

Demand Set: 2020 PM PCU+ CD - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	110.0	578.0
Arm B	54.0	0.0	88.0
Arm C	449.0	134.0	0.0

Demand Set: 2020 AM PCU + CD+ DEV180 - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	54.0	376.0
Arm B	103.0	0.0	131.0
Arm C	534.0	85.0	0.0

Demand Set: 2020 PM PCU+ CD+ DEV180 - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	110.0	623.0
Arm B	54.0	0.0	88.0
Arm C	487.0	134.0	0.0

Demand Set: 2020 AM PCU + CD+ DEV300 - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	54.0	397.0
Arm B	103.0	0.0	131.0
Arm C	563.0	85.0	0.0

Demand Set: 2020 PM PCU+ CD+ DEV300 - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	0.0	110.0	653.0
Arm B	54.0	0.0	88.0
Arm C	512.0	134.0	0.0

ODTAB Synthesised Flows

Demand Set: 2020 AM PCU + CD - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh/min)	Peak Time	Peak Flow (veh/min)	Falling Time	Falling Flow (veh/min)
Arm A	08:00	4.975	08:30	7.462	09:00	4.975
Arm B	08:00	2.925	08:30	4.387	09:00	2.925
Arm C	08:00	7.200	08:30	10.800	09:00	7.200

Heavy Vehicles Percentages

Demand Set: 2020 AM PCU + CD - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2020 PM PCU+ CD - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2020 AM PCU + CD+ DEV180 - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2020 PM PCU+ CD+ DEV180 - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2020 AM PCU + CD+ DEV300 - Wretchwick Way - Peregrine Way

Modelling Period: 07:45-09:15

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

Demand Set: 2020 PM PCU+ CD+ DEV300 - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

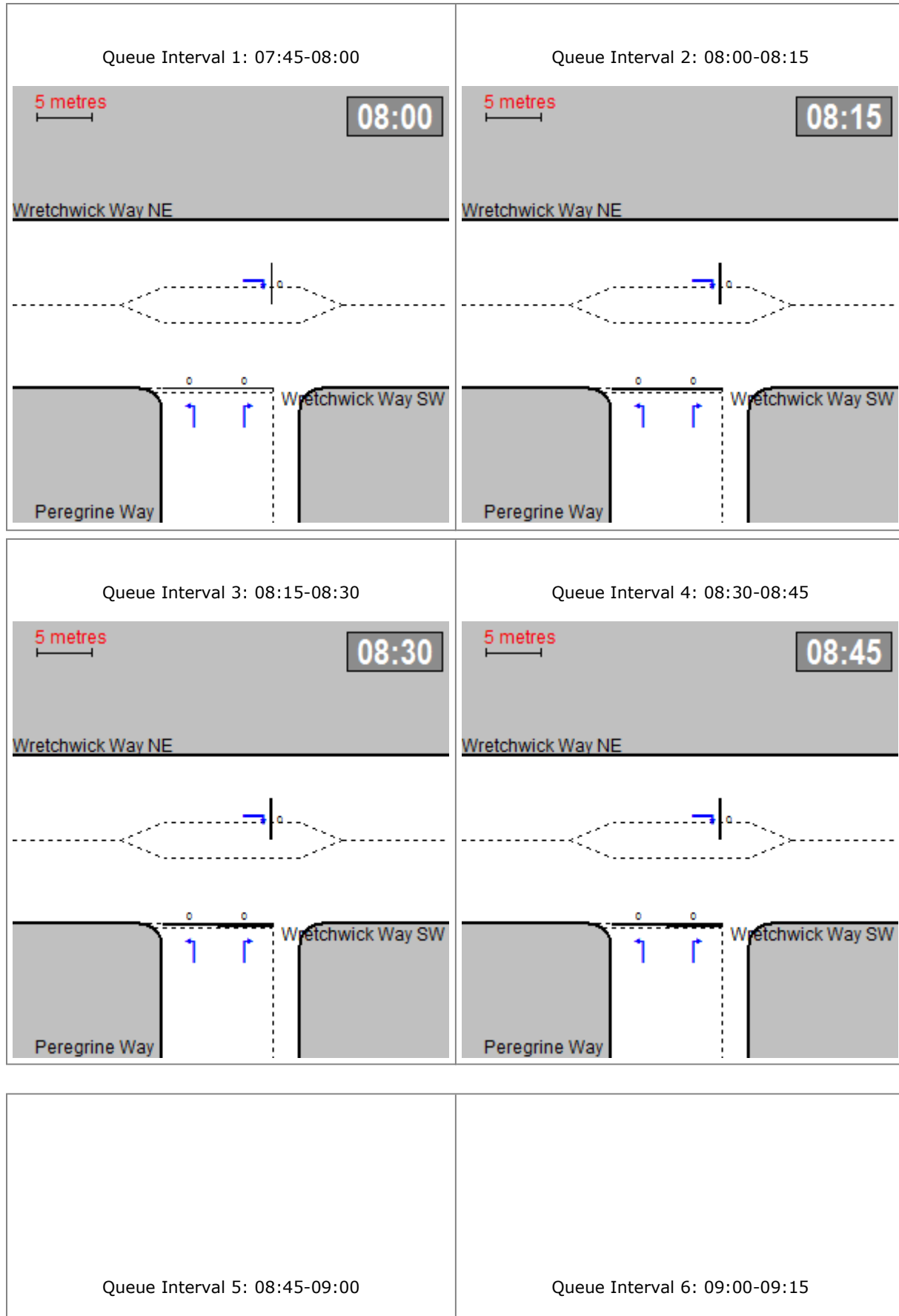
From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

