not include a 2031 assessment scenario. The modelling outputs have been updated to include the 2031 results and are presented in **Table 4.4**, with the full outputs provided at **Appendix H**.

Table 4.4: Bilsham Road/ Burndell Road Mini Roundabout Improvement Scheme Results

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2021 without Development						
B2233 East	2	14	0.69	1	11	0.56
Bilsham Road	47	260	1.15	1	12	0.50
B2233 West	1	8	0.52	5	23	0.84
2021 with Development + Mitigation Scheme						
B2233 East	1	7	0.56	1	6	0.41
Bilsham Road	1	7	0.54	<1	4	0.26
B2233 West	1	6	0.46	3	12	0.75
2031 without Development						
B2233 East	2	15	0.70	1	11	0.57
Bilsham Road	54	301	1.17	1	12	0.51
B2233 West	1	8	0.52	5	25	0.86
2031 with Development + Mitigation Scheme						
B2233 East	1	7	0.57	1	6	0.42
Bilsham Road	1	7	0.56	<1	4	0.27
B2233 West	1	6	0.46	3	12	0.76

Source: Junctions 9

- 4.4.2 The assessment demonstrates that the proposed mitigation has the effect of improving capacity at the junction beyond that in a ‘without development’ scenario. The proposed development has an overall ‘net positive’ impact at the junction.
- 4.4.3 A Cost Estimate for the delivery of the identified improvements has been prepared and is provided at **Appendix I**. No allowance has been made for detailed design, traffic management or utility diversions at this stage, given that the design is at a preliminary phase only. However, in accordance with Table 1 of the Governments Supplementary Green Book Guidance, the costing includes the upper 44% optimism bias appropriate for standard civil engineering projects as well as a contingency inclusion, both of which would be refined further as the design develops from Preliminary to the Detailed and Construction Design phases.

4.5 A259/Church Lane – 2031 Testing

- 4.5.1 WSCC have requested that additional modelling be provided with an assessment year of 2031, as the modelling accompanying application CM/1/17, through which the mitigation was secured, only assessed up until 2026.
- 4.5.2 A review of the baseline traffic surveys for the junction identified that the entry flows were consistent across the peak hour assessment period, therefore, the junction has been undertaken using Junctions 9 and modelled using a flat profile. The full outputs of the assessment are provided at **Appendix J** and are summarised in **Table 4.5**.

Table 4.5: Church Lane Assessment Results

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2031 + Committed Development						
Church Lane	1	6	0.45	2	10	0.67
A259 East	2	7	0.71	5	13	0.84
A259 West	2	6	0.60	2	6	0.66
2031 + Committed Development + Development						
Church Lane	1	7	0.51	3	12	0.73
A259 East	3	8	0.74	9	22	0.91
Yapton Road S	2	6	0.65	2	7	0.69

Source: Junctions 9

- 4.5.3 The assessment demonstrates that the A259 East arm of the junction is approaching capacity in the afternoon peak hour. However, the development results in only a small increase in delay of circa 9 seconds. All other arms continue to operate within capacity with little queuing or delay. Critically, the secured improvement provides a significant capacity enhancement beyond that forecast as part of the Arun Transport Study and the improvement mitigates the impact of Local Plan development at the junction. Therefore, no further mitigation of the junction is required.

4.6 Horsemere Green Lane Modelling

- 4.6.1 Within WSCC's comments, it was noted that no traffic is routed via Horsemere Green Lane. However, WSCC consider it likely that a proportion of traffic associated with the proposed development will route along Horsemere Green Lane as the A259 / Church Lane roundabout improvement is likely to be

implemented before the Oystercatcher improvements. On this basis, WSCC requested a sensitivity test be undertaken to understand the impact of the development on the priority junctions at the eastern and western ends of Horsemere Green Lane.

Development Traffic Redistribution Methodology

4.6.2 To calculate how the development traffic would be assigned along Horsemere Green Lane, the turning proportions for the 2018 baseline data at the A259 / Church Lane roundabout have been utilised. For both peak periods the following turning proportions were calculated:

- West to East (A259 – A259 Bridge Road) = 70%
- North to East (Church Lane – A259 Bridge Road) = 30%

4.6.3 **Table 4.6** provides a summary of how the development related traffic, originally assigned to route south along Yapton Road, has been reassigned as part of the sensitivity test.

Table 4.6: Sensitivity Test Assignment – Development Trips

Scenario	Route	Peak Period (Two-Way)	
		Morning	Evening
Original Assessment	Yapton Road>A259 (E)>A259 Bridge Road	62	68
Sensitivity Test	Yapton Road>A259 (E)>A259 Bridge Road	44	48
	Yapton Road>Horsemere Green Lane>Church Lane (S)>A259 Bridge Road	18	20

Source: Consultant's Calculations

4.6.4 As part of the sensitivity test, it is forecast that Horsemere Green Lane will experience one additional vehicle movement every three minutes during the peak periods. To assess the impact of the redistribution of the development traffic along Horsemere Green Lane, junction capacity assessments have been undertaken at the Yapton Road / Horsemere Green Lane priority junction and at the Church Lane / Horsemere Green Lane priority junction.

4.6.5 The capacity assessments were undertaken out using Junctions 9. The flow profile of the junctions was identified to be consistent across each quarter of the peak period and on this basis a flat profile has been used to represent the operation of the junction. The junction capacity assessment results are summarised in **Tables 4.7** and **4.8**, and the modelling output reports are provided in **Appendix K**.

Table 4.7: Yapton Road / Horsemere Green Lane Sensitivity Test

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2018 Baseline						
HGL	<1	11	0.13	<1	12	0.23
Yapton Road	<1	6	0.12	<1	5	0.05
2021 + Committed Development						
HGL	<1	12	0.27	1	13	0.31
Yapton Road	<1	6	0.15	<1	6	0.12
2021 + Committed Development + Development						
HGL	<1	13	0.29	1	15	0.37
Yapton Road	<1	6	0.15	<1	5	0.13
2031 + Committed Development						
HGL	<1	12	0.27	1	13	0.32
Yapton Road	<1	6	0.15	<1	6	0.13
2031 + Committed Development + Development						
HGL	<1	13	0.30	1	16	0.38
Yapton Road	<1	6	0.16	<1	5	0.14

Source: Junctions 9

- 4.6.6 The junction capacity assessment demonstrates the junction will operate well within capacity during all testing scenarios, with the greatest delay of 16 seconds experienced on Horsemere Green Lane during the 2031 'with' development evening peak period, an increase of 3 seconds when compared to the 2031 'without' development scenario.

Table 4.8: Church Lane / Horsemere Green Lane Sensitivity Test

	Morning Peak (0800-0900)			Evening Peak (1700-1800)		
	Queue	Delay (s)	Max RFC	Queue	Delay (s)	Max RFC
2018 Baseline						
HGL	2	23	0.62	<1	10	0.14
Church Lane	<1	6	0.05	1	5	0.17
2021 + Committed Development						
HGL	2	26	0.65	<1	10	0.15
Yapton Road	<1	6	0.05	1	4	0.18
2021 + Committed Development + Development						
HGL	3	38	0.74	<1	11	0.18
Yapton Road	<1	5	0.06	1	4	0.20
2031 + Committed Development						
HGL	2	28	0.67	<1	10	0.15
Yapton Road	<1	6	0.05	1	4	0.19
2031 + Committed Development + Development						
HGL	3	41	0.76	<1	12	0.18
Yapton Road	<1	5	0.06	1	4	0.21

Source: Junctions 9

- 4.6.7 Table 4.8 demonstrates that the junction will operate within capacity on all arms during all testing scenarios. The greatest increase in delay of 13 seconds is experienced on Horsemere Green Lane during the 2031 'with' development morning peak period with a queue of three vehicles.
- 4.6.8 The sensitivity tests undertaken on the Horsemere Green Lane junctions of Yapton Road and Church Lane demonstrate that the traffic impact of the proposed development at these locations junctions accords with NPPF requirements; no further mitigation of the junctions is required.

SECTION 5 Level Crossings and Rail Line

- 5.1.1** WSCC have requested that further consideration be provided in relation to the impact of additional queuing at the North End Road/Yapton Road and Ford Road level crossings.
- 5.1.2** A detailed assessment of the impact of the proposed development upon the operation of the level crossings has been undertaken and submitted as part of the Transport Assessment. This assessment included an assessment of average and maximum queue lengths based on Passenger Car Units (PCU) with 1 PCU being equivalent to a distance of 6 metres.
- 5.1.3** The outputs of the queue length assessment, summarised in Tables 10.2 and 10.3 of the Transport Assessment, have been converted from PCU to distance and are summarised in **Table 5.1**. The table includes both the existing average and maximum queue lengths plus the additional queue distance as a result of the proposed development. The time period exhibiting the longest average and maximum queue length in the 2021 assessment period (which provides an assessment of the impact as if all development was fully constructed and occupied) has been used for each arm.

Arm	Average Queue Length			Maximum Queue Length		
	Existing	Additional	Total	Existing	Additional	Total
Ford Road (N)	246m	30m	276m	426m	54m	480m
Ford Road (S)	144m	18m	162m	240m	24m	264m
Yapton Lane (N)	264m	42m	306m	498m	54m	552m
Yapton Lane (S)	204m	54m	258m	366m	60m	426m

Source: Consultants calculations

- 5.1.4** The additional queueing at the level crossing arising from the proposed development does not result in the existing queue extending to affect other junctions on the Ford Road (N), Ford Road (S) and Yapton Lane (N) approaches. Therefore, no further mitigation is necessary.
- 5.1.5** The Maypole Lane/Ford Lane/North End Road junction is situated some 435m from the Yapton Lane level crossing while the maximum queue is forecast to extend some 426m. Therefore, vehicles turning right out of Ford Lane will not be prevented from doing so by the length of the queue extending beyond the junction. Notwithstanding, widening of the Ford Lane junction is proposed to enable left turning vehicles to continue with their turning manoeuvre should a vehicle be waiting to turn right.

- 5.1.6 In addition to the junction widening, and given the proximity of the extended queue length to the junction, the proposed mitigation plan has also been amended to include 'Keep Clear' markings at the Maypole Lane junction of North End Road, to enable right turn movements into Maypole Lane from North End Road to continue to occur in the event that the queue might otherwise block the junction. The revised arrangement is presented in **ITB13091-GA-028 Rev B**.

5.2 Bridge Crossing of Railway Line

- 5.2.1 The Network Rail consultation response to the planning application, dated 27 April 2020, indicated that the proposed development should "... *not be considered in isolation but form part of a far greater 'holistic' view of the impacts of all development in the area would cause. Network Rail believe some level crossings would benefit from closure in this area and are keen to work with the council to ensure [this] occurs.*". However, such an exercise has already been undertaken in which Network Rail were a statutory consultee.
- 5.2.2 The proposed development site is an allocated development location with the adopted Arun Local Plan. As part of the plan development process, the transport and highway impact of strategic development has been assessed through the Arun Transport Study (ATS), the most recent version of this Study being the Arun Transport Study Enterprise Bognor Review (2017). The ATS concluded that mitigation at the level crossings was not necessary to mitigate the impact of Local Plan allocated development.
- 5.2.3 The soundness of both the Local Plan and its supporting evidence base, including the ATS, was subjected to detailed scrutiny through the Examination stage of the Local Plan by an Inspector appointed by the Secretary of State. In paragraph 200 of the Arun Local Plan Inspector's Report (July 2018), prepared after a series of Examinations in Public (EiP) the Inspector was clear that:

"Policy T SP3 includes committed and potential highway schemes to enhance the road network and support new development, including links to the A27. Some of the highway schemes already have funding. Work is being undertaken at a strategic level through LSS2 and LSS3 to secure other funding. Not all the schemes are necessary to mitigate severe impacts e.g. bridging the railway line at Ford and the Arundel By-Pass. But those that are needed are including in the IDP. Contributions would be sought from new development under Policy INF SP1."

- 5.2.4 In paragraph 201, the Inspector goes on to state:

Taken together these improvement schemes will ensure that the residual cumulative impacts of the new developments proposed by the LP on the highway network, including congestion, are less than severe.

5.2.5 Finally, in paragraph 204, the Inspector states:

“There are a number of railway level crossing close to strategic allocations, including at Ford, Yapton and Woodgate. The ATP identified that no mitigation was required to address safety concerns.”

5.2.6 Consistent with the Inspector’s findings, the Infrastructure Delivery Plan does not seek financial contributions towards the development or delivery of a bridged crossing of the railway line. The proposed development has been brought forward in accordance with the adopted Local Plan strategy and the Arun Transport Study.

5.2.7 Therefore, no further review of the impact of traffic associated with Local Plan allocated development traffic is necessary; closure of the level crossings is not necessary to mitigate the impact of Local Plan allocated development; and financial contributions towards the delivery of a bridged crossing of the railway line is not necessary to mitigate the impact of development.

5.3 Future Connection

5.3.1 A number of potential routeing options for a potential link between the A259 and A27, including a bridged crossing of the railway line, have been explored by the Council. This includes options that utilise a connection through the Ford development site, or an alternative route that includes a connection to, and improvement of, Ford Road.

5.3.2 The proposed development does not actively seek to promote the route through the site as a link road; it is considered that such a connection would be better accommodated through a link formed with Ford Road given that a number of commercial uses, including waste management, are served via Ford Road and that a direct connection to the A27 would be of greater benefit. In addition, given that the River Arun forms a natural physical barrier to its immediate east, and that Ford Road is located to the east of the majority of the future and allocated built up area, such a connection would likely cause less impact on community severance.

5.3.3 However, it is recognised that the option appraisals include a link through the development site as a potential route to the A259. At this stage, the proposed development is in outline form only with all other matters reserved other than access. While, as noted by WSCC, the illustrative layout has been designed on the basis of the road link being of a nature to serve residential development the design of the road is not a matter for determination at this time. Therefore, the proposed development does not preclude the route being considered as a connection in the future if this route is considered to be the most viable option by both Arun District and West Sussex County Councils.

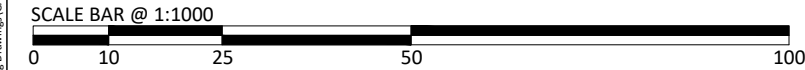
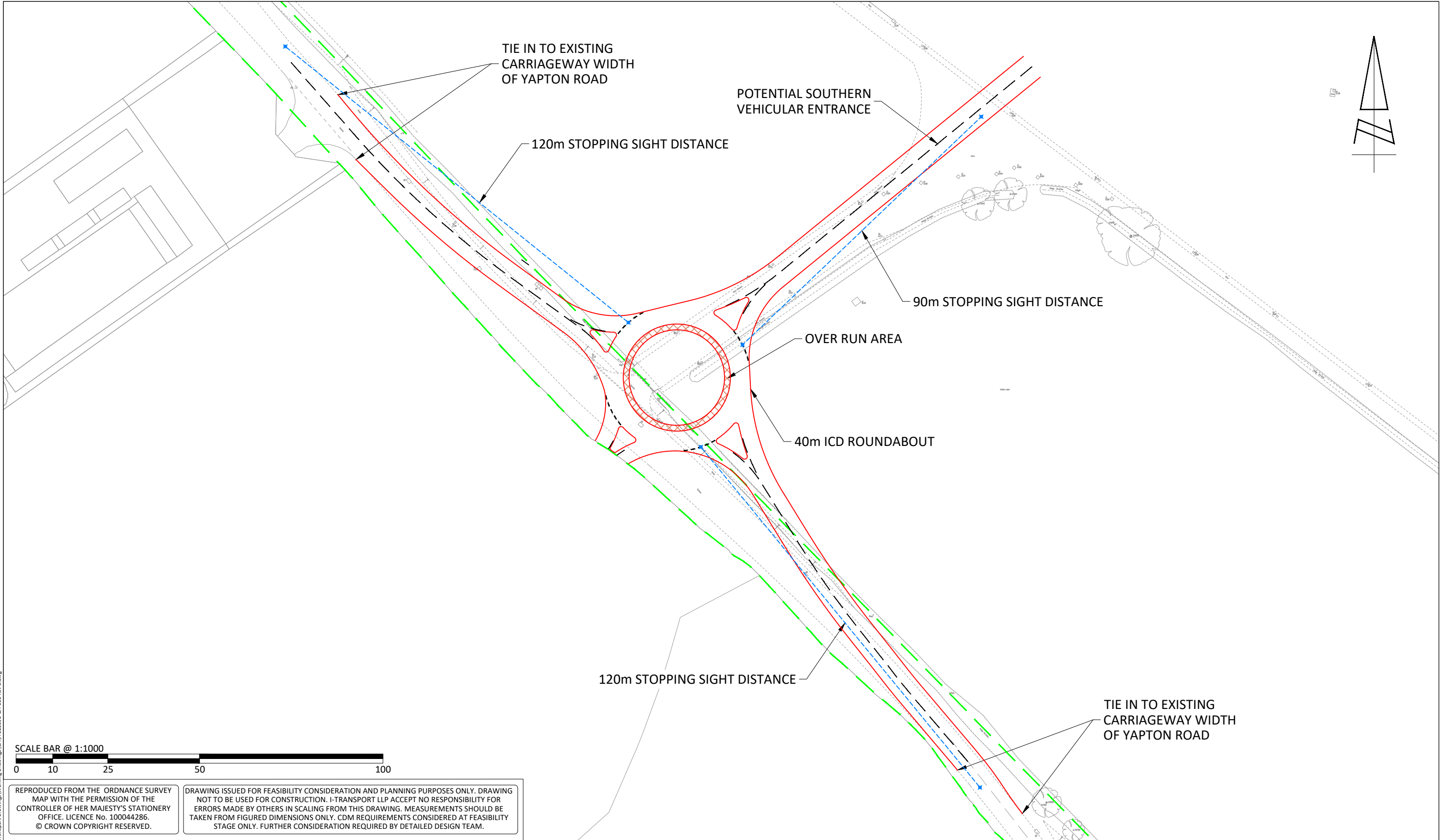
- 5.3.4 Further, the design of the accesses onto Ford Road and Yapton Road have been designed as roundabout arrangements in order to enable continued access by large vehicles to Wicks Farm (Ford Lane) and to accommodate future bus services. Inherently, and as demonstrated through modelling of the junctions, there is significant residual capacity retained within the arrangements should it be required to accommodate traffic associated with a through route.
- 5.3.5 On that basis, while the proposed development does not actively seek to promote a route through the site as a future link to the A27 nor is it necessary for the proposed development to make financial contributions towards the delivery of a bridged link, the proposal does not prejudice nor preclude a future route to a bridged crossing of the railway line.

SECTION 6 Summary

- 6.1 Planning application F/4/20/OUT has been submitted to Arun District Council for consent for the development of up to 1,500 dwellings, 60-bed care home, up to 9,000sq of employment floorspace, local centre of up to 900sqm of retail commercial and 1,450sqm of community/leisure floorspace, land for a two-form entry primary school, public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including the demolition of existing buildings and part removal of existing run hardstanding.
- 6.2 The application was accompanied by a full Transport Assessment (ref: *ITB13091-003E R*) and Framework Travel Plan (ref: *ITB13091-009D R*). West Sussex County Council (WSCC), in their capacity as the local highway authority, has provided comments in relation to matters of highway and transport. Comments from Network Rail have also been received. This Technical Note has been prepared to respond to matters relating to the provision of safe and suitable access and the impact of the development on network capacity.
- 6.3 Access to the development site from Yapton Road is to be provided through a 40m ICD roundabout. The landowner of the agricultural field has been consulted through the design process and is satisfied that the proposed roundabout arrangement provides suitable and appropriate access to the retained agricultural land for vehicles associated with continuation of existing operations.
- 6.4 A review of the most recent PIA data indicates a similar level of frequency in occurrence of accidents on the network. A number of mitigation schemes have been identified for junctions with recorded accidents (e.g. B2233/Bilsham Road and B2233/North End Road mini roundabouts) while strategic intervention has been identified at the Oystercatcher and Comet Corner junctions.
- 6.5 It is confirmed that the movements associated with the Materials Recovery Facility and Residual Waste Treatment facilities have been added directly to the junction modelling that accompanied the F/4/20 planning submission. The 240 daily HGV movements were also taken into account as part of the environmental impact assessment contained within the Environment Statement. In addition to this, no amendment to the baseline traffic surveys has been made to reflect the trips currently accessing the site via Rollaston Park and those trips already exiting the site via Ford Road. As such, there is a further element of double counting within the network impact assessment undertaken as part of application F/4/20

- 6.6 The pedestrian improvement secured through Y/92/17 does not have an impact on deliverability of the proposed mitigation at the B2233/North End Road mini roundabout, but the scheme may need to incorporate any changes to the tactile paving and dropped kerbs if the improvement is constructed after implementation of the secured mitigation. On that basis, the secured dropped kerb and tactile paving has been incorporated into the proposed mitigation drawing
- 6.7 The sensitivity tests undertaken on the Horsemere Green Lane junctions of Yapton Road and Church Lane demonstrate that the traffic impact of the proposed development at these locations junctions accords with NPPF requirements; no further mitigation of the junctions is required.
- 6.8 An additional queue length assessment has been undertaken at both the Ford Road and Yapton Road level crossings. The additional queueing at the level crossings arising from the proposed development does not result in the existing queue extending to affect other junctions on the Ford Road (N), Ford Road (S) and Yapton Lane (N) approaches. Therefore, no further mitigation is necessary at these locations. The additional queuing does extend close to the Maypole Lane/North End Road/Ford Lane junction; while not forecast to impact directly on the operation of the junction additional mitigation is proposed.
- 6.9 The need for direct mitigation of the Ford Road and Yapton Road level crossings has been considered through the Arun Transport Study. This study formed the evidence base of the adopted Arun Local Plan and was scrutinised through Examination by an Inspector. The Inspector concluded, and directly referenced, that mitigation of the level crossings was not required to enable the delivery of Local Plan allocated development.
- 6.10 While the proposed development does not actively seek to promote a route through the site as a future link to the A27, nor is it necessary for the proposed development to make financial contributions towards the delivery of a bridged crossing of the railway line the proposed development does not prejudice nor preclude a future route to a bridged crossing of the railway line.
- 6.11 The Technical Note has addressed all outstanding matters in relation to highway safety and network impact. Subject to the satisfactory resolution of the Road Safety Auditing process, there are no grounds of highway safety or network capacity upon which the application should be refused.

DRAWINGS

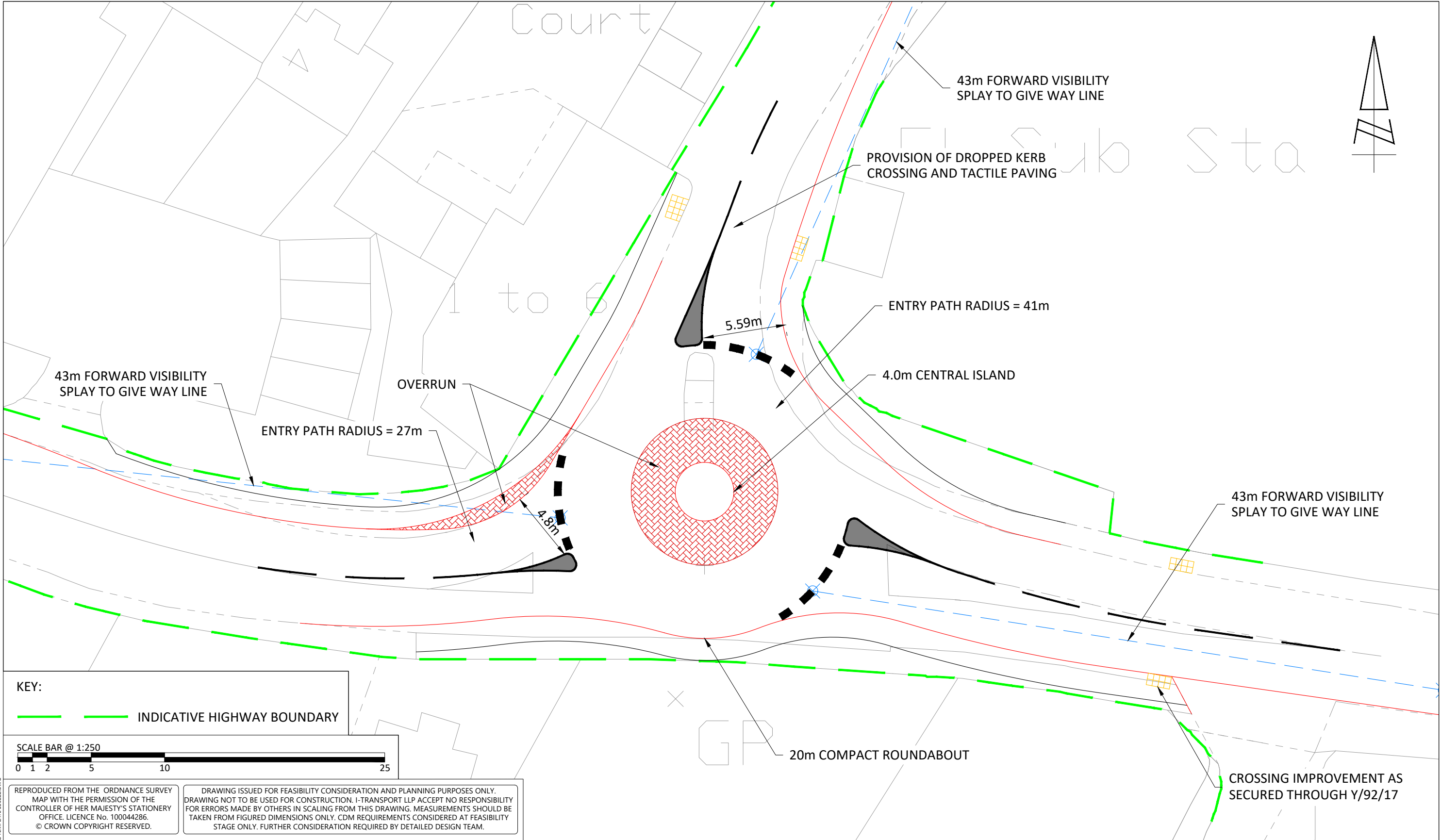


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 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 Fax: 01256 338644 www.i-transport.co.uk	E	10.09.19	SH	ROUNDAABOUT ICD REVISED	DS	DS	TITLE: POTENTIAL SOUTHERN VEHICULAR ACCESS FROM YAPTON ROAD		SCALE @ A3: 1:1000	CHECKED: DS	APPROVED: BH
							PROJECT: FORD AIRFIELD, WEST SUSSEX		FILE REF: ITB13091	DRAWN: PH	DATE: 29.03.18
							CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED		DRAWING No: ITB13091-GA -001		
							STATUS: FOR INFORMATION		PROJECT No: ITB13091	REV: E	

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KEY:
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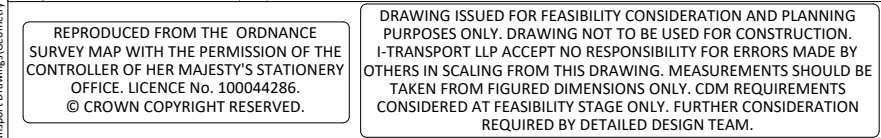
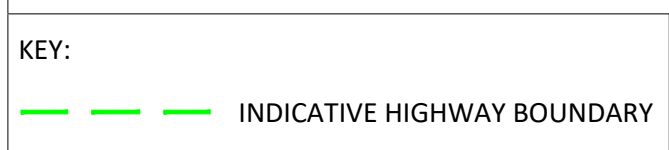


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 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 www.i-transport.co.uk							TITLE:	NORTH END ROAD / B2233 ROUNDABOUT MITIGATION SCHEME			DRAWN: SH	CHECKED: DS	APPROVED: DS	
	A	15.07.20	JD	JUNCTION AMENDED		DS	DS					SCALE @ A3: 1:250	DATE: 21.12.18	
	REV	DATE	BY	DESCRIPTION		CHK	APD	PROJECT:	FORD AIFIELD		CLIENT:	REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED		PROJECT No: ITB13091
	STATUS: FOR INFORMATION													DRAWING No: ITB13091-GA-026

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REDROW HOMES LIMITED &
WATES DEVELOPMENTS LIMITED

FORD LANE / FORD ROAD JUNCTION GEOMETRY

FORD AIRFIELD

REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: FOR INFORMATION					
SCALE @ A3: 1:500		CHECKED: DS		APPROVED: DS	
FILE REF: ITB13091		DRAWN: GT		DATE: 20.07.20	
DRAWING No: ITB13091-GA-006 GEOM					
PROJECT No: ITB13091				REV: -	

APPENDIX A. WSCC AND NR CONSULTEE COMMENTS

WEST SUSSEX COUNTY COUNCIL CONSULTATION

TO:	Arun District Council FAO: Raymond Cole
FROM:	Stephen Gee WSCC - Highways Authority
DATE:	17 April 2020
LOCATION:	Land at Ford Airfield Ford, West Sussex
SUBJECT:	F/4/20/OUT Outline planning application (with all matters reserved except for access) for the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1-A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing buildings and part removal of existing runway hardstanding. This application affects a Public Right of Way. This application is the subject of an Environmental Statement. This application falls within CIL Zone 1 - Zero Rated.
DATE OF SITE VISIT:	
RECOMMENDATION:	More Information
S106 CONTRIBUTION TOTAL:	

Background

The proposed development comprises an outline planning application (with all matters reserved except for access) for the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1-A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing buildings and part removal of existing runway hardstanding at Land at Ford Airfield, Ford.

The site was subject to pre application discussions with WSCC in 2018, whilst comments were provided on the scope and further work identified, further agreement to the outcomes of this work had not been agreed.

Policy

The site is allocated for 1,500 dwellings in the Arun Local Plan, with specific reference in SD8 to the following highway elements.

- A, To take account of sustainable links for all modes of transport between the development, Ford Railway Station and the Littlehampton/Arundel cycleway;
- F, Improvements to the A259 between Climping and Littlehampton

Community Infrastructure Levy (CIL)/ Infrastructure Delivery Plan /Transport Study Arun CIL charging schedule was implemented on the 1st of April 2020, the application would not be CIL liable as sites allocated under Policy H SP2 of the Arun Local Plan are exempt.

These site-specific policies include requirements for on and off-site mitigation measures which must be delivered individually or collectively by sites in order for the site to be acceptable in planning terms. These cumulative and strategic policy requirements have been identified through infrastructure capacity evidence (the Infrastructure Capacity Study and Delivery Plan, 2017 (ICSDP)).

The mitigation costs for each site have been viability tested as part of the preparation of the Arun Local Plan (2018) (Local Plan Viability Assessment Update Report, 2017). However, it should be noted, that at the time of receipt of a planning application for any strategic housing allocation, infrastructure requirements will need to be assessed based on the specific impacts of the proposal. Therefore, exact mitigation costs may change at that time.

Additional Policy Guidance

It should be noted that the relevant parking standards are now contained within an Arun SPD available at:

<https://www.arun.gov.uk/download.cfm?doc=docm93jjjm4n14832.pdf&ver=15210> this includes guidance on the level of Electric Vehicle charging.

An additional guidance document is also the West Sussex Cycle Design Guide

https://www.westsussex.gov.uk/media/13164/cycling_design_guide.pdf which should be considered.

Access

Yapton Road

A 40m ICD roundabout is proposed onto Yapton Road, (section 5.2.4 says 28m and modelled as such) and should be clarified. 4 arms are to be provided, one to the development, Two to Yapton Road and a 4th stub arm to access an agricultural field. Drawing ITB13091-GA-001 Rev E. Forward visibility splays of 120m have been provided along Yapton Road in line with DMRB requirements and a minimum of 90m into the development.

Swept path analysis has been provided and demonstrates that a single or double decker bus are able to make the manoeuvre.

The TA states a Stage 1 RSA has been commissioned however this has not been provided with the application.

Further information on the 4th arm is requested to establish if contact with the land owner has been made that could see an appropriate agricultural access provided along their frontage avoiding the need for a 4th arm.

It is noted that no pedestrian or cyclist facilities appear on the plan nor are shown on the masterplan around the junction. The facilities would need to be provided internal to the development and secured via any future reserve matters application.

Ford Lane

A 40m ICD roundabout is proposed onto Ford Road. 4 arms are to be provided, one to the development, two to Ford Road and one to the consented anaerobic digestive facility (at Wickes Farm) Forward visibility splays of 120m have been provided along Ford Lane in line with DMRB requirements and a minimum of 90m into the development.

Swept path analysis has been provided and detail that a single or double decker bus are able to make the manoeuvre.

The TA stats a Stage 1 RSA has been commissioned however this has not been provided with the application

Employment

Access to the employment provision would utilise the existing Ghost Island right hand turn Lane onto Ford Road, The masterplan shows no vehicular link between the residential area and the employment area.

The TA stats a Stage 1 RSA has been commissioned however this has not been provided with the application.

Internal connection the link road

Within the site, the area identified for employment use will be accessed by the extension of the consented Grundon Access Road. The arrangement comprises the extension of the 7.3m carriageway as well as the 2.0m footway located on the western side of the carriageway. The access arrangement is presented in drawing ITB13091-GA-037.

Non-Motorised Users (NMU) connections

Rollaston Park

A pedestrian and cycle link into Rollaston Park is shown in drawing number ITB13091-GA-041; no cycle facilities are provided along Rollaston Park and as such cyclists would be required to re-join the carriageway. Further improvements are proposed towards Yapton, which includes:

- The provision of an uncontrolled pedestrian crossing with tactile paving and dropped kerbs on the Johnson Way/ Rollaston Park junction;
- The provision of an uncontrolled pedestrian crossing with tactile paving and dropped kerbs on Rollaston Park;
- The provision of an uncontrolled pedestrian crossing with tactile paving on exiting dropped kerbs on Yapton Road next to the bus shelter;
- A new proposed footway extension immediately north of the bus shelter on Yapton Road to tie into the proposed uncontrolled pedestrian crossing;
- Provision of vehicle crossovers and narrowing of pedestrian crossing distance at both junctions leading into Drake Grove from the B2233/ Burndell Road;
- The provision of tactile paving at the existing dropped kerb on the Fordwater Gardens and Burndell Road junction; and
- The provision of tactile paving at the existing dropped kerb on the Goodhew Close and Burndell Road junction.

Given that the link would be the primary connection between the development and Yapton then further consideration should be provided to the extent of cycle facilities provided.

Horsemere Green Lane

A 3m wide shared use facility would be provided from Horesmere Green Lane into the development, cyclists would then be on road until joining a shared use route adjacent to the Church Lane carriageway and onwards to the National Cycle Network Route2 and Climping Beach. The access arrangement is presented in drawing ITB13091-GA-042. The applicant should consider how the scheme would be delivered in combination with the permitted Climping allocation ref CM/1/17.

Details should also be provided of pedestrian facilities along Horsemere Green Lane and any necessary improvements.

Ford Lane

A 2m wide footway is to be provided onto Ford Lane and an adjacent footway provided in front of Wickes Cottages. As shown on ITB13091-GA-054. The full extent of the

provision in both directions along Ford Lane should be identified to determine a safe termination point.

Ford Road

A 3m shared use route is proposed between the site and Ford Rail station. The connection to Ford Road is made through the use of Public Right of Way 200.3 which is accessed from within the development site. The 3m wide provision is then provide alongside Station Road, further clarification is required upon the ability to provide such width alongside property boundary treatments and features such as the bridge (over the stream) and the impacts on effective width.

Footpaths across the site will also be improved, the TA makes reference to them being upgraded to be utilised by cyclists. The PRow include:

- Footpath 363, which runs east-west across the northern section of the site on the line on the old canal, and provides a connection to Footpaths 170, 200.2 and 360 on towards Burndell and Yapton;
- Footpath 366 and 366.1, which provide a connection to Ford Lane and the opportunity to connect north via Footpath 365; and
- Footpath 175, which provides an alternative pedestrian onto Ford Road at the southern end of the site.

Pedestrian access will also be provided between the residential and employment elements of the site. This link is shown in the illustrative masterplan to the rear of the local centre, north of the retained runways.

NMU audits have been provided for key routes and assess the convenience, accessibility, safety, comfort and at attractiveness of the routes. It is considered that NMU Audits is 'overly positive' in its assessment of existing routes, failing to take in account the speed and flow of vehicles, facilities for cyclists and equestrians and utilises minimum standards for footway provision.

