

Junctions 9	
ARCADY 9 - Roundabout Module	
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Path: U:\London\Projects\237\4\73\05\Modell\Local Junction Modelling\J05_Ifield Drive\J9

Report generation date: 15/05/2025 09:28:07

»2025, AM

»2025, PM

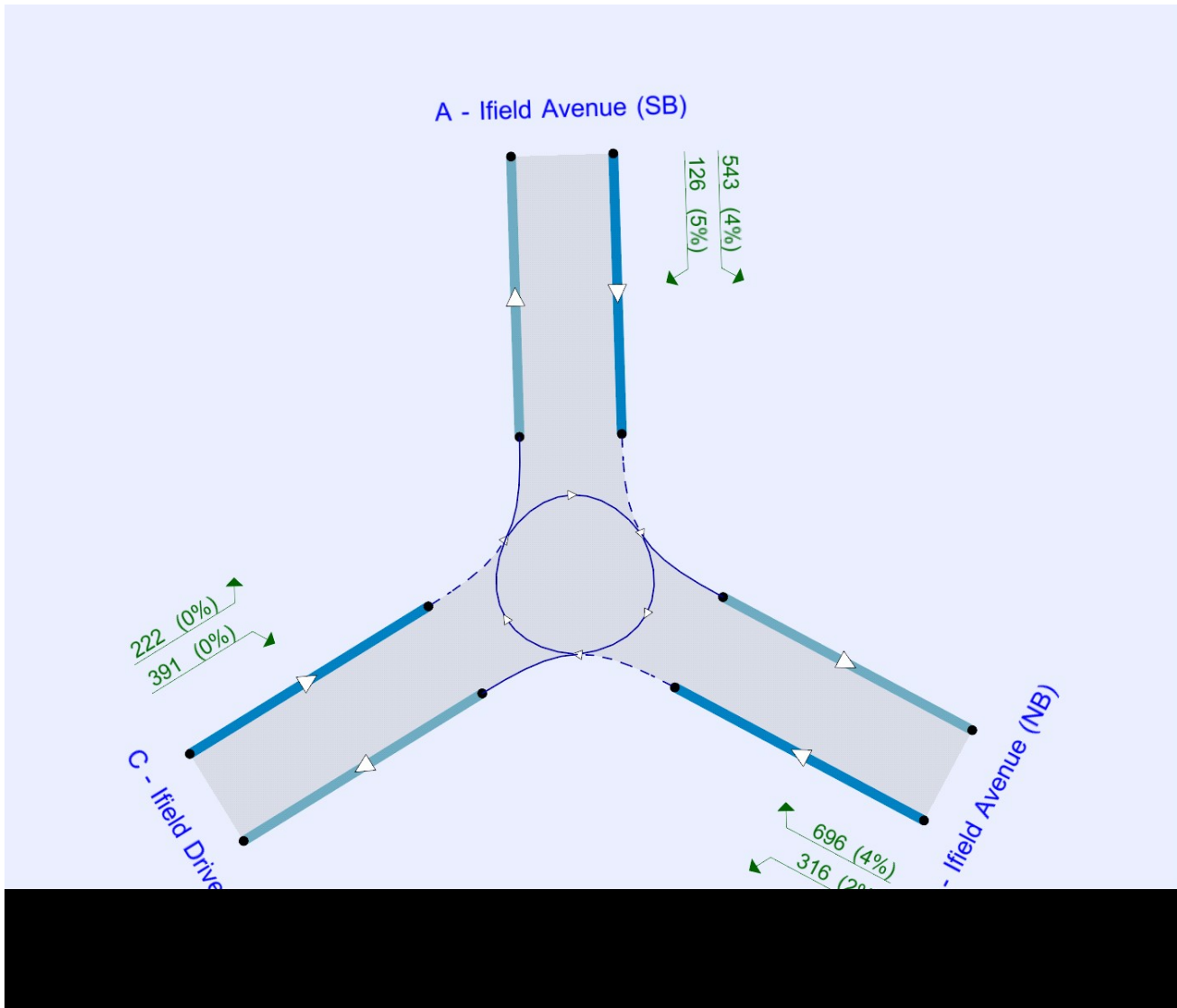
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	07/02/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ARCADIS\gordedom9989
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Hour	perHour



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Results for central hour only	Run automatically
D1	2025	AM	ONE HOUR	07:45	09:15	15	✓	✓
D2	2025	PM	ONE HOUR	16:45	18:15	15	✓	✓

Analysis Set Details

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

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D1 - 2025, AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		A, B, C	155.79	F

Junction Network Options

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

Arms

Arms

Arm	Name	Description
A	Ifield Avenue (SB)	
B	Ifield Avenue (NB)	
C	Ifield Drive	

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
A - Ifield Avenue (SB)	3.50	3.50	4.35	8.0	13.60	12.30	0.0	✓
B - Ifield Avenue (NB)	3.65	3.65	4.50	8.0	11.38	8.35	0.0	✓
C - Ifield Drive	3.29	3.29	4.97	8.5	11.37	8.19	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Ifield Avenue (SB)	0.529	1038
B - Ifield Avenue (NB)	0.529	1049
C - Ifield Drive	0.530	1027