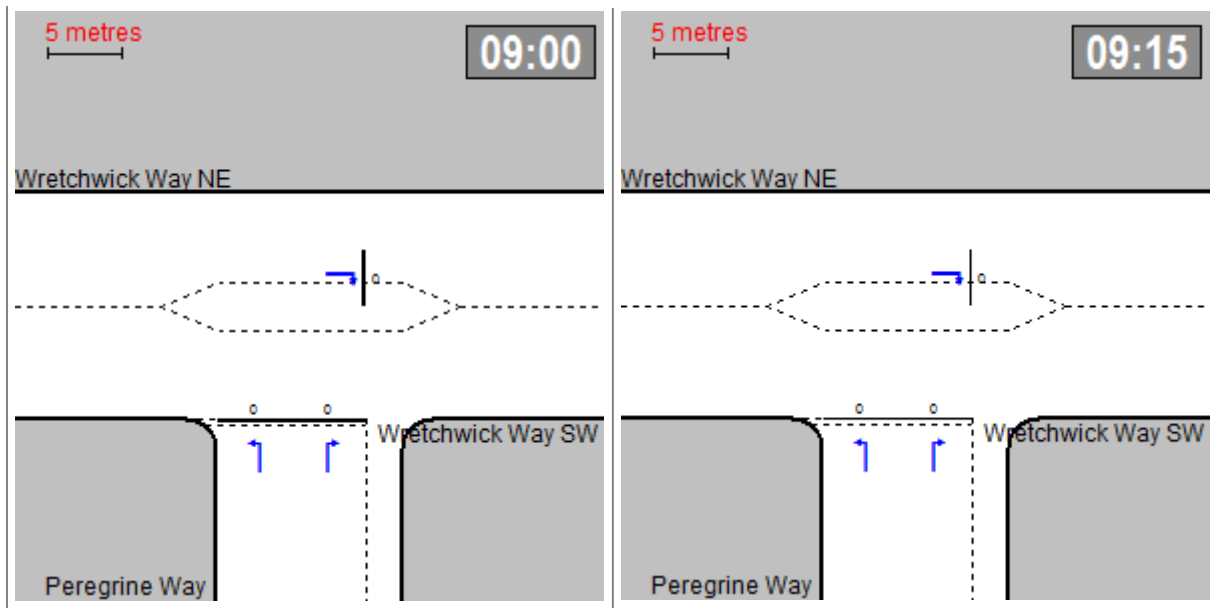
Queue Diagrams

Demand Set: 2020 AM PCU + CD - Wretchwick Way - Peregrine Way

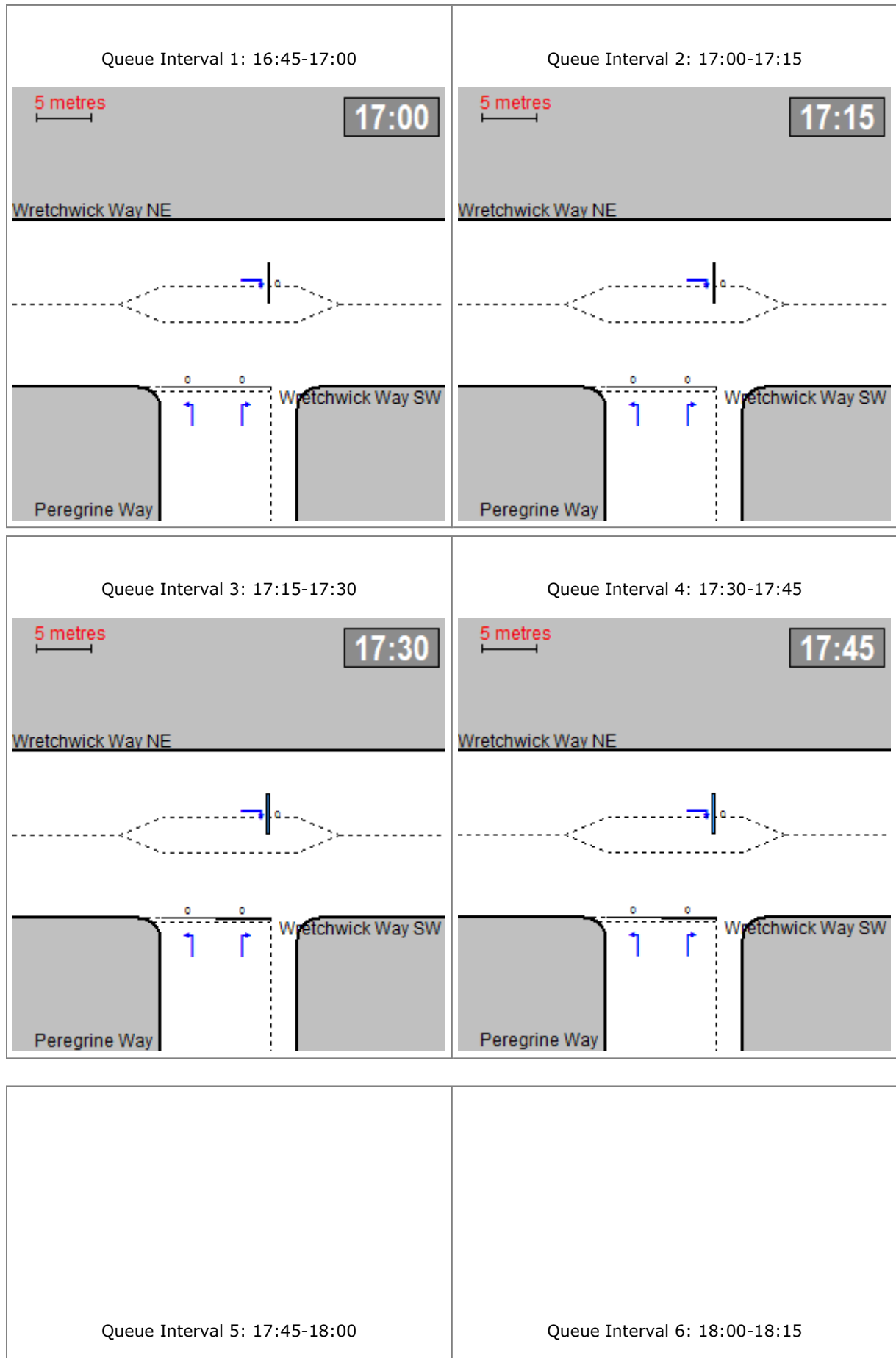
Modelling Period: 07:45-09:15

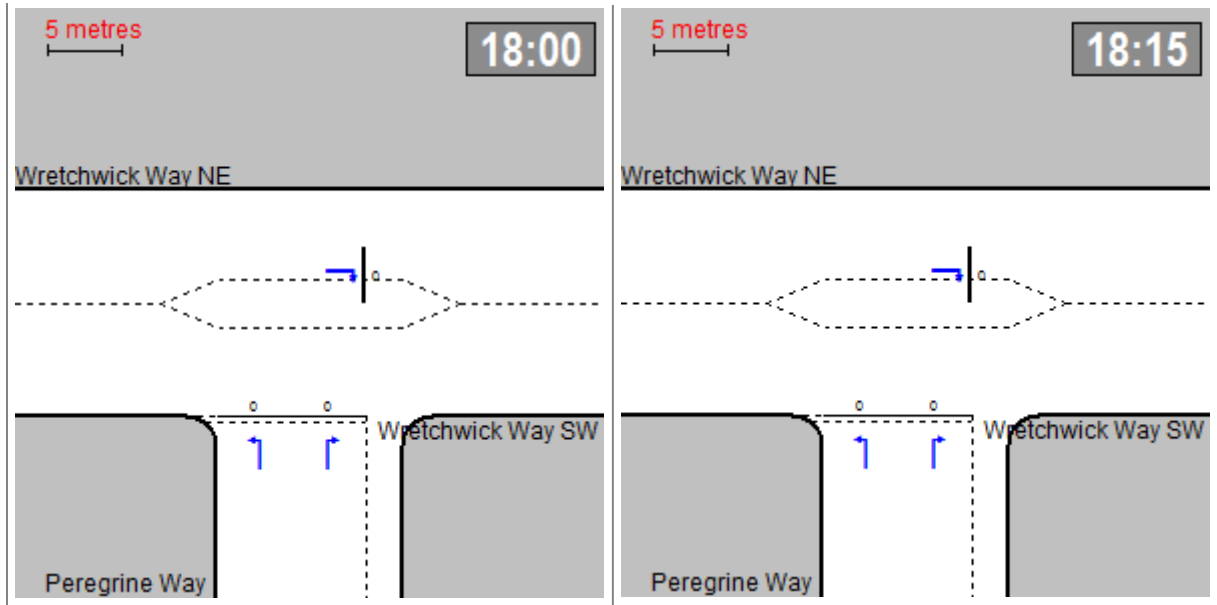
View Extent: 40m



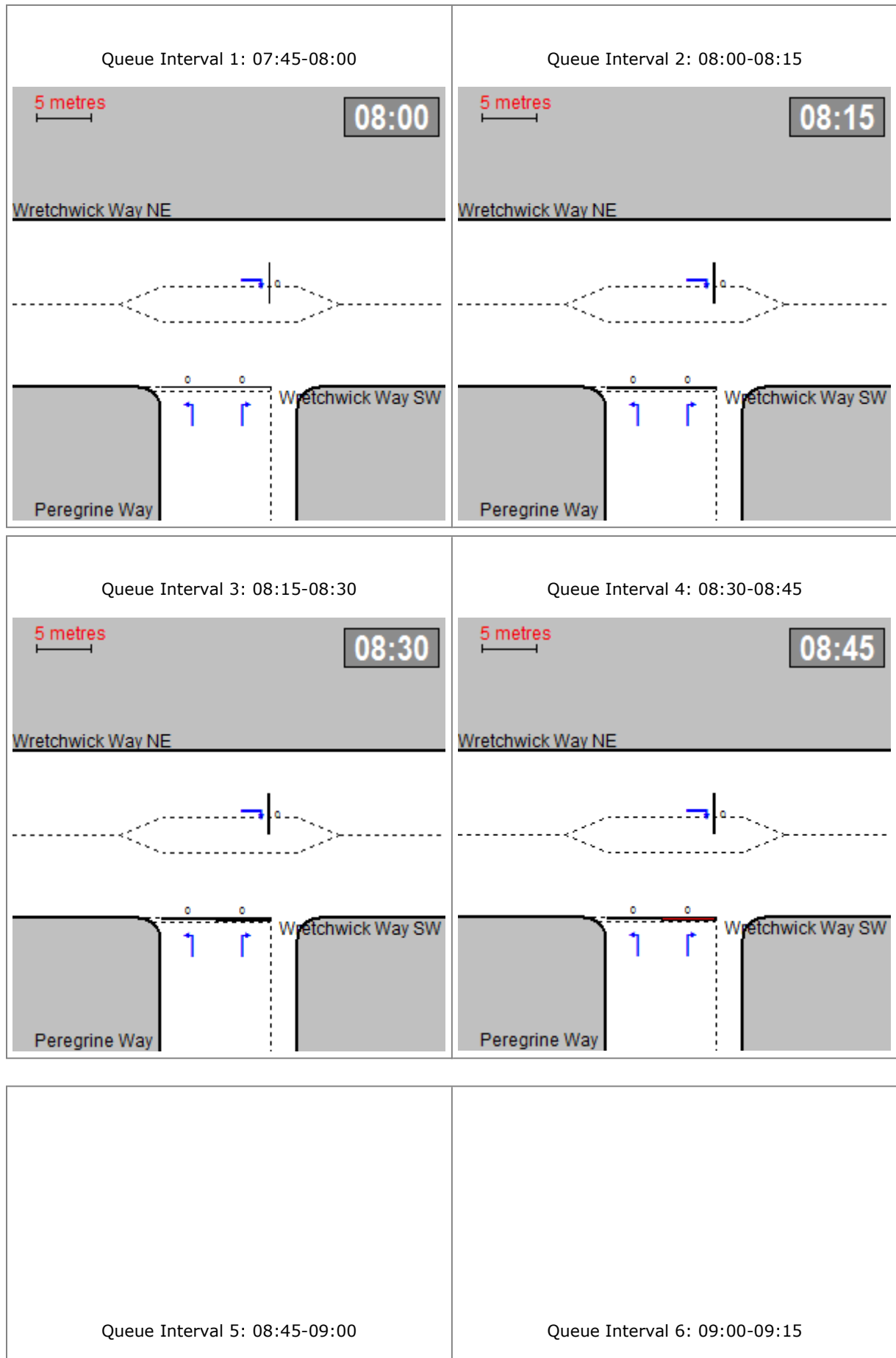