No improvements to the route between Station Road and Footpath 206 have been proposed, with the application stating that Arun DC have secured funding. Confirmation of the details should be provided and details of the crossing facilities at Station Road identified.

Equestrians

Details should be provided on the proposed status of the PRow across the site and the impact of adjoining routes in creating appropriate facilities to be used by equestrians.

Public Transport

The Transport Assessment states:

Stagecoach South has advised that they would be willing and able to provide bus services to

the site and correspondence with Stagecoach regarding details of the service provision is ongoing. The potential routing options that have been identified are:

- A morning and evening peak hour service between the development and Barnham Railway Station;
- A regular (e.g. hourly) service between Barnham and Littlehampton which enters the Development; or
- The diversion of the existing 700 'Coastliner' service, via Ford Lane to enter the site at the northern boundary before routing south through the site to re-join the existing route.

Supporting evidence of the bus operators views should be provided, information provided upon the phasing of any new services and any necessary financial contributions to pump prime.

Ford station

Arun Local Plan policy T DM2 states "car parks at Railway Stations will be safeguarded from development to meet wider transport objectives of encouraging the use of public transport. In particular the expansion of car parking facilities will be encouraged.

Ford railway station also currently only has 14 cycle parking spaces which would need to be significantly increased to encourage additional cycle journeys to the station. It is recommended that improvements are discussed with Southern Rail.

Personal Injury Accident (PIA)

PIA information has been provided for the period 11/2013 to 10/2018. The applicant should provide an assessment of the most up to date information available. The assessment should also cover the northern approaches to both Ford and Yapton level crossings.

Development Impacts

Trip Generation

The TA provides an assessment of the trip rates utilised within the Arun Transport Study Stage 3 report and provides a comparison against the trip rates from TRICS. The Arun Transport Study trip rates are higher and as such a robust scenario utilises these rates. The residential element of the site is forecast to generate 526 AM peak and 515 PM peak two-way trips.

Primary School

It is acknowledged that a level of trips would be internalised from the primary school, the following trips

- All staff would come from offsite, pupils would generate 32 AM peak and 4 PM peak
- Reduction of 58 two way trips in AM peak due to internalisation.
- Trips associated with off-site primary school trips have not been included¹, the TA states that the trips are not new trips, whilst it is acknowledged that they are not new to the wider network they may be new to the junctions in proximity to the site.

Employment

TRICS has been utilised to generate employment trips for 9,000sqm of commercial floorspace (B1 and B2). A total of 52 AM peak and 45 peaks would be generated from this land use.

Retail / Health Care / Community Space

No trips associated with the retail, health care and community space have been included within the assessment. It is acknowledged that most of the trips would be internal to the development or diverted trips already on the network and as such the non-inclusion of the trips would not have a significant impact on the overall modelling assessment.

Total Generation

The applicant's figures detail that the site could generate 537 AM and 577 PM peak trips on to the wider highway network.

Trip Distribution and Assignment

Residential trips have been distributed according to a gravity model and assigned according to Google Maps Journey time information.

Employment and School staff trips have been distributed according to census information.

¹ judgment utilised in assessing the impact of increase of 32 AM peak trips and 4 PM peaks on the site access considered later in this response.

Surveys

Traffic Surveys were undertaken in July 2018 in school term time. Whilst July is outside the typical window for undertaking surveys, the applicant has presented additional information that shows the surveys provide a robust baseline scenario.

TEMPRO

As the number of dwellings/jobs to be provided exceeds the levels identified in the local TEMPRO data over the period to 2031, vehicle flows from committed developments are to be utilised. Confirmation should be provided to the inclusion of the allocated Grundon/Viridor Extended Waste Management within the committed development. Since the agreement of the scope and production of the TA several small developments have been approved within the local area however these would unlikely have a significant impact on the modelling provided.

Modelling

Site Accesses

- Site Access with Yapton Road. Would operate satisfactorily in all scenarios (with a 28m ICD). This would also be the case should the additional primary school trips be included.
- Site Access with Ford Lane. Would operate satisfactorily in all scenarios. This would also be the case should the additional primary school trips be included.
- Site Access with Ford Road. No 2031 scenario has been provided and should be done so. It is also noted that an application F/5/20 has been submitted which has the potential to impact vehicle flows on Thursday Market flows on which further assessment and commentary should be provided.
- As identified within the TEMPRO assessment above confirmation of the inclusion of the allocated Grundon/Viridor Extended Waste Management should be provided.

It is noted that the access road permission ref WSCC/027/18/F has a condition allowing a maximum of 240 HGV movements. It should be confirmed that the maximum allowable HGV movements have been included within the committed development, Arun and WSCC County Planning would need to consider the impact on the condition and how it is monitored in the future.

Strategic Junctions

The following junctions have been modelled as part of the Arun Local Plan Transport Study and as such the application does not provide any additional modelling of the junction., It again should be noted that contributions would be requested to mitigate the impact of the development on the junctions.

- A27/B2233
- A27/A29 (East)
- A27/A284
- A27/The Causeway
- A27/A280
- A259/Church Lane²
- A259/B2187

Junction Modelling has also been provided for Oystercatcher and Comet Corner both junctions it is noted that the observed conditions have not been replicated at Comet Corner and Linsig has been utilised to indicate that both junctions operating over capacity in a 2021 baseline and the development would result in a severe impact in future year scenarios. No further review of the modelling or improvement scheme has been undertaken as it assumed contributions will be secured to a comprehensive improvement to both junctions in line with Arun Transport apportionment study.

² See comments on Junction and mitigation proposed by CM/1/17

Ford Lane / Ford Road

The junction is currently working within capacity and would remain so in a 2031 with development scenario. The largest delay of 48 seconds would be on Ford Road. Further information is requested on the parameters utilised in the modelling of the junction and should be confirmed on a plan.

Ford Lane/North End Road /Maypole Lane

The modelling indicates that the junction currently works under capacity but the inclusion of the development would increase queues and delays on the Ford Lane approach in the AM peak and as such mitigation would be required.

A mitigation scheme comprising increasing the entry width of the Ford Lane arm has been tested and details the junction would provide appropriate mitigation in a 2031 scenario.

North End Road/B2233 Mini Roundabout

The junction modelling indicates that the junction is approaching capacity and the addition of the development flows would result in a severe impact on the B2233 East arm in the AM peak and North End Road in the PM peak and as such mitigation would be required.

A mitigation scheme comprising the conversion of the existing mini roundabout to a kerb roundabout arrangement with alterations to the approach, entry and exit geometries has been proposed by the applicant. The mitigation scheme has been tested for a 2021 and would mitigate the impacts of the development. No 2031 scenario is shown within the main document but is included within the modelling output files. It is identified that funding towards this junction could also be utilised to provide a more comprehensive Yapton to Barnham cycle route / corridor improvement. The scheme should consider how pedestrian improvements secured via planning application ref Y/91/17 would impact the delivery of a scheme.

Bilsham Road / Burndell Road

The junction modelling indicates the junction would be operating over capacity in the baseline scenario and exacerbated with the development with severe queues and delays on Bilsham Road and over design capacity on the B2233 Western approach. As such the junction will require mitigation.

A mitigation scheme comprising the conversion of the existing mini roundabout to a kerb roundabout arrangement with alterations to the approach, entry and exit geometries has been proposed. The mitigation scheme has been tested for a 2021 and would mitigate the impacts of the development. No 2031 scenario has been provided and should be provided. It is identified that funding towards this junction could also be utilised to provide a more comprehensive Yapton to Barnham cycle route / corridor improvement.

Rollaston Park/Yapton Road

The junction currently operates within capacity and would continue to do so in a future year scenario with the addition of development traffic.

Yapton Road /The Street mini roundabout

The junction currently operates within capacity and would continue to do so in a future year scenario with the addition of development traffic.

Comet Corner

A traffic signal mitigation scheme has been designed by the applicant, the scheme would still result in arms being over or close to capacity.

Oystercatcher

The consent of planning application CM/1/17 includes the provision of land for the development of a roundabout improvement scheme, Testing has been undertaken for such a junction and indicates that the development could be accommodated.

A259/ Church Lane

A 50m ICD roundabout has been secured in associated with CM/1/17. Whilst the comments of the inspector at the appeal are noted the application only assessed the scheme to a 2026 scenario. As such as to ensure a robust assessment a 2031 scenario should be provided.

Horsemere Green Lane

It is noted that no traffic is routed via Horsemere Green Lane. However, should the A259/Church Lane junctions be implemented before the Oystercatcher improvements (which is likely to happen due to the securing the Church lane improvements prior to first occupation of the CM/1/17) and the funding arrangements and land take associated with improvements to Oystercatcher) a sensitivity test including assessment of the junctions of Yapton Road /Horsemere Green Lane and Church Lane /Horsemere Green Lane should be provided.

Level Crossing Assessments

It is noted that the maximum queue on the southern arm of Yapton Lane would extend back into close proximity of the Ford Lane junction in a 2031 scenario additional commentary should be provided on the impacts of the increased queues and their potential to impact on additional junctions. Arun DC should consider the environmental impacts of the queuing vehicles.

Ford Bridge

The Arun Local Plan States 15.3.4 - A route for a new road crossing over the railway to relieve congestion at the Ford level crossing has been investigated and this route is safeguarded in the ALP to enable ongoing options to be considered and funding to be obtained.

The application should provide information on how it could enable delivery of such a facility.

Construction

Details of the LGV and HGV flows have been provided within the Transport Assessment and highlight the highest peak hour flows would be in 2026/27 with a total of 680 daily two-way movements (inc 106 two-way HGV movements) A construction management plan would be conditioned should the application be approved.

Layout

Road Hierarchy

Street hierarchy information has been provided which details road widths and pedestrian/cyclist provision alongside each type of road.

Servicing and emergency access

Vehicle tracking has been provided which details that a double decker bus can safely undertake turning manoeuvres at the site accesses. Further information on the internal network would be provided as part of any future reserve matters application.

It is noted that in planning application ref F/5/20 Ford Market that an emergency link would be provided from the market onto the area of runway in vicinity of the Arun Sports Arena.

Parking

A statement of intent is provided which details car (including EV) and cycle parking will be provided in line with local parking standards as part of a reserve matters stage application. Parking design would need to be carefully considered around the pedestrian entrance to the Ford Market to reduce the potential for market visitors to utilise the residential parking areas.

A259 to A27 Links

It is noted that there are local community aspirations for a new north/south route between the A259 and A27. At the examination of the Arun Local Plan despite local representations on this matter, the Planning Inspector for Arun Local Plan concluded that this route was not a scheme that is required to mitigate the transport impacts of the current Local Plan. Within the plan however there is the additional new road crossing over the railway line from Ford Lane. This could form part of a potential future north south route between the A27 and A259. Whilst indicative, due to the outline nature of the planning application, the route through the development site itself could also form part of this route; although it should be noted that it is designed primarily to act as a means of access to the development itself. Whilst at this stage the alignment and design of such a scheme are not clearly defined it is not considered that the development would prejudice the delivery of such a route at a later date; should this be necessary. However, it should be noted that on the illustrative layout of the site the internal spine road is designed as primarily as an access road rather than through route.

Travel Plan

The following comments have been provided by the Travel Plan officer:

- 2.3.2 Need to refer to West Sussex Cycle Design Guide too
- Table 3.1 highlights the need to provide connectivity for cyclists (as well as pedestrians) to local services. Provision of paths that can be cycled on (segregated from traffic) should therefore be an important consideration.
- 3.4.8 NCN2 no longer uses Yapton Road and has been diverted on to the new parallel track (installed in 2018) on A259 Grevatt's Lane
- 3.6.2 I do not concur with the NMU Assessment's conclusions that cycle provision on Ford Road ('Route 1') is safe, attractive and convenient. There are in fact no facilities for cyclists.
- 3.6.4 I do not concur with the NMU Assessment's conclusions that cycle provision on B2233 Yapton Road/Brundell Road ('Route 2') is safe, attractive and convenient. There are in fact no protected facilities for cyclists.
- 3.6.6 I do not concur with the NMU Assessment's conclusions that cycle connection from the site to the A259 ('Route 3') is safe, attractive and convenient. There are in fact no protected facilities for cyclists.
- 3.6.9 I do not concur with the NMU Assessment's conclusions that 'Route 4' is safe, attractive and convenient. There are in fact no protected facilities for cyclists and the northern end of Crookthorne Lane is narrow. The audit states that the surface of Byway 197 is not suitable for vehicles in some sections - it will not therefore be suitable for cycles, and is not therefore convenient or attractive.
- 3.6.11 We are not aware the Arun DC has secured funding to improve FP206 and do not believe this to be the case.
- 3.6.12 I do not concur with the NMU Assessment's conclusions that 'Route 5' is safe, attractive and convenient. There are in fact no facilities for cyclists. The audit states that FP206 is accessible for walking only, and is submerged during periods of high water. It is not therefore convenient or attractive. The audit proposes to re-route the path, but without a change in status it could not be used by cyclists.

- 4.2.3 We require the key target to be "Over a period of 5 years, achieve a 12-hour vehicle trip rate that is 10% lower than was predicted in the Transport Assessment for the site"
- 4.4.3 Given that 1,500 units are to be constructed it is likely that full occupation will not be achieved until after Year 5, and therefore more than one cycle of TRICS SAM surveys may be required. To this end the monitoring programme should align with the site construction and occupation schedule, with the final SAM survey being conducted after full occupancy has been achieved. This section of the Framework TP should be amended accordingly, including details of the expected construction and occupation schedules.
- 5.3.2 There do not seem to be any proposed improvements for cyclists
- 5.3.5 Check Ford lane drawings for cycle provision
- 6.2.2 New residents should receive their letter/leaflet informing them about the Travel Plan within 7 days of occupying their new home.
- 6.2.3 Due to the size of this site it is likely that notice boards will be required in 3 or more locations.
- 6.2.5 New residents should receive their Travel Information Packs within 7 days of occupying their new home. The value of the sustainable travel voucher may need to be revised depending the impact of COVID-19 on the inflation and the value of sterling. For the sake of clarity, the voucher should be equivalent in value to £150 as at 1st Feb 2020. Please note the updated URL for the Plan Your Journey page on the WSCC website: <https://www.westsussex.gov.uk/roads-and-travel/travel-and-public-transport/rail-air-and-ferry-travel/plan-your-train-journey/>
- 7.5.1 , 7.7.1, 8.1.1-8.2.2 See response to 4.4.3 above and the potential need for the monitoring period to be longer than 5 years.
- 8.3 In line with all other Residential Travel Plans in West Sussex, the Travel Plan must include a second and final £150 voucher offer (equivalent value as at 01.02.20) to all residents in the event that the trip rate reduction target is not achieved.
- I consider that the developer should also be providing a car club at this site (at least 3 vehicles to be provided on 1st occupation). Additional cars may need to be added and they should base the final number on advice from their chosen provider.

Contributions

The application should set out the level of contributions to be provided, the mitigation to be provided and details of the phasing requirements for both.

Conclusion

Additional information is required in order to assess the application.

In summary the following is required:

- Consideration of additional policy- Arun Parking SPD and WSCC cycle design guide;
- Access/Highway Improvements – Confirmation of Yapton Road access ICD and RSA/Designers Responses;
- Yapton Road – 4th Arm consideration;
- NMU links to Yapton – Further NMU consideration;
- Horsemere Green Lane – Further NMU consideration;
- Ford Lane – Extent of pedestrian improvements clarified;
- Ford Road/Station Road – Further information on effective widths of shared use provision;
- Further details on Footpath 206 and secured funding;
- Equestrian facilities – identification of any facilities to be provided;

- Public Transport – Supporting information from bus companies to be provided;
- Ford Station – Consideration of facilities;
- PIA – Update data and expand scope;
- Employment Access – confirm consideration of WSCC/027/18/F HGV movements;
- Junction Modelling – Provide plans with parameters utilised;
- North End Road/B2233 Mini Roundabout – consideration of pedestrian improvements secured within Y/91/17;
- North End Road/B2233 Mini Roundabout and Bilsham Road / Burndell Road – provide costings to allow consideration of a financial contribution or works.
- Church Lane – provide a 2031 scenario;
- Horsemere Green Lane – provide modelling sensitivity testing;
- Level Crossing impacts – provide commentary on the impact on adjoining junctions;
- Ford Rail Bridge – Details of how the application will support its delivery;
- Travel Plan – update in line with comments;
- Contributions – set out levels to be provided and any further information on when these would be provided.

Stephen Gee
West Sussex County Council – Planning Services



Dear Sir/Madam

Thank you for consulting Network Rail, please see attached Network Rail’s response to planning application **F/4/20/OUT – Land at Ford Airfield Ford, West Sussex.**

Network Rail’s level crossing team also raised concerns regarding the accumulative impact of developments in the area. The Ford Airfield development is just one of many other smaller developments in the area as a whole, all of which are adding to the traffic volumes in the area and resulting in higher daily use at Level crossings. From a rail perspective, this large development should not be considered in isolation but form part of a far greater ‘holistic’ view of the impacts all developments in the area would cause. Network Rail believe some level crossings would benefit from closure in this area and are keen to work with the council to ensure occurs.

Kind Regards,



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Nick Donoghue,
Network Rail - Planning,
1 Eversholt Street,
London, NW1 2DN

Planning Services
Arun District Council, Civic Centre
Littlehampton
West Sussex
BN17 5LF

27/04/2020

Dear Sir/Madam,

Network Rail Consultation Response: F/4/20/OUT - Land at Ford Airfield Ford, West Sussex

Thank you for consulting Network Rail regarding the planning application F/4/20/OUT. Following an initial assessment of the application by Network Rail's Level Crossing team, concerns have been raised regarding the proposed 1,500 dwelling development's impact on Yapton and Ford Manually Controlled Barrier (MCB) level crossings as well as Hoe Lane, Long Barn and Lake Lane Public Footpath level crossings.

As part of our licence to operate and manage Britain's railway infrastructure, we have the legal duty to protect our passengers, the public and our workforce, and to reduce risk at our level crossings so far as is reasonably practicable. Our aim is to close and upgrade crossings across the network, which will improve safety for everyone.

Network Rail's initial concerns regarding the impact of the proposed development at Ford Airfield are outlined below.

Yapton and Ford MCB level crossings

Both MCB crossings currently experience high usage, any additional traffic in the area would create unacceptable traffic queues and tailbacks on both sides of the crossing.

The barrier down time at both Ford and Yapton CCTV crossings is already high causing long tailbacks in both directions leading to frustration from motorists and frequent requests to Network Rail for information relating to this. Any increase in road traffic at these crossings would create a longer waiting time for motorists leading to a much higher risk of red light jumping and general crossing misuse.

This development is also likely to generate rail trips at Ford Station therefore adding to the current tailbacks and blocking back issues in the AM and PM peaks. During this time the 'drop offs' and 'pick ups' are higher and can cause motorists to manoeuvre in the road causing obstructions to through users of Ford MCB level crossing.

Hoe Lane, Long Barn and Lake Lane Public Footpath level crossings

Lake lane, Hoe lane and Long barn PF level crossings are shown on the proposed development plan to be integrated into the development for recreational access. With the current protection measures in place at these foot crossings, any significant rise in the number of uses would create an unacceptable level of risk when assessed in relation to the number of trains (308 per day) that pass over these crossings.

Jacobs ladder and Langmeads farm foot crossings are also in the vicinity of the development and would need to be included in any comprehensive survey regarding increased risk at crossings in the area.

If the development is implemented, Network Rail's preferred mitigation would be to close the footpath level crossings, completely removing the risk to the rail network. However, the mechanism and practicality for the footpath level crossing closures still needs to be assessed. If closure is not feasible, Network Rail may require mitigation at these footpath crossings to reduce the risk to an acceptable level.

Impact on Ford Station

Network Rail are currently assessing the impact of the development on Ford Station and whether any mitigation may be required. Network Rail will provide further comments in due course.

Network Rail Position

As a result of our concerns outlined above, Network Rail would like to **holding object** until discussions have taken place between Arun District Council and the applicant where our concerns have been addressed.

Please could Arun District Council and the applicant provide Network Rail with their availability for a virtual meeting to discuss.

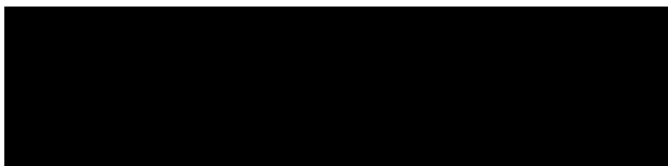
Kind Regards,

Nick Donoghue

Town Planning Technician | Property

Network Rail

1 Eversholt St | London | NW1 2DN



**APPENDIX B. JUNCTIONS 9 OUTPUTS – FORD ROAD SITE
ACCESS**

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: Ford Road Employment Access.j9

Path: T:\Projects\13000 Series\13091ITB Ford Airfield\Tech\Junction Assessments\Picady\Ford Road Employment Access

Report generation date: 20/07/2020 17:10:40

-
- »2018, AM
 - »2018, PM
 - »2021 with Grundon, AM
 - »2021 with Grundon, PM
 - »2021 with Grundon + Dev, AM
 - »2021 with Grundon + Dev, PM
 - »2031 with Grundon, AM
 - »2031 with Grundon, PM
 - »2031 with Grundon + Dev, AM
 - »2031 with Grundon + Dev, PM
 - »2031 with Grundon + Dev + Carboot, AM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018											
Stream B-C	D1	0.0	6.74	0.02	A	64 % [Stream B-A]	D2	0.0	5.90	0.02	A	95 % [Stream B-A]
Stream B-A		0.0	21.38	0.03	C			0.0	19.44	0.02	C	
Stream C-AB		0.0	7.45	0.02	A			0.0	6.53	0.02	A	
	2021 with Grundon											
Stream B-C	D3	0.0	7.48	0.02	A	49 % [Stream B-A]	D4	0.0	6.54	0.02	A	75 % [Stream B-A]
Stream B-A		0.1	22.04	0.08	C			0.1	20.06	0.10	C	
Stream C-AB		0.0	7.63	0.02	A			0.0	6.51	0.01	A	
	2021 with Grundon + Dev											
Stream B-C	D5	0.0	7.73	0.03	A	31 % [Stream B-A]	D6	0.1	7.52	0.06	A	15 % [Stream B-A]
Stream B-A		0.1	24.63	0.10	C			0.4	28.73	0.30	D	
Stream C-AB		0.1	8.25	0.06	A			0.0	6.85	0.02	A	
	2031 with Grundon											
Stream B-C	D7	0.0	7.54	0.02	A	46 % [Stream B-A]	D8	0.0	6.51	0.02	A	71 % [Stream B-A]
Stream B-A		0.1	22.32	0.08	C			0.1	19.96	0.07	C	
Stream C-AB		0.0	7.71	0.02	A			0.0	6.66	0.02	A	
	2031 with Grundon + Dev											
Stream B-C	D9	0.0	7.78	0.03	A	29 % [Stream B-A]	D10	0.1	7.41	0.05	A	20 % [Stream B-A]
Stream B-A		0.1	24.99	0.10	C			0.3	27.51	0.26	D	
Stream C-AB		0.1	8.32	0.06	A			0.0	6.89	0.02	A	
	2031 with Grundon + Dev + Carboot											
Stream B-C	D11	4.6	119.82	0.95	F	-18 % [Stream B-A]						
Stream B-A		4.8	144.73	0.89	F							
Stream C-AB		3.3	33.13	0.76	D							

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	27/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2018	AM	ONE HOUR	07:45	09:15		15
D2	2018	PM	ONE HOUR	16:45	18:15		15
D3	2021 with Grundon	AM	ONE HOUR	07:45	09:15		15
D4	2021 with Grundon	PM	DIRECT	16:45	18:15	90	15
D5	2021 with Grundon + Dev	AM	ONE HOUR	07:45	09:15		15
D6	2021 with Grundon + Dev	PM	ONE HOUR	16:45	18:15		15
D7	2031 with Grundon	AM	ONE HOUR	07:45	09:15		15
D8	2031 with Grundon	PM	ONE HOUR	16:45	18:15		15
D9	2031 with Grundon + Dev	AM	ONE HOUR	07:45	09:15		15
D10	2031 with Grundon + Dev	PM	ONE HOUR	16:45	18:15		15
D11	2031 with Grundon + Dev + Carboot	AM	ONE HOUR	07:45	09:15		15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.34	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Ford Road South		Major
B	Site Access		Minor
C	Ford Road North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Ford Road North	7.00		✓	3.40	120.0	✓	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	5.20	4.00	3.60	3.60		5.00	45	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	548	0.095	0.241	0.152	0.345
B-C	714	0.105	0.265	-	-
C-B	727	0.270	0.270	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	564	100.000
B - Site Access		✓	14	100.000
C - Ford Road North		✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	19	545
	B - Site Access	4	0	10
	C - Ford Road North	284	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	16	2
	B - Site Access	100	0	0
	C - Ford Road North	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	6.74	0.0	A
B-A	0.03	21.38	0.0	C
C-AB	0.02	7.45	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	599	0.013	7	0.0	6.083	A
B-A	3	205	0.015	3	0.0	17.840	C
C-AB	6	540	0.011	6	0.0	6.741	A
C-A	214			214			
A-B	14			14			
A-C	410			410			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	577	0.016	9	0.0	6.342	A
B-A	4	191	0.019	4	0.0	19.171	C
C-AB	7	520	0.014	7	0.0	7.021	A
C-A	255			255			
A-B	17			17			
A-C	490			490			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	546	0.020	11	0.0	6.734	A
B-A	4	173	0.026	4	0.0	21.378	C
C-AB	9	492	0.018	9	0.0	7.449	A
C-A	313			313			
A-B	21			21			
A-C	600			600			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	545	0.020	11	0.0	6.736	A
B-A	4	173	0.025	4	0.0	21.379	C
C-AB	9	492	0.018	9	0.0	7.449	A
C-A	313			313			
A-B	21			21			
A-C	600			600			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	576	0.016	9	0.0	6.346	A
B-A	4	191	0.019	4	0.0	19.167	C
C-AB	7	520	0.014	7	0.0	7.024	A
C-A	255			255			
A-B	17			17			
A-C	490			490			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	599	0.013	8	0.0	6.092	A
B-A	3	205	0.015	3	0.0	17.833	C
C-AB	6	540	0.011	6	0.0	6.744	A
C-A	214			214			
A-B	14			14			
A-C	410			410			

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.32	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	95	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	312	100.000
B - Site Access		✓	14	100.000
C - Ford Road North		✓	511	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	19	293
	B - Site Access	4	0	10
	C - Ford Road North	503	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	16	1
	B - Site Access	100	0	0
	C - Ford Road North	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	5.90	0.0	A
B-A	0.02	19.44	0.0	C
C-AB	0.02	6.53	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	651	0.012	7	0.0	5.594	A
B-A	3	216	0.014	3	0.0	16.879	C
C-AB	6	587	0.010	6	0.0	6.199	A
C-A	379			379			
A-B	14			14			
A-C	221			221			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	638	0.014	9	0.0	5.720	A
B-A	4	205	0.018	4	0.0	17.867	C
C-AB	7	576	0.012	7	0.0	6.332	A
C-A	452			452			
A-B	17			17			
A-C	263			263			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	621	0.018	11	0.0	5.899	A
B-A	4	190	0.023	4	0.0	19.443	C
C-AB	9	560	0.016	9	0.0	6.527	A
C-A	554			554			
A-B	21			21			
A-C	323			323			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	621	0.018	11	0.0	5.901	A
B-A	4	190	0.023	4	0.0	19.443	C
C-AB	9	560	0.016	9	0.0	6.527	A
C-A	554			554			
A-B	21			21			
A-C	323			323			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	638	0.014	9	0.0	5.725	A
B-A	4	205	0.018	4	0.0	17.865	C
C-AB	7	576	0.012	7	0.0	6.335	A
C-A	452			452			
A-B	17			17			
A-C	263			263			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	650	0.012	8	0.0	5.600	A
B-A	3	216	0.014	3	0.0	16.874	C
C-AB	6	587	0.010	6	0.0	6.199	A
C-A	379			379			
A-B	14			14			
A-C	221			221			

2021 with Grundon, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	49	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 with Grundon	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	605	100.000
B - Site Access		✓	23	100.000
C - Ford Road North		✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	28	577
	B - Site Access	13	0	10
	C - Ford Road North	301	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	16	2
	B - Site Access	100	0	0
	C - Ford Road North	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	7.48	0.0	A
B-A	0.08	22.04	0.1	C
C-AB	0.02	7.63	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	549	0.014	7	0.0	6.653	A
B-A	10	214	0.046	10	0.0	17.601	C
C-AB	6	532	0.011	6	0.0	6.840	A
C-A	227			227			
A-B	21			21			
A-C	434			434			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	525	0.017	9	0.0	6.976	A
B-A	12	199	0.059	12	0.1	19.232	C
C-AB	7	511	0.014	7	0.0	7.150	A
C-A	271			271			
A-B	25			25			
A-C	519			519			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	493	0.022	11	0.0	7.474	A
B-A	14	178	0.081	14	0.1	22.016	C
C-AB	9	481	0.018	9	0.0	7.628	A
C-A	331			331			
A-B	31			31			
A-C	635			635			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	492	0.022	11	0.0	7.477	A
B-A	14	178	0.081	14	0.1	22.035	C
C-AB	9	481	0.018	9	0.0	7.628	A
C-A	331			331			
A-B	31			31			
A-C	635			635			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	525	0.017	9	0.0	6.981	A
B-A	12	199	0.059	12	0.1	19.256	C
C-AB	7	511	0.014	7	0.0	7.150	A
C-A	271			271			
A-B	25			25			
A-C	519			519			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	548	0.014	8	0.0	6.661	A
B-A	10	214	0.046	10	0.0	17.631	C
C-AB	6	532	0.011	6	0.0	6.840	A
C-A	227			227			
A-B	21			21			
A-C	434			434			

2021 with Grundon, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Profile Type	D4 - 2021 with Grundon, PM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	75	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2021 with Grundon	PM	DIRECT	16:45	18:15	90	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
A - Ford Road South		✓	100.000
B - Site Access		✓	100.000
C - Ford Road North		✓	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	28	312
	B - Site Access	20	0	11
	C - Ford Road North	531	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	16	1
	B - Site Access	100	0	0
	C - Ford Road North	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	6.54	0.0	A
B-A	0.10	20.06	0.1	C
C-AB	0.01	6.51	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	562	0.020	11	0.0	6.532	A
B-A	20	199	0.100	20	0.1	19.968	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	561	0.020	11	0.0	6.540	A
B-A	20	199	0.100	20	0.1	20.056	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	561	0.020	11	0.0	6.540	A
B-A	20	199	0.100	20	0.1	20.058	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	561	0.020	11	0.0	6.540	A
B-A	20	199	0.100	20	0.1	20.058	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	561	0.020	11	0.0	6.540	A
B-A	20	199	0.100	20	0.1	20.058	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	561	0.020	11	0.0	6.540	A
B-A	20	199	0.100	20	0.1	20.058	C
C-AB	8	561	0.014	8	0.0	6.510	A
C-A	531			531			
A-B	28			28			
A-C	312			312			

2021 with Grundon + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.93	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 with Grundon + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	663	100.000
B - Site Access		✓	26	100.000
C - Ford Road North		✓	387	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	61	602
	B - Site Access	15	0	11
	C - Ford Road North	362	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	16	2
	B - Site Access	100	0	0
	C - Ford Road North	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	7.73	0.0	A
B-A	0.10	24.63	0.1	C
C-AB	0.06	8.25	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	538	0.015	8	0.0	6.789	A
B-A	11	204	0.055	11	0.1	18.653	C
C-AB	19	521	0.036	19	0.0	7.168	A
C-A	273			273			
A-B	46			46			
A-C	453			453			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	513	0.019	10	0.0	7.154	A
B-A	13	187	0.072	13	0.1	20.773	C
C-AB	22	497	0.045	22	0.0	7.586	A
C-A	325			325			
A-B	55			55			
A-C	541			541			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	478	0.025	12	0.0	7.727	A
B-A	17	163	0.102	16	0.1	24.591	C
C-AB	28	464	0.059	27	0.1	8.247	A
C-A	399			399			
A-B	67			67			
A-C	663			663			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	478	0.025	12	0.0	7.731	A
B-A	17	163	0.102	17	0.1	24.630	C
C-AB	28	464	0.059	28	0.1	8.249	A
C-A	399			399			
A-B	67			67			
A-C	663			663			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	513	0.019	10	0.0	7.161	A
B-A	13	187	0.072	14	0.1	20.815	C
C-AB	22	497	0.045	23	0.0	7.591	A
C-A	325			325			
A-B	55			55			
A-C	541			541			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	538	0.015	8	0.0	6.801	A
B-A	11	204	0.055	11	0.1	18.692	C
C-AB	19	521	0.036	19	0.0	7.171	A
C-A	273			273			
A-B	46			46			
A-C	453			453			

2021 with Grundon + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.76	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 with Grundon + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	404	100.000
B - Site Access		✓	75	100.000
C - Ford Road North		✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	29	375
	B - Site Access	49	0	26
	C - Ford Road North	563	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	16	1
	B - Site Access	100	0	0
	C - Ford Road North	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.06	7.52	0.1	A
B-A	0.30	28.73	0.4	D
C-AB	0.02	6.85	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	558	0.035	19	0.0	6.680	A
B-A	37	212	0.174	36	0.2	20.319	C
C-AB	7	570	0.012	7	0.0	6.394	A
C-A	424			424			
A-B	22			22			
A-C	282			282			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	537	0.044	23	0.0	7.006	A
B-A	44	198	0.222	44	0.3	23.213	C
C-AB	8	555	0.015	8	0.0	6.577	A
C-A	506			506			
A-B	26			26			
A-C	337			337			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	508	0.056	29	0.1	7.513	A
B-A	54	179	0.301	53	0.4	28.504	D
C-AB	10	535	0.019	10	0.0	6.849	A
C-A	620			620			
A-B	32			32			
A-C	413			413			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	507	0.056	29	0.1	7.523	A
B-A	54	179	0.301	54	0.4	28.727	D
C-AB	10	535	0.019	10	0.0	6.849	A
C-A	620			620			
A-B	32			32			
A-C	413			413			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	536	0.044	23	0.0	7.020	A
B-A	44	199	0.222	45	0.3	23.461	C
C-AB	8	555	0.015	8	0.0	6.577	A
C-A	506			506			
A-B	26			26			
A-C	337			337			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	557	0.035	20	0.0	6.702	A
B-A	37	212	0.174	37	0.2	20.576	C
C-AB	7	570	0.012	7	0.0	6.394	A
C-A	424			424			
A-B	22			22			
A-C	282			282			

2031 with Grundon, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	46	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2031 with Grundon	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	616	100.000
B - Site Access		✓	23	100.000
C - Ford Road North		✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	29	587
	B - Site Access	13	0	10
	C - Ford Road North	306	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	41	2
	B - Site Access	100	0	0
	C - Ford Road North	3	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	7.54	0.0	A
B-A	0.08	22.32	0.1	C
C-AB	0.02	7.71	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	546	0.014	7	0.0	6.684	A
B-A	10	213	0.046	10	0.0	17.726	C
C-AB	6	529	0.011	6	0.0	6.884	A
C-A	230			230			
A-B	22			22			
A-C	442			442			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	522	0.017	9	0.0	7.017	A
B-A	12	197	0.059	12	0.1	19.411	C
C-AB	7	507	0.014	7	0.0	7.207	A
C-A	275			275			
A-B	26			26			
A-C	528			528			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	489	0.023	11	0.0	7.532	A
B-A	14	176	0.082	14	0.1	22.302	C
C-AB	9	476	0.019	9	0.0	7.709	A
C-A	337			337			
A-B	32			32			
A-C	646			646			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	489	0.023	11	0.0	7.535	A
B-A	14	176	0.082	14	0.1	22.324	C
C-AB	9	476	0.019	9	0.0	7.709	A
C-A	337			337			
A-B	32			32			
A-C	646			646			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	522	0.017	9	0.0	7.025	A
B-A	12	197	0.059	12	0.1	19.434	C
C-AB	7	507	0.014	7	0.0	7.208	A
C-A	275			275			
A-B	26			26			
A-C	528			528			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	545	0.014	8	0.0	6.692	A
B-A	10	213	0.046	10	0.0	17.757	C
C-AB	6	529	0.011	6	0.0	6.884	A
C-A	230			230			
A-B	22			22			
A-C	442			442			