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)	Results for central hour only	Run automatically
D1	2025	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 (PCU/hr)	Scaling Factor (%)
A - Ifield Avenue (SB)		ONE HOUR	✓	668	100.000
B - Ifield Avenue (NB)		ONE HOUR	✓	1012	100.000
C - Ifield Drive		ONE HOUR	✓	613	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Ifield Avenue (SB)	B - Ifield Avenue (NB)	C - Ifield Drive
From	A - Ifield Avenue (SB)	0	543	126
	B - Ifield Avenue (NB)	696	0	316
	C - Ifield Drive	222	391	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ifield Avenue (SB)	B - Ifield Avenue (NB)	C - Ifield Drive
From	A - Ifield Avenue (SB)	0	4	5
	B - Ifield Avenue (NB)	4	0	2
	C - Ifield Drive	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Ifield Avenue (SB)	0.90	39.79	7.6	E	668	668
B - Ifield Avenue (NB)	1.14	265.30	79.8	F	1012	1012
C - Ifield Drive	1.00	101.55	18.8	F	613	613

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	601	150	347	855	0.703	597	808	1.3	2.3	14.304	B
B - Ifield Avenue (NB)	909	227	112	989	0.919	889	832	3.1	8.2	31.811	D
C - Ifield Drive	551	138	611	703	0.784	544	390	1.5	3.3	21.761	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	736	184	406	824	0.893	719	895	2.3	6.6	31.549	D
B - Ifield Avenue (NB)	1114	278	135	977	1.140	967	989	8.2	44.9	112.174	F
C - Ifield Drive	675	169	665	674	1.001	635	437	3.3	13.1	62.025	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	736	184	416	818	0.899	732	906	6.6	7.6	39.788	E
B - Ifield Avenue (NB)	1114	278	138	976	1.141	974	1010	44.9	79.8	239.559	F
C - Ifield Drive	675	169	670	671	1.005	652	442	13.1	18.8	101.554	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	601	150	386	835	0.720	620	889	7.6	2.8	18.790	C
B - Ifield Avenue (NB)	909	227	117	987	0.921	974	889	79.8	63.5	265.295	F
C - Ifield Drive	551	138	670	671	0.821	604	421	18.8	5.6	63.580	F

2025, PM

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 A and B have 86% of the total flow for the roundabout for one or more time segments]
Warning	Demand Sets	D2 - 2025, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		A, B, C	245.45	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)	Results for central hour only	Run automatically
D2	2025	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 (PCU/hr)	Scaling Factor (%)
A - Ifield Avenue (SB)		ONE HOUR	✓	850	100.000
B - Ifield Avenue (NB)		ONE HOUR	✓	1040	100.000
C - Ifield Drive		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Ifield Avenue (SB)	B - Ifield Avenue (NB)	C - Ifield Drive
From	A - Ifield Avenue (SB)	0	690	160
	B - Ifield Avenue (NB)	458	0	582
	C - Ifield Drive	12	292	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Ifield Avenue (SB)	B - Ifield Avenue (NB)	C - Ifield Drive
From	A - Ifield Avenue (SB)	0	1	10
	B - Ifield Avenue (NB)	3	0	0
	C - Ifield Drive	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Ifield Avenue (SB)	1.08	162.24	45.3	F	850	850
B - Ifield Avenue (NB)	1.19	382.76	103.7	F	1040	1040
C - Ifield Drive	0.42	7.99	0.7	A	304	304

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	764	191	262	900	0.849	753	409	2.2	5.0	23.553	C
B - Ifield Avenue (NB)	935	234	142	974	0.960	904	874	3.6	11.3	40.592	E
C - Ifield Drive	273	68	399	815	0.335	272	647	0.4	0.5	6.877	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	936	234	321	869	1.077	848	435	5.0	27.0	82.689	F
B - Ifield Avenue (NB)	1145	286	159	965	1.187	959	1009	11.3	57.9	142.170	F
C - Ifield Drive	334	84	423	803	0.417	333	696	0.5	0.7	7.953	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	936	234	322	868	1.078	863	437	27.0	45.3	162.240	F
B - Ifield Avenue (NB)	1145	286	162	963	1.189	962	1022	57.9	103.7	310.980	F
C - Ifield Drive	334	84	424	802	0.417	334	700	0.7	0.7	7.993	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Ifield Avenue (SB)	764	191	263	899	0.850	879	430	45.3	16.5	131.816	F
B - Ifield Avenue (NB)	935	234	165	961	0.973	952	977	103.7	99.5	382.761	F
C - Ifield Drive	273	68	420	804	0.339	274	698	0.7	0.5	7.059	A