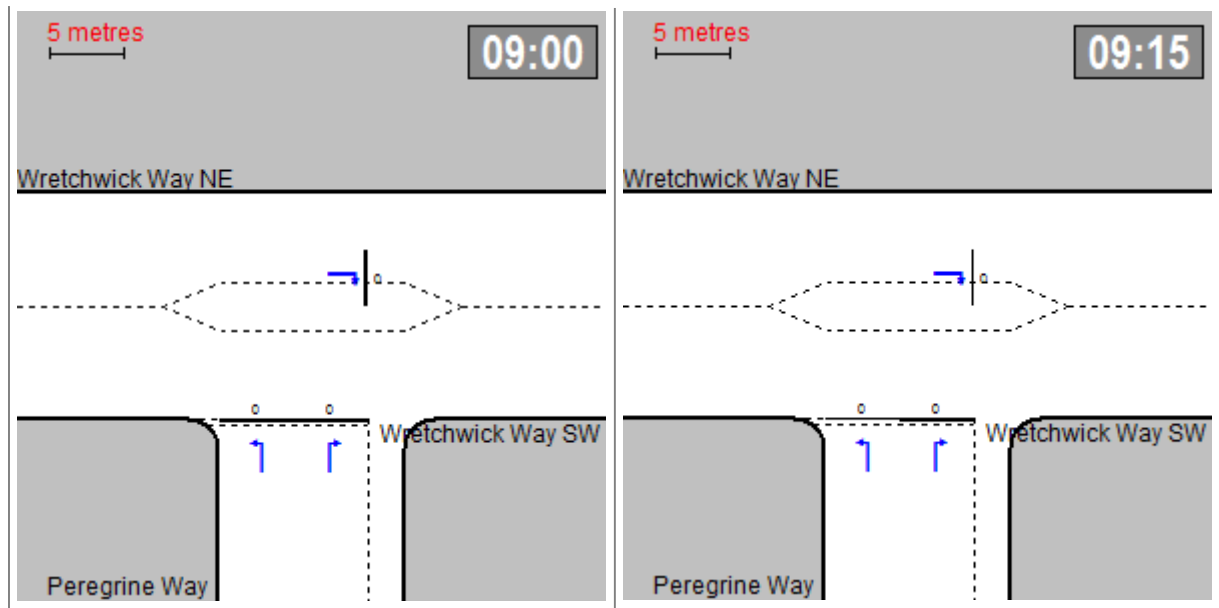
Demand Set: 2020 PM PCU+ CD - Wretchwick Way - Peregrine Way
Modelling Period: 16:45-18:15
View Extent: 40m





Demand Set: 2020 AM PCU + CD+ DEV180 - Wretchwick Way - Peregrine Way
Modelling Period: 07:45-09:15
View Extent: 40m