2031 with Grundon, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	71	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2031 with Grundon	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	345	100.000
B - Site Access		✓	23	100.000
C - Ford Road North		✓	547	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	28	317
	B - Site Access	13	0	10
	C - Ford Road North	539	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	43	1
	B - Site Access	100	0	0
	C - Ford Road North	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	6.51	0.0	A
B-A	0.07	19.96	0.1	C
C-AB	0.02	6.66	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	598	0.013	7	0.0	6.099	A
B-A	10	226	0.043	10	0.0	16.656	C
C-AB	6	579	0.010	6	0.0	6.281	A
C-A	406			406			
A-B	21			21			
A-C	239			239			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	584	0.015	9	0.0	6.264	A
B-A	12	213	0.055	12	0.1	17.905	C
C-AB	7	567	0.013	7	0.0	6.435	A
C-A	485			485			
A-B	25			25			
A-C	285			285			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	564	0.020	11	0.0	6.505	A
B-A	14	195	0.074	14	0.1	19.946	C
C-AB	9	549	0.016	9	0.0	6.661	A
C-A	593			593			
A-B	31			31			
A-C	349			349			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	564	0.020	11	0.0	6.507	A
B-A	14	195	0.074	14	0.1	19.959	C
C-AB	9	549	0.016	9	0.0	6.661	A
C-A	593			593			
A-B	31			31			
A-C	349			349			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	583	0.015	9	0.0	6.270	A
B-A	12	213	0.055	12	0.1	17.922	C
C-AB	7	567	0.013	7	0.0	6.438	A
C-A	485			485			
A-B	25			25			
A-C	285			285			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	597	0.013	8	0.0	6.108	A
B-A	10	226	0.043	10	0.0	16.680	C
C-AB	6	579	0.010	6	0.0	6.281	A
C-A	406			406			
A-B	21			21			
A-C	239			239			

2031 with Grundon + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.93	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2031 with Grundon + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	674	100.000
B - Site Access		✓	26	100.000
C - Ford Road North		✓	392	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	62	612
	B - Site Access	15	0	11
	C - Ford Road North	367	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	19	2
	B - Site Access	100	0	0
	C - Ford Road North	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	7.78	0.0	A
B-A	0.10	24.99	0.1	C
C-AB	0.06	8.32	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	536	0.015	8	0.0	6.816	A
B-A	11	202	0.056	11	0.1	18.777	C
C-AB	19	518	0.036	19	0.0	7.202	A
C-A	276			276			
A-B	47			47			
A-C	461			461			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	510	0.019	10	0.0	7.191	A
B-A	13	185	0.073	13	0.1	20.979	C
C-AB	22	494	0.045	22	0.0	7.632	A
C-A	330			330			
A-B	56			56			
A-C	550			550			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	475	0.026	12	0.0	7.781	A
B-A	17	161	0.103	16	0.1	24.945	C
C-AB	28	460	0.060	27	0.1	8.313	A
C-A	404			404			
A-B	68			68			
A-C	674			674			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	475	0.026	12	0.0	7.785	A
B-A	17	161	0.103	17	0.1	24.986	C
C-AB	28	460	0.060	28	0.1	8.315	A
C-A	404			404			
A-B	68			68			
A-C	674			674			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	510	0.019	10	0.0	7.201	A
B-A	13	185	0.073	14	0.1	21.021	C
C-AB	22	494	0.045	23	0.0	7.637	A
C-A	330			330			
A-B	56			56			
A-C	550			550			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	536	0.015	8	0.0	6.826	A
B-A	11	203	0.056	11	0.1	18.831	C
C-AB	19	518	0.036	19	0.0	7.208	A
C-A	276			276			
A-B	47			47			
A-C	461			461			

2031 with Grundon + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2031 with Grundon + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	409	100.000
B - Site Access		✓	67	100.000
C - Ford Road North		✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	29	380
	B - Site Access	42	0	25
	C - Ford Road North	571	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Ford Road South	B - Site Access	C - Ford Road North
	A - Ford Road South	0	41	1
	B - Site Access	100	0	0
	C - Ford Road North	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.05	7.41	0.1	A
B-A	0.26	27.51	0.3	D
C-AB	0.02	6.89	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	563	0.033	19	0.0	6.610	A
B-A	32	211	0.150	31	0.2	19.937	C
C-AB	7	568	0.012	7	0.0	6.419	A
C-A	430			430			
A-B	22			22			
A-C	286			286			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	543	0.041	22	0.0	6.920	A
B-A	38	197	0.192	38	0.2	22.588	C
C-AB	8	553	0.015	8	0.0	6.609	A
C-A	513			513			
A-B	26			26			
A-C	342			342			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	514	0.054	27	0.1	7.399	A
B-A	46	177	0.261	46	0.3	27.343	D
C-AB	10	532	0.019	10	0.0	6.891	A
C-A	629			629			
A-B	32			32			
A-C	418			418			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	513	0.054	28	0.1	7.406	A
B-A	46	177	0.261	46	0.3	27.508	D
C-AB	10	532	0.019	10	0.0	6.891	A
C-A	629			629			
A-B	32			32			
A-C	418			418			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	542	0.041	23	0.0	6.933	A
B-A	38	197	0.192	38	0.2	22.771	C
C-AB	8	553	0.015	8	0.0	6.612	A
C-A	513			513			
A-B	26			26			
A-C	342			342			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	562	0.034	19	0.0	6.631	A
B-A	32	211	0.150	32	0.2	20.142	C
C-AB	7	568	0.012	7	0.0	6.422	A
C-A	430			430			
A-B	22			22			
A-C	286			286			

2031 with Grundon + Dev + Carboot, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		22.48	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-18	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2031 with Grundon + Dev + Carboot	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road South		✓	997	100.000
B - Site Access		✓	231	100.000
C - Ford Road North		✓	626	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	385	612
	B - Site Access	116	0	115
	C - Ford Road North	367	259	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road South	B - Site Access	C - Ford Road North
From	A - Ford Road South	0	3	2
	B - Site Access	16	0	0
	C - Ford Road North	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.95	119.82	4.6	F
B-A	0.89	144.73	4.8	F
C-AB	0.76	33.13	3.3	D
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	498	0.174	86	0.2	8.705	A
B-A	87	253	0.345	85	0.5	21.252	C
C-AB	196	462	0.423	193	0.7	13.244	B
C-A	276			276			
A-B	290			290			
A-C	461			461			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	447	0.231	103	0.3	10.446	B
B-A	104	207	0.503	103	0.9	33.846	D
C-AB	237	433	0.548	235	1.2	18.069	C
C-A	326			326			
A-B	346			346			
A-C	550			550			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	249	0.508	124	1.0	28.195	D
B-A	128	145	0.884	117	3.7	103.999	F
C-AB	341	451	0.756	333	3.1	29.877	D
C-A	348			348			
A-B	424			424			
A-C	674			674			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	133	0.955	112	4.6	119.822	F
B-A	128	143	0.895	123	4.8	144.729	F
C-AB	341	449	0.759	340	3.3	33.133	D
C-A	348			348			
A-B	424			424			
A-C	674			674			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	431	0.240	121	0.3	12.250	B
B-A	104	204	0.512	119	1.1	47.947	E
C-AB	237	430	0.552	245	1.3	19.994	C
C-A	326			326			
A-B	346			346			
A-C	550			550			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	495	0.175	87	0.2	8.842	A
B-A	87	252	0.347	90	0.6	22.541	C
C-AB	196	461	0.424	198	0.8	13.740	B
C-A	276			276			
A-B	290			290			
A-C	461			461			

APPENDIX C. PIA DATA

Burndell Road – Climping – I-Transport

Collision report 01/05/2015 – 30/04/2020

Date produced
09 June 2020

The information included in this report is provided for analysis and is based on the data provided by Sussex Police. Some of the data included in this report is subjective and as such is not considered suitable for general release. In view of this it should not be transmitted to any other person in its original form, including in any report which may be available to the public. If you have any doubt regarding how this data may be used other than for analysis please contact SSRP for advice.

Sussex Safer Roads
P A R T N E R S H I P

Safer Roads
Safer Communities
Sharing the Responsibility

Produced by Sussex Safer Roads Partnership on behalf of Sussex Police

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

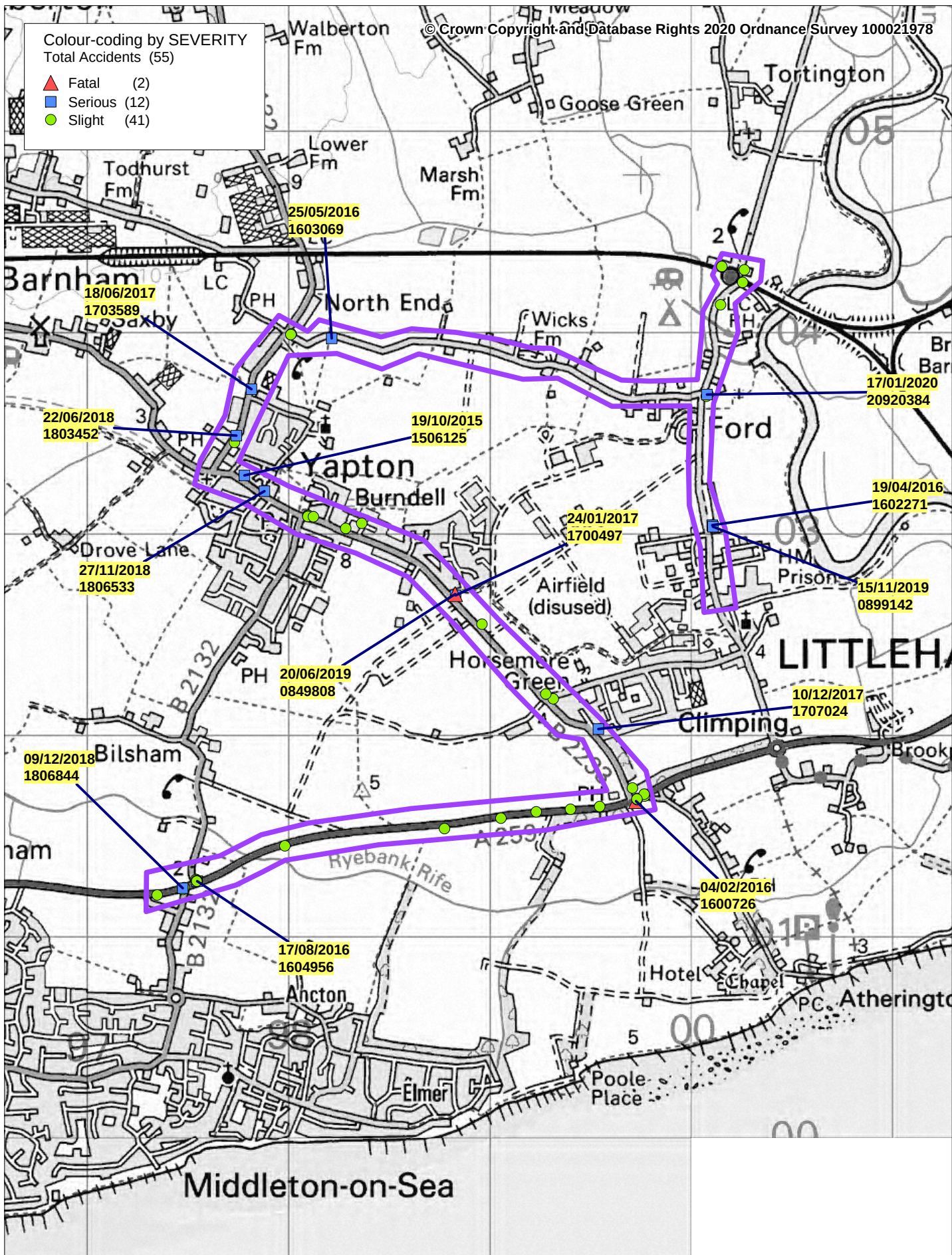
This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:

web: www.sussexsaferroads.gov.uk

email: data@sussexsaferroads.gov.uk



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Sussex Safer Roads
PARTNERSHIP

Burndell Road, Climping
Collision Dates 01/05/2015 - 30/04/2020
i-Transport

SCALE	1 : 25000
DATE	09/06/2020
DRAWING No.	
DRAWN BY	

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1503914 Thursday U STATION ROAD FORD 750M Veh 1 Car Going ahead N to S
09/07/2015 NORTH OF U FORD LANE OUTSIDE Veh 2 Pedal cycle Going ahead N to S Dri M 42 Slight
R1: U 0830hrs FORD LEVEL CROSSING
Daylight:street lights present
E 500,260 Dry
N 104,248 Fine without high winds
30 mph

Causation Factor: Participant: Confidence:
1st: Passing too close to cyclist, horse rider or pedestrian Vehicle 1 Very Likely
V2 (CYCLIST) WAS HEADING IN A SOUTHERLY DIRECTION. V1, ALSO HEADING IN THE SAME DIRECTION, HAS CLIPPED V2 WITH NEAR SIDE WING MIRROR, CAUSING CYCLIST TO COME OFF. BOTH PARTIES EXCHANGED DETAILS AT THE SCENE.

1503599 Friday A259 MIDDLETON ON SEA AT Veh 1 Car Turning right S to E
26/06/2015 JUNCTION OF B2132 YAPTON ROAD Veh 2 Car Going ahead E to W FSP F 28 Slight
R1: A 259 1505hrs
R2: B 2132 Daylight:street lights present
E 497,478 Dry
N 101,235 Fine without high winds
50 mph

Causation Factor: Participant: Confidence:
1st: Poor turn or manoeuvre Vehicle 1 Very Likely
2nd: Failed to look properly Vehicle 1 Very Likely
VEHICLE TWO EXITED SIDE ROAD ONTO MAIN ROAD TO HEAD WEST. VEHICLE ONE EXITED SIDE ROAD IN FRONT OF VEHICLE TWO CAUSING COLLISION.

1507691 Wednesday U FORD ROAD FORD AT JUNCTION Veh 1 Car Turning right W to S
23/12/2015 OF U FORD LANE Veh 2 Pedal cycle Going ahead S to N Dri M 53 Slight
R1: U 1740hrs
R2: U Darkness: no street lighting
E 500,079 Dry
N 103,683 Fine without high winds
60 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 1 Possible
DRIVER VEHICLE 1 MERGED FROM JUNCTION, THEN STOPPED SUDDENLY. CYCLIST (VEHICLE 2) RAN INTO THE FRONT OFFSIDE WING OF VEHICLE 1, WENT OVER THE BONNET AND LANDED ON THE OTHER SIDE CAUSING INJURIES.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

			Vehicles					Casualties		
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev		
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										
1506125	Monday	B2132 MAIN ROAD YAPTON 30M EAST OF U CHURCH ROAD OUTSIDE OLD POST OFFICE COTTAGES	Veh 1	Car		Going ahead	SE to NW Dri	M	55	Serious
R1: B 2132	19/10/2015									
	1847hrs	Darkness: street lights present a								
E 497,784	Dry									
N 103,289	Fine without high winds									
	30 mph									
Causation Factor:			Participant:			Confidence:				
1st:	Fatigue		Vehicle 1			Very Likely				
2nd:	Illness or disability, mental or physical		Vehicle 1			Possible				
VEH1 TRAVELLING WESTBOUND CROSSED ONTO OPPOSITE SIDE OF THE CARRIAGEWAY, ACROSS THE PAVEMENT, AND THE FOS CORNER OF THE VEHICLE STRUCK THE CORNER OF A HOUSE, BEFORE REJOINING THE CARRIAGEWAY.										
1602271	Tuesday	U FORD ROAD FORD AT JUNCTION OF U NELSON ROW OUTSIDE AT JUNCTION	Veh 1	Taxi		Going ahead	S to N			
R1: U	19/04/2016		Veh 2	Car		Wait to turn right	S to N Dri	M	38	Serious
R2: U	0732hrs	Daylight:street lights present								
E 500,109	Dry									
N 103,042	Fine without high winds									
	40 mph									
Causation Factor:			Participant:			Confidence:				
1st:	Failed to look properly		Vehicle 1			Very Likely				
VEHICLE 2 TRAVELLING NORTH ON FORD ROAD, SLOWED WITH INTENTION TO TURN INTO NELSON ROW WHEN VEHICLE 1 FOLLOWING BEHIND FAILED TO NOTICE V2 SLOWING AND DROVE INTO REAR OF V2 CAUSING MINOR NECK PAIN INJURY TO DRIVER OF V2.										
1602024	Thursday	A259 CLIMPING 250M WEST OF B2233 YAPTON ROAD	Veh 1	Goods < 3.5t		O/take m/veh o/side	W to E			
R1: A 259	07/04/2016		Veh 2	Pedal cycle		Going ahead	W to E Dri	M	28	Slight
	0705hrs	Daylight:street lights present								
E 499,234	Dry									
N 101,617	Fine without high winds									
	60 mph									
Causation Factor:			Participant:			Confidence:				
1st:	Dazzling sun		Vehicle 1			Very Likely				
2nd:	Failed to judge other persons path or speed		Vehicle 1			Possible				
V1 TRAVELLING EAST BOUND IN LOW SUNLIGHT OVERTAKES PEDAL CYCLIST V2 AND HAS MINOR CONTACT WITH WING MIRROR CAUSING INJURY										

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1602432 Wednesday C17 STATION ROAD ARUNDEL AT 27/04/2016 JUNCTION OF U FORD LANE
 R1: C 17 0820hrs
 R2: U Daylight:street lights present
 E 500,089 Wet/Damp
 N 103,692 Fine without high winds
 30 mph

Causation Factor: Participant: Confidence:
 1st: Careless/Reckless/In a hurry Vehicle 1 Possible
 V1 TURNING RIGHT/SOUTH, FROM FORD LANE JUNC INTO STATION ROAD FORD ARUNDEL. V1 COLLIDED WITH V2 WHICH WAS TRAVELLING NORTH BOUND ON STATION ROAD.

1603069 Wednesday U FORD LANE BARNHAM 300M 25/05/2016 WEST OF B2132 NORTH END ROAD
 R1: U 0110hrs
 Darkness: no street lighting
 E 498,218 Dry
 N 103,970 Fine without high winds
 60 mph

Causation Factor: Participant: Confidence:
 1st: Failed to look properly Vehicle 1 Possible
 2nd: Other Vehicle 2 Very Likely
 V2 A PEDAL CYCLE HAS BIT HIT FROM BEHIND BY V1 WHICH IS UNKNOWN. V1 DID NOT STOP AT SCENE OR REPORT INCIDENT. THERE ARE NO KNOWN DETAILS WITH REGARDS TO V1. RIDER OF V2 SUFFERED LOWER BACK PAIN AND WAS TAKEN TO ST RICHARDS.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1601603 Thursday B2132 MAIN ROAD BOGNOR REGIS 17/03/2016 AT JUNCTION OF B2132 BILSHAM ROAD
R1: B 2132 1606hrs
R2: B 2132 Daylight:street lights present
E 498,099 Dry
N 103,091 Fine without high winds 30 mph

Causation Factor:

1st: Inexperienced or learner driver/rider
2nd: Careless/Reckless/In a hurry
3rd: Failed to judge other persons path or speed
4th: Poor turn or manoeuvre
5th: Dazzling sun
6th: Failed to judge other persons path or speed

Participant:

Vehicle 1
Vehicle 1
Vehicle 1
Vehicle 1
Vehicle 2
Vehicle 2

Confidence:

Very Likely
Possible
Possible
Possible
Possible
Possible

V1 HAS BEEN TRAVELLING WEST TO EAST FROM BARNHAM TO LITTLEHAMPTON. V2 HAS BEEN TRAVELLING IN THE OPPOSITE DIRECTION. V1 BEEN INDICATING THEIR INTENTION TO TURN RIGHT AND ENTERED THE ROUNDABOUT, CUTTING THE ROUNDABOUT OFF. V2 HAS ENTERED THE ROUNDABOUT CUTTING THE ROUNDABOUT AND STRAIGHTENING THE ROAD AT THE SAME TIME AND A COLLISION HAS OCCURED. THE SUN WAS LOW AT THE TIME IN A SOUTH WEST HEADING WHICH MAY HAVE CAUSED DAZZLE TO V2. V1 HAS COME TO REST IN 4TH GEAR.

1604747 Sunday A259 YAPTON AT JUNCTION OF 07/08/2016 B2132 YAPTON ROAD
R1: A 259 2230hrs
R2: B 2132 Darkness: street lights present a
E 497,549 Dry
N 101,270 Fine without high winds 50 mph

Causation Factor:

1st: Failed to judge other persons path or speed

Participant:

Vehicle 1

Confidence:

Very Likely

VEHICLE 2 DRIVING FROM WEST TO EAST ALONG A259 TRAVELLING 10MPH SLOWER THAN THE 50MPH SPEED LIMIT. VEHICLE 1 WAITING TO PULL OUT ONTO THE A259 FROM YAPTON ROAD POINTING SOUTH (NORTH SIDE OF JUNCTION) DROVE STRAIGHT INTO SIDE OF VEH 2.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1604956 Wednesday A259 GREVATTS LANE MIDDLETON Veh 1 Car Turning right N to W
 17/08/2016 ON SEA AT JUNCTION OF B2132 Veh 2 M/C > 500 cc Going ahead W to E Dri M 52 Serious
 R1: A 259 1325hrs YAPTON ROAD Veh 2 M/C > 500 cc Going ahead W to E F 47 Serious
 R2: B 2132 Daylight:street lights present
 E 497,549 Dry
 N 101,272 Fine without high winds
 50 mph

Causation Factor:

1st: Failed to look properly
 2nd: Poor turn or manoeuvre

Participant:

Vehicle 1
 Vehicle 1

Confidence:

Very Likely
 Possible

VEHICLE TWO HEADING EAST ON MAIN ROAD, VEHICLE ONE EXITING SIDE ROAD IN PATH OF VEHICLE TWO. COLLISION OCCURRED SERIOUS INJURIES.

1701147 Monday B2233 BURDELL ROAD YAPTON AT Veh 1 Car Turning right N to W
 27/02/2017 JUNCTION OF U GOODHEW CLOSE Veh 2 M/C > 125 cc Going ahead NWto SE Dri M 22 Slight
 R1: B 2233 0825hrs
 R2: U Daylight:street lights present
 E 498,288 Wet/Damp
 N 103,026 Fine without high winds
 30 mph

Causation Factor:

1st: Failed to look properly
 2nd: Failed to judge other persons path or speed

Participant:

Vehicle 1
 Vehicle 1

Confidence:

Very Likely
 Very Likely

V1 EXITING SIDE ROAD ONTO MAIN SINGLE CARRIAGEWAY TURNED RIGHT AND COLLIDED WITH V2 TRAVELLING SOUTH EAST AT LOW SPEED

1702280 Tuesday U FORD LANE ARUNDEL AT Veh 1 Car Turning right S to E
 25/04/2017 JUNCTION OF B2132 NORTH END Veh 2 Pedal cycle Turning left N to E Dri M 32 Slight
 R1: U 0805hrs ROAD OUTSIDE JUNCTION
 R2: B 2132 Daylight:street lights present
 E 498,017 Dry
 N 103,993 Fine without high winds
 20 mph

V1 HAD BEEN NORTHBOUND ON NORTH END ROAD & WAS INDICATING RT IN ORDER TO THEN TRAVEL EAST ON FORD LANE CYCLIST WAS SOUTHBOUND ON NORTHEAST RD HAND SIGNALLING LEFT INTENDING TO ALSO TRAVEL EAST ON FORD LANE V1 TURNS IN FRONT OF V2 WHO COULD NOT AVOID IMPACT

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1600726 Thursday A259 GREVATTS LANE CLIMPING AT JUNCTION OF B2233 YAPTON ROAD Veh 1 Car Going ahead NW to S Dri F 29 Fatal
04/02/2016
R1: A 259 1737hrs
R2: B 2233 Darkness: no street lighting
E 499,730 Dry
N 101,670 Fine without high winds
40 mph

Causation Factor:

Participant:

Confidence:

1st: Careless/Reckless/In a hurry

Vehicle 1

Possible

2nd: Distraction in vehicle

Vehicle 1

Possible

V1 HEADING SOUTH ON YAPTON ROAD, FOR UNKNOWN REASON THE DRIVER HAS FAILED TO NEGOTIATE THE JUNCTION AND CONTINUED STRAIGHT OVER INTO A WATER FILLED DITCH. VEHICLE THEN OVERTURNED INTO THE DITCH AND DRIVER SUSTAINED FATAL INJURIES.

1700497 Tuesday B2233 BURNDELL ROAD FORD AT JUNCTION OF U ROLLASTON PARK Veh 1 Car Turning right SE to NE
24/01/2017 Veh 2 M/C < 125 cc Going ahead NW to SE Dri M 23 Serious
R1: B 2233 1530hrs
R2: U Daylight:street lights present
E 498,833 Wet/Damp
N 102,693 Fine without high winds
30 mph

Causation Factor:

Participant:

Confidence:

1st: Poor turn or manoeuvre

Vehicle 1

Very Likely

2nd: Failed to look properly

Vehicle 1

Very Likely

V1 IN RIGHT HAND FILTER LANE AT JUNCTION TURNS RIGHT INTO PATH OF MOTORCYCLIST WHO WAS TRAVELLING SOUTH EAST ALONG MAIN ROAD CAUSING SERIOUS INJURIES TO THE RIDER.

1705009 Thursday A259 GREVATTS LANE YAPTON Veh 1 Car Going ahead E to W Dri F 40 Slight
27/04/2017 400M WEST OF B2233 YAPTON ROAD Veh 2 Car Stopping E to W
R1: A 259 1406hrs Veh 3 Car Stopping E to W
Daylight:street lights present
E 499,059 Dry
N 101,586 Fine without high winds
40 mph

Causation Factor:

Participant:

Confidence:

1st: Failed to look properly

Vehicle 1

Very Likely

V1 FAILED TO SEE SLOWER MOVING TRAFFIC IN FRONT AND COLLIDED INTO REAR OF V2 PUSHING IT INTO V3. MINOR INJURY TO DRIVER OF V1.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1704966 Sunday U GOODHEW CLOSE YAPTON AT
03/09/2017 JUNCTION OF U GOODHEW CLOSE
R1: U 1420hrs Veh 1 Car Stopping NW to E
R2: U Daylight:street lights present Veh 2 Taxi Stopping E to NW RSP F 19 Slight
E 498,367 Wet/Damp Veh 2 Taxi Stopping E to NW Dri F 20 Slight
N 103,051 Fine without high winds
30 mph

VEH 2 WAS ON THE BLIND BEND AND WAS WAITING AS THE ROAD WAS BLOCKED HER SIDE AS VEH 1 CAME TOWARDS THEM.
VEH 1 TRIED TO STOP BUT SKIDDED INTO VEH 2 CAUSING DAMAGE TO VEH AND INJURY TO PASSENGER -

1703589 Sunday B2132 NORTH END ROAD YAPTON
18/06/2017 30M NORTH OF U CHURCH LANE
R1: B 2132 1300hrs Veh 1 Goods 3.5 - 7.5t O/take m/veh o/side S to NE
E 497,819 Dry Veh 2 Pedal cycle Going ahead S to NE Dri M 57 Serious
N 103,718 Fine without high winds
30 mph

V2 (CYCLIST) WAS HEADING IN A NORTHERLY DIRECTION. A VEHICLE WAS COMING IN THE OTHER DIRECTION AND V1 HAS CUT
ACROSS V2 TO AVOID HITTING THE VEHICLE. V2(CYCLIST) WAS KNOCKED OFF HER CYCLE AND DRIVER OF V1 DROVE AWAY
FROM THE SCENE WITHOUT EXCHANGING DE
TAILS.

1707283 Friday U GAUGEMASTER WAY FORD 146M
22/12/2017 WEST OF U FORD ROAD
R1: U 1702hrs Veh 1 Car Reversing NW to SE Dri M 78 Slight
E 500,156 Darkness: no street lighting
N 104,328 Dry
Fine without high winds
30 mph

Causation Factor: Participant: Confidence:
1st: Inexperience with type of vehicle Vehicle 1 Very Likely
2nd: Loss of control Vehicle 1 Very Likely
THE DRIVER OF VEHICLE 1, WHICH IS AN AUTOMATIC HAS GOTTEN HIMSELF CONFUSED OVER FORWARD AND REVERSE GEAR.
THE DRIVER HAS THEN REVERSED AND SUFFERED A SASH MOMENT COLLIDING WITH A BUILDING.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties		
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1706840 Wednesday B2132 NORTH END ROAD ARUNDEL
29/11/2017 AT JUNCTION OF U PRIVATE
R1: B 2132 1315hrs DRIVEWAY
R2: U Daylight:street lights present
E 497,735 Dry
N 103,453 Fine without high winds
30 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 1 Very Likely
2nd: Failed to judge other persons path or speed Vehicle 1 Very Likely
VEHICLE AND 1 AND 2 WERE TRAVELLING SOUTH DOWN NORTH END ROAD WHEN VEHICLE 2 STOPPED DUE TO VEHICLE 3 SLOWING TO PULL INTO DRIVEWAY, VEHICLE 1 DID NOT STOP AND HIT THE BACK OF VEHICLE 2 CAUSING DAMAGE TO BOTH VEHICLES AND MINOR INJURY TO DRIVER OF VEHICLE 2.

1800071 Friday B2233 YAPTON ROAD
05/01/2018 LITTLEHAMPTON AT JUNCTION OF
R1: B 2233 1815hrs U HORSEMER GREEN LANE
R2: U Darkness: no street lighting
E 499,319 Wet/Damp
N 102,179 Raining without high winds
40 mph

VEHICLE 1 PULLED OUT OF JUNCTION INTO PATH OF VEHICLE 2.

1800208 Saturday U FORD ROAD FORD AT JUNCTION
13/01/2018 OF U GAUGEMASTER WAY OUTSIDE
R1: U 2027hrs JUNCTION RTC
R2: U Darkness: street lights present a
E 500,269 Dry
N 104,311 Fine without high winds
40 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 1 Possible
2nd: Failed to judge other persons path or speed Vehicle 1 Possible
V2 S/B TOWARDS JUNCTION O/S V1 ENTERS MAIN ROAD FROM JUNCTION INTO PATH OF V2.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1800722 Thursday B2233 YAPTON ROAD Veh 1 Car Turning right N to W
08/02/2018 LITTLEHAMPTON AT JUNCTION OF Veh 2 M/C > 500 cc Going ahead E to W Dri M 46 Slight
0738hrs A259 CROOKTHORN LANE OUTSIDE
R1: B 2233 Daylight:street lights present
R2: A 259 Dry
E 499,736 Fine without high winds
N 101,678 40 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 1 Very Likely
V1 EXITING YAPTON ROAD TO TRAVEL WEST BOUND, HIT V2 IN MAIN CARRIAGEWAY WHICH WAS TRAVELING WEST BOUND. CYCLIST LEFT THE ROAD AND LANDED IN A BUSH, CAUSING MINOR INJURIES.

1800972 Monday A259 GREVATT'S LANE CLIMPING Veh 1 Car Going ahead W to E
19/02/2018 120M WEST OF B2233 YAPTON ROAD Veh 2 Car Going ahead W to E
0944hrs Veh 3 Car Going ahead W to E Dri M 23 Slight
Daylight:street lights present
E 499,404 Wet/Damp
N 101,630 Raining without high winds
40 mph

Causation Factor: Participant: Confidence:
1st: Aggressive driving Vehicle 1 Possible
2nd: Careless/Reckless/In a hurry Vehicle 1 Possible
A WHITE HATCHBACK (VEHICLE 1) HIT VEHICLE 2 ON THE REAR WHICH THEN LEAD TO VEHICLE 2 TO HIT THE REAR OF VEHICLE 3. VEHICLE 1 FAILED TO STOP.

1802525 Wednesday A259 CROOKTHORN LANE Veh 1 Car Going ahead E to W
09/05/2018 LITTLEHAMPTON AT JUNCTION OF Veh 2 Taxi Wait go ahead held E to W RSP M 13 Slight
0800hrs A2233 YAPTON ROAD
R1: A 259 Daylight:street lights present
R2: A 2233 Dry
E 499,773 Fine without high winds
N 101,695 40 mph

V2 HAS SLOWED DOWN DUE TO ONGOING TRAFFIC. V1 HAS DRIVEN INTO THE REAR OF V2. BOTH DRIVERS EXCHANGED DETAILS AT THE SCENE.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1802448 Monday U FORD LANE YAPTON AT Junction of B2132 North End Road Outside at Junction
R1: U 07/05/2018 1821hrs
R2: B 2132 Daylight:street lights present
E 498,015 Dry
N 103,989 Fine without high winds 40 mph

Causation Factor:

Participant:

Confidence:

1st: Impaired by alcohol

Vehicle 1

Very Likely

2nd: Passing too close to cyclist, horse rider or pedestrian

Vehicle 1

Very Likely

V1 WAS TRAVELLING WEST ON FORD LANE, ON THE APPROACH TO THE JUNCTION OF NORTH END ROAD V1 CLIPPED A PEDESTRIAN STOOD AT THE SIDE OF THE ROAD CAUSING SLIGHT INJURY.

1803452 Friday B2132 NORTH END ROAD YAPTON 300M NORTH OF B2233 MAIN ROAD OUTSIDE JUST SOUTH OF THE
R1: B 2132 22/06/2018 1510hrs
E 497,744 Daylight:street lights present
N 103,487 Dry
 Fine without high winds 30 mph

V2 PARKED WITH DRIVERS DOOR OPEN, V1 CYCLIST HAS RODE INTO THE OPEN DOOR, INJURY CAUSED.

1804930 Saturday A259 WORMS LANE YAPTON AT Junction of B2132 YAPTON ROAD
R1: A 259 25/08/2018 1301hrs
R2: B 2132 Daylight:street lights present
E 497,545 Dry
N 101,277 Fine without high winds 50 mph

Causation Factor:

Participant:

Confidence:

1st: Failed to judge other persons path or speed

Vehicle 1

Very Likely

V1 WAS TOWING V2 FROM YAPTON ROAD ONTO THE A259. V3 TRAVELLING W/B WAS IN COLLISION WITH V2 WHILST IT WAS BEING TOWED.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties			
			Veh No	Type	Manv	Dir	Class	Sex / Age / Sev			
Road No.	Date										
2nd Road No.	Time										
Grid Ref.	D/L										
	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

1806283 Wednesday A259 CROOKTHORN LANE Veh 1 Car Turning right N to W Dri F 43 Slight
 14/11/2018 CLIMPING AT JUNCTION OF B2233 Veh 2 Car Going ahead W to E Dri M 66 Slight
 R1: A 259 1846hrs YAPTON ROAD Veh 3 Car Going ahead E to W
 R2: B 2233 Darkness: street lights present a
 E 499,736 Dry
 N 101,684 Fine without high winds
 40 mph

Causation Factor:

Participant:

Confidence:

1st: Disobeyed Give Way or Stop sign or markings

Vehicle 1

Very Likely

2nd: Failed to judge other persons path or speed

Vehicle 1

Very Likely

3rd: Failed to look properly

Vehicle 1

V2 TRAVELLING EASTBOUND ON MAIN CARRIAGEWAY. V1 APPROACHES JUNCTION AND COMMENCES EDGING INTO CARRIAGEWAY. V3 TRAVELLING WESTBOUND FLASHES HEADLIGHTS. V1 ASSUMES THIS MEANS MOVE SO MOVES FURTHER INTO CARRIAGEWAY. V2 ONLY SEES V1 AT LAST MINUTE AND ATTEMPT TO SWERVE AND AVOID V1 BUT THEY COLLIDE. V1 AND V2 SUSTAINED DAMAGE. V3 DIDN'T STOP. DRIVER OF V1 AND V2 SUSTAINED MINOR INJURY.