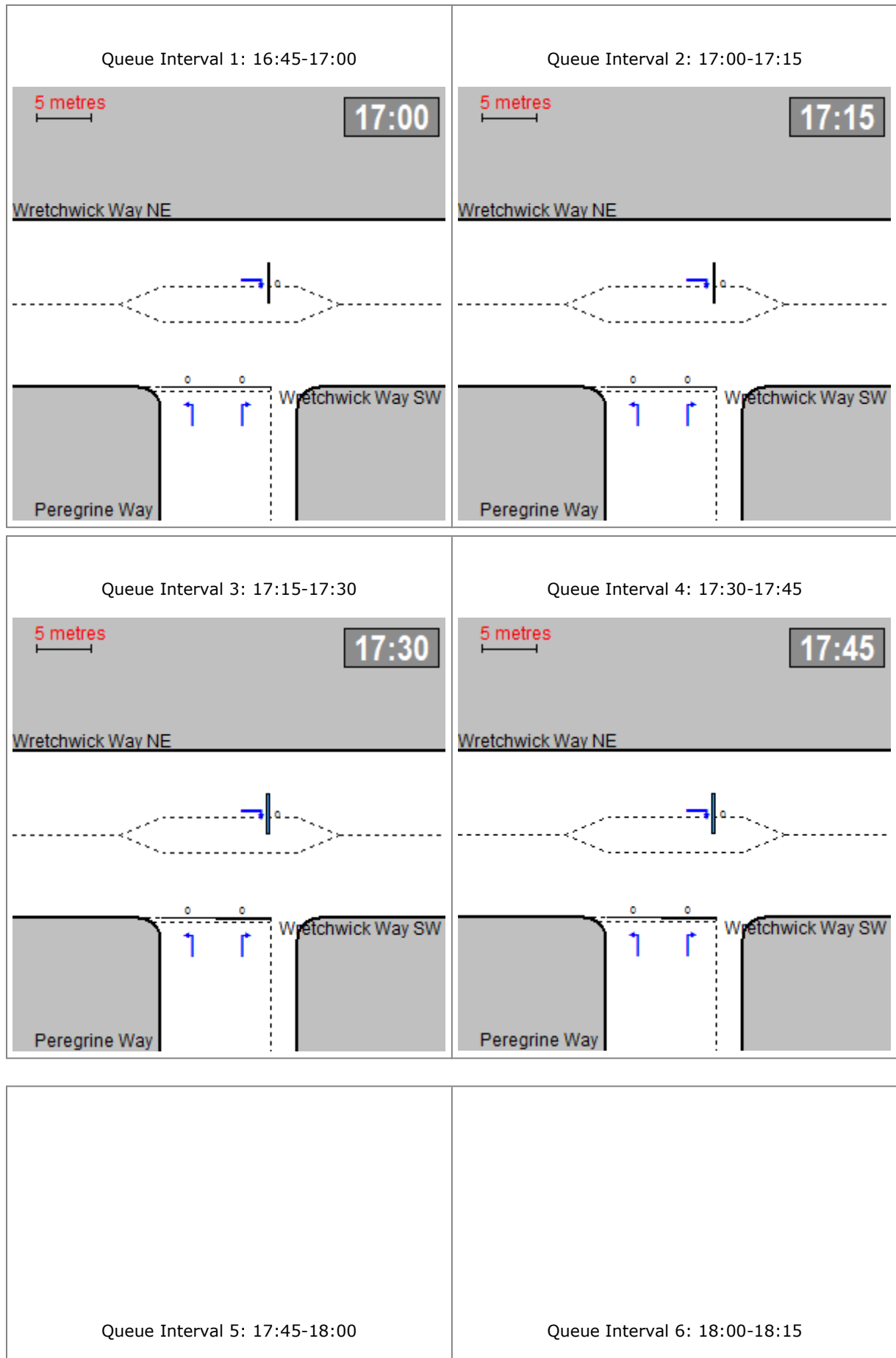


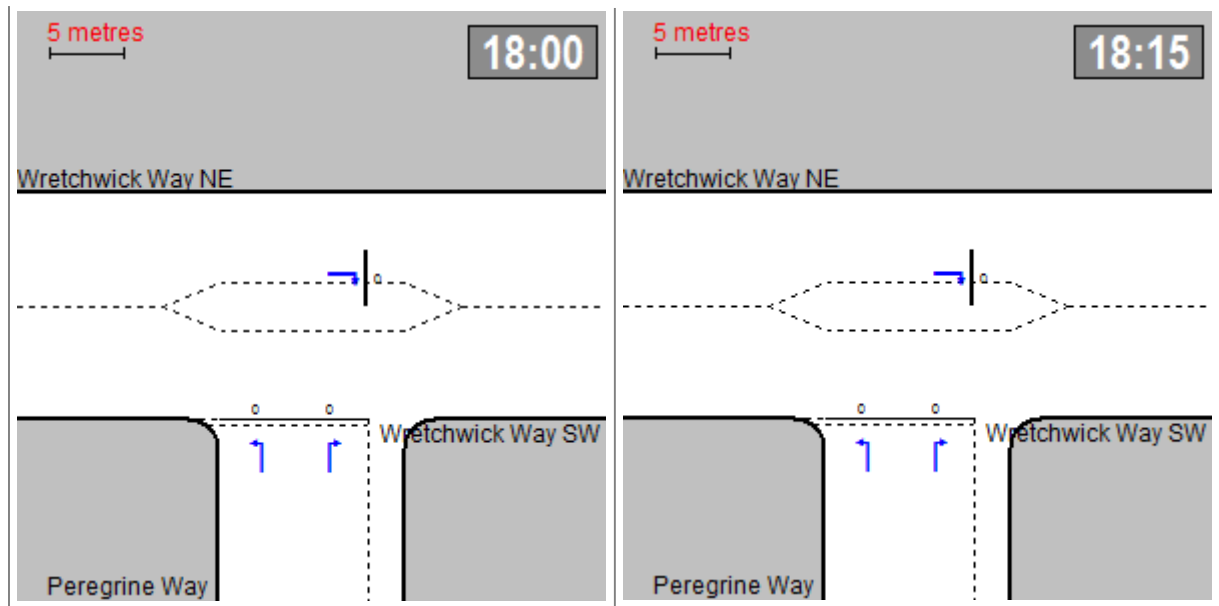


Demand Set: 2020 PM PCU+ CD+ DEV180 - Wretchwick Way - Peregrine Way

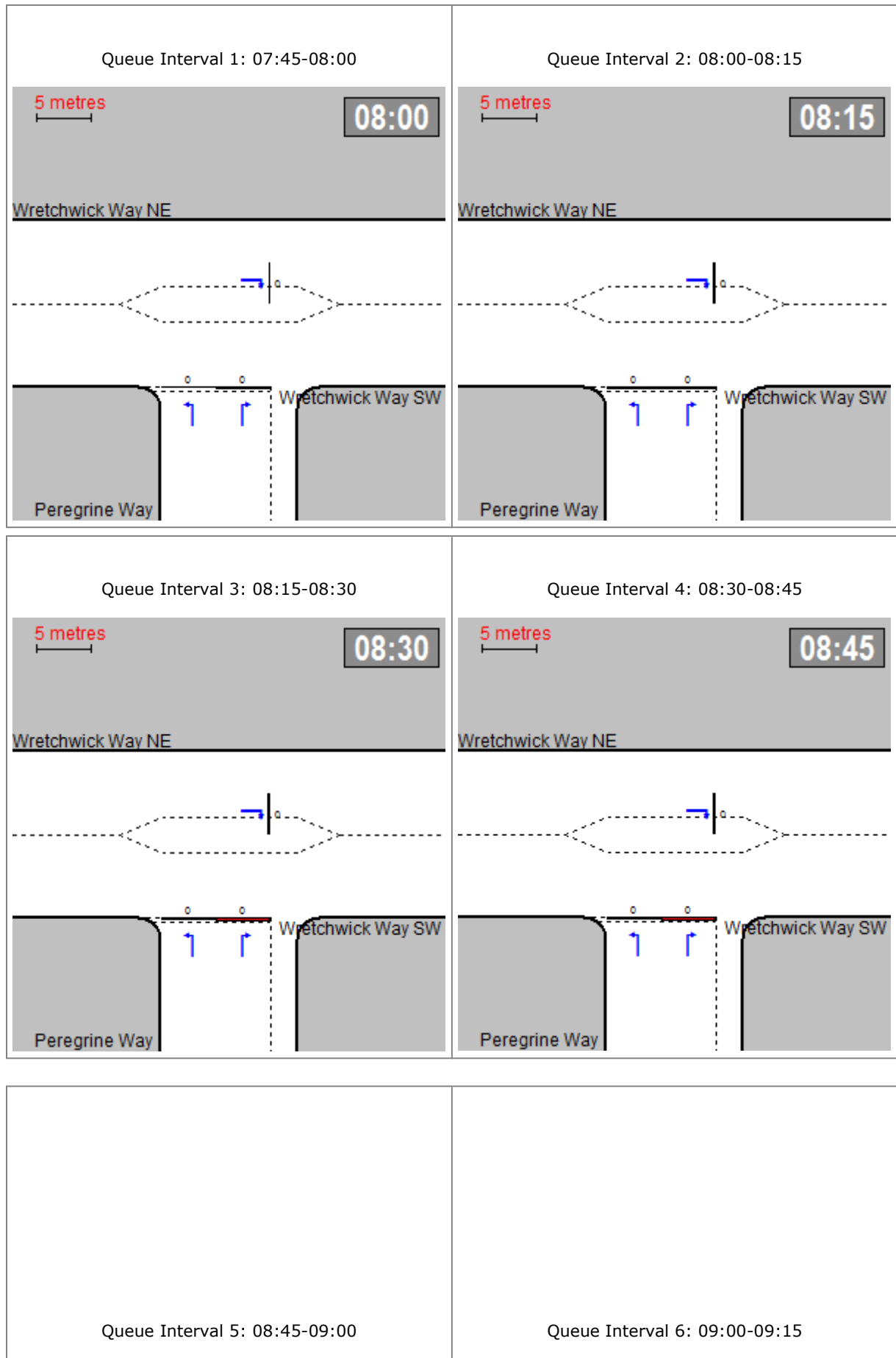
Modelling Period: 16:45-18:15

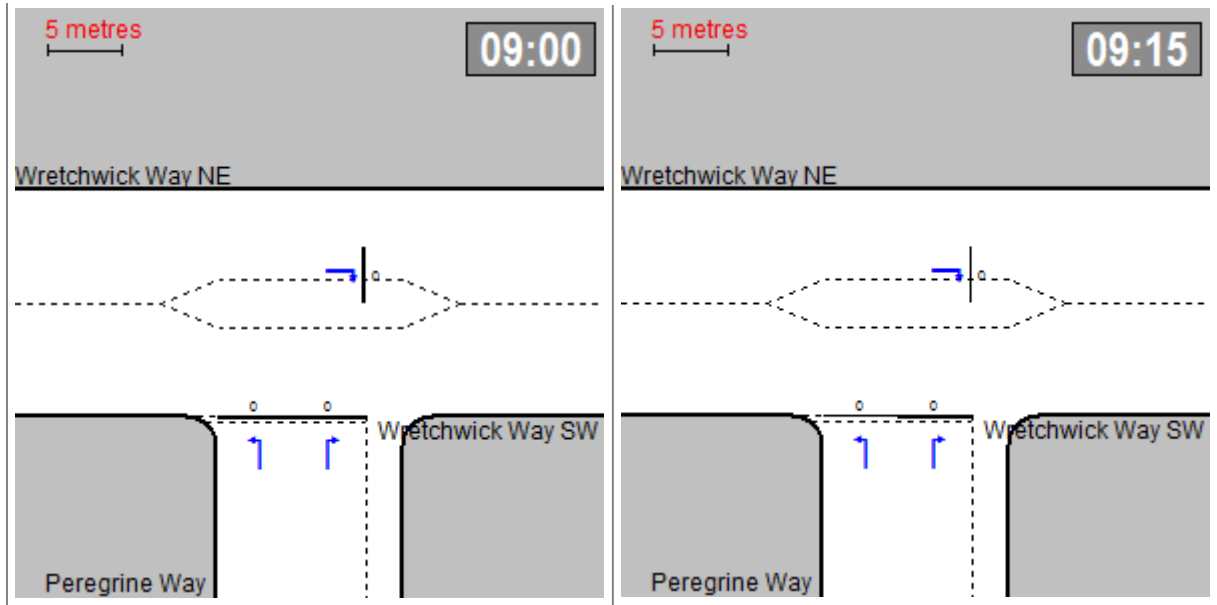
View Extent: 40m





Demand Set: 2020 AM PCU + CD+ DEV300 - Wretchwick Way - Peregrine Way
Modelling Period: 07:45-09:15
View Extent: 40m

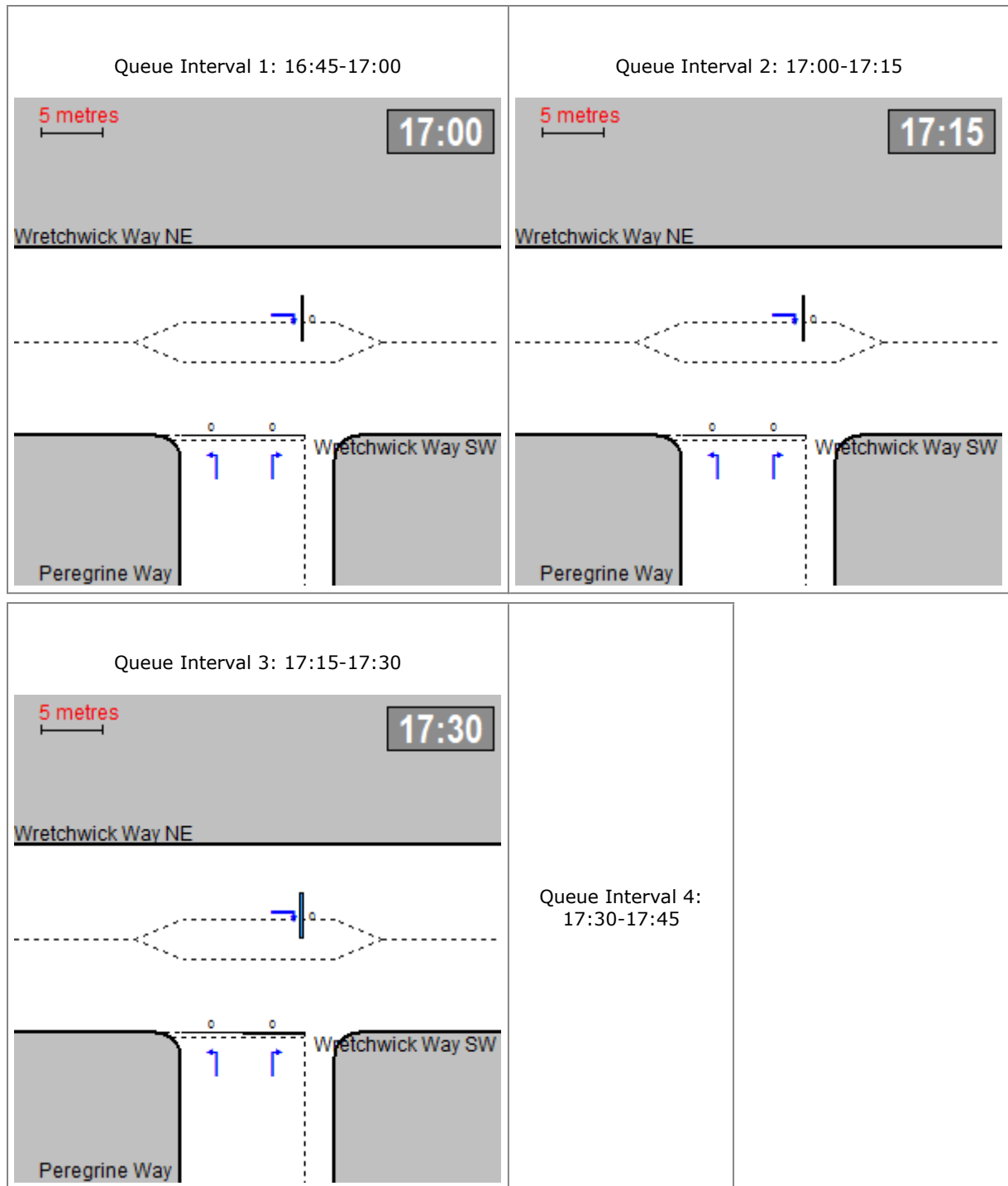




Demand Set: 2020 PM PCU+ CD+ DEV300 - Wretchwick Way - Peregrine Way

Modelling Period: 16:45-18:15

View Extent: 40m



APPENDIX I: TRICS OUTPUTS

TRICS 7.1.2

Trip Rate Parameter: Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Ranking Type: TOTALS Time Range: 08:00-09:00