1806380 Sunday A259 CROOKTHORN LANE Veh 1 Car Going ahead W to E Dri M 91 Slight
 18/11/2018 LITTLEHAMPTON 30M EAST OF Veh 2 Car Wait go ahead held W to E FSP F 28 Slight
 R1: A 259 1200hrs B2233 YAPTON ROAD Veh 2 Car Wait go ahead held W to E Dri F 53 Slight
 Daylight:street lights present Veh 3 Car Wait go ahead held W to E Dri M 30 Slight
 E 499,770 Dry Veh 3 Car Wait go ahead held W to E FSP F 28 Slight
 N 101,705 Fine without high winds
 40 mph

Causation Factor:

Participant:

Confidence:

1st: Failed to look properly

Vehicle 1

Very Likely

VEHICLES 2 & 3 HEADING EAST ALONG A259 HAVING PULLED OUT OF THE B2233 YAPTON ROAD JUNCTION. VEHICLES HAD CLEARED SAME WHEN THEY SLOWED FOR CONGESTION AHEAD AND VEH 1 COLLIDED INTO THE REAR OF VEH 2, CAUSING A SHUNT, AND THEN VEH 2 COLLIDED INTO THE REAR OF VEH 3.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1805704 Tuesday B2233 YAPTON ROAD CLIMPING 30M NORTH OF U HORSEMERE GREEN
R1: B 2233 09/10/2018 LANE OUTSIDE BUS STOP
 1557hrs
 Daylight:street lights present
E 499,282 Dry
N 102,203 Fine without high winds
 60 mph

THE INJURED PERSON (REPORTING) HAD JUST ALIGHTED THE STAGECOACH 700 BUS TO HEAD SOUTH IN HER WHEELCHAIR WITH HER ASSISTANCE DOG. SHE MOVED ALONG THE UNEAVEN GRASS VERGE ALONG THE NEARSIDE THE BUS. HER WHEELCHAIR SUDDENLY TURNED 90 DEGREES DUE TO THE UNEAVEN SURFACE. SHE PLACED BOTH PALMS AGAINST THE BUS BUT HER LEFT FOOT WAS IN FRONT OF THE REAR WHEEL OF THE BUS. THE DRIVER THEN PULLED AWAY HEADING NORTH. THIS LADY HAS BEEN UNABLE TO GAIN ANY RESPONSE FROM STAGECOACH AT THIS TIME.

1707024 Sunday B2233 YAPTON ROAD CLIMPING 260M SOUTH OF U HORSEMERE GREEN LANE
R1: B 2233 10/12/2017
 1418hrs
 Daylight:street lights present
E 499,543 Wet/Damp
N 102,029 Fine without high winds
 40 mph

Causation Factor: **Participant:** **Confidence:**
1st: Loss of control Vehicle 1 Very Likely
2nd: Travelling too fast for conditions Vehicle 1 Very Likely
 V1 TRAVELLING SOUTH ON A SINGLE CARRIAGEWAY ROAD NEGOTIATES LEFT HAND BEND FIRST THEN ON EXITING THE FOLLOWING RIGHT HAND BEND LOST CONTROL AND LEFT ROAD NEARSIDE AND COLLIDED INTO A FLINT WALL AND PEDESTRIAN DOG WALKER AND DOG WHO STOOD JUST OFF THE CAR RIAGEWAY. V1 THEN CAME TO REST BACK IN THE CARRIAGEWAY.

1806672 Monday B2233 YAPTON AT JUNCTION OF B2233
R1: B 2233 03/12/2018
R2: B 2233 0820hrs
 Daylight:street lights present
E 498,123 Wet/Damp
N 103,084 Raining without high winds
 30 mph

Causation Factor: **Participant:** **Confidence:**
1st: Deposit on road (eg oil, mud, chippings) Casualty 1 Very Likely
 THE MOTORCYCLIST WAS TRAVELLING IN A WESTERLY DIRECTION ON THE APPROACH TO THE JUNCTION OF BILSHAM ROAD. THE MOTORCYCLIST APPLIED BRAKES ON THE APPROACH AND THE WHEEL SPUN OUT. ON ARRIVAL AT THE SCENE THERE WAS A SPILLAGE OF DIESEL.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1900336 Friday B2233 YAPTON ROAD CLIMPING AT JUNCTION OF A259 CROOKTHORN LANE OUTSIDE OYSTERCATCHER
 R1: B 2233 18/01/2019 1333hrs
 R2: A 259 Daylight:street lights present
 E 499,712 Wet/Damp
 N 101,736 Fine without high winds 30 mph

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Possible
2nd:	Careless/Reckless/In a hurry	Vehicle 1	Possible
3rd:	Loss of control	Vehicle 2	
APPARENTLY VEH 1 MADE A REVERSE MANOEUVRE WITHOUT NOTICING VEH 2 DIRECTLY BEHIND. VEH 1 REVERSED ONTO VEH 2 PUSHING THE RIDER TO THE GROUND			

1901063 Saturday A259 WORMS LANE YAPTON AT JUNCTION OF B2132 YAPTON ROAD
 R1: A 259 23/02/2019 1510hrs
 R2: B 2132 Daylight:street lights present
 E 497,544 Dry
 N 101,281 Unknown 50 mph

Causation Factor:		Participant:	Confidence:
1st:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
2nd:	Poor turn or manoeuvre	Vehicle 1	Very Likely
3rd:	Failed to look properly	Vehicle 1	
V1 ATTEMPTED TO NEGOTIATE JUNCTION AND DROVE IN THE PATH OF AN ON COMING VEHICLE.			

0878377 Thursday YAPTON ROAD (B2233) - 82 METRES FROM JUNCTION WITH UNCLASSIFIED ROAD
 R1: B 2233 05/09/2019 1130hrs
 E 498,964 Daylight:street lights present
 N 102,550 Dry
 Unknown 50 mph

CASUALTY WAS DRIVING V2 A HORSE AND CART ALONG YAPTON ROAD, YAPTON, TOWARDS CLIMPING. V1, A BUS WAS TRAVELLING IN SAME DIRECTION. COMMENCED OVERTAKE ON OFFSIDE OF CART. FOR REASONS UNKNOWN, EITHER MISJUDGEMENT OF DRIVER V1 OR CHANGE IN DIRECTION OF CART, V1 COLLIDED WITH OFFSIDE OF CART, CAUSING HORSE TO BOLT AND VEER OFF CARRIAGEWAY ON NEAR SIDE BEFORE REJOINING CARRIAGEWAY. INJURY CAUSED TO CASUALTY - GRAZED BACK DUE TO BEING THROWN ABOUT IN SEAT. INJURY CAUSED TO HORSE EITHER BY DIRECT CONTACT

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1806533 Tuesday B2132 MAIN ROAD YAPTON AT JUNCTION OF U CANAL ROAD OUTSIDE REAR OF 4 THE PINES
R1: B 2132 27/11/2018 1150hrs
R2: U Daylight:street lights present
E 497,884 Wet/Damp
N 103,211 Raining without high winds 30 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 1 Very Likely
VEHICLE 1 WAS TRAVELLING BEHIND VEHICLE 2 WHEN VEHICLE 2 ATTEMPTED A 180 DEGREE TURN ON THE MINI ROUNDABOUT. AS IT WENT WIDE TO THE LEFT AND STEERED TO THE RIGHT VEHICLE 1 MADE CONTACT WITH VEHICLE 2 AT THE FRONT OFFSIDE BUMPER. VEHICLE 1 THEN CAME PAST VEHICLE 2 KNOCKING VEHICLE 2 TO THE LEFT. VEHICLE 1 THEN SPUN, OVER CORRECTED AND SPUN OFF LEFT ONTO THE PAVEMENT AND INTO A BRICK WALL.

0846203 Sunday CROOKTHORN LANE (A259) AT JUNCTION WITH YAPTON ROAD (B2233)
R1: A 259 09/06/2019 0935hrs
R2: B 2233 Daylight:street lights present
E 499,734 Dry
N 101,681 Fine without high winds 40 mph

Causation Factor: Participant: Confidence:
1st: Careless/Reckless/In a hurry Vehicle 1 Very Likely
2nd: Failed to look properly Vehicle 1 Very Likely
3rd: Following too close Vehicle 1
V1 TRAVELLING SOUTHBOUND ON YAPTON ROAD NEXT TO OYSTER CATCHER. V2 TRAVELLING EASTBOUND ON A259 FROM BOGNOR REGIS. V1 HAS PULLED OUT FOLLOWING BEHIND 2 NON-INVOLVED VEHICLES AND V2 HAS NOT HAD TIME TO STOP.

0849808 Thursday ROLLASTON PARK NEAR JUNCTION WITH YAPTON ROAD (B2233)
R1: U 20/06/2019 0855hrs
R2: B 2233 Daylight:street lights present
E 498,831 Dry
N 102,699 Fine without high winds 30 mph

Causation Factor: Participant: Confidence:
1st: Careless/Reckless/In a hurry Vehicle 1 Possible
2nd: Careless/Reckless/In a hurry Vehicle 2 Possible
VEH 2 TRAVELLING SOUTHEAST ON MAIN CARRIAGEWAY VEH 1 TURNED RIGHT INTO SIDE ROAD ACROSS THE PATH OF VEH 2. VEH 2 COLLIDED WITH NEAR SIDE OF VEH 1

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

0854406 Thursday GREVATTS LANE (A259) Veh 1 Goods < 3.5t U turn W to W
04/07/2019 Veh 2 Car Stopping E to W Dri F 50 Slight
R1: A 259 1755hrs Veh 3 Goods < 3.5t Stopping E to W
Daylight:street lights present
E 497,985 Dry
N 101,448 Fine without high winds
60 mph

Causation Factor: Participant: Confidence:
1st: Failed to look properly Vehicle 3 Very Likely
2nd: Following too close Vehicle 3 Very Likely
3rd: Driver using mobile phone Vehicle 3
VEHICLE 1 WAS A FORD TRANSIT OR SMALLER, TRAVELLING EAST ON A259, WAS DOING A U TURN IN THE ROAD TO CHANGE TO WESTBOUND CARRIAGEWAY. VEHICLE 2 WAS TRAVELLING WESTBOUND, BRAKED FOR VEHICLE 1 TURNING IN THE ROAD, WAS HIT BY VEHICLE 3, TRAVELLING BE HIND HER. DRIVER OF VEHICLE 3 BELIEVED BY DRIVER 2 TO HAVE BEEN ON HIS MOBILE PHONE AT TIME OF COLLISION, THIS WAS ONLY DISCLOSED AFTER DRIVER 3 HAD LEFT SCENE. VEHICLE 1 DID NOT STOP. VEHICLE 2 REAR END DAMAGE REMOVED TO FONTWELL BY WESTBOUR E. VEHICLE 3 FRONT END DAMAGE REMOVED BY OWNER. WITNESS WAS BEHIND VEHICLE 3 AND HAS DASHCAM FOOTAGE.

0865703 Wednesday FORD ROAD - 150 METRES FROM Veh 1 Car Going ahead RH bend S to NE
07/08/2019 JUNCTION WITH UNCLASSIFIED Veh 2 Car Going ahead LH bend NE to S Dri M 56 Slight
R1: U 0338hrs ROAD
Daylight:street lights present
E 500,150 Dry
N 104,137 Fine without high winds
60 mph

Causation Factor: Participant: Confidence:
1st: Inexperience of driving on the left Vehicle 1 Very Likely
2nd: Illegal turn or direction of travel Vehicle 1 Very Likely
V1 AND V2 TRAVELLING IN OPPOSITE DIRECTIONS ON FORD ROAD. V1 WAS DRIVING ON THE WRONG SIDE OF THE RIDE AND HIT V2 HEAD ON. V1 IS FROM SWITZERLAND AND WAS HEADING HOME HAVING ONLY JUST LEFT A CAMPSITE. V1 WAS DRIVING ON THE RIGHT AS FORGOT DUE TO NO O THER TRAFFIC AROUND.

0872811 Thursday GREVATTS LANE (A259) AT Veh 1 Car Starting N to SW
29/08/2019 JUNCTION WITH YAPTON ROAD Veh 2 Car Going ahead SW to NE Dri F 63 Slight
R1: A 259 0650hrs (B2132)
R2: B 2132 Daylight:street lights present
E 497,549 Dry
N 101,272 Fine without high winds
40 mph

Causation Factor: Participant: Confidence:
1st: Dazzling sun Vehicle 1 Very Likely
V1 HAS ENTERED THE MAIN ROAD, FROM A SIDE ROAD, INTO THE PATH OF V2, WHICH WAS TRAVELLING AT RELATIVELY LOW SPEED. MINOR INJURY TO D2

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

0885518 Tuesday BILSHAM ROAD (B2132) NEAR Junction with BURDELL ROAD
08/10/2019 (B2233)
R1: B 2132 0838hrs
R2: B 2233 Darkness: street lights present b
E 498,103 Wet/Damp
N 103,089 Raining without high winds
30 mph

Causation Factor:

1st: Failed to look properly

2nd: Failed to signal/Misleading signal

DRIVER IN VEHICLE 1 TURNING RIGHT AT MINI ROUNDABOUT FAILED TO OBSERVE PEDESTRIAN IN ROAD

Participant:

Vehicle 1

Vehicle 1

Confidence:

Very Likely

Very Likely

0891812 Friday GREVATTS LANE (A259) AT Junction with YAPTON ROAD
25/10/2019 (B2132)
R1: A 259 1708hrs
R2: B 2132 Darkness: street lights present a
E 497,485 Wet/Damp
N 101,241 Fine with high winds
50 mph

Causation Factor:

1st: Careless/Reckless/In a hurry

V1 PULLED OUT FROM YAPTON RD ONTO WORMS LANE (A259) AT SPEED DIRECTLY INTO THE PATH OF ONCOMING V2. V2 ATTEMPTED TO AVOID V1 BY PULLING TO THE RIGHT BUT A COLLISION WAS UNAVOIDABLE. BOTH DRIVERS COMPLAINED OF LEG PAIN.

Participant:

Vehicle 1

Confidence:

Very Likely

0890910 Wednesday YAPTON ROAD (B2132) NEAR Junction with GREVATTS LANE
23/10/2019 (A259)
R1: B 2132 0855hrs
R2: A 259 Daylight:street lights present
E 497,549 Dry
N 101,277 Fine without high winds
50 mph

VEH2 DRIVING EASTBOUND ON THE A259, ON APPROACHING THE YAPTON ROAD JUNCTION VEH1 HAS EXITED YAPTON ROAD ON TO A259 IN FRONT OF VEH2 WHICH CAUSED VEH2 TO PERFORM AN EMERGENCY STOP AND VEH2 COLLIDED WITH VEH1 DRIVERS SIDE FRONT WHEEL ARCH.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1901239 Monday A259 WORMS LANE MIDDLETON ON Sea AT JUNCTION OF B2132 YAPON ROAD
 R1: A 259 04/03/2019 1915hrs
 R2: B 2132 Darkness: street lights present a
 E 497,547 Wet/Damp
 N 101,276 Raining with high winds
 40 mph

Causation Factor: Participant: Confidence:
 1st: Failed to look properly Vehicle 1 Very Likely
 2nd: Failed to judge other persons path or speed Vehicle 1 Very Likely
 3rd: Junction overshoot Vehicle 1
 V1 (NORTH TO SOUTH) OVERSHOT GIVE WAY LINES FROM MINOR TO MAJOR ROAD. V2 (WEST TO EAST) ON MAJOR ROAD COLLIDED WITH OFFSIDE OF V1.

20917236 Thursday WORMS LANE (A259) AT JUNCTION WITH YAPTON ROAD
 R1: A 259 09/01/2020 0846hrs
 R2: U Daylight:street lights present
 E 497,351 Wet/Damp
 N 101,204 Raining without high winds
 50 mph

Causation Factor: Participant: Confidence:
 1st: Failed to look properly Vehicle 1 Very Likely
 V1 APPROACHED JUNCTION FROM WORMS LANE, MIDDLETON, ONTO MAIN A259 LITTLEHAMPTON ROAD. V1 TURNED LEFT TOWARDS BOGNOR COLLIDING WITH V2 WHICH WAS TRAVELLING WEST CAUSING V2 TO CROSS THE CARRIAGEWAY ONTO THE VERGE.

0899140 Friday GREVATTS LANE (A259)
 R1: A 259 15/11/2019 1732hrs
 E 499,549 Darkness: no street lighting
 N 101,644 Wet/Damp
 Raining without high winds
 40 mph

Causation Factor: Participant: Confidence:
 1st: Failed to look properly Vehicle 1 Very Likely
 VEHICLE ONE IN SLOW MOVING TRAFFIC HAS GONE IN TO THE BACK OF VEHICLE 2 WHICH HAS GONE IN TO VEHICLE 3

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

0899142 Friday FORD ROAD NEAR JUNCTION WITH NELSON ROW
 15/11/2019
 R1: U 1852hrs
 R2: U Darkness: no street lighting
 E 500,112 Wet/Damp
 N 103,034 Raining without high winds
 40 mph

Veh 1 Car Turning right N to W
 Veh 2 Car Going ahead N to S Dri F 48 Serious
 Veh 3 Car Going ahead N to S
 Veh 4 Goods < 3.5t Turning left N to E

Causation Factor:

1st: Careless/Reckless/In a hurry
 2nd: Following too close
 3rd: Slippery road (due to weather)
 4th: Slippery road (due to weather)
 5th: Careless/Reckless/In a hurry

Participant:

Vehicle 2
 Vehicle 3
 Vehicle 2
 Vehicle 3
 Vehicle 1

Confidence:

Possible
 Possible
 Possible
 Possible
 Very Likely

V1 BROKE SUDDENLY IN FRONT CAUSING V2 TO GO INTO THE BACK OF IT AND V3 WENT INTO THE BACK OF V2

19905236 Monday BILSHAM ROAD (B2132) NEAR JUNCTION WITH BILSHAM ROAD (B2132)
 02/12/2019
 R1: B 2132 1900hrs
 R2: B 2132 Darkness: street lights present a
 E 498,099 Dry
 N 103,085 Fine without high winds
 30 mph

Veh 1 Car Turning right NWto SW Ped F 26 Slight

V1 EXITING ROUNDABOUT HIT PEDESTRIAN CROSSING IN ROAD

20925833 Friday BURNDILL ROAD (B2233) - 29 METRES FROM JUNCTION WITH BILSHAM ROAD (B2132)
 31/01/2020
 R1: B 2233 1555hrs
 Daylight:street lights present
 E 498,127 Wet/Damp
 N 103,084 Raining without high winds
 30 mph

Veh 1 Car Going ahead NWto SE Ped F 6 Slight

Causation Factor:

1st: Crossed road masked by stationary veh

Participant:

Casualty 1

Confidence:

Very Likely

VEHICLE 1 TRAVELLING SOUTH TO EAST , CLEARED ROUNDABOUT . VEHICLE 1 CONTINUED EAST ON BURNDILL ROAD.FEMALE PEDESTRIAN WEARING HEAD PHONES RAN INTO ROAD FROM BEHIND OTHER UNKNOWN STATIONARY VEHICLES INTO PATH OF V1.INJURED PARTY ATTENDED HOSPITAL.MIN OR SCRATCHES TO HAND AND KNEE.

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties		
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

19913371 Sunday GREVATTS LANE (A259) Veh 1 Car Going ahead LH bend W to NE Dri F 27 Slight
22/12/2019
R1: A 259 0224hrs
Darkness: no street lighting
E 498,778 Wet/Damp
N 101,534 Fine without high winds
60 mph

Causation Factor:

Participant:

Confidence:

1st: Impaired by alcohol

Vehicle 1

Very Likely

VEHICLE BEING DRIVEN BY SINGLE FEMALE OCCUPANT WHILST UNDER INFLUENCE OF ALCOHOL LEFT 60MPH CARRIAGEWAY TO THE OFFSIDE. VEHICLE 1 HAS DRIVEN APPROX 150 YARDS ALONG GRASS EMBANKMENT BEFORE VEHICLE HAS DRIVEN DOWN INTO GULLY DITCH. VEHICLE 1 HAS CONTINUED TO DRIVE THROUGH DITCH UNTIL HAVING STRUCK BUSHES AND TREES FLIPPED VEHICLE OVER TRAPPING FEMALE DRIVER IN DRIVERS SEAT AMBULANCE CREW IN OASIS G FOUND FEMALE DRIVER IN DRIVERS SEAT IN BADLY CRUSHED VEHICLE. FEMALE SUFFERING LOW LEVEL INJURIES
ELF EXTRACTED FROM THE DRIVERS SEAT.

20920384 Friday STATION ROAD AT JUNCTION WITH FORD LANE Veh 1 Car Turning right W to S
17/01/2020 Veh 2 Car Going ahead S to N FSP F 74 Serious
R1: U 1215hrs Veh 3 Car Wait to turn right N to W
R2: U Daylight:street lights present
E 500,082 Dry
N 103,691 Fine without high winds
40 mph

Causation Factor:

Participant:

Confidence:

1st: Failed to look properly

Vehicle 1

Very Likely

V1 WAITING TO EXIT THE JUNCTION OF FORD LANE. V3 HELD IN STATION ROAD WAITING TO TURN RIGHT IN TO FORD LANE. THEY HELD BACK FROM THE JUNCTION TO ALLOW V1 TO EXIT. V1 PULLS OUT OF THE JUNCTION ON TO STATION ROAD WITHOUT LOOKING AND HITS V2 TRAVELLING NORTH ON STATION ROAD. THIS CAUSES V2 TO COLLIDE IN TO V3. V1 MINOR DAMAGE, V2 AND V3 BOTH HAVE EXTENSIVE DAMAGE AND WILL BE WRITTEN OFF.

20934894 Friday YAPTON ROAD (B2132) NEAR JUNCTION WITH WORMS LANE (A259) Veh 1 Car Turning right S to NE
28/02/2020 Veh 2 Car Going ahead SW to NE Dri F 24 Slight
R1: B 2132 0825hrs
R2: A 259 Daylight:street lights present
E 497,478 Wet/Damp
N 101,231 Raining without high winds
50 mph

Causation Factor:

Participant:

Confidence:

1st: Failed to look properly

Vehicle 1

Very Likely

VEHICLE 1 WAS PULLING OUT OF A JUNCTION A259 V YAPTON ROAD (COMMETS CORNER) WHEN SHE COLLIDED WITH VEHICLE 2

Details of Personal Injury Accidents for Period - 01/05/2015 to 30/04/2020 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties			
			Veh No	Type	Manv	Dir	Class	Sex / Age / Sev			
Road No.	Date										
2nd Road No.	Time										
Grid Ref.	D/L										
	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

1806844	Sunday	A259 WORMS LANE YAPTON AT	Veh 1	Car	Turning right	W	to	S	Dri	F	23	Slight
	09/12/2018	JUNCTION OF B2132 YAPTON ROAD	Veh 2	Car	Going ahead	E	to	W	Dri	M	78	Slight
R1: A 259	1445hrs		Veh 2	Car	Going ahead	E	to	W	FSP	F	83	Serious
R2: B 2132	Daylight:street lights present		Veh 3	Car	Going ahead	W	to	E	FSP	F	63	Slight
E 497,478	Wet/Damp		Veh 3	Car	Going ahead	W	to	E	Dri	F	35	Slight
N 101,238	Fine without high winds											
	50 mph											

Causation Factor:		Participant:	Confidence:
1st:	Poor turn or manoeuvre	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely
VEHICLE ONE WENT INTO JUNCTION FILTER LANE TO TURN RIGHT. VEHICLE TWO HEADING WEST. UNKNOWN REASON VEHICLE ONE TURNED RIGHT INFRONT OF VEHICLE TWO CAUSING COLLISION. VEHICLE ONE SPUN NORTH CAUSING VEHICLE THREE TO BRAKE HARD AND COLLIDE WITH VEHICLE ONE.			

**APPENDIX D. JUNCTIONS 9 OUTPUTS – FORD LANE/FORD
JUNCTION**

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.1.7462 © Copyright TRL Limited, 2019				
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Filename: Ford Road - Ford Lane Upd.j9

Path: T:\Projects\13000 Series\13091ITB Ford Airfield\Tech\Junction Assessments\Picady\Ford Road - Ford Lane

Report generation date: 20/07/2020 10:20:22

- »2018 Base, AM
- »2018 Base, PM
- »2021 Base, AM
- »2021 Base, PM
- »2021 with Development, AM
- »2021 with Development, PM
- »2031 Base, AM
- »2031 Base, PM
- »2031 with Development, AM
- »2031 with Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2018 Base									
Stream B-C	D1	0.2	9.81	0.17	A	D2	0.2	10.79	0.16	B
Stream B-A		0.7	14.94	0.40	B		1.3	18.47	0.58	C
Stream C-AB		0.1	7.19	0.06	A		0.1	7.04	0.10	A
	2021 Base									
Stream B-C	D15	0.3	10.66	0.21	B	D16	0.2	12.36	0.20	B
Stream B-A		0.8	16.65	0.45	C		1.7	21.86	0.63	C
Stream C-AB		0.1	7.37	0.08	A		0.1	7.17	0.12	A
	2021 with Development									
Stream B-C	D25	0.7	18.49	0.41	C	D26	0.5	20.71	0.35	C
Stream B-A		2.0	29.52	0.68	D		3.1	36.81	0.77	E
Stream C-AB		0.1	7.66	0.11	A		0.2	7.94	0.19	A
	2031 Base									
Stream B-C	D29	0.3	10.92	0.22	B	D30	0.3	12.87	0.21	B
Stream B-A		0.8	17.07	0.46	C		1.8	22.99	0.65	C
Stream C-AB		0.1	7.44	0.08	A		0.1	7.21	0.12	A
	2031 with Development									
Stream B-C	D31	0.7	19.59	0.42	C	D32	0.6	22.91	0.37	C
Stream B-A		2.1	30.94	0.69	D		3.4	40.00	0.79	E
Stream C-AB		0.1	7.73	0.11	A		0.2	7.99	0.19	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	23/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	2021	AM	ONE HOUR	07:45	09:15	15		Simple	D1*G1
D4	2021	PM	ONE HOUR	16:45	18:15	15		Simple	D2*G2
D5	2024	AM	ONE HOUR	07:45	09:15	15		Simple	D1*G3
D6	2024	PM	ONE HOUR	16:45	18:15	15		Simple	D2*G4
D7	Com Dev	AM	ONE HOUR	07:45	09:15	15			
D8	Com Dev	PM	ONE HOUR	16:45	18:15	15			
D9	Com Dev ST	AM	ONE HOUR	07:45	09:15	15			
D10	Com Dev ST	PM	ONE HOUR	16:45	18:15	15			
D11	2021 + CD	AM	ONE HOUR	07:45	09:15	15		Simple	D3+D7
D12	2021 + CD	PM	ONE HOUR	16:45	18:15	15		Simple	D4+D8
D13	2024 + CD	AM	ONE HOUR	07:45	09:15	15		Simple	D5+D7
D14	2024 + CD	PM	ONE HOUR	16:45	18:15	15		Simple	D6+D8
D15	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D7+D9
D16	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D8+D10
D17	2024 + CD ST	AM	ONE HOUR	07:45	09:15	15		Simple	D5+D7+D9
D18	2024 + CD ST	PM	ONE HOUR	16:45	18:15	15		Simple	D6+D8+D10
D19	Dev	AM	ONE HOUR	07:45	09:15	15			
D20	Dev	PM	ONE HOUR	16:45	18:15	15			
D21	2021 + CD + D	AM	ONE HOUR	07:45	09:15	15		Simple	D11+D19
D22	2021 + CD + D	PM	ONE HOUR	16:45	18:15	15		Simple	D12+D20
D23	2024 + CD + D	AM	ONE HOUR	07:45	09:15	15		Simple	D13+D19
D24	2024 + CD + D	PM	ONE HOUR	16:45	18:15	15		Simple	D14+D20
D25	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15+D19
D26	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D16+D20
D27	2024 + CD ST + D	AM	ONE HOUR	07:45	09:15	15		Simple	D17+D19
D28	2024 + CD ST + D	PM	ONE HOUR	16:45	18:15	15		Simple	D18+D20
D29	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D30	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D31	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D29 + D19
D32	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D30 + D20

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2018-2021 AM		1.0103
G2	2018-2021 PM		1.0071
G3	2018-2024 AM		1.0235
G4	2018-2024 PM		1.0191

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		3.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Ford Road		Major
B	Ford Lane		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	7.25		✓	3.00	100.0	✓	13.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Ford Lane	One lane plus flare	10.00	9.10	5.40	5.00	4.70		1.00	113	56

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	602	0.104	0.262	0.165	0.374
B-C	642	0.093	0.235	-	-
C-B	687	0.252	0.252	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	469	100.000
B - Ford Lane		ONE HOUR	✓	216	100.000
C - Station Road		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	197	272
	B - Ford Lane	148	0	68
	C - Station Road	208	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	3	5
	B - Ford Lane	9	0	4
	C - Station Road	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	9.81	0.2	A	62	94
B-A	0.40	14.94	0.7	B	136	204
C-AB	0.06	7.19	0.1	A	28	41
C-A					191	286
A-B					181	271
A-C					250	374

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	512	0.100	51	0.0	0.1	7.799	A
B-A	111	28	453	0.246	110	0.0	0.3	10.468	B
C-AB	23	6	575	0.039	22	0.0	0.0	6.510	A
C-A	157	39			157				
A-B	148	37			148				
A-C	205	51			205				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	485	0.126	61	0.1	0.1	8.480	A
B-A	133	33	433	0.308	133	0.3	0.4	11.980	B
C-AB	27	7	558	0.048	27	0.0	0.1	6.779	A
C-A	187	47			187				
A-B	177	44			177				
A-C	245	61			245				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	443	0.169	75	0.1	0.2	9.779	A
B-A	163	41	404	0.404	162	0.4	0.7	14.835	B
C-AB	33	8	534	0.062	33	0.1	0.1	7.186	A
C-A	229	57			229				
A-B	217	54			217				
A-C	299	75			299				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	442	0.169	75	0.2	0.2	9.812	A
B-A	163	41	404	0.404	163	0.7	0.7	14.942	B
C-AB	33	8	534	0.062	33	0.1	0.1	7.186	A
C-A	229	57			229				
A-B	217	54			217				
A-C	299	75			299				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	61	15	484	0.126	61	0.2	0.1	8.513	A
B-A	133	33	433	0.308	134	0.7	0.5	12.086	B
C-AB	27	7	558	0.048	27	0.1	0.1	6.781	A
C-A	187	47			187				
A-B	177	44			177				
A-C	245	61			245				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	511	0.100	51	0.1	0.1	7.835	A
B-A	111	28	453	0.246	112	0.5	0.3	10.576	B
C-AB	23	6	575	0.039	23	0.1	0.0	6.516	A
C-A	157	39			157				
A-B	148	37			148				
A-C	205	51			205				

2018 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		6.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	263	100.000
B - Ford Lane		ONE HOUR	✓	299	100.000
C - Station Road		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	85	178
	B - Ford Lane	241	0	58
	C - Station Road	293	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	5	3
	B - Ford Lane	3	0	0
	C - Station Road	1	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.16	10.79	0.2	B	53	80
B-A	0.58	18.47	1.3	C	221	332
C-AB	0.10	7.04	0.1	A	45	67
C-A					269	403
A-B					78	117
A-C					163	245

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	509	0.086	43	0.0	0.1	7.730	A
B-A	181	45	507	0.358	179	0.0	0.5	10.908	B
C-AB	37	9	587	0.063	37	0.0	0.1	6.535	A
C-A	221	55			221				
A-B	64	16			64				
A-C	134	34			134				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	470	0.111	52	0.1	0.1	8.609	A
B-A	217	54	488	0.444	216	0.5	0.8	13.184	B
C-AB	44	11	578	0.076	44	0.1	0.1	6.742	A
C-A	263	66			263				
A-B	76	19			76				
A-C	160	40			160				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	400	0.160	64	0.1	0.2	10.689	B
B-A	265	66	460	0.577	263	0.8	1.3	18.105	C
C-AB	54	13	565	0.095	54	0.1	0.1	7.041	A
C-A	323	81			323				
A-B	94	23			94				
A-C	196	49			196				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	398	0.161	64	0.2	0.2	10.785	B
B-A	265	66	460	0.577	265	1.3	1.3	18.465	C
C-AB	54	13	565	0.095	54	0.1	0.1	7.041	A
C-A	323	81			323				
A-B	94	23			94				
A-C	196	49			196				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	467	0.112	52	0.2	0.1	8.681	A
B-A	217	54	488	0.444	219	1.3	0.8	13.483	B
C-AB	44	11	578	0.076	44	0.1	0.1	6.744	A
C-A	263	66			263				
A-B	76	19			76				
A-C	160	40			160				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	506	0.086	44	0.1	0.1	7.786	A
B-A	181	45	507	0.358	182	0.8	0.6	11.124	B
C-AB	37	9	587	0.063	37	0.1	0.1	6.542	A
C-A	221	55			221				
A-B	64	16			64				
A-C	134	34			134				

2021 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3+D7+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	501	100.000
B - Ford Lane		ONE HOUR	✓	242	100.000
C - Station Road		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	216	285
	B - Ford Lane	160	0	83
	C - Station Road	214	36	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	5
	B - Ford Lane	8	0	4
	C - Station Road	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	10.66	0.3	B	76	114
B-A	0.45	16.65	0.8	C	146	220
C-AB	0.08	7.37	0.1	A	33	50
C-A					197	295
A-B					198	297
A-C					261	392

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	16	511	0.122	62	0.0	0.1	8.002	A
B-A	120	30	445	0.270	119	0.0	0.4	10.975	B
C-AB	27	7	572	0.048	27	0.0	0.0	6.600	A
C-A	161	40			161				
A-B	163	41			163				
A-C	214	54			214				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	19	480	0.155	74	0.1	0.2	8.856	A
B-A	143	36	423	0.339	143	0.4	0.5	12.809	B
C-AB	33	8	554	0.059	33	0.0	0.1	6.906	A
C-A	193	48			193				
A-B	194	49			194				
A-C	256	64			256				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	430	0.212	91	0.2	0.3	10.607	B
B-A	176	44	392	0.448	174	0.5	0.8	16.485	C
C-AB	40	10	528	0.076	40	0.1	0.1	7.374	A
C-A	236	59			236				
A-B	238	59			238				
A-C	314	78			314				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	429	0.212	91	0.3	0.3	10.664	B
B-A	176	44	392	0.448	176	0.8	0.8	16.654	C
C-AB	40	10	528	0.076	40	0.1	0.1	7.374	A
C-A	236	59			236				
A-B	238	59			238				
A-C	314	78			314				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	19	479	0.155	75	0.3	0.2	8.909	A
B-A	143	36	423	0.339	145	0.8	0.5	12.964	B
C-AB	33	8	554	0.059	33	0.1	0.1	6.911	A
C-A	193	48			193				
A-B	194	49			194				
A-C	256	64			256				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	16	510	0.122	62	0.2	0.1	8.051	A
B-A	120	30	445	0.270	121	0.5	0.4	11.113	B
C-AB	27	7	572	0.048	27	0.1	0.1	6.607	A
C-A	161	40			161				
A-B	163	41			163				
A-C	214	54			214				

2021 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		7.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4+D8+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	282	100.000
B - Ford Lane		ONE HOUR	✓	324	100.000
C - Station Road		ONE HOUR	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	98	184
	B - Ford Lane	258	0	66
	C - Station Road	304	59	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	4	3
	B - Ford Lane	3	0	0
	C - Station Road	1	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	12.36	0.2	B	61	91
B-A	0.63	21.86	1.7	C	236	355
C-AB	0.12	7.17	0.1	A	54	82
C-A					279	419
A-B					90	134
A-C					169	254

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	499	0.100	50	0.0	0.1	8.009	A
B-A	194	49	500	0.388	192	0.0	0.6	11.598	B
C-AB	45	11	591	0.076	44	0.0	0.1	6.575	A
C-A	229	57			229				
A-B	73	18			73				
A-C	139	35			139				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	60	15	453	0.132	60	0.1	0.2	9.144	A
B-A	232	58	478	0.484	231	0.6	0.9	14.453	B
C-AB	53	13	581	0.092	53	0.1	0.1	6.817	A
C-A	273	68			273				
A-B	88	22			88				
A-C	166	41			166				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	368	0.199	73	0.2	0.2	12.170	B
B-A	284	71	448	0.634	281	0.9	1.6	21.189	C
C-AB	65	16	567	0.115	65	0.1	0.1	7.165	A
C-A	335	84			335				
A-B	107	27			107				
A-C	203	51			203				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	364	0.201	73	0.2	0.2	12.365	B
B-A	284	71	448	0.634	284	1.6	1.7	21.856	C
C-AB	65	16	567	0.115	65	0.1	0.1	7.168	A
C-A	335	84			335				
A-B	107	27			107				
A-C	203	51			203				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	60	15	449	0.133	60	0.2	0.2	9.265	A
B-A	232	58	478	0.484	235	1.7	1.0	14.933	B
C-AB	53	13	581	0.092	53	0.1	0.1	6.819	A
C-A	273	68			273				
A-B	88	22			88				
A-C	166	41			166				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	12	496	0.101	50	0.2	0.1	8.082	A
B-A	194	49	499	0.388	195	1.0	0.6	11.887	B
C-AB	45	11	591	0.076	45	0.1	0.1	6.585	A
C-A	229	57			229				
A-B	73	18			73				
A-C	139	35			139				