85th Percentile = no. 5

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	MS-03-A-03	DETACHED	LIVERPOOL	15	Friday	21/06/2013	0.4	0.933	1.333
2	GM-03-A-10	DETACHED/SEMI	MANCHESTER	29	Wednesday	12/10/2011	0.138	0.759	0.897
3	CH-03-A-05	DETACHED	CREWE	17	Tuesday	14/10/2008	0.235	0.588	0.823
4	SF-03-A-02	SEMI DET./TERRACED	IPSWICH	230	Thursday	24/05/2007	0.243	0.491	0.734
5	WM-03-A-03	MIXED HOUSING	COVENTRY	84	Monday	24/09/2007	0.321	0.405	0.726
6	SH-03-A-01	DETACHED	SHREWSBURY	10	Friday	26/06/2009	0.2	0.5	0.7
7	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	237	Tuesday	13/05/2008	0.177	0.523	0.7
8	CB-03-A-03	SEMI DETACHED	WORKINGTON	40	Thursday	20/11/2008	0.225	0.45	0.675
9	ST-03-A-05	TERRACED & DETACHED	STOKE-ON-TRENT	14	Wednesday	22/11/2008	0.143	0.5	0.643
10	CH-03-A-08	DETACHED	CHESTER	11	Tuesday	22/05/2012	0.182	0.455	0.637
11	LN-03-A-01	MIXED HOUSES	LINCOLN	150	Tuesday	15/05/2007	0.187	0.44	0.627
12	TW-03-A-02	SEMI-DETACHED	GATESHEAD	16	Monday	07/10/2013	0.188	0.438	0.626
13	LN-03-A-02	MIXED HOUSES	LINCOLN	186	Monday	14/05/2007	0.183	0.425	0.608
14	WM-03-A-01	TERRACED	COVENTRY	79	Friday	03/02/2006	0.152	0.418	0.57
15	NY-03-A-11	PRIVATE HOUSING	BOROUGHBRIDGE	23	Wednesday	18/09/2013	0	0.565	0.565
16	SF-03-A-01	SEMI DETACHED	IPSWICH	77	Wednesday	23/05/2007	0.104	0.416	0.52
17	NF-03-A-02	HOUSES & FLATS	NORWICH	98	Monday	22/10/2012	0.122	0.347	0.469
18	NF-03-A-01	SEMI DET. & BUNGALOWS	CAISTER-ON-SEA	27	Tuesday	16/10/2012	0.148	0.296	0.444
19	CW-03-A-02	SEMI D./DETACHED	TRURO	73	Tuesday	18/09/2007	0.096	0.329	0.425
20	CH-03-A-06	SEMI-DET./BUNGALOWS	CREWE	129	Tuesday	14/10/2008	0.163	0.24	0.403
21	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	52	Monday	16/09/2013	0.173	0.212	0.385
22	CA-03-A-04	DETACHED	PETERBOROUGH	9	Tuesday	18/10/2011	0	0.333	0.333
23	WK-03-A-01	TERRACED/SEMI/DET.	LEAMINGTON SPA	6	Friday	21/10/2011	0	0.167	0.167

TRICS 7.1.2

Trip Rate Parameter: Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Ranking Type: TOTALS Time Range: 08:00-09:00

85th Percentile = no. 5

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	MS-03-A-03	DETACHED	LIVERPOOL	15	Friday	21/06/2013	0.667	1.267	1.934
2	CB-03-A-03	SEMI DETACHED	WORKINGTON	40	Thursday	20/11/2008	0.45	1.425	1.875
3	CH-03-A-05	DETACHED	CREWE	17	Tuesday	14/10/2008	0.235	1.471	1.706
4	CA-03-A-04	DETACHED	PETERBOROUGH	9	Friday	18/10/2011	0	1.556	1.556
5	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	237	Tuesday	13/05/2008	0.367	1.152	1.519
6	SF-03-A-02	SEMI DET./TERRACED	IPSWICH	230	Thursday	24/05/2007	0.443	1.074	1.517
7	NY-03-A-11	PRIVATE HOUSING	BOROUGHBRIDGE	23	Wednesday	18/09/2013	0.13	1.348	1.478
8	GM-03-A-10	DETACHED/SEMI	MANCHESTER	29	Wednesday	12/10/2011	0.172	1.207	1.379
9	CH-03-A-08	DETACHED	CHESTER	11	Tuesday	22/05/2012	0.182	1.182	1.364
10	WM-03-A-03	MIXED HOUSING	COVENTRY	84	Monday	24/09/2007	0.405	0.905	1.31
11	WM-03-A-01	TERRACED	COVENTRY	79	Friday	03/02/2006	0.38	0.886	1.266
12	LN-03-A-01	MIXED HOUSES	LINCOLN	150	Tuesday	15/05/2007	0.247	0.92	1.167
13	SH-03-A-03	DETACHED	SHREWSBURY	10	Friday	26/06/2009	0.3	0.8	1.1
14	LN-03-A-02	MIXED HOUSES	LINCOLN	186	Monday	14/05/2007	0.301	0.79	1.091
15	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	52	Monday	16/09/2013	0.327	0.75	1.077
16	TW-03-A-02	SEMI-DETACHED	GATESHEAD	16	Monday	07/10/2013	0.438	0.625	1.063
17	CW-03-A-02	SEMI D./DETACHED	TRURO	73	Tuesday	18/09/2007	0.178	0.877	1.055
18	ST-03-A-05	TERRACED & DETACHED	STOKE-ON-TRENT	14	Wednesday	26/11/2008	0.214	0.714	0.928
19	SF-03-A-01	SEMI DETACHED	IPSWICH	77	Wednesday	23/05/2007	0.117	0.805	0.922
20	NF-03-A-01	SEMI DET. & BUNGALOWS	CAISTER-ON-SEA	27	Tuesday	16/10/2012	0.296	0.556	0.852
21	NF-03-A-02	HOUSES & FLATS	NORWICH	98	Monday	22/10/2012	0.173	0.633	0.806
22	CH-03-A-06	SEMI-DET./BUNGALOWS	CREWE	129	Tuesday	14/10/2008	0.225	0.457	0.682
23	WK-03-A-01	TERRACED/SEMI/DET.	LEAMINGTON SPA	6	Friday	21/10/2011	0	0.167	0.167