2021 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		8.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D25	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15+D19

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	527	100.000
B - Ford Lane		ONE HOUR	✓	352	100.000
C - Station Road		ONE HOUR	✓	269	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	242	285
	B - Ford Lane	232	0	121
	C - Station Road	219	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	5
	B - Ford Lane	6	0	3
	C - Station Road	6	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.41	18.49	0.7	C	111	166
B-A	0.68	29.52	2.0	D	212	319
C-AB	0.11	7.66	0.1	A	46	69
C-A					201	302
A-B					222	333
A-C					261	392

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	482	0.189	90	0.0	0.2	9.169	A
B-A	174	44	446	0.391	172	0.0	0.6	13.025	B
C-AB	38	9	572	0.066	38	0.0	0.1	6.734	A
C-A	165	41			165				
A-B	182	46			182				
A-C	214	54			214				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	430	0.253	108	0.2	0.3	11.180	B
B-A	208	52	419	0.497	207	0.6	1.0	16.876	C
C-AB	45	11	552	0.082	45	0.1	0.1	7.099	A
C-A	197	49			197				
A-B	218	54			218				
A-C	256	64			256				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	333	0.399	132	0.3	0.6	17.746	C
B-A	255	64	376	0.677	251	1.0	1.9	27.878	D
C-AB	55	14	525	0.106	55	0.1	0.1	7.661	A
C-A	241	60			241				
A-B	266	67			266				
A-C	314	78			314				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	327	0.406	133	0.6	0.7	18.490	C
B-A	255	64	376	0.679	255	1.9	2.0	29.524	D
C-AB	55	14	525	0.106	55	0.1	0.1	7.664	A
C-A	241	60			241				
A-B	266	67			266				
A-C	314	78			314				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	424	0.256	110	0.7	0.3	11.512	B
B-A	208	52	418	0.498	212	2.0	1.0	17.772	C
C-AB	45	11	552	0.082	45	0.1	0.1	7.102	A
C-A	197	49			197				
A-B	218	54			218				
A-C	256	64			256				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	478	0.190	91	0.3	0.2	9.314	A
B-A	174	44	446	0.391	176	1.0	0.7	13.413	B
C-AB	38	9	572	0.066	38	0.1	0.1	6.741	A
C-A	165	41			165				
A-B	182	46			182				
A-C	214	54			214				

2021 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		11.61	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D26	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D16+D20

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	360	100.000
B - Ford Lane		ONE HOUR	✓	374	100.000
C - Station Road		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	171	189
	B - Ford Lane	290	0	84
	C - Station Road	304	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	3
	B - Ford Lane	2	0	0
	C - Station Road	1	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.35	20.71	0.5	C	77	116
B-A	0.77	36.81	3.1	E	266	399
C-AB	0.19	7.94	0.2	A	90	135
C-A					279	419
A-B					157	235
A-C					174	261

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	472	0.135	63	0.0	0.2	8.777	A
B-A	218	55	479	0.455	215	0.0	0.8	13.461	B
C-AB	74	19	593	0.125	73	0.0	0.1	6.928	A
C-A	229	57			229				
A-B	128	32			128				
A-C	142	36			142				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	407	0.186	76	0.2	0.2	10.842	B
B-A	260	65	453	0.575	259	0.8	1.3	18.304	C
C-AB	88	22	579	0.153	88	0.1	0.2	7.327	A
C-A	273	68			273				
A-B	153	38			153				
A-C	170	43			170				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	278	0.334	92	0.2	0.5	19.215	C
B-A	319	80	415	0.769	313	1.3	2.9	33.329	D
C-AB	108	27	561	0.193	108	0.2	0.2	7.937	A
C-A	335	84			335				
A-B	188	47			188				
A-C	208	52			208				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	266	0.349	93	0.5	0.5	20.708	C
B-A	319	80	414	0.770	318	2.9	3.1	36.807	E
C-AB	108	27	561	0.193	108	0.2	0.2	7.944	A
C-A	335	84			335				
A-B	188	47			188				
A-C	208	52			208				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	396	0.192	77	0.5	0.2	11.323	B
B-A	260	65	453	0.575	267	3.1	1.4	20.021	C
C-AB	88	22	579	0.153	89	0.2	0.2	7.337	A
C-A	273	68			273				
A-B	153	38			153				
A-C	170	43			170				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	467	0.136	64	0.2	0.2	8.930	A
B-A	218	55	479	0.455	220	1.4	0.9	14.036	B
C-AB	74	19	593	0.125	74	0.2	0.1	6.946	A
C-A	229	57			229				
A-B	128	32			128				
A-C	142	36			142				

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	510	100.000
B - Ford Lane		ONE HOUR	✓	246	100.000
C - Station Road		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	220	290
	B - Ford Lane	162	0	84
	C - Station Road	218	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	5
	B - Ford Lane	8	0	4
	C - Station Road	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	10.92	0.3	B	77	116
B-A	0.46	17.07	0.8	C	149	223
C-AB	0.08	7.44	0.1	A	34	51
C-A					200	300
A-B					202	303
A-C					266	399

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	16	507	0.125	63	0.0	0.1	8.087	A
B-A	122	30	444	0.275	120	0.0	0.4	11.076	B
C-AB	28	7	570	0.049	28	0.0	0.1	6.642	A
C-A	164	41			164				
A-B	166	41			166				
A-C	218	55			218				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	476	0.159	75	0.1	0.2	8.984	A
B-A	146	36	422	0.345	145	0.4	0.5	12.986	B
C-AB	33	8	551	0.060	33	0.1	0.1	6.956	A
C-A	196	49			196				
A-B	198	49			198				
A-C	261	65			261				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	423	0.218	92	0.2	0.3	10.854	B
B-A	178	45	389	0.458	177	0.5	0.8	16.883	C
C-AB	41	10	525	0.078	41	0.1	0.1	7.439	A
C-A	240	60			240				
A-B	242	61			242				
A-C	319	80			319				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	422	0.219	92	0.3	0.3	10.918	B
B-A	178	45	389	0.458	178	0.8	0.8	17.071	C
C-AB	41	10	525	0.078	41	0.1	0.1	7.439	A
C-A	240	60			240				
A-B	242	61			242				
A-C	319	80			319				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	474	0.159	76	0.3	0.2	9.041	A
B-A	146	36	422	0.345	147	0.8	0.5	13.155	B
C-AB	33	8	551	0.060	33	0.1	0.1	6.961	A
C-A	196	49			196				
A-B	198	49			198				
A-C	261	65			261				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	16	506	0.125	63	0.2	0.1	8.140	A
B-A	122	30	444	0.275	123	0.5	0.4	11.222	B
C-AB	28	7	570	0.049	28	0.1	0.1	6.646	A
C-A	164	41			164				
A-B	166	41			166				
A-C	218	55			218				

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		7.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	286	100.000
B - Ford Lane		ONE HOUR	✓	329	100.000
C - Station Road		ONE HOUR	✓	369	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	99	187
	B - Ford Lane	262	0	67
	C - Station Road	309	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	4	3
	B - Ford Lane	3	0	0
	C - Station Road	1	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	12.87	0.3	B	61	92
B-A	0.65	22.99	1.8	C	240	361
C-AB	0.12	7.21	0.1	A	55	83
C-A					284	425
A-B					91	136
A-C					172	257

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	495	0.102	50	0.0	0.1	8.082	A
B-A	197	49	497	0.397	195	0.0	0.6	11.816	B
C-AB	45	11	590	0.077	45	0.0	0.1	6.604	A
C-A	233	58			233				
A-B	75	19			75				
A-C	141	35			141				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	60	15	447	0.135	60	0.1	0.2	9.293	A
B-A	236	59	475	0.495	234	0.6	1.0	14.853	B
C-AB	54	13	579	0.093	54	0.1	0.1	6.850	A
C-A	278	69			278				
A-B	89	22			89				
A-C	168	42			168				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	358	0.206	73	0.2	0.3	12.636	B
B-A	288	72	444	0.649	285	1.0	1.7	22.195	C
C-AB	66	17	565	0.117	66	0.1	0.1	7.207	A
C-A	340	85			340				
A-B	109	27			109				
A-C	206	51			206				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	353	0.209	74	0.3	0.3	12.870	B
B-A	288	72	444	0.649	288	1.7	1.8	22.989	C
C-AB	66	17	565	0.117	66	0.1	0.1	7.210	A
C-A	340	85			340				
A-B	109	27			109				
A-C	206	51			206				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	60	15	443	0.136	61	0.3	0.2	9.434	A
B-A	236	59	475	0.496	239	1.8	1.0	15.401	C
C-AB	54	13	579	0.093	54	0.1	0.1	6.853	A
C-A	278	69			278				
A-B	89	22			89				
A-C	168	42			168				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	492	0.103	51	0.2	0.1	8.163	A
B-A	197	49	497	0.397	199	1.0	0.7	12.126	B
C-AB	45	11	590	0.077	45	0.1	0.1	6.617	A
C-A	233	58			233				
A-B	75	19			75				
A-C	141	35			141				

2031 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		8.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D31	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D29 + D19

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	536	100.000
B - Ford Lane		ONE HOUR	✓	356	100.000
C - Station Road		ONE HOUR	✓	274	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	246	290
	B - Ford Lane	234	0	122
	C - Station Road	223	51	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	5
	B - Ford Lane	6	0	3
	C - Station Road	6	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.42	19.59	0.7	C	112	168
B-A	0.69	30.94	2.1	D	215	322
C-AB	0.11	7.73	0.1	A	47	70
C-A					205	307
A-B					226	339
A-C					266	399

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	478	0.192	91	0.0	0.2	9.285	A
B-A	176	44	444	0.397	174	0.0	0.6	13.190	B
C-AB	38	10	569	0.067	38	0.0	0.1	6.774	A
C-A	168	42			168				
A-B	185	46			185				
A-C	218	55			218				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	424	0.259	109	0.2	0.3	11.415	B
B-A	210	53	416	0.505	209	0.6	1.0	17.241	C
C-AB	46	11	549	0.083	46	0.1	0.1	7.148	A
C-A	200	50			200				
A-B	221	55			221				
A-C	261	65			261				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	324	0.414	133	0.3	0.7	18.678	C
B-A	258	64	373	0.691	253	1.0	2.0	29.206	D
C-AB	56	14	522	0.108	56	0.1	0.1	7.728	A
C-A	246	61			246				
A-B	271	68			271				
A-C	319	80			319				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	318	0.423	134	0.7	0.7	19.594	C
B-A	258	64	372	0.693	257	2.0	2.1	30.939	D
C-AB	56	14	522	0.108	56	0.1	0.1	7.731	A
C-A	246	61			246				
A-B	271	68			271				
A-C	319	80			319				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	418	0.263	111	0.7	0.4	11.796	B
B-A	210	53	416	0.506	215	2.1	1.1	18.259	C
C-AB	46	11	549	0.083	46	0.1	0.1	7.152	A
C-A	200	50			200				
A-B	221	55			221				
A-C	261	65			261				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	474	0.194	92	0.4	0.2	9.441	A
B-A	176	44	444	0.397	178	1.1	0.7	13.608	B
C-AB	38	10	569	0.067	38	0.1	0.1	6.784	A
C-A	168	42			168				
A-B	185	46			185				
A-C	218	55			218				

2031 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ford Road / Ford Lane	T-Junction	Two-way		12.61	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D32	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D30 + D20

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ford Road		ONE HOUR	✓	364	100.000
B - Ford Lane		ONE HOUR	✓	379	100.000
C - Station Road		ONE HOUR	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	172	192
	B - Ford Lane	294	0	85
	C - Station Road	309	99	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ford Road	B - Ford Lane	C - Station Road
From	A - Ford Road	0	2	3
	B - Ford Lane	3	0	0
	C - Station Road	1	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.37	22.91	0.6	C	78	117
B-A	0.79	40.00	3.4	E	270	405
C-AB	0.19	7.99	0.2	A	91	136
C-A					284	425
A-B					158	237
A-C					176	264

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	468	0.137	63	0.0	0.2	8.884	A
B-A	221	55	477	0.464	218	0.0	0.8	13.745	B
C-AB	75	19	591	0.126	74	0.0	0.1	6.956	A
C-A	233	58			233				
A-B	129	32			129				
A-C	145	36			145				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	400	0.191	76	0.2	0.2	11.108	B
B-A	264	66	450	0.587	262	0.8	1.4	18.926	C
C-AB	89	22	578	0.154	89	0.1	0.2	7.361	A
C-A	278	69			278				
A-B	155	39			155				
A-C	173	43			173				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	23	264	0.354	92	0.2	0.5	20.817	C
B-A	324	81	411	0.787	317	1.4	3.1	35.622	E
C-AB	109	27	559	0.195	109	0.2	0.2	7.983	A
C-A	340	85			340				
A-B	189	47			189				
A-C	211	53			211				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	23	251	0.374	93	0.5	0.6	22.906	C
B-A	324	81	410	0.789	323	3.1	3.4	39.998	E
C-AB	109	27	559	0.195	109	0.2	0.2	7.990	A
C-A	340	85			340				
A-B	189	47			189				
A-C	211	53			211				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	387	0.198	78	0.6	0.3	11.694	B
B-A	264	66	450	0.587	272	3.4	1.5	20.998	C
C-AB	89	22	578	0.154	89	0.2	0.2	7.374	A
C-A	278	69			278				
A-B	155	39			155				
A-C	173	43			173				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	64	16	462	0.138	64	0.3	0.2	9.051	A
B-A	221	55	476	0.465	224	1.5	0.9	14.378	B
C-AB	75	19	591	0.126	75	0.2	0.1	6.974	A
C-A	233	58			233				
A-B	129	32			129				
A-C	145	36			145				

APPENDIX E. JUNCTIONS 9 OUTPUTS – B2233/NORTH END ROAD MITIGATION

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: North End Road Mini.j9

Path: T:\Projects\13000 Series\13091ITB Ford Airfield\Tech\Junction Assessments\Arcady\North End Road Mini Roundabout

Report generation date: 30/04/2019 16:59:02

»2018, AM
 »2018, PM
 »2021 Base, AM
 »2021 Base, PM
 »2021 with Development, AM
 »2021 with Development, PM
 »2031 Base, AM
 »2031 Base, PM
 »2031 with Development, AM
 »2031 with Development, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2018								
1 - North End Road	0.3	8.15	0.23	A	3.1	26.63	0.77	D
2 - B2233 East	6.3	25.98	0.88	D	0.7	5.77	0.41	A
3 - B2233 West	0.9	9.62	0.48	A	0.9	7.85	0.47	A
2021 Base								
1 - North End Road	0.5	9.52	0.35	A	5.8	45.38	0.87	E
2 - B2233 East	10.4	41.16	0.93	E	0.9	6.61	0.47	A
3 - B2233 West	1.6	13.26	0.62	B	1.2	9.24	0.55	A
2021 with Development								
1 - North End Road	1.0	12.37	0.50	B	22.8	143.51	1.04	F
2 - B2233 East	37.4	118.98	1.04	F	1.3	7.97	0.56	A
3 - B2233 West	2.1	15.98	0.69	C	2.1	13.68	0.69	B
2031 Base								
1 - North End Road	0.5	9.66	0.36	A	6.4	49.32	0.89	E
2 - B2233 East	12.3	47.64	0.95	E	0.9	6.68	0.48	A
3 - B2233 West	1.7	13.66	0.63	B	1.2	9.40	0.56	A
2031 with Development								
1 - North End Road	1.0	12.62	0.51	B	25.7	158.21	1.06	F
2 - B2233 East	44.2	136.37	1.06	F	1.3	8.07	0.57	A
3 - B2233 West	2.2	16.40	0.69	C	2.2	14.06	0.69	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓		
D5	2024 Base	AM	ONE HOUR	07:45	09:15	15			
D6	2024 Base	PM	ONE HOUR	16:45	18:15	15			
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D9	2024 Base ST	AM	ONE HOUR	07:45	09:15	15			
D10	2024 Base ST	PM	ONE HOUR	16:45	18:15	15			
D11	Development	AM	ONE HOUR	07:45	09:15	15			
D12	Development	PM	ONE HOUR	16:45	18:15	15			
D15	2024 + Development	AM	ONE HOUR	07:45	09:15	15		Simple	D5 + D11
D16	2024 + Development	PM	ONE HOUR	16:45	18:15	15		Simple	D6 + D12
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12
D19	2024 + Development ST	AM	ONE HOUR	07:45	09:15	15		Simple	D9 + D11
D20	2024 + Development ST	PM	ONE HOUR	16:45	18:15	15		Simple	D10 + D12
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 + D11
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22 + D12

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 89% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	20.10	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	North End Road	
2	B2233 East	
3	B2233 West	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - North End Road	2.20	2.20	5.27	2.9	9.57	6.90	0.0	✓
2 - B2233 East	3.75	3.75	4.50	8.5	15.35	15.28	0.0	✓
3 - B2233 West	3.50	3.50	3.91	0.3	11.26	9.34	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - North End Road	0.476	780
2 - B2233 East	0.558	1102
3 - B2233 West	0.503	965

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	123	100.000
2 - B2233 East		ONE HOUR	✓	841	100.000
3 - B2233 West		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	89	34
	2 - B2233 East	380	0	461
	3 - B2233 West	40	275	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	7	15
	2 - B2233 East	3	0	1
	3 - B2233 West	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.23	8.15	0.3	A	113	169
2 - B2233 East	0.88	25.98	6.3	D	772	1158
3 - B2233 West	0.48	9.62	0.9	A	289	434

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	93	23	206	621	0.149	92	313	0.0	0.2	6.794	A
2 - B2233 East	633	158	25	1066	0.594	627	272	0.0	1.4	8.110	A
3 - B2233 West	237	59	283	788	0.301	235	369	0.0	0.4	6.500	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	111	28	247	603	0.184	110	376	0.2	0.2	7.310	A
2 - B2233 East	756	189	31	1063	0.712	752	327	1.4	2.4	11.455	B
3 - B2233 West	283	71	340	760	0.373	283	443	0.4	0.6	7.535	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	135	34	302	578	0.234	135	456	0.2	0.3	8.129	A
2 - B2233 East	926	231	37	1058	0.875	912	399	2.4	5.8	22.680	C
3 - B2233 West	347	87	412	724	0.479	346	537	0.6	0.9	9.491	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	135	34	303	577	0.235	135	462	0.3	0.3	8.149	A
2 - B2233 East	926	231	37	1058	0.875	924	401	5.8	6.3	25.977	D
3 - B2233 West	347	87	418	721	0.481	347	544	0.9	0.9	9.619	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	111	28	248	602	0.184	111	384	0.3	0.2	7.339	A
2 - B2233 East	756	189	31	1063	0.712	771	329	6.3	2.6	12.928	B
3 - B2233 West	283	71	348	755	0.375	284	453	0.9	0.6	7.666	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	93	23	208	620	0.149	93	318	0.2	0.2	6.830	A
2 - B2233 East	633	158	26	1066	0.594	637	275	2.6	1.5	8.489	A
3 - B2233 West	237	59	288	785	0.302	238	375	0.6	0.4	6.584	A

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	13.64	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	397	100.000
2 - B2233 East		ONE HOUR	✓	388	100.000
3 - B2233 West		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	359	38
	2 - B2233 East	124	0	264
	3 - B2233 West	25	348	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	4	3
	2 - B2233 East	4	0	2
	3 - B2233 West	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.77	26.63	3.1	D	364	546
2 - B2233 East	0.41	5.77	0.7	A	356	534
3 - B2233 West	0.47	7.85	0.9	A	342	513

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	299	75	260	628	0.476	295	112	0.0	0.9	10.712	B
2 - B2233 East	292	73	28	1058	0.276	291	527	0.0	0.4	4.679	A
3 - B2233 West	281	70	93	891	0.315	279	226	0.0	0.5	5.860	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	357	89	312	604	0.591	355	134	0.9	1.4	14.356	B
2 - B2233 East	349	87	34	1055	0.331	348	633	0.4	0.5	5.091	A
3 - B2233 West	335	84	111	882	0.380	335	271	0.5	0.6	6.570	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	437	109	382	571	0.766	431	164	1.4	2.9	24.727	C
2 - B2233 East	427	107	41	1051	0.406	426	772	0.5	0.7	5.757	A
3 - B2233 West	411	103	136	869	0.472	410	331	0.6	0.9	7.811	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	437	109	383	570	0.767	436	164	2.9	3.1	26.629	D
2 - B2233 East	427	107	42	1051	0.407	427	778	0.7	0.7	5.773	A
3 - B2233 West	411	103	137	869	0.472	411	332	0.9	0.9	7.848	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	357	89	314	603	0.592	363	134	3.1	1.5	15.403	C
2 - B2233 East	349	87	35	1055	0.331	350	642	0.7	0.5	5.110	A
3 - B2233 West	335	84	112	882	0.380	336	273	0.9	0.6	6.611	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	299	75	263	627	0.477	301	112	1.5	0.9	11.126	B
2 - B2233 East	292	73	29	1058	0.276	293	535	0.5	0.4	4.706	A
3 - B2233 West	281	70	93	891	0.315	281	228	0.6	0.5	5.912	A

2021 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	29.35	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	184	100.000
2 - B2233 East		ONE HOUR	✓	881	100.000
3 - B2233 West		ONE HOUR	✓	405	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	122	62
	2 - B2233 East	397	0	484
	3 - B2233 West	103	302	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	5	8
	2 - B2233 East	3	0	1
	3 - B2233 West	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.35	9.52	0.5	A	169	253
2 - B2233 East	0.93	41.16	10.4	E	808	1213
3 - B2233 West	0.62	13.26	1.6	B	372	557

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	139	35	225	631	0.220	137	373	0.0	0.3	7.283	A
2 - B2233 East	663	166	46	1054	0.629	657	317	0.0	1.7	8.909	A
3 - B2233 West	305	76	296	786	0.388	302	407	0.0	0.6	7.405	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	165	41	271	610	0.271	165	447	0.3	0.4	8.092	A
2 - B2233 East	792	198	56	1049	0.755	787	380	1.7	2.9	13.477	B
3 - B2233 West	364	91	355	757	0.481	363	488	0.6	0.9	9.111	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	203	51	331	582	0.348	202	539	0.4	0.5	9.466	A
2 - B2233 East	970	243	68	1042	0.931	946	464	2.9	8.9	31.686	D
3 - B2233 West	446	111	426	721	0.619	443	588	0.9	1.6	12.844	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	203	51	332	581	0.349	203	548	0.5	0.5	9.519	A
2 - B2233 East	970	243	68	1041	0.931	964	467	8.9	10.4	41.156	E
3 - B2233 West	446	111	434	717	0.622	446	598	1.6	1.6	13.258	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	165	41	273	608	0.272	166	463	0.5	0.4	8.151	A
2 - B2233 East	792	198	56	1049	0.755	820	384	10.4	3.3	17.438	C
3 - B2233 West	364	91	370	749	0.486	367	507	1.6	1.0	9.471	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	139	35	228	629	0.220	139	380	0.4	0.3	7.345	A
2 - B2233 East	663	166	47	1054	0.629	669	320	3.3	1.7	9.502	A
3 - B2233 West	305	76	302	783	0.389	306	415	1.0	0.6	7.562	A

2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	20.73	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	451	100.000
2 - B2233 East		ONE HOUR	✓	443	100.000
3 - B2233 West		ONE HOUR	✓	429	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	377	74
	2 - B2233 East	155	0	288
	3 - B2233 West	61	368	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	3	1
	2 - B2233 East	3	0	2
	3 - B2233 West	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.87	45.38	5.8	E	414	621
2 - B2233 East	0.47	6.61	0.9	A	407	610
3 - B2233 West	0.55	9.24	1.2	A	394	590

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	340	85	275	630	0.539	335	162	0.0	1.1	12.037	B
2 - B2233 East	334	83	55	1047	0.319	332	555	0.0	0.5	5.020	A
3 - B2233 West	323	81	116	890	0.363	321	271	0.0	0.6	6.309	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	405	101	330	604	0.672	402	194	1.1	1.9	17.575	C
2 - B2233 East	398	100	66	1041	0.383	398	666	0.5	0.6	5.593	A
3 - B2233 West	386	96	139	878	0.439	385	325	0.6	0.8	7.290	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	497	124	404	569	0.873	484	237	1.9	5.2	37.408	E
2 - B2233 East	488	122	79	1033	0.472	487	808	0.6	0.9	6.571	A
3 - B2233 West	472	118	170	862	0.548	471	396	0.8	1.2	9.160	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	497	124	405	568	0.874	494	238	5.2	5.8	45.377	E
2 - B2233 East	488	122	81	1032	0.472	488	818	0.9	0.9	6.608	A
3 - B2233 West	472	118	171	862	0.548	472	398	1.2	1.2	9.238	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	405	101	332	603	0.673	420	195	5.8	2.2	21.062	C
2 - B2233 East	398	100	69	1039	0.383	399	683	0.9	0.6	5.637	A
3 - B2233 West	386	96	140	878	0.439	387	329	1.2	0.8	7.368	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	340	85	278	628	0.540	343	163	2.2	1.2	12.791	B
2 - B2233 East	334	83	56	1046	0.319	334	565	0.6	0.5	5.060	A
3 - B2233 West	323	81	117	889	0.363	324	274	0.8	0.6	6.377	A

2021 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	74.55	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	264	100.000
2 - B2233 East		ONE HOUR	✓	972	100.000
3 - B2233 West		ONE HOUR	✓	445	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	172	92
	2 - B2233 East	426	0	546
	3 - B2233 West	124	321	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	4	5
	2 - B2233 East	3	0	1
	3 - B2233 West	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.50	12.37	1.0	B	242	363
2 - B2233 East	1.04	118.98	37.4	F	892	1338
3 - B2233 West	0.69	15.98	2.1	C	408	613

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	199	50	240	635	0.313	197	409	0.0	0.4	8.181	A
2 - B2233 East	732	183	69	1044	0.701	723	368	0.0	2.2	10.922	B
3 - B2233 West	335	84	317	778	0.430	332	475	0.0	0.7	8.015	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	237	59	287	613	0.387	237	490	0.4	0.6	9.558	A
2 - B2233 East	874	218	82	1036	0.843	864	442	2.2	4.7	19.801	C
3 - B2233 West	400	100	379	747	0.535	399	568	0.7	1.1	10.274	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	291	73	351	583	0.499	289	572	0.6	1.0	12.215	B
2 - B2233 East	1070	268	101	1025	1.044	995	539	4.7	23.5	64.378	F
3 - B2233 West	490	122	436	718	0.682	486	660	1.1	2.0	15.264	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	291	73	353	581	0.500	291	581	1.0	1.0	12.374	B
2 - B2233 East	1070	268	101	1025	1.044	1015	543	23.5	37.4	118.975	F
3 - B2233 West	490	122	445	714	0.686	490	671	2.0	2.1	15.984	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	237	59	291	611	0.389	239	548	1.0	0.6	9.707	A
2 - B2233 East	874	218	83	1036	0.844	994	446	37.4	7.3	82.084	F
3 - B2233 West	400	100	436	719	0.557	403	642	2.1	1.3	11.534	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	199	50	243	634	0.314	199	423	0.6	0.5	8.309	A
2 - B2233 East	732	183	70	1044	0.701	751	373	7.3	2.4	13.048	B
3 - B2233 West	335	84	329	772	0.434	337	491	1.3	0.8	8.312	A

2021 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	54.50	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	508	100.000
2 - B2233 East		ONE HOUR	✓	521	100.000
3 - B2233 West		ONE HOUR	✓	521	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	411	97
	2 - B2233 East	207	0	314
	3 - B2233 West	90	431	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	3	1
	2 - B2233 East	2	0	2
	3 - B2233 West	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	1.04	143.51	22.8	F	466	699
2 - B2233 East	0.56	7.97	1.3	A	478	717
3 - B2233 West	0.69	13.68	2.1	B	478	717

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	382	96	322	610	0.627	376	222	0.0	1.6	15.011	C
2 - B2233 East	392	98	72	1041	0.377	390	626	0.0	0.6	5.507	A
3 - B2233 West	392	98	155	873	0.449	389	307	0.0	0.8	7.390	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	457	114	386	579	0.788	450	266	1.6	3.3	26.465	D
2 - B2233 East	468	117	86	1033	0.453	467	750	0.6	0.8	6.350	A
3 - B2233 West	468	117	186	857	0.546	467	368	0.8	1.2	9.174	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	559	140	472	539	1.037	513	326	3.3	14.8	82.071	F
2 - B2233 East	574	143	98	1027	0.559	572	887	0.8	1.2	7.885	A
3 - B2233 West	574	143	227	836	0.686	570	443	1.2	2.1	13.329	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	559	140	474	538	1.040	527	327	14.8	22.8	143.507	F
2 - B2233 East	574	143	101	1025	0.560	574	901	1.2	1.3	7.967	A
3 - B2233 West	574	143	228	836	0.686	573	446	2.1	2.1	13.683	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	457	114	390	577	0.791	529	268	22.8	4.7	86.514	F
2 - B2233 East	468	117	101	1025	0.457	470	818	1.3	0.9	6.503	A
3 - B2233 West	468	117	187	857	0.547	472	384	2.1	1.2	9.440	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	382	96	326	608	0.629	394	224	4.7	1.8	17.689	C
2 - B2233 East	392	98	75	1039	0.377	393	645	0.9	0.6	5.579	A
3 - B2233 West	392	98	156	872	0.450	394	312	1.2	0.8	7.550	A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	33.35	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	187	100.000
2 - B2233 East		ONE HOUR	✓	897	100.000
3 - B2233 West		ONE HOUR	✓	411	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	124	63
	2 - B2233 East	404	0	493
	3 - B2233 West	104	307	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	5	8
	2 - B2233 East	3	0	1
	3 - B2233 West	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.36	9.66	0.5	A	172	257
2 - B2233 East	0.95	47.64	12.3	E	823	1235
3 - B2233 West	0.63	13.66	1.7	B	377	566

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	141	35	229	629	0.224	140	379	0.0	0.3	7.339	A
2 - B2233 East	675	169	47	1056	0.640	668	322	0.0	1.7	9.145	A
3 - B2233 West	309	77	301	786	0.394	307	414	0.0	0.6	7.483	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	168	42	275	608	0.277	168	454	0.3	0.4	8.175	A
2 - B2233 East	806	202	57	1050	0.768	801	386	1.7	3.1	14.132	B
3 - B2233 West	369	92	361	756	0.489	368	497	0.6	0.9	9.236	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	206	51	336	579	0.355	205	546	0.4	0.5	9.603	A
2 - B2233 East	988	247	69	1042	0.947	959	472	3.1	10.2	34.964	D
3 - B2233 West	453	113	432	720	0.629	450	596	0.9	1.6	13.193	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	206	51	338	579	0.356	206	556	0.5	0.5	9.658	A
2 - B2233 East	988	247	69	1042	0.948	979	474	10.2	12.3	47.637	E
3 - B2233 West	453	113	441	715	0.633	452	608	1.6	1.7	13.663	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	168	42	278	606	0.277	169	473	0.5	0.4	8.239	A
2 - B2233 East	806	202	57	1050	0.768	841	390	12.3	3.6	19.663	C
3 - B2233 West	369	92	379	746	0.495	372	519	1.7	1.0	9.686	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	141	35	232	628	0.224	141	386	0.4	0.3	7.406	A
2 - B2233 East	675	169	48	1055	0.640	682	326	3.6	1.8	9.822	A
3 - B2233 West	309	77	307	782	0.395	311	423	1.0	0.7	7.653	A

2031 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	22.14	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	457	100.000
2 - B2233 East		ONE HOUR	✓	449	100.000
3 - B2233 West		ONE HOUR	✓	436	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	382	75
	2 - B2233 East	157	0	292
	3 - B2233 West	62	374	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	3	1
	2 - B2233 East	3	0	2
	3 - B2233 West	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.89	49.32	6.4	E	419	629
2 - B2233 East	0.48	6.68	0.9	A	412	618
3 - B2233 West	0.56	9.40	1.2	A	400	600

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	344	86	280	629	0.547	339	164	0.0	1.2	12.225	B
2 - B2233 East	338	85	56	1048	0.323	336	563	0.0	0.5	5.047	A
3 - B2233 West	328	82	118	891	0.368	326	274	0.0	0.6	6.346	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	411	103	335	603	0.681	407	197	1.2	2.0	18.084	C
2 - B2233 East	404	101	67	1041	0.388	403	676	0.5	0.6	5.633	A
3 - B2233 West	392	98	141	879	0.446	391	329	0.6	0.8	7.363	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	503	126	410	568	0.886	489	240	2.0	5.6	39.757	E
2 - B2233 East	494	124	80	1034	0.478	493	819	0.6	0.9	6.643	A
3 - B2233 West	480	120	172	863	0.556	478	401	0.8	1.2	9.315	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	503	126	412	567	0.887	500	241	5.6	6.4	49.324	E
2 - B2233 East	494	124	82	1033	0.479	494	830	0.9	0.9	6.682	A
3 - B2233 West	480	120	173	863	0.556	480	404	1.2	1.2	9.401	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	411	103	338	602	0.682	427	197	6.4	2.3	22.273	C
2 - B2233 East	404	101	70	1040	0.388	405	695	0.9	0.6	5.679	A
3 - B2233 West	392	98	142	879	0.446	394	333	1.2	0.8	7.448	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	344	86	282	628	0.548	348	165	2.3	1.2	13.043	B
2 - B2233 East	338	85	57	1047	0.323	339	573	0.6	0.5	5.088	A
3 - B2233 West	328	82	118	891	0.369	329	277	0.8	0.6	6.424	A

2031 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	84.79	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 + D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	267	100.000
2 - B2233 East		ONE HOUR	✓	988	100.000
3 - B2233 West		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	174	93
	2 - B2233 East	433	0	555
	3 - B2233 West	125	326	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	4	5
	2 - B2233 East	3	0	1
	3 - B2233 West	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	0.51	12.62	1.0	B	245	368
2 - B2233 East	1.06	136.37	44.2	F	907	1360
3 - B2233 West	0.69	16.40	2.2	C	414	621

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	201	50	243	634	0.317	199	415	0.0	0.5	8.253	A
2 - B2233 East	744	186	69	1045	0.712	734	373	0.0	2.4	11.274	B
3 - B2233 West	340	85	322	777	0.437	336	482	0.0	0.8	8.110	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	240	60	292	611	0.393	239	496	0.5	0.6	9.676	A
2 - B2233 East	888	222	83	1037	0.857	877	448	2.4	5.2	21.123	C
3 - B2233 West	405	101	384	746	0.543	404	576	0.8	1.2	10.469	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	294	73	356	580	0.507	293	575	0.6	1.0	12.447	B
2 - B2233 East	1088	272	102	1026	1.060	1001	547	5.2	26.9	70.939	F
3 - B2233 West	497	124	439	719	0.691	493	664	1.2	2.1	15.657	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	294	73	359	579	0.508	294	584	1.0	1.0	12.618	B
2 - B2233 East	1088	272	102	1026	1.060	1018	550	26.9	44.2	136.374	F
3 - B2233 West	497	124	446	715	0.695	496	675	2.1	2.2	16.403	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	240	60	296	609	0.394	241	557	1.0	0.7	9.836	A
2 - B2233 East	888	222	84	1036	0.857	1013	453	44.2	12.9	107.168	F
3 - B2233 West	405	101	444	716	0.566	409	653	2.2	1.3	11.850	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	201	50	247	632	0.318	202	439	0.7	0.5	8.387	A
2 - B2233 East	744	186	70	1044	0.712	785	378	12.9	2.6	15.888	C
3 - B2233 West	340	85	344	766	0.443	342	511	1.3	0.8	8.521	A

2031 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	59.46	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22 + D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - North End Road		ONE HOUR	✓	514	100.000
2 - B2233 East		ONE HOUR	✓	527	100.000
3 - B2233 West		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	416	98
	2 - B2233 East	209	0	318
	3 - B2233 West	91	437	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - North End Road	2 - B2233 East	3 - B2233 West
From	1 - North End Road	0	3	1
	2 - B2233 East	2	0	2
	3 - B2233 West	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - North End Road	1.06	158.21	25.7	F	472	707
2 - B2233 East	0.57	8.07	1.3	A	484	725
3 - B2233 West	0.69	14.06	2.2	B	485	727

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	387	97	326	609	0.635	380	224	0.0	1.7	15.311	C
2 - B2233 East	397	99	73	1042	0.381	394	634	0.0	0.6	5.539	A
3 - B2233 West	398	99	156	874	0.455	394	310	0.0	0.8	7.454	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	462	116	392	579	0.799	455	269	1.7	3.5	27.565	D
2 - B2233 East	474	118	87	1034	0.458	473	760	0.6	0.8	6.405	A
3 - B2233 West	475	119	188	858	0.553	473	372	0.8	1.2	9.309	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	566	141	478	538	1.052	515	329	3.5	16.2	87.848	F
2 - B2233 East	580	145	98	1028	0.565	578	895	0.8	1.3	7.983	A
3 - B2233 West	581	145	229	837	0.695	577	447	1.2	2.2	13.672	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	566	141	481	536	1.055	528	330	16.2	25.7	158.209	F
2 - B2233 East	580	145	101	1026	0.565	580	908	1.3	1.3	8.068	A
3 - B2233 West	581	145	230	837	0.695	581	451	2.2	2.2	14.063	B

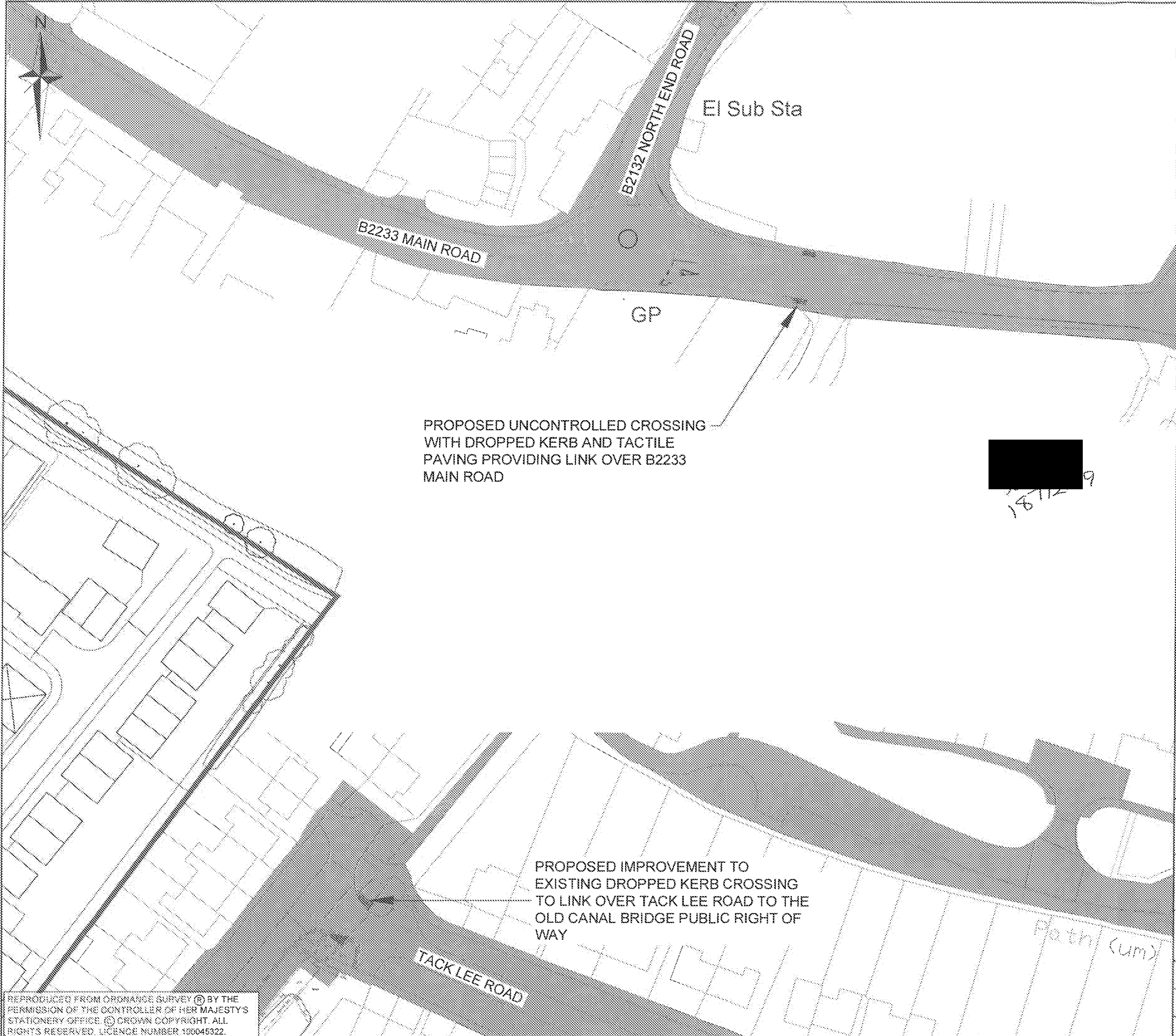
17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	462	116	396	576	0.802	543	271	25.7	5.4	104.476	F
2 - B2233 East	474	118	104	1025	0.462	475	836	1.3	0.9	6.574	A
3 - B2233 West	475	119	189	858	0.553	478	390	2.2	1.3	9.588	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - North End Road	387	97	330	607	0.637	401	227	5.4	1.8	18.561	C
2 - B2233 East	397	99	77	1040	0.382	398	655	0.9	0.6	5.617	A
3 - B2233 West	398	99	158	873	0.455	399	317	1.3	0.8	7.621	A

APPENDIX F. Y/92/17 SECURED IMPROVEMENTS



NOTES

1. THIS DRAWING IS TO BE TREATED AS INDICATIVE AND IS FOR DISCUSSION PURPOSES ONLY.

2. ANY DESIGNERS WHO PROGRESS THESE PROPOSALS OR DESIGN FURTHER WILL NEED TO RECONSIDER THE PROPOSALS BASED UPON THE INFORMATION WHICH SUBSEQUENTLY BECOMES AVAILABLE INCLUDING POTENTIAL SITE HAZARDS

KEY

SITE BOUNDARY

ADOPTED HIGHWAY BOUNDARY

For and on behalf of
Denton & Co Trustees Limited

ODYSSEY

Tiscany House
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E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

LAND SOUTH OF B2233 MAIN ROAD
YAPTON

Drawing Title

PROPOSED MINOR IMPROVEMENTS
TO EXISTING PEDESTRIAN LINKS

Client

LANDLINK ESTATES

Scale	Date	Designed
1:500 @A2	MAR 2018	TDM
Drawn	Checked	Approved
TDM	TDM	RH
Job No	Drawing No	Rev
14-111	14-111/305	-

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APPENDIX G. B2233/NORTH END ROAD MITIGATION COST ESTIMATE

Ford Airfield

Indicative Cost Assessment - Based on: Drawing ITB13091-GA-026
North End Road / B2233 Roundabout Mitigation Scheme

Item	Description	Quantity	Unit	Rate	Total
1	Site Clearance				
	General site clearance including tree removal		Item	£5,000.00	£5,000.00
	Take up and dispose of kerbs	250	m	£7.15	£1,787.50
	Disconnect and remove existing street lights	2	Nr	£350.00	£700.00
	Take up existing road signs	7	Nr	£75.00	£525.00
				Sub Total	£8,012.50
2	Earthworks				
	Excavation of unacceptable material	266	m ³	£25.00	£6,650.00
	Excavation of unacceptable material in the carriageway	80	m ³	£45.00	£3,600.00
	Disposal of material	346	m ³	£20.00	£6,920.00
	Embankment works / Topsoil implanting		Sum	£10,000.00	£10,000.00
				Sub Total	£27,170.00
3	Kerbs Footways and Paved Areas				
	Precast concrete kerbs	215	m	£23.82	£5,121.30
	Precast concrete footway edging	130	m	£10.00	£1,300.00
	Full Depth Carriageway Construction including making good and jointing to existing	80	m ²	£135.00	£10,800.00
	Full Depth Footway Construction including tie into existing	235	m ²	£77.00	£18,095.00
	Making good exisitng footway (provisional)	50	m ²	£50.00	£2,500.00
	Plane and overlay carriageway (provisional)	1165	m ²	£45.00	£52,425.00
	New Verge Construction	45	m ²	£20.00	£900.00
	Tactile paving	4	m ²	£45.00	£180.00
	Allowance for highway drainage		Item		£20,000.00
				Sub Total	£111,321.30
4	Traffic signs, Street Furniture and Road Markings				
	New Road Lines	120	m	£2.00	£240.00
	New single post sign	7	Nr	£500.00	£3,500.00
	New directional signs	3	Nr	£750.00	£2,250.00
	New lighting columns including electrical connections	5	Nr	£1,500.00	£7,500.00
				Sub Total	£13,490.00
Works Sub Total					£159,993.80
Professional Fees 15%					£23,999.07
Preliminaries 15%					£23,999.07
Traffic Management 15%					£23,999.07
Contingency 20%					£31,998.76
TOTAL WORKS COST					£263,989.77
S278 Fees @ 10%					£26,398.98
Optimisation Bias @ 44%					£116,155.50
TOTAL:					£406,544.25

Exclusions: Utility diversion costs
Commutated sums

**APPENDIX H. JUNCTIONS 9 OUTPUTS – B2233/BILSHAM ROAD
MITIGATION SCHEME**

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.0.6896 © Copyright TRL Limited, 2018							
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: Bilsham Road Mini - Mitigation.j9

Path: T:\Projects\13000 Series\13091\ITB Ford Airfield\Tech\Junction Assessments\Arcady\Bilsham Road Mini Roundabout

Report generation date: 30/04/2019 16:56:59

»2018, AM
»2018, PM
»2021 Base, AM
»2021 Base, PM
»2021 with Development, AM
»2021 with Development, PM
»2031 Base, AM
»2031 Base, PM
»2031 with Development, AM
»2031 with Development, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2018								
1 - B2233 East	0.8	5.62	0.44	A	0.5	5.03	0.33	A
2 - Bilsham Road	0.9	5.53	0.47	A	0.3	3.48	0.21	A
3 - B2233 West	0.6	4.75	0.36	A	1.7	7.81	0.63	A
2021 Base								
1 - B2233 East	1.0	6.22	0.49	A	0.6	5.45	0.38	A
2 - Bilsham Road	1.0	6.13	0.51	A	0.3	3.70	0.24	A
3 - B2233 West	0.7	5.13	0.41	A	2.1	9.07	0.68	A
2021 with Development								
1 - B2233 East	1.3	7.31	0.56	A	0.7	5.78	0.41	A
2 - Bilsham Road	1.2	6.83	0.54	A	0.4	3.87	0.26	A
3 - B2233 West	0.8	5.51	0.46	A	2.9	11.72	0.75	B
2031 Base								
1 - B2233 East	1.0	6.28	0.50	A	0.6	5.51	0.39	A
2 - Bilsham Road	1.1	6.30	0.52	A	0.3	3.71	0.24	A
3 - B2233 West	0.7	5.19	0.42	A	2.1	9.32	0.69	A
2031 with Development								
1 - B2233 East	1.3	7.40	0.57	A	0.7	5.86	0.42	A
2 - Bilsham Road	1.2	7.03	0.56	A	0.4	3.89	0.27	A
3 - B2233 West	0.9	5.57	0.46	A	3.1	12.15	0.76	B

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓		
D5	2024 Base	AM	ONE HOUR	07:45	09:15	15			
D6	2024 Base	PM	ONE HOUR	16:45	18:15	15			
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D9	2024 Base ST	AM	ONE HOUR	07:45	09:15	15			
D10	2024 Base ST	PM	ONE HOUR	16:45	18:15	15			
D11	Development	AM	ONE HOUR	07:45	09:15	15			
D12	Development	PM	ONE HOUR	16:45	18:15	15			
D15	2024 with Development	AM	ONE HOUR	07:45	09:15	15		Simple	D5 + D11
D16	2024 with Development	PM	ONE HOUR	16:45	18:15	15		Simple	D6 + D12
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12
D19	2024 with Development ST	AM	ONE HOUR	07:45	09:15	15		Simple	D9 + D11
D20	2024 with Development ST	PM	ONE HOUR	16:45	18:15	15		Simple	D10 + D12
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 + D11
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22 + D12

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B2233 East	
2	Bilsham Road	
3	B2233 West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2233 East	3.40	4.60	10.9	9.0	20.0	22.0	
2 - Bilsham Road	3.70	5.60	13.5	15.0	20.0	21.5	
3 - B2233 West	3.30	4.50	8.1	16.0	20.0	10.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2233 East	0.563	1258
2 - Bilsham Road	0.635	1538
3 - B2233 West	0.603	1316

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	461	100.000
2 - Bilsham Road		ONE HOUR	✓	532	100.000
3 - B2233 West		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	76	385
	2 - Bilsham Road	123	0	409
	3 - B2233 West	277	114	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	4	3
	2 - Bilsham Road	2	0	2
	3 - B2233 West	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.44	5.62	0.8	A	423	635
2 - Bilsham Road	0.47	5.53	0.9	A	488	732
3 - B2233 West	0.36	4.75	0.6	A	359	538

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	347	87	85	1171	0.296	345	300	0.0	0.4	4.351	A
2 - Bilsham Road	401	100	288	1323	0.303	399	142	0.0	0.4	3.888	A
3 - B2233 West	294	74	92	1215	0.242	293	595	0.0	0.3	3.901	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	414	104	102	1161	0.357	414	359	0.4	0.6	4.812	A
2 - Bilsham Road	478	120	346	1286	0.372	478	171	0.4	0.6	4.452	A
3 - B2233 West	352	88	110	1204	0.292	351	713	0.3	0.4	4.220	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	508	127	125	1149	0.442	507	440	0.6	0.8	5.600	A
2 - Bilsham Road	586	146	423	1237	0.474	585	209	0.6	0.9	5.511	A
3 - B2233 West	431	108	135	1189	0.362	430	873	0.4	0.6	4.737	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	508	127	126	1148	0.442	508	440	0.8	0.8	5.616	A
2 - Bilsham Road	586	146	424	1236	0.474	586	209	0.9	0.9	5.535	A
3 - B2233 West	431	108	135	1189	0.362	430	874	0.6	0.6	4.745	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	414	104	103	1161	0.357	415	360	0.8	0.6	4.833	A
2 - Bilsham Road	478	120	347	1285	0.372	479	171	0.9	0.6	4.474	A
3 - B2233 West	352	88	111	1204	0.292	352	715	0.6	0.4	4.232	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	347	87	86	1171	0.296	348	302	0.6	0.4	4.377	A
2 - Bilsham Road	401	100	290	1322	0.303	401	143	0.6	0.4	3.914	A
3 - B2233 West	294	74	93	1214	0.242	295	599	0.4	0.3	3.917	A

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	322	100.000
2 - Bilsham Road		ONE HOUR	✓	248	100.000
3 - B2233 West		ONE HOUR	✓	699	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	66	256
	2 - Bilsham Road	77	0	171
	3 - B2233 West	456	243	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	8	2
	2 - Bilsham Road	5	0	3
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.33	5.03	0.5	A	295	443
2 - Bilsham Road	0.21	3.48	0.3	A	228	341
3 - B2233 West	0.63	7.81	1.7	A	641	962

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	242	61	182	1117	0.217	241	399	0.0	0.3	4.106	A
2 - Bilsham Road	187	47	192	1364	0.137	186	231	0.0	0.2	3.053	A
3 - B2233 West	526	132	58	1247	0.422	523	320	0.0	0.7	4.957	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	289	72	218	1097	0.264	289	478	0.3	0.4	4.454	A
2 - Bilsham Road	223	56	230	1341	0.166	223	277	0.2	0.2	3.220	A
3 - B2233 West	628	157	69	1240	0.507	627	383	0.7	1.0	5.867	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	355	89	267	1070	0.331	354	585	0.4	0.5	5.025	A
2 - Bilsham Road	273	68	281	1308	0.209	273	339	0.2	0.3	3.476	A
3 - B2233 West	770	192	85	1230	0.626	767	470	1.0	1.6	7.733	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	355	89	268	1069	0.332	355	587	0.5	0.5	5.035	A
2 - Bilsham Road	273	68	282	1308	0.209	273	340	0.3	0.3	3.477	A
3 - B2233 West	770	192	85	1230	0.626	770	470	1.6	1.7	7.813	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	289	72	219	1096	0.264	290	481	0.5	0.4	4.467	A
2 - Bilsham Road	223	56	231	1340	0.166	223	279	0.3	0.2	3.225	A
3 - B2233 West	628	157	69	1240	0.507	631	384	1.7	1.0	5.938	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	242	61	183	1116	0.217	243	402	0.4	0.3	4.124	A
2 - Bilsham Road	187	47	193	1364	0.137	187	233	0.2	0.2	3.058	A
3 - B2233 West	526	132	58	1247	0.422	527	322	1.0	0.7	5.016	A

2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	512	100.000
2 - Bilsham Road		ONE HOUR	✓	558	100.000
3 - B2233 West		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	78	434
	2 - Bilsham Road	127	0	431
	3 - B2233 West	326	125	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	4	3
	2 - Bilsham Road	2	0	2
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.49	6.22	1.0	A	470	705
2 - Bilsham Road	0.51	6.13	1.0	A	512	768
3 - B2233 West	0.41	5.13	0.7	A	414	621

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	385	96	94	1167	0.330	384	340	0.0	0.5	4.584	A
2 - Bilsham Road	420	105	325	1299	0.323	418	152	0.0	0.5	4.077	A
3 - B2233 West	340	85	95	1224	0.277	338	648	0.0	0.4	4.055	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	460	115	112	1157	0.398	460	407	0.5	0.7	5.160	A
2 - Bilsham Road	502	125	390	1258	0.399	501	182	0.5	0.7	4.749	A
3 - B2233 West	405	101	114	1213	0.334	405	776	0.4	0.5	4.451	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	564	141	137	1143	0.493	562	498	0.7	1.0	6.192	A
2 - Bilsham Road	614	154	477	1202	0.511	613	223	0.7	1.0	6.093	A
3 - B2233 West	497	124	139	1198	0.415	496	950	0.5	0.7	5.123	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	564	141	138	1143	0.493	564	499	1.0	1.0	6.218	A
2 - Bilsham Road	614	154	478	1201	0.511	614	224	1.0	1.0	6.131	A
3 - B2233 West	497	124	140	1198	0.415	497	952	0.7	0.7	5.133	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	460	115	113	1157	0.398	461	408	1.0	0.7	5.190	A
2 - Bilsham Road	502	125	391	1257	0.399	503	183	1.0	0.7	4.783	A
3 - B2233 West	405	101	115	1213	0.334	406	780	0.7	0.5	4.468	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	385	96	94	1167	0.330	386	342	0.7	0.5	4.615	A
2 - Bilsham Road	420	105	327	1298	0.324	421	153	0.7	0.5	4.107	A
3 - B2233 West	340	85	96	1224	0.277	340	652	0.5	0.4	4.073	A

2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	371	100.000
2 - Bilsham Road		ONE HOUR	✓	275	100.000
3 - B2233 West		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	68	303
	2 - Bilsham Road	85	0	190
	3 - B2233 West	503	249	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	7	2
	2 - Bilsham Road	5	0	3
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.38	5.45	0.6	A	340	511
2 - Bilsham Road	0.24	3.70	0.3	A	252	379
3 - B2233 West	0.68	9.07	2.1	A	690	1035

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	279	70	186	1118	0.250	278	440	0.0	0.3	4.272	A
2 - Bilsham Road	207	52	227	1342	0.154	206	237	0.0	0.2	3.167	A
3 - B2233 West	566	142	64	1243	0.456	563	370	0.0	0.8	5.269	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	334	83	223	1097	0.304	333	528	0.3	0.4	4.709	A
2 - Bilsham Road	247	62	272	1314	0.188	247	284	0.2	0.2	3.372	A
3 - B2233 West	676	169	76	1235	0.547	675	443	0.8	1.2	6.406	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	408	102	273	1070	0.382	408	645	0.4	0.6	5.433	A
2 - Bilsham Road	303	76	333	1276	0.237	302	348	0.2	0.3	3.697	A
3 - B2233 West	828	207	93	1224	0.676	825	542	1.2	2.0	8.927	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	408	102	274	1069	0.382	408	647	0.6	0.6	5.449	A
2 - Bilsham Road	303	76	334	1276	0.237	303	349	0.3	0.3	3.698	A
3 - B2233 West	828	207	94	1224	0.676	828	543	2.0	2.1	9.071	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	334	83	225	1096	0.304	334	531	0.6	0.4	4.728	A
2 - Bilsham Road	247	62	273	1314	0.188	248	286	0.3	0.2	3.376	A
3 - B2233 West	676	169	77	1235	0.547	679	444	2.1	1.2	6.516	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	279	70	188	1117	0.250	280	444	0.4	0.3	4.302	A
2 - Bilsham Road	207	52	228	1342	0.154	207	239	0.2	0.2	3.176	A
3 - B2233 West	566	142	64	1243	0.456	568	372	1.2	0.8	5.347	A

2021 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	581	100.000
2 - Bilsham Road		ONE HOUR	✓	570	100.000
3 - B2233 West		ONE HOUR	✓	497	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	78	503
	2 - Bilsham Road	127	0	443
	3 - B2233 West	348	149	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	4	3
	2 - Bilsham Road	2	0	2
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.56	7.31	1.3	A	533	800
2 - Bilsham Road	0.54	6.83	1.2	A	523	785
3 - B2233 West	0.46	5.51	0.8	A	456	684

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	437	109	112	1161	0.377	435	356	0.0	0.6	4.940	A
2 - Bilsham Road	429	107	377	1268	0.338	427	170	0.0	0.5	4.271	A
3 - B2233 West	374	94	95	1227	0.305	372	709	0.0	0.4	4.201	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	522	131	134	1149	0.455	521	426	0.6	0.8	5.727	A
2 - Bilsham Road	512	128	451	1220	0.420	512	204	0.5	0.7	5.074	A
3 - B2233 West	447	112	114	1216	0.367	446	849	0.4	0.6	4.673	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	640	160	164	1132	0.565	638	522	0.8	1.3	7.253	A
2 - Bilsham Road	628	157	552	1156	0.543	626	249	0.7	1.2	6.771	A
3 - B2233 West	547	137	139	1201	0.456	546	1039	0.6	0.8	5.498	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	640	160	164	1132	0.565	640	523	1.3	1.3	7.307	A
2 - Bilsham Road	628	157	554	1155	0.544	628	250	1.2	1.2	6.829	A
3 - B2233 West	547	137	140	1201	0.456	547	1041	0.8	0.8	5.508	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	522	131	134	1149	0.455	524	428	1.3	0.8	5.777	A
2 - Bilsham Road	512	128	454	1219	0.421	514	205	1.2	0.7	5.125	A
3 - B2233 West	447	112	115	1216	0.367	448	853	0.8	0.6	4.692	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	437	109	112	1161	0.377	438	358	0.8	0.6	4.987	A
2 - Bilsham Road	429	107	379	1266	0.339	430	171	0.7	0.5	4.310	A
3 - B2233 West	374	94	96	1227	0.305	375	714	0.6	0.4	4.227	A

2021 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	400	100.000
2 - Bilsham Road		ONE HOUR	✓	300	100.000
3 - B2233 West		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	68	332
	2 - Bilsham Road	85	0	215
	3 - B2233 West	574	263	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	7	2
	2 - Bilsham Road	5	0	3
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.41	5.78	0.7	A	367	551
2 - Bilsham Road	0.26	3.87	0.4	A	275	413
3 - B2233 West	0.75	11.72	2.9	B	768	1152

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	301	75	197	1115	0.270	300	493	0.0	0.4	4.409	A
2 - Bilsham Road	226	56	249	1333	0.169	225	248	0.0	0.2	3.248	A
3 - B2233 West	630	158	64	1246	0.506	626	410	0.0	1.0	5.770	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	360	90	236	1093	0.329	359	591	0.4	0.5	4.903	A
2 - Bilsham Road	270	67	298	1302	0.207	269	297	0.2	0.3	3.486	A
3 - B2233 West	752	188	76	1238	0.608	750	491	1.0	1.5	7.347	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	440	110	288	1064	0.414	440	722	0.5	0.7	5.759	A
2 - Bilsham Road	330	83	365	1260	0.262	330	363	0.3	0.4	3.867	A
3 - B2233 West	922	230	93	1228	0.751	916	601	1.5	2.9	11.355	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	440	110	289	1063	0.414	440	725	0.7	0.7	5.783	A
2 - Bilsham Road	330	83	366	1260	0.262	330	364	0.4	0.4	3.872	A
3 - B2233 West	922	230	94	1228	0.751	921	602	2.9	2.9	11.720	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	360	90	238	1091	0.329	360	596	0.7	0.5	4.931	A
2 - Bilsham Road	270	67	299	1301	0.207	270	299	0.4	0.3	3.490	A
3 - B2233 West	752	188	77	1238	0.608	758	493	2.9	1.6	7.575	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	301	75	199	1114	0.270	302	498	0.5	0.4	4.436	A
2 - Bilsham Road	226	56	250	1332	0.170	226	250	0.3	0.2	3.255	A
3 - B2233 West	630	158	64	1246	0.506	632	412	1.6	1.0	5.887	A

2031 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	520	100.000
2 - Bilsham Road		ONE HOUR	✓	569	100.000
3 - B2233 West		ONE HOUR	✓	458	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	79	441
	2 - Bilsham Road	130	0	439
	3 - B2233 West	331	127	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	4	3
	2 - Bilsham Road	2	0	2
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.50	6.28	1.0	A	477	716
2 - Bilsham Road	0.52	6.30	1.1	A	522	783
3 - B2233 West	0.42	5.19	0.7	A	420	630

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	391	98	95	1170	0.335	389	345	0.0	0.5	4.600	A
2 - Bilsham Road	428	107	330	1297	0.330	426	154	0.0	0.5	4.124	A
3 - B2233 West	345	86	97	1226	0.281	343	659	0.0	0.4	4.073	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	467	117	114	1160	0.403	467	414	0.5	0.7	5.189	A
2 - Bilsham Road	512	128	396	1256	0.407	511	185	0.5	0.7	4.828	A
3 - B2233 West	412	103	117	1214	0.339	411	790	0.4	0.5	4.480	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	573	143	140	1146	0.500	571	507	0.7	1.0	6.254	A
2 - Bilsham Road	626	157	484	1199	0.523	625	226	0.7	1.1	6.253	A
3 - B2233 West	504	126	143	1199	0.421	503	967	0.5	0.7	5.172	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	573	143	140	1145	0.500	573	508	1.0	1.0	6.283	A
2 - Bilsham Road	626	157	486	1198	0.523	626	227	1.1	1.1	6.295	A
3 - B2233 West	504	126	143	1198	0.421	504	969	0.7	0.7	5.185	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	467	117	114	1160	0.403	469	415	1.0	0.7	5.219	A
2 - Bilsham Road	512	128	398	1254	0.408	513	186	1.1	0.7	4.867	A
3 - B2233 West	412	103	117	1214	0.339	413	793	0.7	0.5	4.496	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	391	98	96	1170	0.335	392	348	0.7	0.5	4.634	A
2 - Bilsham Road	428	107	333	1296	0.331	429	155	0.7	0.5	4.156	A
3 - B2233 West	345	86	98	1225	0.281	345	664	0.5	0.4	4.092	A

2031 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	377	100.000
2 - Bilsham Road		ONE HOUR	✓	279	100.000
3 - B2233 West		ONE HOUR	✓	764	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	70	307
	2 - Bilsham Road	86	0	193
	3 - B2233 West	511	253	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	7	2
	2 - Bilsham Road	5	0	3
	3 - B2233 West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.39	5.51	0.6	A	346	519
2 - Bilsham Road	0.24	3.71	0.3	A	256	384
3 - B2233 West	0.69	9.32	2.1	A	701	1052

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	284	71	189	1118	0.254	282	447	0.0	0.3	4.302	A
2 - Bilsham Road	210	53	230	1344	0.156	209	242	0.0	0.2	3.171	A
3 - B2233 West	575	144	65	1246	0.462	572	375	0.0	0.8	5.315	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	339	85	227	1097	0.309	338	536	0.3	0.4	4.745	A
2 - Bilsham Road	251	63	276	1315	0.191	251	290	0.2	0.2	3.380	A
3 - B2233 West	687	172	77	1238	0.555	685	449	0.8	1.2	6.496	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	415	104	277	1069	0.388	414	655	0.4	0.6	5.496	A
2 - Bilsham Road	307	77	337	1277	0.241	307	354	0.2	0.3	3.712	A
3 - B2233 West	841	210	95	1227	0.685	838	550	1.2	2.1	9.157	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	415	104	279	1068	0.389	415	657	0.6	0.6	5.512	A
2 - Bilsham Road	307	77	338	1276	0.241	307	356	0.3	0.3	3.713	A
3 - B2233 West	841	210	95	1227	0.686	841	550	2.1	2.1	9.317	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	339	85	229	1096	0.309	340	539	0.6	0.5	4.764	A
2 - Bilsham Road	251	63	277	1315	0.191	251	292	0.3	0.2	3.384	A
3 - B2233 West	687	172	77	1238	0.555	690	450	2.1	1.3	6.616	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	284	71	191	1117	0.254	284	451	0.5	0.3	4.325	A
2 - Bilsham Road	210	53	231	1343	0.156	210	244	0.2	0.2	3.177	A
3 - B2233 West	575	144	65	1246	0.462	577	377	1.3	0.9	5.395	A

2031 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 + D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	589	100.000
2 - Bilsham Road		ONE HOUR	✓	581	100.000
3 - B2233 West		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	79	510
	2 - Bilsham Road	130	0	451
	3 - B2233 West	353	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	4	2
	2 - Bilsham Road	2	0	2
	3 - B2233 West	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.57	7.40	1.3	A	540	811
2 - Bilsham Road	0.56	7.03	1.2	A	533	800
3 - B2233 West	0.46	5.57	0.9	A	462	694

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	443	111	113	1164	0.381	441	362	0.0	0.6	4.961	A
2 - Bilsham Road	437	109	382	1266	0.346	435	172	0.0	0.5	4.324	A
3 - B2233 West	379	95	97	1229	0.309	378	720	0.0	0.4	4.222	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	529	132	136	1152	0.460	529	434	0.6	0.8	5.769	A
2 - Bilsham Road	522	131	458	1218	0.429	521	206	0.5	0.7	5.165	A
3 - B2233 West	453	113	117	1217	0.372	453	862	0.4	0.6	4.706	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	648	162	166	1135	0.571	647	531	0.8	1.3	7.347	A
2 - Bilsham Road	640	160	560	1152	0.555	638	253	0.7	1.2	6.968	A
3 - B2233 West	555	139	143	1201	0.462	554	1055	0.6	0.8	5.551	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	648	162	166	1135	0.572	648	532	1.3	1.3	7.402	A
2 - Bilsham Road	640	160	561	1151	0.556	640	253	1.2	1.2	7.034	A
3 - B2233 West	555	139	143	1201	0.462	555	1058	0.8	0.9	5.570	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	529	132	136	1151	0.460	531	435	1.3	0.9	5.824	A
2 - Bilsham Road	522	131	460	1216	0.430	524	207	1.2	0.8	5.219	A
3 - B2233 West	453	113	117	1217	0.372	454	867	0.9	0.6	4.729	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	443	111	114	1164	0.381	444	364	0.9	0.6	5.012	A
2 - Bilsham Road	437	109	385	1264	0.346	438	173	0.8	0.5	4.366	A
3 - B2233 West	379	95	98	1228	0.309	380	725	0.6	0.5	4.249	A

2031 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22 + D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2233 East		ONE HOUR	✓	406	100.000
2 - Bilsham Road		ONE HOUR	✓	304	100.000
3 - B2233 West		ONE HOUR	✓	849	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	70	336
	2 - Bilsham Road	86	0	218
	3 - B2233 West	582	267	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2233 East	2 - Bilsham Road	3 - B2233 West
From	1 - B2233 East	0	7	2
	2 - Bilsham Road	5	0	2
	3 - B2233 West	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2233 East	0.42	5.86	0.7	A	373	559
2 - Bilsham Road	0.27	3.89	0.4	A	279	418
3 - B2233 West	0.76	12.15	3.1	B	779	1169

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	306	76	200	1114	0.274	304	500	0.0	0.4	4.435	A
2 - Bilsham Road	229	57	252	1334	0.172	228	252	0.0	0.2	3.253	A
3 - B2233 West	639	160	65	1249	0.512	635	415	0.0	1.0	5.829	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	365	91	239	1092	0.334	364	599	0.4	0.5	4.944	A
2 - Bilsham Road	273	68	302	1303	0.210	273	302	0.2	0.3	3.495	A
3 - B2233 West	763	191	77	1241	0.615	761	497	1.0	1.6	7.472	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	447	112	292	1063	0.421	446	731	0.5	0.7	5.830	A
2 - Bilsham Road	335	84	369	1261	0.266	334	369	0.3	0.4	3.884	A
3 - B2233 West	935	234	95	1230	0.760	929	609	1.6	3.0	11.734	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	447	112	294	1062	0.421	447	735	0.7	0.7	5.855	A
2 - Bilsham Road	335	84	370	1260	0.266	335	371	0.4	0.4	3.889	A
3 - B2233 West	935	234	95	1230	0.760	934	610	3.0	3.1	12.149	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	365	91	242	1091	0.335	366	605	0.7	0.5	4.971	A
2 - Bilsham Road	273	68	303	1302	0.210	274	305	0.4	0.3	3.500	A
3 - B2233 West	763	191	77	1241	0.615	769	499	3.1	1.6	7.723	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B2233 East	306	76	202	1113	0.275	306	505	0.5	0.4	4.464	A
2 - Bilsham Road	229	57	253	1333	0.172	229	255	0.3	0.2	3.263	A
3 - B2233 West	639	160	65	1248	0.512	641	418	1.6	1.1	5.954	A

APPENDIX I. B2233/BILSHAM ROAD MITIGATION COST ESTIMATE

Ford Airfield

Indicative Cost Assessment - Based on: Drawing ITB13091-GA-026
North End Road / B2233 Roundabout Mitigation Scheme

Item	Description	Quantity	Unit	Rate	Total
1	Site Clearance				
	General site clearance including tree removal		Item	£5,000.00	£5,000.00
	Take up and dispose of kerbs	250	m	£7.15	£1,787.50
	Disconnect and remove existing street lights	2	Nr	£350.00	£700.00
	Take up existing road signs	7	Nr	£75.00	£525.00
				Sub Total	£8,012.50
2	Earthworks				
	Excavation of unacceptable material	266	m ³	£25.00	£6,650.00
	Excavation of unacceptable material in the carriageway	80	m ³	£45.00	£3,600.00
	Disposal of material	346	m ³	£20.00	£6,920.00
	Embankment works / Topsoil implanting		Sum	£10,000.00	£10,000.00
				Sub Total	£27,170.00
3	Kerbs Footways and Paved Areas				
	Precast concrete kerbs	215	m	£23.82	£5,121.30
	Precast concrete footway edging	130	m	£10.00	£1,300.00
	Full Depth Carriageway Construction including making good and jointing to existing	80	m ²	£135.00	£10,800.00
	Full Depth Footway Construction including tie into existing	235	m ²	£77.00	£18,095.00
	Making good exisitng footway (provisional)	50	m ²	£50.00	£2,500.00
	Plane and overlay carriageway (provisional)	1165	m ²	£45.00	£52,425.00
	New Verge Construction	45	m ²	£20.00	£900.00
	Tactile paving	4	m ²	£45.00	£180.00
	Allowance for highway drainage		Item		£20,000.00
				Sub Total	£111,321.30
4	Traffic signs, Street Furniture and Road Markings				
	New Road Lines	120	m	£2.00	£240.00
	New single post sign	7	Nr	£500.00	£3,500.00
	New directional signs	3	Nr	£750.00	£2,250.00
	New lighting columns including electrical connections	5	Nr	£1,500.00	£7,500.00
				Sub Total	£13,490.00
Works Sub Total					£159,993.80
Professional Fees 15%					£23,999.07
Preliminaries 15%					£23,999.07
Traffic Management 15%					£23,999.07
Contingency 20%					£31,998.76
TOTAL WORKS COST					£263,989.77
S278 Fees @ 10%					£26,398.98
Optimisation Bias @ 44%					£116,155.50
TOTAL:					£406,544.25

Exclusions: Utility diversion costs
Commutated sums

APPENDIX J. JUNCTIONS 9 OUTPUTS – CHURCH LANE ROUNDBOUT MITIGATION SCHEME

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.0.6896 © Copyright TRL Limited, 2018	
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk	
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Filename: A259 - Church Lane.j9

Path: T:\Projects\13000 Series\13091\TB Ford Airfield\Tech\Junction Assessments\Arcady\A259-Church Lane

Report generation date: 02/05/2019 12:03:51

»2018, AM
 »2018, PM
 »2021 Base, AM
 »2021 Base, PM
 »2021 with Development, AM
 »2021 with Development, PM
 »2031 Base, AM
 »2031 Base, PM
 »2031 with Development, AM
 »2031 with Development, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2018								
1 - Church Lane	1.3	10.41	0.57	B	14.6	75.55	0.97	F
2 - A259 East	6.1	16.85	0.87	C	11.6	30.93	0.94	D
3 - Crookthorn Lane	0.1	8.47	0.10	A	0.1	10.78	0.05	B
4 - A259 West	109.7	448.99	1.25	F	134.5	480.61	1.24	F
2021 Base								
1 - Church Lane	2.0	13.41	0.67	B	20.4	96.31	1.00	F
2 - A259 East	9.6	25.83	0.92	D	37.5	82.45	1.02	F
3 - Crookthorn Lane	0.1	9.85	0.12	A	0.1	12.91	0.06	B
4 - A259 West	178.9	737.26	1.38	F	205.2	717.10	1.33	F
2021 with Development								
1 - Church Lane	2.7	16.17	0.74	C	40.2	162.68	1.07	F
2 - A259 East	15.4	39.68	0.96	E	87.2	167.89	1.10	F
3 - Crookthorn Lane	0.1	11.01	0.13	B	0.1	13.43	0.07	B
4 - A259 West	259.8	1076.01	1.51	F	255.4	921.86	1.39	F
2031 Base								
1 - Church Lane	2.0	12.97	0.67	B	23.0	105.01	1.02	F
2 - A259 East	11.0	29.30	0.93	D	46.1	97.37	1.04	F
3 - Crookthorn Lane	0.1	10.16	0.12	B	0.1	13.11	0.06	B
4 - A259 West	197.7	807.38	1.41	F	223.4	775.08	1.35	F
2031 with Development								
1 - Church Lane	2.6	15.65	0.73	C	44.3	175.59	1.08	F
2 - A259 East	18.4	46.06	0.97	E	98.7	199.05	1.12	F
3 - Crookthorn Lane	0.2	11.33	0.13	B	0.1	13.47	0.07	B
4 - A259 West	280.1	1155.29	1.54	F	272.7	1004.03	1.41	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓		
D5	2024 Base	AM	ONE HOUR	07:45	09:15	15			
D6	2024 Base	PM	ONE HOUR	16:45	18:15	15			
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D9	2024 ST	AM	ONE HOUR	07:45	09:15	15			
D10	2024 ST	PM	ONE HOUR	16:45	18:15	15			
D11	Development	AM	ONE HOUR	07:45	09:15	15			
D12	Development	PM	ONE HOUR	16:45	18:15	15			
D15	2024 with Development	AM	ONE HOUR	07:45	09:15	15		Simple	D5 + D11
D16	2024 with Development	PM	ONE HOUR	16:45	18:15	15		Simple	D6 + D12
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12
D19	2024 with Development ST	AM	ONE HOUR	07:45	09:15	15		Simple	D9 + D11
D20	2024 with Development ST	PM	ONE HOUR	16:45	18:15	15		Simple	D10 + D12
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 + D11
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22+D12

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	164.65	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Church Lane	
2	A259 East	
3	Crookthorn Lane	
4	A259 West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Church Lane	3.21	6.18	4.7	27.5	33.0	19.5	
2 - A259 East	2.54	6.73	47.6	15.9	33.0	32.5	
3 - Crookthorn Lane	2.28	6.08	14.7	38.6	33.0	11.5	
4 - A259 West	2.87	6.64	5.1	16.0	33.0	36.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Church Lane	0.596	1335
2 - A259 East	0.653	1723
3 - Crookthorn Lane	0.628	1436
4 - A259 West	0.536	1169

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	419	100.000
2 - A259 East		ONE HOUR	✓	1237	100.000
3 - Crookthorn Lane		ONE HOUR	✓	44	100.000
4 - A259 West		ONE HOUR	✓	901	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	340	14	65
	2 - A259 East	503	4	1	729
	3 - Crookthorn Lane	15	14	0	15
	4 - A259 West	106	787	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	8	0	20
	2 - A259 East	5	50	0	5
	3 - Crookthorn Lane	7	0	0	0
	4 - A259 West	8	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.57	10.41	1.3	B	384	577
2 - A259 East	0.87	16.85	6.1	C	1135	1703
3 - Crookthorn Lane	0.10	8.47	0.1	A	40	61
4 - A259 West	1.25	448.99	109.7	F	827	1240

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	315	79	602	874	0.361	313	466	0.0	0.6	6.388	A
2 - A259 East	931	233	65	1592	0.585	926	850	0.0	1.4	5.361	A
3 - Crookthorn Lane	33	8	974	770	0.043	33	17	0.0	0.0	4.880	A
4 - A259 West	678	170	401	894	0.759	667	605	0.0	2.9	15.139	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	377	94	706	815	0.462	376	556	0.6	0.8	8.178	A
2 - A259 East	1112	278	78	1583	0.703	1108	1004	1.4	2.3	7.530	A
3 - Crookthorn Lane	40	10	1166	646	0.061	39	20	0.0	0.1	5.939	A
4 - A259 West	810	202	480	852	0.951	782	725	2.9	9.8	40.983	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	461	115	718	808	0.571	460	658	0.8	1.3	10.289	B
2 - A259 East	1362	340	94	1571	0.867	1348	1084	2.3	5.8	15.247	C
3 - Crookthorn Lane	48	12	1418	482	0.101	48	23	0.1	0.1	8.303	A
4 - A259 West	992	248	584	796	1.246	792	882	9.8	59.9	171.736	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	461	115	719	807	0.572	461	663	1.3	1.3	10.408	B
2 - A259 East	1362	340	94	1571	0.867	1361	1087	5.8	6.1	16.852	C
3 - Crookthorn Lane	48	12	1431	473	0.102	48	24	0.1	0.1	8.473	A
4 - A259 West	992	248	590	793	1.251	793	890	59.9	109.7	386.919	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	377	94	757	785	0.480	378	571	1.3	0.9	8.873	A
2 - A259 East	1112	278	79	1582	0.703	1127	1057	6.1	2.4	8.149	A
3 - Crookthorn Lane	40	10	1184	633	0.062	40	21	0.1	0.1	6.067	A
4 - A259 West	810	202	488	848	0.956	840	736	109.7	102.2	448.989	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	315	79	793	765	0.412	316	496	0.9	0.7	8.036	A
2 - A259 East	931	233	67	1590	0.586	935	1042	2.4	1.4	5.531	A
3 - Crookthorn Lane	33	8	984	764	0.043	33	19	0.1	0.0	4.929	A
4 - A259 West	678	170	405	892	0.761	883	612	102.2	51.0	314.671	F

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	202.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	662	100.000
2 - A259 East		ONE HOUR	✓	1305	100.000
3 - Crookthorn Lane		ONE HOUR	✓	17	100.000
4 - A259 West		ONE HOUR	✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	1	451	4	206
	2 - A259 East	242	0	0	1063
	3 - Crookthorn Lane	3	8	0	6
	4 - A259 West	64	1045	1	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	2	0	1
	2 - A259 East	4	0	0	2
	3 - Crookthorn Lane	0	13	0	0
	4 - A259 West	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.97	75.55	14.6	F	607	911
2 - A259 East	0.94	30.93	11.6	D	1197	1796
3 - Crookthorn Lane	0.05	10.78	0.1	B	16	23
4 - A259 West	1.24	480.61	134.5	F	1019	1529

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	498	125	780	843	0.591	493	231	0.0	1.4	10.131	B
2 - A259 East	982	246	159	1581	0.621	976	1114	0.0	1.6	5.888	A
3 - Crookthorn Lane	13	3	1131	670	0.019	13	4	0.0	0.0	5.481	A
4 - A259 West	836	209	190	1032	0.811	821	954	0.0	3.9	16.061	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	595	149	909	765	0.778	588	275	1.4	3.2	19.616	C
2 - A259 East	1173	293	189	1561	0.751	1168	1308	1.6	2.9	9.030	A
3 - Crookthorn Lane	15	4	1353	535	0.029	15	4	0.0	0.0	6.920	A
4 - A259 West	999	250	227	1011	0.987	957	1141	3.9	14.4	46.375	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	729	182	935	749	0.973	697	322	3.2	11.2	50.788	F
2 - A259 East	1437	359	224	1539	0.934	1409	1408	2.9	10.0	23.689	C
3 - Crookthorn Lane	19	5	1627	369	0.051	19	5	0.0	0.1	10.263	B
4 - A259 West	1223	306	274	986	1.241	983	1372	14.4	74.5	173.871	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	729	182	935	748	0.974	715	326	11.2	14.6	75.551	F
2 - A259 East	1437	359	230	1535	0.936	1430	1421	10.0	11.6	30.932	D
3 - Crookthorn Lane	19	5	1655	353	0.053	19	5	0.1	0.1	10.775	B
4 - A259 West	1223	306	278	984	1.243	983	1395	74.5	134.5	387.385	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	595	149	949	741	0.804	635	285	14.6	4.7	40.989	E
2 - A259 East	1173	293	204	1552	0.756	1207	1380	11.6	3.2	11.352	B
3 - Crookthorn Lane	15	4	1406	503	0.030	15	5	0.1	0.0	7.381	A
4 - A259 West	999	250	235	1008	0.991	999	1187	134.5	134.4	480.607	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	498	125	970	728	0.685	508	245	4.7	2.3	17.014	C
2 - A259 East	982	246	164	1578	0.623	989	1314	3.2	1.7	6.175	A
3 - Crookthorn Lane	13	3	1148	659	0.019	13	4	0.0	0.0	5.574	A
4 - A259 West	836	209	192	1030	0.812	1023	969	134.4	87.8	392.349	F

2021 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	269.64	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2021 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	494	100.000
2 - A259 East		ONE HOUR	✓	1290	100.000
3 - Crookthorn Lane		ONE HOUR	✓	44	100.000
4 - A259 West		ONE HOUR	✓	977	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	386	14	94
	2 - A259 East	526	4	1	759
	3 - Crookthorn Lane	15	14	0	15
	4 - A259 West	119	850	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	8	0	20
	2 - A259 East	5	50	0	5
	3 - Crookthorn Lane	7	0	0	0
	4 - A259 West	8	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.67	13.41	2.0	B	453	680
2 - A259 East	0.92	25.83	9.6	D	1184	1776
3 - Crookthorn Lane	0.12	9.85	0.1	A	40	61
4 - A259 West	1.38	737.26	178.9	F	897	1345

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	372	93	644	847	0.439	369	492	0.0	0.8	7.488	A
2 - A259 East	971	243	87	1576	0.616	965	927	0.0	1.6	5.832	A
3 - Crookthorn Lane	33	8	1034	729	0.045	33	17	0.0	0.0	5.168	A
4 - A259 West	736	184	418	885	0.831	718	649	0.0	4.3	19.935	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	444	111	730	798	0.557	442	583	0.8	1.2	10.073	B
2 - A259 East	1160	290	103	1564	0.742	1155	1069	1.6	2.8	8.703	A
3 - Crookthorn Lane	40	10	1238	597	0.066	39	20	0.0	0.1	6.462	A
4 - A259 West	878	220	501	841	1.045	813	777	4.3	20.7	70.566	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	544	136	708	810	0.671	541	681	1.2	2.0	13.215	B
2 - A259 East	1420	355	125	1548	0.917	1397	1124	2.8	8.6	21.124	C
3 - Crookthorn Lane	48	12	1499	427	0.113	48	23	0.1	0.1	9.500	A
4 - A259 West	1076	269	606	785	1.371	783	941	20.7	93.8	274.534	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	544	136	705	812	0.670	544	689	2.0	2.0	13.408	B
2 - A259 East	1420	355	125	1548	0.918	1416	1123	8.6	9.6	25.826	D
3 - Crookthorn Lane	48	12	1519	414	0.117	48	23	0.1	0.1	9.850	A
4 - A259 West	1076	269	614	780	1.379	780	953	93.8	167.7	595.308	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	444	111	748	787	0.564	447	599	2.0	1.3	10.654	B
2 - A259 East	1160	290	104	1563	0.742	1186	1091	9.6	3.0	10.171	B
3 - Crookthorn Lane	40	10	1270	576	0.069	40	20	0.1	0.1	6.719	A
4 - A259 West	878	220	514	834	1.053	833	796	167.7	178.9	737.257	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	372	93	784	767	0.485	373	516	1.3	1.0	9.180	A
2 - A259 East	971	243	89	1574	0.617	977	1069	3.0	1.6	6.074	A
3 - Crookthorn Lane	33	8	1047	721	0.046	33	19	0.1	0.0	5.233	A
4 - A259 West	736	184	423	882	0.834	877	657	178.9	143.4	662.008	F

2021 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	310.55	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2021 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	702	100.000
2 - A259 East		ONE HOUR	✓	1418	100.000
3 - Crookthorn Lane		ONE HOUR	✓	17	100.000
4 - A259 West		ONE HOUR	✓	1169	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	1	476	4	221
	2 - A259 East	282	0	0	1136
	3 - Crookthorn Lane	3	8	0	6
	4 - A259 West	90	1077	1	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	2	0	1
	2 - A259 East	4	0	0	2
	3 - Crookthorn Lane	0	13	0	0
	4 - A259 West	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	1.00	96.31	20.4	F	644	966
2 - A259 East	1.02	82.45	37.5	F	1301	1952
3 - Crookthorn Lane	0.06	12.91	0.1	B	16	23
4 - A259 West	1.33	717.10	205.2	F	1073	1609

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	529	132	798	832	0.636	522	280	0.0	1.7	11.390	B
2 - A259 East	1068	267	169	1574	0.678	1059	1151	0.0	2.1	6.895	A
3 - Crookthorn Lane	13	3	1225	612	0.021	13	4	0.0	0.0	6.003	A
4 - A259 West	880	220	220	1016	0.867	858	1018	0.0	5.5	20.663	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	631	158	901	770	0.820	622	330	1.7	4.0	23.014	C
2 - A259 East	1275	319	202	1553	0.821	1266	1321	2.1	4.3	12.178	B
3 - Crookthorn Lane	15	4	1463	468	0.033	15	4	0.0	0.0	7.944	A
4 - A259 West	1051	263	262	992	1.059	968	1216	5.5	26.2	72.584	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	773	193	901	769	1.005	731	373	4.0	14.6	60.402	F
2 - A259 East	1561	390	237	1530	1.020	1482	1395	4.3	24.2	45.021	E
3 - Crookthorn Lane	19	5	1714	317	0.059	19	5	0.0	0.1	12.062	B
4 - A259 West	1287	322	308	968	1.330	967	1424	26.2	106.3	256.212	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	773	193	899	770	1.003	749	379	14.6	20.4	96.307	F
2 - A259 East	1561	390	243	1526	1.023	1508	1406	24.2	37.5	82.446	F
3 - Crookthorn Lane	19	5	1746	298	0.063	19	5	0.1	0.1	12.909	B
4 - A259 West	1287	322	313	965	1.334	965	1451	106.3	186.8	550.683	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	631	158	909	764	0.826	690	358	20.4	5.7	58.659	F
2 - A259 East	1275	319	224	1539	0.828	1403	1376	37.5	5.5	39.499	E
3 - Crookthorn Lane	15	4	1622	373	0.041	15	5	0.1	0.0	10.083	B
4 - A259 West	1051	263	290	978	1.075	977	1347	186.8	205.2	717.095	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	529	132	937	748	0.707	541	296	5.7	2.5	18.350	C
2 - A259 East	1068	267	176	1569	0.680	1081	1302	5.5	2.2	7.554	A
3 - Crookthorn Lane	13	3	1253	596	0.021	13	4	0.0	0.0	6.179	A
4 - A259 West	880	220	224	1013	0.869	1008	1042	205.2	173.1	675.847	F

2021 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	393.99	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2021 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D7 + D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	557	100.000
2 - A259 East		ONE HOUR	✓	1346	100.000
3 - Crookthorn Lane		ONE HOUR	✓	44	100.000
4 - A259 West		ONE HOUR	✓	1042	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	441	14	102
	2 - A259 East	567	4	1	774
	3 - Crookthorn Lane	15	14	0	15
	4 - A259 West	137	897	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	7	0	18
	2 - A259 East	5	50	0	5
	3 - Crookthorn Lane	7	0	0	0
	4 - A259 West	7	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.74	16.17	2.7	C	511	767
2 - A259 East	0.96	39.68	15.4	E	1235	1853
3 - Crookthorn Lane	0.13	11.01	0.1	B	40	61
4 - A259 West	1.51	1076.01	259.8	F	956	1434

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	419	105	672	841	0.499	415	535	0.0	1.0	8.394	A
2 - A259 East	1013	253	92	1576	0.643	1006	995	0.0	1.8	6.249	A
3 - Crookthorn Lane	33	8	1082	700	0.047	33	17	0.0	0.0	5.393	A
4 - A259 West	784	196	449	872	0.899	758	666	0.0	6.6	27.179	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	501	125	723	811	0.617	498	628	1.0	1.6	11.426	B
2 - A259 East	1210	303	110	1563	0.774	1204	1111	1.8	3.3	9.864	A
3 - Crookthorn Lane	40	10	1294	562	0.070	39	20	0.0	0.1	6.885	A
4 - A259 West	937	234	537	825	1.135	814	797	6.6	37.3	112.841	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	613	153	686	832	0.737	609	726	1.6	2.6	15.808	C
2 - A259 East	1482	370	133	1546	0.958	1444	1162	3.3	12.7	28.264	D
3 - Crookthorn Lane	48	12	1555	393	0.123	48	22	0.1	0.1	10.435	B
4 - A259 West	1147	287	644	768	1.495	767	959	37.3	132.3	408.649	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	613	153	681	835	0.734	613	736	2.6	2.7	16.165	C
2 - A259 East	1482	370	134	1546	0.959	1471	1161	12.7	15.4	39.680	E
3 - Crookthorn Lane	48	12	1582	375	0.129	48	22	0.1	0.1	11.013	B
4 - A259 West	1147	287	656	761	1.507	761	975	132.3	228.8	832.915	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	501	125	722	811	0.617	505	650	2.7	1.7	11.896	B
2 - A259 East	1210	303	111	1562	0.775	1257	1116	15.4	3.6	13.470	B
3 - Crookthorn Lane	40	10	1349	527	0.075	40	20	0.1	0.1	7.393	A
4 - A259 West	937	234	560	813	1.152	813	829	228.8	259.8	1076.007	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	419	105	765	787	0.533	421	555	1.7	1.2	9.901	A
2 - A259 East	1013	253	94	1574	0.644	1020	1092	3.6	1.8	6.584	A
3 - Crookthorn Lane	33	8	1097	690	0.048	33	18	0.1	0.1	5.480	A
4 - A259 West	784	196	455	869	0.903	866	675	259.8	239.5	1038.556	F

2021 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	425.25	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2021 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D8 + D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	764	100.000
2 - A259 East		ONE HOUR	✓	1523	100.000
3 - Crookthorn Lane		ONE HOUR	✓	17	100.000
4 - A259 West		ONE HOUR	✓	1197	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	1	521	4	238
	2 - A259 East	339	0	0	1184
	3 - Crookthorn Lane	3	8	0	6
	4 - A259 West	98	1097	1	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	2	0	1
	2 - A259 East	3	0	0	2
	3 - Crookthorn Lane	0	13	0	0
	4 - A259 West	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	1.07	162.68	40.2	F	701	1052
2 - A259 East	1.10	167.89	87.2	F	1398	2096
3 - Crookthorn Lane	0.07	13.43	0.1	B	16	23
4 - A259 West	1.39	921.86	255.4	F	1098	1648

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	575	144	807	828	0.695	566	327	0.0	2.2	13.385	B
2 - A259 East	1147	287	182	1568	0.731	1136	1192	0.0	2.6	8.141	A
3 - Crookthorn Lane	13	3	1314	560	0.023	13	4	0.0	0.0	6.580	A
4 - A259 West	901	225	262	994	0.906	873	1065	0.0	7.2	25.445	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	687	172	883	781	0.879	673	383	2.2	5.7	29.764	D
2 - A259 East	1369	342	216	1547	0.885	1353	1340	2.6	6.6	17.313	C
3 - Crookthorn Lane	15	4	1564	409	0.037	15	4	0.0	0.0	9.149	A
4 - A259 West	1076	269	312	967	1.112	954	1268	7.2	37.6	98.220	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	841	210	878	784	1.072	765	418	5.7	24.7	87.068	F
2 - A259 East	1677	419	245	1528	1.098	1510	1398	6.6	48.4	75.909	F
3 - Crookthorn Lane	19	5	1750	297	0.063	19	5	0.0	0.1	12.936	B
4 - A259 West	1318	329	349	947	1.391	947	1419	37.6	130.4	328.154	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	841	210	877	785	1.072	779	421	24.7	40.2	162.676	F
2 - A259 East	1677	419	249	1525	1.100	1522	1407	48.4	87.2	167.887	F
3 - Crookthorn Lane	19	5	1766	287	0.065	19	5	0.1	0.1	13.430	B
4 - A259 West	1318	329	352	946	1.393	946	1433	130.4	223.4	678.837	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	687	172	878	785	0.875	766	418	40.2	20.5	147.099	F
2 - A259 East	1369	342	245	1528	0.896	1510	1398	87.2	51.9	167.339	F
3 - Crookthorn Lane	15	4	1751	296	0.052	15	5	0.1	0.1	12.814	B
4 - A259 West	1076	269	347	949	1.134	948	1419	223.4	255.4	904.117	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	575	144	893	776	0.741	645	381	20.5	3.2	38.203	E
2 - A259 East	1147	287	207	1552	0.739	1342	1331	51.9	3.0	34.948	D
3 - Crookthorn Lane	13	3	1545	421	0.030	13	4	0.1	0.0	8.833	A
4 - A259 West	901	225	308	970	0.929	966	1250	255.4	239.2	921.855	F

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	296.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	501	100.000
2 - A259 East		ONE HOUR	✓	1313	100.000
3 - Crookthorn Lane		ONE HOUR	✓	44	100.000
4 - A259 West		ONE HOUR	✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	392	14	95
	2 - A259 East	536	4	1	772
	3 - Crookthorn Lane	15	14	0	15
	4 - A259 West	121	865	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	7	0	14
	2 - A259 East	5	50	0	5
	3 - Crookthorn Lane	7	0	0	0
	4 - A259 West	8	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.67	12.97	2.0	B	460	690
2 - A259 East	0.93	29.30	11.0	D	1205	1807
3 - Crookthorn Lane	0.12	10.16	0.1	B	40	61
4 - A259 West	1.41	807.38	197.7	F	912	1368

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	377	94	654	857	0.440	374	501	0.0	0.8	7.412	A
2 - A259 East	988	247	87	1580	0.626	982	941	0.0	1.6	5.954	A
3 - Crookthorn Lane	33	8	1052	721	0.046	33	17	0.0	0.0	5.229	A
4 - A259 West	748	187	426	883	0.847	729	660	0.0	4.7	21.312	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	450	113	733	811	0.555	449	593	0.8	1.2	9.878	A
2 - A259 East	1180	295	104	1568	0.753	1175	1077	1.6	2.9	9.034	A
3 - Crookthorn Lane	40	10	1259	587	0.067	39	20	0.0	0.1	6.575	A
4 - A259 West	894	223	509	839	1.066	816	790	4.7	24.2	79.162	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	552	138	706	827	0.667	549	691	1.2	1.9	12.815	B
2 - A259 East	1446	361	126	1553	0.931	1419	1129	2.9	9.7	23.070	C
3 - Crookthorn Lane	48	12	1522	417	0.116	48	23	0.1	0.1	9.750	A
4 - A259 West	1094	274	615	782	1.400	781	955	24.2	102.5	303.024	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	552	138	702	829	0.666	552	699	1.9	2.0	12.970	B
2 - A259 East	1446	361	126	1553	0.931	1440	1127	9.7	11.0	29.296	D
3 - Crookthorn Lane	48	12	1544	403	0.120	48	23	0.1	0.1	10.158	B
4 - A259 West	1094	274	624	777	1.408	777	968	102.5	181.9	648.044	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	450	113	745	804	0.560	453	609	2.0	1.3	10.335	B
2 - A259 East	1180	295	105	1568	0.753	1212	1093	11.0	3.2	10.934	B
3 - Crookthorn Lane	40	10	1297	563	0.070	40	20	0.1	0.1	6.887	A
4 - A259 West	894	223	525	830	1.076	830	812	181.9	197.7	807.385	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	377	94	783	782	0.482	379	524	1.3	0.9	8.952	A
2 - A259 East	988	247	89	1579	0.626	994	1072	3.2	1.7	6.222	A
3 - Crookthorn Lane	33	8	1065	713	0.046	33	18	0.1	0.0	5.299	A
4 - A259 West	748	187	431	881	0.850	876	668	197.7	165.8	747.271	F

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	339.60	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	714	100.000
2 - A259 East		ONE HOUR	✓	1439	100.000
3 - Crookthorn Lane		ONE HOUR	✓	17	100.000
4 - A259 West		ONE HOUR	✓	1187	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	1	484	4	225
	2 - A259 East	286	0	0	1153
	3 - Crookthorn Lane	3	8	0	6
	4 - A259 West	91	1094	1	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	1	0	1
	2 - A259 East	4	0	0	2
	3 - Crookthorn Lane	0	13	0	0
	4 - A259 West	2	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	1.02	105.01	23.0	F	655	983
2 - A259 East	1.04	97.37	46.1	F	1320	1981
3 - Crookthorn Lane	0.06	13.11	0.1	B	16	23
4 - A259 West	1.35	775.08	223.4	F	1089	1634

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	538	134	809	831	0.647	530	283	0.0	1.8	11.731	B
2 - A259 East	1083	271	172	1573	0.689	1075	1167	0.0	2.2	7.109	A
3 - Crookthorn Lane	13	3	1243	602	0.021	13	4	0.0	0.0	6.111	A
4 - A259 West	894	223	223	1015	0.880	870	1034	0.0	6.0	22.031	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	642	160	904	773	0.831	632	333	1.8	4.3	23.995	C
2 - A259 East	1294	323	205	1552	0.834	1284	1331	2.2	4.6	12.972	B
3 - Crookthorn Lane	15	4	1485	456	0.034	15	4	0.0	0.0	8.166	A
4 - A259 West	1067	267	266	992	1.076	972	1234	6.0	29.8	80.068	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	786	197	902	774	1.015	739	375	4.3	15.9	64.034	F
2 - A259 East	1584	396	240	1529	1.036	1490	1402	4.6	28.3	50.429	F
3 - Crookthorn Lane	19	5	1724	311	0.060	19	5	0.0	0.1	12.300	B
4 - A259 West	1307	327	309	968	1.350	967	1434	29.8	114.7	278.092	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	786	197	900	775	1.014	758	379	15.9	23.0	105.008	F
2 - A259 East	1584	396	246	1526	1.039	1513	1413	28.3	46.1	97.366	F
3 - Crookthorn Lane	19	5	1754	293	0.064	19	5	0.1	0.1	13.111	B
4 - A259 West	1307	327	314	966	1.353	966	1459	114.7	200.0	591.121	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	642	160	906	772	0.832	709	367	23.0	6.1	67.298	F
2 - A259 East	1294	323	230	1536	0.842	1452	1385	46.1	6.5	57.760	F
3 - Crookthorn Lane	15	4	1677	339	0.045	15	5	0.1	0.0	11.110	B
4 - A259 West	1067	267	300	974	1.096	973	1393	200.0	223.4	775.078	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	538	134	937	753	0.714	551	299	6.1	2.6	18.911	C
2 - A259 East	1083	271	179	1568	0.691	1100	1309	6.5	2.3	7.948	A
3 - Crookthorn Lane	13	3	1275	582	0.022	13	4	0.0	0.0	6.321	A
4 - A259 West	894	223	228	1013	0.883	1008	1061	223.4	194.8	747.242	F

2031 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	425.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D23	2031 with Development	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D21 +D11

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	564	100.000
2 - A259 East		ONE HOUR	✓	1369	100.000
3 - Crookthorn Lane		ONE HOUR	✓	44	100.000
4 - A259 West		ONE HOUR	✓	1059	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	447	14	103
	2 - A259 East	577	4	1	787
	3 - Crookthorn Lane	15	14	0	15
	4 - A259 West	139	912	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	6	0	13
	2 - A259 East	4	50	0	5
	3 - Crookthorn Lane	7	0	0	0
	4 - A259 West	7	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	0.73	15.65	2.6	C	518	776
2 - A259 East	0.97	46.06	18.4	E	1256	1884
3 - Crookthorn Lane	0.13	11.33	0.2	B	40	61
4 - A259 West	1.54	1155.29	280.1	F	972	1458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	425	106	680	850	0.500	421	543	0.0	1.0	8.318	A
2 - A259 East	1031	258	93	1580	0.652	1023	1008	0.0	1.8	6.389	A
3 - Crookthorn Lane	33	8	1099	692	0.048	33	17	0.0	0.0	5.459	A
4 - A259 West	797	199	456	871	0.916	767	676	0.0	7.4	29.448	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	507	127	723	825	0.615	505	636	1.0	1.5	11.171	B
2 - A259 East	1231	308	111	1567	0.785	1224	1117	1.8	3.5	10.291	B
3 - Crookthorn Lane	40	10	1315	553	0.072	39	20	0.0	0.1	7.012	A
4 - A259 West	952	238	546	823	1.157	814	809	7.4	42.0	124.999	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	621	155	684	847	0.733	617	733	1.5	2.6	15.342	C
2 - A259 East	1507	377	134	1552	0.972	1463	1167	3.5	14.5	31.116	D
3 - Crookthorn Lane	48	12	1575	385	0.126	48	22	0.1	0.1	10.684	B
4 - A259 West	1166	291	653	765	1.523	765	970	42.0	142.2	443.975	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	621	155	679	850	0.730	621	745	2.6	2.6	15.647	C
2 - A259 East	1507	377	135	1551	0.972	1492	1165	14.5	18.4	46.060	E
3 - Crookthorn Lane	48	12	1604	366	0.132	48	22	0.1	0.2	11.327	B
4 - A259 West	1166	291	665	759	1.537	759	987	142.2	244.0	892.567	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	507	127	718	827	0.613	511	663	2.6	1.6	11.520	B
2 - A259 East	1231	308	112	1567	0.786	1289	1117	18.4	3.9	15.384	C
3 - Crookthorn Lane	40	10	1381	510	0.078	40	20	0.2	0.1	7.657	A
4 - A259 West	952	238	573	808	1.178	808	848	244.0	280.1	1155.292	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	425	106	764	801	0.530	427	562	1.6	1.2	9.664	A
2 - A259 East	1031	258	95	1578	0.653	1039	1096	3.9	1.9	6.761	A
3 - Crookthorn Lane	33	8	1116	682	0.049	33	18	0.1	0.1	5.552	A
4 - A259 West	797	199	463	867	0.920	864	686	280.1	263.4	1132.665	F

2031 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A259 East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A259/ Church Lane	Standard Roundabout		1, 2, 3, 4	470.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D24	2031 with Development	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D22+D12

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Church Lane		ONE HOUR	✓	776	100.000
2 - A259 East		ONE HOUR	✓	1544	100.000
3 - Crookthorn Lane		ONE HOUR	✓	17	100.000
4 - A259 West		ONE HOUR	✓	1215	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	1	529	4	242
	2 - A259 East	343	0	0	1201
	3 - Crookthorn Lane	3	8	0	6
	4 - A259 West	99	1114	1	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Church Lane	2 - A259 East	3 - Crookthorn Lane	4 - A259 West
	1 - Church Lane	0	1	0	1
	2 - A259 East	3	0	0	2
	3 - Crookthorn Lane	0	13	0	0
	4 - A259 West	2	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Church Lane	1.08	175.59	44.3	F	712	1068
2 - A259 East	1.12	199.05	98.7	F	1417	2125
3 - Crookthorn Lane	0.07	13.47	0.1	B	16	23
4 - A259 West	1.41	1004.03	272.7	F	1115	1672

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	584	146	817	827	0.707	575	331	0.0	2.3	13.840	B
2 - A259 East	1162	291	184	1567	0.742	1151	1208	0.0	2.8	8.442	A
3 - Crookthorn Lane	13	3	1332	549	0.023	13	4	0.0	0.0	6.709	A
4 - A259 West	915	229	265	994	0.920	883	1080	0.0	7.9	27.335	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	698	174	885	785	0.888	682	386	2.3	6.1	31.114	D
2 - A259 East	1388	347	219	1545	0.898	1370	1349	2.8	7.3	18.775	C
3 - Crookthorn Lane	15	4	1584	397	0.038	15	4	0.0	0.0	9.424	A
4 - A259 West	1092	273	315	967	1.130	956	1284	7.9	42.0	107.531	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	854	214	880	789	1.083	772	417	6.1	26.8	92.154	F
2 - A259 East	1700	425	247	1527	1.113	1512	1404	7.3	54.3	83.331	F
3 - Crookthorn Lane	19	5	1755	294	0.064	19	5	0.0	0.1	13.047	B
4 - A259 West	1338	334	349	949	1.410	948	1424	42.0	139.4	352.783	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	854	214	879	789	1.083	784	420	26.8	44.3	175.593	F
2 - A259 East	1700	425	251	1525	1.115	1522	1412	54.3	98.7	187.876	F
3 - Crookthorn Lane	19	5	1769	286	0.065	19	5	0.1	0.1	13.473	B
4 - A259 West	1338	334	351	947	1.412	947	1436	139.4	237.0	720.580	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	698	174	880	789	0.884	771	417	44.3	25.9	167.050	F
2 - A259 East	1388	347	247	1527	0.909	1512	1404	98.7	67.7	199.049	F
3 - Crookthorn Lane	15	4	1754	295	0.052	15	5	0.1	0.1	12.893	B
4 - A259 West	1092	273	347	950	1.150	950	1423	237.0	272.7	970.577	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Church Lane	584	146	886	785	0.744	675	397	25.9	3.3	49.700	E
2 - A259 East	1162	291	216	1547	0.751	1420	1345	67.7	3.3	64.295	F
3 - Crookthorn Lane	13	3	1632	368	0.035	13	4	0.1	0.0	10.129	B
4 - A259 West	915	229	325	962	0.951	958	1320	272.7	261.8	1004.027	F

APPENDIX K. JUNCTIONS 9 OUTPUTS – HORSEMERE GREEN LANE JUNCTIONS

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.5.1.7462 © Copyright TRL Limited, 2019											
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Filename: Church Lane-Horsemere Green Lane E Upd Dist Flat.j9

Path: T:\Projects\13000 Series\13091ITB Ford Airfield\Tech\Junction Assessments\Picady\Horsemere Green Lane

Report generation date: 20/07/2020 16:07:27

»2018, AM
 »2018, PM
 »2021 + CD, AM
 »2021 + CD, PM
 »2031 + CD, AM
 »2031 + CD, PM
 »2021 + CD + D, AM
 »2021 + CD + D, PM
 »2031 + CD + D, AM
 »2031 + CD + D, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018											
Stream B-AC	D1	1.6	23.02	0.62	C	12 %	D2	0.2	9.55	0.14	A	98 %
Stream C-AB		0.1	5.74	0.05	A	[Stream B-AC]		0.5	4.47	0.17	A	[Stream C-AB]
	2021 + CD											
Stream B-AC	D11	1.8	26.23	0.65	D	7 %	D12	0.2	10.01	0.15	B	85 %
Stream C-AB		0.1	5.68	0.05	A	[Stream B-AC]		0.5	4.43	0.18	A	[Stream C-AB]
	2031 + CD											
Stream B-AC	D15	2.0	27.97	0.67	D	6 %	D16	0.2	10.11	0.15	B	82 %
Stream C-AB		0.1	5.68	0.05	A	[Stream B-AC]		0.5	4.43	0.19	A	[Stream C-AB]
	2021 + CD + D											
Stream B-AC	D19	2.7	37.60	0.74	E	-1 %	D20	0.2	11.34	0.18	B	67 %
Stream C-AB		0.1	5.41	0.06	A	[Stream B-AC]		0.6	4.39	0.20	A	[Stream B-AC]
	2031 + CD + D											
Stream B-AC	D23	3.0	41.20	0.76	E	-3 %	D24	0.2	11.47	0.18	B	65 %
Stream C-AB		0.1	5.41	0.06	A	[Stream B-AC]		0.6	4.39	0.21	A	[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	11/06/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018	AM	FLAT	08:00	09:00	60	15	✓		
D2	2018	PM	FLAT	17:00	18:00	60	15	✓		
D3	2021	AM	FLAT	08:00	09:00	60	15		Simple	D1*G1
D4	2021	PM	FLAT	17:00	18:00	60	15		Simple	D2*G2
D5	2024	AM	FLAT	08:00	09:00	60	15		Simple	D1*G3
D6	2024	PM	FLAT	17:00	18:00	60	15		Simple	D2*G4
D7	2031	AM	FLAT	08:00	09:00	60	15		Simple	D1*G5
D8	2031	PM	FLAT	17:00	18:00	60	15		Simple	D2*G6
D9	Com Dev	AM	FLAT	08:00	09:00	60	15			
D10	Com Dev	PM	FLAT	17:00	18:00	60	15			
D11	2021 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D3+D9
D12	2021 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D4+D10
D13	2024 + CD	AM	FLAT	08:00	09:00	60	15		Simple	D5+D9
D14	2024 + CD	PM	FLAT	17:00	18:00	60	15		Simple	D6+D10
D15	2031 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D7+D9
D16	2031 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D8+D10
D17	Dev	AM	FLAT	08:00	09:00	60	15			
D18	Dev	PM	FLAT	17:00	18:00	60	15			
D19	2021 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D11+D17
D20	2021 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D12+D18
D21	2024 + CD + D	AM	FLAT	08:00	09:00	60	15		Simple	D13+D17
D22	2024 + CD + D	PM	FLAT	17:00	18:00	60	15		Simple	D14+D18
D23	2031 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D15+D17
D24	2031 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D16+D18

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2018-2021 AM		1.0103
G2	2018-2021 PM		1.0071
G3	2018-2024 AM		1.0235
G4	2018-2024 PM		1.0191
G5	2018-2031 AM		1.0293
G6	2018-2031 PM		1.0233

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.86	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Church Lane S		Major
B	Horsemere Green Lane		Minor
C	Church Lane N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Church Lane N	6.67			95.9	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Horsemere Green Lane	One lane	3.76	19	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	531	0.094	0.237	0.149	0.339
B-C	685	0.102	0.258	-	-
C-B	630	0.237	0.237	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	621	100.000
B - Horsemere Green Lane		FLAT	✓	253	100.000
C - Church Lane N		FLAT	✓	313	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	38	583
	B - Horsemere Green Lane	109	0	144
	C - Church Lane N	295	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	5
	B - Horsemere Green Lane	1	0	2
	C - Church Lane N	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.62	23.02	1.6	C	253	253
C-AB	0.05	5.74	0.1	A	33	33
C-A					280	280
A-B					38	38
A-C					583	583

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	409	0.618	247	0.0	1.5	21.467	C
C-AB	33	8	661	0.049	32	0.0	0.1	5.729	A
C-A	280	70			280				
A-B	38	10			38				
A-C	583	146			583				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	409	0.618	253	1.5	1.6	22.956	C
C-AB	33	8	661	0.049	33	0.1	0.1	5.736	A
C-A	280	70			280				
A-B	38	10			38				
A-C	583	146			583				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	409	0.618	253	1.6	1.6	23.014	C
C-AB	33	8	661	0.049	33	0.1	0.1	5.736	A
C-A	280	70			280				
A-B	38	10			38				
A-C	583	146			583				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	409	0.618	253	1.6	1.6	23.022	C
C-AB	33	8	661	0.049	33	0.1	0.1	5.736	A
C-A	280	70			280				
A-B	38	10			38				
A-C	583	146			583				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	98	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2018	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	303	100.000
B - Horsemere Green Lane		FLAT	✓	63	100.000
C - Church Lane N		FLAT	✓	678	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	60	243
	B - Horsemere Green Lane	33	0	30
	C - Church Lane N	618	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	6
	B - Horsemere Green Lane	0	0	0
	C - Church Lane N	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	9.55	0.2	A	63	63
C-AB	0.17	4.47	0.5	A	165	165
C-A					513	513
A-B					60	60
A-C					243	243

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	440	0.143	62	0.0	0.2	9.514	A
C-AB	164	41	973	0.169	163	0.0	0.4	4.443	A
C-A	514	128			514				
A-B	60	15			60				
A-C	243	61			243				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	440	0.143	63	0.2	0.2	9.554	A
C-AB	166	41	974	0.170	166	0.4	0.5	4.466	A
C-A	512	128			512				
A-B	60	15			60				
A-C	243	61			243				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	440	0.143	63	0.2	0.2	9.554	A
C-AB	166	41	974	0.170	166	0.5	0.5	4.467	A
C-A	512	128			512				
A-B	60	15			60				
A-C	243	61			243				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	440	0.143	63	0.2	0.2	9.554	A
C-AB	166	41	974	0.170	166	0.5	0.5	4.465	A
C-A	512	128			512				
A-B	60	15			60				
A-C	243	61			243				

2021 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2021 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D3+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	662	100.000
B - Horsemere Green Lane		FLAT	✓	256	100.000
C - Church Lane N		FLAT	✓	339	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	38	624
	B - Horsemere Green Lane	110	0	145
	C - Church Lane N	321	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	6
	B - Horsemere Green Lane	1	0	2
	C - Church Lane N	15	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.65	26.23	1.8	D	256	256
C-AB	0.05	5.68	0.1	A	35	35
C-A					304	304
A-B					38	38
A-C					624	624

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	256	64	393	0.651	249	0.0	1.7	24.013	C
C-AB	35	9	669	0.052	35	0.0	0.1	5.677	A
C-A	304	76			304				
A-B	38	10			38				
A-C	624	156			624				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	256	64	393	0.651	255	1.7	1.8	26.114	D
C-AB	35	9	669	0.053	35	0.1	0.1	5.684	A
C-A	304	76			304				
A-B	38	10			38				
A-C	624	156			624				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	256	64	393	0.651	256	1.8	1.8	26.199	D
C-AB	35	9	669	0.053	35	0.1	0.1	5.685	A
C-A	304	76			304				
A-B	38	10			38				
A-C	624	156			624				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	256	64	393	0.651	256	1.8	1.8	26.230	D
C-AB	35	9	669	0.053	35	0.1	0.1	5.682	A
C-A	304	76			304				
A-B	38	10			38				
A-C	624	156			624				

2021 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	85	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2021 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D4+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	331	100.000
B - Horsemere Green Lane		FLAT	✓	63	100.000
C - Church Lane N		FLAT	✓	724	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	60	271
	B - Horsemere Green Lane	33	0	30
	C - Church Lane N	663	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	9
	B - Horsemere Green Lane	0	0	0
	C - Church Lane N	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	10.01	0.2	B	63	63
C-AB	0.18	4.43	0.5	A	182	182
C-A					542	542
A-B					60	60
A-C					271	271

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	424	0.150	63	0.0	0.2	9.960	A
C-AB	181	45	997	0.181	179	0.0	0.5	4.403	A
C-A	543	136			543				
A-B	60	15			60				
A-C	271	68			271				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	423	0.150	63	0.2	0.2	10.008	B
C-AB	182	46	997	0.183	182	0.5	0.5	4.429	A
C-A	542	135			542				
A-B	60	15			60				
A-C	271	68			271				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	423	0.150	63	0.2	0.2	10.008	B
C-AB	182	46	997	0.183	182	0.5	0.5	4.429	A
C-A	542	135			542				
A-B	60	15			60				
A-C	271	68			271				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	423	0.150	63	0.2	0.2	10.008	B
C-AB	182	46	997	0.183	182	0.5	0.5	4.430	A
C-A	542	135			542				
A-B	60	15			60				
A-C	271	68			271				

2031 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.56	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2031 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D7+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	674	100.000
B - Horsemere Green Lane		FLAT	✓	260	100.000
C - Church Lane N		FLAT	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	39	635
	B - Horsemere Green Lane	112	0	148
	C - Church Lane N	327	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	6
	B - Horsemere Green Lane	1	0	2
	C - Church Lane N	15	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.67	27.97	2.0	D	260	260
C-AB	0.05	5.68	0.1	A	36	36
C-A					309	309
A-B					39	39
A-C					635	635

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	389	0.670	253	0.0	1.9	25.312	D
C-AB	36	9	671	0.054	36	0.0	0.1	5.670	A
C-A	309	77			309				
A-B	39	10			39				
A-C	635	159			635				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	389	0.670	260	1.9	1.9	27.815	D
C-AB	36	9	671	0.054	36	0.1	0.1	5.678	A
C-A	309	77			309				
A-B	39	10			39				
A-C	635	159			635				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	389	0.670	260	1.9	2.0	27.931	D
C-AB	36	9	671	0.054	36	0.1	0.1	5.678	A
C-A	309	77			309				
A-B	39	10			39				
A-C	635	159			635				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	389	0.670	260	2.0	2.0	27.972	D
C-AB	36	9	671	0.054	36	0.1	0.1	5.678	A
C-A	309	77			309				
A-B	39	10			39				
A-C	635	159			635				

2031 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	82	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2031 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D8+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	336	100.000
B - Horsmere Green Lane		FLAT	✓	64	100.000
C - Church Lane N		FLAT	✓	735	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsmere Green Lane	C - Church Lane N
From	A - Church Lane S	0	61	275
	B - Horsmere Green Lane	34	0	31
	C - Church Lane N	673	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsmere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	9
	B - Horsmere Green Lane	0	0	0
	C - Church Lane N	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	10.11	0.2	B	64	64
C-AB	0.19	4.43	0.5	A	188	188
C-A					547	547
A-B					61	61
A-C					275	275

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	421	0.153	64	0.0	0.2	10.064	B
C-AB	187	47	1003	0.186	185	0.0	0.5	4.403	A
C-A	548	137			548				
A-B	61	15			61				
A-C	275	69			275				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	420	0.153	64	0.2	0.2	10.114	B
C-AB	189	47	1004	0.188	188	0.5	0.5	4.428	A
C-A	546	137			546				
A-B	61	15			61				
A-C	275	69			275				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	420	0.153	64	0.2	0.2	10.114	B
C-AB	189	47	1004	0.188	189	0.5	0.5	4.430	A
C-A	546	137			546				
A-B	61	15			61				
A-C	275	69			275				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	420	0.153	64	0.2	0.2	10.114	B
C-AB	189	47	1004	0.188	189	0.5	0.5	4.428	A
C-A	546	137			546				
A-B	61	15			61				
A-C	275	69			275				

2021 + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.07	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2021 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D11+D17

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	725	100.000
B - Horsemere Green Lane		FLAT	✓	270	100.000
C - Church Lane N		FLAT	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	42	683
	B - Horsemere Green Lane	124	0	145
	C - Church Lane N	384	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	6
	B - Horsemere Green Lane	1	0	2
	C - Church Lane N	12	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.74	37.60	2.7	E	270	270
C-AB	0.06	5.41	0.1	A	40	40
C-A					362	362
A-B					42	42
A-C					683	683

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	67	365	0.740	260	0.0	2.5	31.910	D
C-AB	40	10	706	0.057	40	0.0	0.1	5.403	A
C-A	362	91			362				
A-B	42	11			42				
A-C	683	171			683				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	67	365	0.740	269	2.5	2.6	37.070	E
C-AB	40	10	706	0.057	40	0.1	0.1	5.410	A
C-A	362	91			362				
A-B	42	11			42				
A-C	683	171			683				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	67	365	0.740	269	2.6	2.7	37.450	E
C-AB	40	10	706	0.057	40	0.1	0.1	5.411	A
C-A	362	91			362				
A-B	42	11			42				
A-C	683	171			683				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	67	365	0.740	269	2.7	2.7	37.598	E
C-AB	40	10	706	0.057	40	0.1	0.1	5.409	A
C-A	362	91			362				
A-B	42	11			42				
A-C	683	171			683				

2021 + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	67	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2021 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D12+D18

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	410	100.000
B - Horsemere Green Lane		FLAT	✓	69	100.000
C - Church Lane N		FLAT	✓	785	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	74	336
	B - Horsemere Green Lane	39	0	30
	C - Church Lane N	724	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	7
	B - Horsemere Green Lane	0	0	0
	C - Church Lane N	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	11.34	0.2	B	69	69
C-AB	0.20	4.39	0.6	A	206	206
C-A					579	579
A-B					74	74
A-C					336	336

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	387	0.179	69	0.0	0.2	11.262	B
C-AB	204	51	1029	0.199	202	0.0	0.6	4.356	A
C-A	581	145			581				
A-B	74	19			74				
A-C	336	84			336				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	387	0.179	69	0.2	0.2	11.338	B
C-AB	206	52	1030	0.200	206	0.6	0.6	4.385	A
C-A	579	145			579				
A-B	74	19			74				
A-C	336	84			336				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	387	0.179	69	0.2	0.2	11.338	B
C-AB	206	52	1030	0.200	206	0.6	0.6	4.387	A
C-A	579	145			579				
A-B	74	19			74				
A-C	336	84			336				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	387	0.179	69	0.2	0.2	11.338	B
C-AB	206	52	1030	0.200	206	0.6	0.6	4.386	A
C-A	579	145			579				
A-B	74	19			74				
A-C	336	84			336				

2031 + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.75	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D23	2031 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D15+D17

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	737	100.000
B - Horsemere Green Lane		FLAT	✓	274	100.000
C - Church Lane N		FLAT	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	43	694
	B - Horsemere Green Lane	126	0	148
	C - Church Lane N	390	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	6
	B - Horsemere Green Lane	1	0	2
	C - Church Lane N	12	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.76	41.20	3.0	E	274	274
C-AB	0.06	5.41	0.1	A	41	41
C-A					367	367
A-B					43	43
A-C					694	694

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	361	0.761	264	0.0	2.7	34.065	D
C-AB	41	10	708	0.058	41	0.0	0.1	5.398	A
C-A	367	92			367				
A-B	43	11			43				
A-C	694	174			694				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	361	0.761	274	2.7	2.9	40.438	E
C-AB	41	10	708	0.059	41	0.1	0.1	5.405	A
C-A	367	92			367				
A-B	43	11			43				
A-C	694	174			694				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	361	0.761	274	2.9	3.0	40.987	E
C-AB	41	10	708	0.059	41	0.1	0.1	5.403	A
C-A	367	92			367				
A-B	43	11			43				
A-C	694	174			694				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	361	0.761	274	3.0	3.0	41.205	E
C-AB	41	10	708	0.059	41	0.1	0.1	5.405	A
C-A	367	92			367				
A-B	43	11			43				
A-C	694	174			694				

2031 + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	65	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D24	2031 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D16+D18

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Church Lane S		FLAT	✓	415	100.000
B - Horsemere Green Lane		FLAT	✓	70	100.000
C - Church Lane N		FLAT	✓	796	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	75	340
	B - Horsemere Green Lane	40	0	31
	C - Church Lane N	734	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Church Lane S	B - Horsemere Green Lane	C - Church Lane N
From	A - Church Lane S	0	0	7
	B - Horsemere Green Lane	0	0	0
	C - Church Lane N	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	11.47	0.2	B	70	70
C-AB	0.21	4.39	0.6	A	213	213
C-A					583	583
A-B					75	75
A-C					340	340

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	385	0.183	70	0.0	0.2	11.394	B
C-AB	211	53	1035	0.204	209	0.0	0.6	4.360	A
C-A	584	146			584				
A-B	75	19			75				
A-C	340	85			340				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	384	0.183	70	0.2	0.2	11.473	B
C-AB	213	53	1036	0.206	213	0.6	0.6	4.390	A
C-A	582	146			582				
A-B	75	19			75				
A-C	340	85			340				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	384	0.183	70	0.2	0.2	11.474	B
C-AB	213	53	1036	0.206	213	0.6	0.6	4.390	A
C-A	582	146			582				
A-B	75	19			75				
A-C	340	85			340				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	384	0.183	70	0.2	0.2	11.474	B
C-AB	213	53	1036	0.206	213	0.6	0.6	4.390	A
C-A	582	146			582				
A-B	75	19			75				
A-C	340	85			340				

Junctions 9											
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Filename: Yapton Road-Horsmere Green Lane W Upd Dist Flat.j9

Path: T:\Projects\13000 Series\13091ITB Ford Airfield\Tech\Junction Assessments\Picady\Horsmere Green Lane

Report generation date: 20/07/2020 16:08:56

»2018, AM
»2018, PM
»2021 + CD, AM
»2021 + CD, PM
»2031 + CD, AM
»2031 + CD, PM
»2021 + CD + D, AM
»2021 + CD + D, PM
»2031 + CD + D, AM
»2031 + CD + D, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018											
Stream B-AC	D1	0.2	10.47	0.13	B	131 %	D2	0.3	11.65	0.23	B	85 %
Stream C-AB		0.2	5.56	0.12	A	[Stream B-AC]		0.1	5.24	0.05	A	[Stream B-AC]
	2021 + CD											
Stream B-AC	D11	0.4	11.45	0.27	B	82 %	D12	0.5	13.20	0.31	B	58 %
Stream C-AB		0.3	5.71	0.15	A	[Stream B-AC]		0.2	5.59	0.12	A	[Stream B-AC]
	2031 + CD											
Stream B-AC	D15	0.4	11.59	0.27	B	80 %	D16	0.5	13.40	0.32	B	56 %
Stream C-AB		0.3	5.71	0.15	A	[Stream B-AC]		0.2	5.59	0.13	A	[Stream B-AC]
	2021 + CD + D											
Stream B-AC	D19	0.4	12.66	0.29	B	63 %	D20	0.6	15.32	0.37	C	40 %
Stream C-AB		0.3	5.78	0.15	A	[Stream B-AC]		0.3	5.29	0.13	A	[Stream B-AC]
	2031 + CD + D											
Stream B-AC	D23	0.4	12.83	0.30	B	61 %	D24	0.6	15.59	0.38	C	38 %
Stream C-AB		0.3	5.79	0.16	A	[Stream B-AC]		0.3	5.29	0.14	A	[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	11/06/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2018	AM	FLAT	08:00	09:00	60	15	✓		
D2	2018	PM	FLAT	17:00	18:00	60	15	✓		
D3	2021	AM	FLAT	08:00	09:00	60	15		Simple	D1*G1
D4	2021	PM	FLAT	17:00	18:00	60	15		Simple	D2*G2
D5	2024	AM	FLAT	08:00	09:00	60	15		Simple	D1*G3
D6	2024	PM	FLAT	17:00	18:00	60	15		Simple	D2*G4
D7	2031	AM	FLAT	08:00	09:00	60	15		Simple	D1*G5
D8	2031	PM	FLAT	17:00	18:00	60	15		Simple	D2*G6
D9	Com Dev	AM	FLAT	08:00	09:00	60	15			
D10	Com Dev	PM	FLAT	17:00	18:00	60	15			
D11	2021 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D3+D9
D12	2021 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D4+D10
D13	2024 + CD	AM	FLAT	08:00	09:00	60	15		Simple	D5+D9
D14	2024 + CD	PM	FLAT	17:00	18:00	60	15		Simple	D6+D10
D15	2031 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D7+D9
D16	2031 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D8+D10
D17	Dev	AM	FLAT	08:00	09:00	60	15			
D18	Dev	PM	FLAT	17:00	18:00	60	15			
D19	2021 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D11+D17
D20	2021 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D12+D18
D21	2024 + CD + D	AM	FLAT	08:00	09:00	60	15		Simple	D13+D17
D22	2024 + CD + D	PM	FLAT	17:00	18:00	60	15		Simple	D14+D18
D23	2031 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D15+D17
D24	2031 + CD + D	PM	FLAT	17:00	18:30	90	15	✓	Simple	D16+D18

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2018-2021 AM		1.0103
G2	2018-2021 PM		1.0071
G3	2018-2024 AM		1.0235
G4	2018-2024 PM		1.0191
G5	2018-2031 AM		1.0293
G6	2018-2031 PM		1.0233

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	131	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Yapton Rd N		Major
B	Horsemere Green Lane		Minor
C	Yapton Rd S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Yapton Rd S	6.59			140.2	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Horsemere Green Lane	One lane	3.67	24	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	540	0.096	0.242	0.152	0.346
B-C	694	0.104	0.262	-	-
C-B	655	0.247	0.247	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	375	100.000
B - Horsemere Green Lane		FLAT	✓	52	100.000
C - Yapton Rd S		FLAT	✓	327	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	145	230
	B - Horsemere Green Lane	49	0	3
	C - Yapton Rd S	269	58	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	2	8
	B - Horsemere Green Lane	4	0	0
	C - Yapton Rd S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	10.47	0.2	B	52	52
C-AB	0.12	5.56	0.2	A	91	91
C-A					236	236
A-B					145	145
A-C					230	230

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	396	0.131	51	0.0	0.1	10.426	B
C-AB	91	23	740	0.123	90	0.0	0.2	5.542	A
C-A	236	59			236				
A-B	145	36			145				
A-C	230	58			230				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	396	0.131	52	0.1	0.2	10.468	B
C-AB	91	23	740	0.124	91	0.2	0.2	5.558	A
C-A	236	59			236				
A-B	145	36			145				
A-C	230	58			230				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	396	0.131	52	0.2	0.2	10.468	B
C-AB	91	23	740	0.124	91	0.2	0.2	5.560	A
C-A	236	59			236				
A-B	145	36			145				
A-C	230	58			230				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	396	0.131	52	0.2	0.2	10.468	B
C-AB	91	23	740	0.124	91	0.2	0.2	5.558	A
C-A	236	59			236				
A-B	145	36			145				
A-C	230	58			230				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.51	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	85	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2018	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	428	100.000
B - Horsemere Green Lane		FLAT	✓	93	100.000
C - Yapton Rd S		FLAT	✓	305	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	43	385
	B - Horsemere Green Lane	79	0	14
	C - Yapton Rd S	285	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	0	4
	B - Horsemere Green Lane	0	0	14
	C - Yapton Rd S	3	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.23	11.65	0.3	B	93	93
C-AB	0.05	5.24	0.1	A	33	33
C-A					272	272
A-B					43	43
A-C					385	385

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	402	0.231	92	0.0	0.3	11.563	B
C-AB	33	8	720	0.046	33	0.0	0.1	5.239	A
C-A	272	68			272				
A-B	43	11			43				
A-C	385	96			385				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	402	0.231	93	0.3	0.3	11.652	B
C-AB	33	8	720	0.046	33	0.1	0.1	5.245	A
C-A	272	68			272				
A-B	43	11			43				
A-C	385	96			385				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	402	0.231	93	0.3	0.3	11.652	B
C-AB	33	8	720	0.046	33	0.1	0.1	5.245	A
C-A	272	68			272				
A-B	43	11			43				
A-C	385	96			385				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	402	0.231	93	0.3	0.3	11.652	B
C-AB	33	8	720	0.046	33	0.1	0.1	5.243	A
C-A	272	68			272				
A-B	43	11			43				
A-C	385	96			385				

2021 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	82	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2021 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D3+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	408	100.000
B - Horsemere Green Lane		FLAT	✓	115	100.000
C - Yapton Rd S		FLAT	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	159	248
	B - Horsemere Green Lane	82	0	33
	C - Yapton Rd S	278	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	2	7
	B - Horsemere Green Lane	2	0	0
	C - Yapton Rd S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.45	0.4	B	115	115
C-AB	0.15	5.71	0.3	A	107	107
C-A					237	237
A-B					159	159
A-C					248	248

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	429	0.267	113	0.0	0.4	11.336	B
C-AB	107	27	739	0.144	106	0.0	0.3	5.684	A
C-A	238	59			238				
A-B	159	40			159				
A-C	248	62			248				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	429	0.267	115	0.4	0.4	11.445	B
C-AB	107	27	739	0.145	107	0.3	0.3	5.703	A
C-A	237	59			237				
A-B	159	40			159				
A-C	248	62			248				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	429	0.267	115	0.4	0.4	11.446	B
C-AB	107	27	739	0.145	107	0.3	0.3	5.704	A
C-A	237	59			237				
A-B	159	40			159				
A-C	248	62			248				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	429	0.267	115	0.4	0.4	11.446	B
C-AB	107	27	739	0.145	107	0.3	0.3	5.706	A
C-A	237	59			237				
A-B	159	40			159				
A-C	248	62			248				

2021 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	58	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2021 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D4+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	467	100.000
B - Horsemere Green Lane		FLAT	✓	125	100.000
C - Yapton Rd S		FLAT	✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	72	395
	B - Horsemere Green Lane	96	0	29
	C - Yapton Rd S	301	54	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	0	4
	B - Horsemere Green Lane	0	0	7
	C - Yapton Rd S	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	13.20	0.5	B	125	125
C-AB	0.12	5.59	0.2	A	92	92
C-A					263	263
A-B					72	72
A-C					395	395

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	125	31	398	0.314	123	0.0	0.4	13.024	B
C-AB	92	23	737	0.124	91	0.0	0.2	5.571	A
C-A	264	66			264				
A-B	72	18			72				
A-C	395	99			395				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	125	31	397	0.314	125	0.4	0.5	13.198	B
C-AB	92	23	737	0.125	92	0.2	0.2	5.590	A
C-A	263	66			263				
A-B	72	18			72				
A-C	395	99			395				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	125	31	397	0.314	125	0.5	0.5	13.201	B
C-AB	92	23	737	0.125	92	0.2	0.2	5.588	A
C-A	263	66			263				
A-B	72	18			72				
A-C	395	99			395				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	125	31	397	0.314	125	0.5	0.5	13.201	B
C-AB	92	23	737	0.125	92	0.2	0.2	5.588	A
C-A	263	66			263				
A-B	72	18			72				
A-C	395	99			395				

2031 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.18	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	80	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2031 + CD	AM	FLAT	08:00	09:00	60	15	✓	Simple	D7+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	415	100.000
B - Horsemere Green Lane		FLAT	✓	116	100.000
C - Yapton Rd S		FLAT	✓	351	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	162	253
	B - Horsemere Green Lane	82	0	33
	C - Yapton Rd S	283	68	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	2	7
	B - Horsemere Green Lane	2	0	0
	C - Yapton Rd S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.59	0.4	B	116	116
C-AB	0.15	5.71	0.3	A	110	110
C-A					241	241
A-B					162	162
A-C					253	253

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	426	0.271	114	0.0	0.4	11.475	B
C-AB	110	27	741	0.148	108	0.0	0.3	5.692	A
C-A	241	60			241				
A-B	162	41			162				
A-C	253	63			253				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	426	0.271	116	0.4	0.4	11.589	B
C-AB	110	27	741	0.148	110	0.3	0.3	5.712	A
C-A	241	60			241				
A-B	162	41			162				
A-C	253	63			253				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	426	0.271	116	0.4	0.4	11.589	B
C-AB	110	27	741	0.148	110	0.3	0.3	5.712	A
C-A	241	60			241				
A-B	162	41			162				
A-C	253	63			253				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	426	0.271	116	0.4	0.4	11.589	B
C-AB	110	27	741	0.148	110	0.3	0.3	5.714	A
C-A	241	60			241				
A-B	162	41			162				
A-C	253	63			253				

2031 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	56	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2031 + CD	PM	FLAT	17:00	18:00	60	15	✓	Simple	D8+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	474	100.000
B - Horsemere Green Lane		FLAT	✓	126	100.000
C - Yapton Rd S		FLAT	✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	73	401
	B - Horsemere Green Lane	97	0	29
	C - Yapton Rd S	306	54	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	0	4
	B - Horsemere Green Lane	0	0	7
	C - Yapton Rd S	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	13.40	0.5	B	126	126
C-AB	0.13	5.59	0.2	A	93	93
C-A					267	267
A-B					73	73
A-C					401	401

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	32	395	0.319	124	0.0	0.5	13.216	B
C-AB	93	23	738	0.126	92	0.0	0.2	5.569	A
C-A	267	67			267				
A-B	73	18			73				
A-C	401	100			401				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	32	395	0.320	126	0.5	0.5	13.400	B
C-AB	93	23	739	0.126	93	0.2	0.2	5.585	A
C-A	267	67			267				
A-B	73	18			73				
A-C	401	100			401				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	32	395	0.320	126	0.5	0.5	13.403	B
C-AB	93	23	739	0.126	93	0.2	0.2	5.585	A
C-A	267	67			267				
A-B	73	18			73				
A-C	401	100			401				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	32	395	0.320	126	0.5	0.5	13.403	B
C-AB	93	23	739	0.126	93	0.2	0.2	5.585	A
C-A	267	67			267				
A-B	73	18			73				
A-C	401	100			401				

2021 + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	63	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2021 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D11+D17

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	502	100.000
B - Horsemere Green Lane		FLAT	✓	119	100.000
C - Yapton Rd S		FLAT	✓	370	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	173	328
	B - Horsemere Green Lane	86	0	33
	C - Yapton Rd S	304	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	2	6
	B - Horsemere Green Lane	2	0	0
	C - Yapton Rd S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.29	12.66	0.4	B	119	119
C-AB	0.15	5.78	0.3	A	114	114
C-A					257	257
A-B					173	173
A-C					328	328

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	403	0.294	117	0.0	0.4	12.505	B
C-AB	113	28	738	0.154	112	0.0	0.3	5.753	A
C-A	257	64			257				
A-B	173	43			173				
A-C	328	82			328				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	403	0.294	119	0.4	0.4	12.656	B
C-AB	114	28	738	0.154	114	0.3	0.3	5.777	A
C-A	257	64			257				
A-B	173	43			173				
A-C	328	82			328				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	403	0.294	119	0.4	0.4	12.658	B
C-AB	114	28	738	0.154	114	0.3	0.3	5.775	A
C-A	257	64			257				
A-B	173	43			173				
A-C	328	82			328				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	403	0.294	119	0.4	0.4	12.658	B
C-AB	114	28	738	0.154	114	0.3	0.3	5.775	A
C-A	257	64			257				
A-B	173	43			173				
A-C	328	82			328				

2021 + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	40	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2021 + CD + D	PM	FLAT	17:00	18:00	60	15	✓	Simple	D12+D18

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	507	100.000
B - Horsemere Green Lane		FLAT	✓	139	100.000
C - Yapton Rd S		FLAT	✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	78	429
	B - Horsemere Green Lane	110	0	29
	C - Yapton Rd S	383	54	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	0	4
	B - Horsemere Green Lane	0	0	7
	C - Yapton Rd S	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	15.32	0.6	C	139	139
C-AB	0.13	5.29	0.3	A	106	106
C-A					331	331
A-B					78	78
A-C					429	429

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	374	0.371	136	0.0	0.6	15.019	C
C-AB	105	26	787	0.134	104	0.0	0.3	5.273	A
C-A	332	83			332				
A-B	78	20			78				
A-C	429	107			429				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	374	0.371	139	0.6	0.6	15.315	C
C-AB	106	27	787	0.135	106	0.3	0.3	5.291	A
C-A	331	83			331				
A-B	78	20			78				
A-C	429	107			429				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	374	0.371	139	0.6	0.6	15.318	C
C-AB	106	27	787	0.135	106	0.3	0.3	5.291	A
C-A	331	83			331				
A-B	78	20			78				
A-C	429	107			429				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	374	0.371	139	0.6	0.6	15.321	C
C-AB	106	27	787	0.135	106	0.3	0.3	5.293	A
C-A	331	83			331				
A-B	78	20			78				
A-C	429	107			429				

2031 + CD + D, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D23	2031 + CD + D	AM	FLAT	08:00	09:00	60	15	✓	Simple	D15+D17

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	509	100.000
B - Horsemere Green Lane		FLAT	✓	120	100.000
C - Yapton Rd S		FLAT	✓	377	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	176	333
	B - Horsemere Green Lane	86	0	33
	C - Yapton Rd S	309	68	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	2	6
	B - Horsemere Green Lane	2	0	0
	C - Yapton Rd S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.30	12.83	0.4	B	120	120
C-AB	0.16	5.79	0.3	A	117	117
C-A					260	260
A-B					176	176
A-C					333	333

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	400	0.299	118	0.0	0.4	12.672	B
C-AB	116	29	740	0.157	115	0.0	0.3	5.759	A
C-A	260	65			260				
A-B	176	44			176				
A-C	333	83			333				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	400	0.299	120	0.4	0.4	12.831	B
C-AB	117	29	740	0.158	117	0.3	0.3	5.787	A
C-A	260	65			260				
A-B	176	44			176				
A-C	333	83			333				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	400	0.299	120	0.4	0.4	12.833	B
C-AB	117	29	740	0.158	117	0.3	0.3	5.787	A
C-A	260	65			260				
A-B	176	44			176				
A-C	333	83			333				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	400	0.299	120	0.4	0.4	12.833	B
C-AB	117	29	740	0.158	117	0.3	0.3	5.785	A
C-A	260	65			260				
A-B	176	44			176				
A-C	333	83			333				

2031 + CD + D, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2021 + CD, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	38	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically	Relationship type	Relationship
D24	2031 + CD + D	PM	FLAT	17:00	18:30	90	15	✓	Simple	D16+D18

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Yapton Rd N		FLAT	✓	514	100.000
B - Horsemere Green Lane		FLAT	✓	140	100.000
C - Yapton Rd S		FLAT	✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	79	435
	B - Horsemere Green Lane	111	0	29
	C - Yapton Rd S	388	54	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Yapton Rd N	B - Horsemere Green Lane	C - Yapton Rd S
From	A - Yapton Rd N	0	0	4
	B - Horsemere Green Lane	0	0	7
	C - Yapton Rd S	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	15.59	0.6	C	140	210
C-AB	0.14	5.29	0.3	A	108	161
C-A					335	502
A-B					79	119
A-C					435	652

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	138	0.0	0.6	15.272	C
C-AB	107	27	789	0.136	106	0.0	0.3	5.271	A
C-A	335	84			335				
A-B	79	20			79				
A-C	435	109			435				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	140	0.6	0.6	15.585	C
C-AB	108	27	789	0.136	108	0.3	0.3	5.291	A
C-A	334	84			334				
A-B	79	20			79				
A-C	435	109			435				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	140	0.6	0.6	15.590	C
C-AB	108	27	789	0.136	108	0.3	0.3	5.292	A
C-A	334	84			334				
A-B	79	20			79				
A-C	435	109			435				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	140	0.6	0.6	15.592	C
C-AB	108	27	789	0.136	108	0.3	0.3	5.290	A
C-A	334	84			334				
A-B	79	20			79				
A-C	435	109			435				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	140	0.6	0.6	15.592	C
C-AB	108	27	789	0.136	108	0.3	0.3	5.292	A
C-A	334	84			334				
A-B	79	20			79				
A-C	435	109			435				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	371	0.378	140	0.6	0.6	15.592	C
C-AB	108	27	789	0.136	108	0.3	0.3	5.290	A
C-A	334	84			334				
A-B	79	20			79				
A-C	435	109			435				