Reference	Description	Town/City	Area	Location	DWELLS	Status
CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	Suburban /	9	One-Off
CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	Edge of To	40	Re-Survey
CH-03-A-05	DETACHED	CREWE	CHESHIRE	Edge of To	17	One-Off
CH-03-A-06	SEMI-DET./BUNGALOWS	CAISTER-ON-SEA	CHESHIRE	Suburban /	129	One-Off
CH-03-A-08	DETACHED	CHESTER	CHESHIRE	Suburban /	11	One-Off
CW-03-A-02	SEMI D./DETACHED	TRURO	CORNWALL	Suburban /	73	One-Off
EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	Edge of To	237	One-Off
GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	Edge of To	29	One-Off
LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	Edge of To	150	One-Off
LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	Suburban /	186	One-Off
MS-03-A-03	DETACHED	LIVERPOOL	MERseyside	Suburban /	15	One-Off
NF-03-A-01	SEMI DET. & BUNGA	CAISTER-ON-SEA	NORFOLK	Suburban /	27	One-Off
NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	Suburban /	98	One-Off
NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	Suburban /	52	Re-Survey
NY-03-A-11	PRIVATE HOUSING	BOROUGHBRIDGE	NORTH YORKSHIRE	Edge of To	23	Re-Survey
SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	Suburban /	77	One-Off
SF-03-A-02	SEMI DET./TERRACE	IPSWICH	SUFFOLK	Edge of To	230	One-Off
SH-03-A-03	DETACHED	SHREWSBURY	SHROPSHIRE	Edge of To	10	One-Off
ST-03-A-05	TERRACED & DETACI	STOKE-ON-TRENT	STAFFORDSHIRE	Suburban /	14	One-Off
TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	Suburban /	16	One-Off
WK-03-A-01	TERRACED/SEMI/DE	LEAMINGTON SPA	WARWICKSHIRE	Suburban /	6	One-Off
WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	Suburban /	79	One-Off
WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	Edge of To	84	One-Off

Manually Deselected Sites

Site	Reason for Deselecting the Site
CB-03-A-04	Parking Ratio
DS-03-A-01	Bedroom Ratio
ES-03-A-02	parking ratio
LN-03-A-03	parking ratio
NF-03-A-03	parking ratio
NY-03-A-06	bedroom ratio
NY-03-A-08	parking ratio
NY-03-A-10	parking ratio
SC-03-A-04	parking ratio
SF-03-A-03	bedroom ratio
SF-03-A-04	bedroom ratio
SH-03-A-04	parking ratio
SH-03-A-05	parking ratio
SY-03-A-01	parking ratio
WK-03-A-02	bedroom
WL-03-A-01	bedroom
WM-03-A-02	bedroom
WO-03-A-02	bedroom
WO-03-A-03	bedroom

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Ranking Type: TOTALS Time Range: 17:00-18:00

85th Percentile = no. 5

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	SH-03-A-03	DETACHED	SHREWSBURY	10	Friday	26/06/2009	0.7	0.6	1.3
2	LN-03-A-02	MIXED HOUSES	LINCOLN	186	Monday	14/05/2007	0.495	0.355	0.85
3	CH-03-A-08	DETACHED	CHESTER	11	Tuesday	22/05/2012	0.545	0.273	0.818
4	CA-03-A-04	DETACHED	PETERBOROUGH	9	Tuesday	18/10/2011	0.556	0.222	0.778
5	WM-03-A-03	MIXED HOUSING	COVENTRY	84	Monday	24/09/2007	0.405	0.369	0.774
6	CH-03-A-05	DETACHED	CREWE	17	Tuesday	14/10/2008	0.353	0.412	0.765
7	NY-03-A-11	PRIVATE HOUSING	BOROUGHBRIDGE	23	Wednesday	18/09/2013	0.609	0.13	0.739
8	SF-03-A-02	SEMI DET./TERRACED	IPSWICH	230	Thursday	24/05/2007	0.478	0.248	0.726
9	CB-03-A-03	SEMI DETACHED	WORKINGTON	40	Thursday	20/11/2008	0.475	0.25	0.725
10	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	237	Tuesday	13/05/2008	0.439	0.274	0.713
11	CW-03-A-02	SEMI D./DETACHED	TRURO	73	Tuesday	18/09/2007	0.425	0.219	0.644
12	LN-03-A-01	MIXED HOUSES	LINCOLN	150	Tuesday	15/05/2007	0.413	0.213	0.626
13	NF-03-A-01	SEMI DET. & BUNGALOWS	CAISTER-ON-SEA	27	Tuesday	16/10/2012	0.407	0.148	0.555
14	GM-03-A-10	DETACHED/SEMI	MANCHESTER	29	Wednesday	12/10/2011	0.448	0.103	0.551
15	WM-03-A-01	TERRACED	COVENTRY	79	Friday	03/02/2006	0.342	0.203	0.545
16	TW-03-A-02	SEMI-DETACHED	GATESHEAD	16	Monday	07/10/2013	0.438	0.063	0.5
17	ST-03-A-05	TERRACED & DETACHED	STOKE-ON-TRENT	14	Wednesday	26/11/2008	0.286	0.214	0.5
18	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	52	Monday	16/09/2013	0.269	0.192	0.461
19	SF-03-A-01	SEMI DETACHED	IPSWICH	77	Wednesday	23/05/2007	0.247	0.169	0.416
20	MS-03-A-03	DETACHED	LIVERPOOL	15	Friday	21/06/2013	0.2	0.2	0.4
21	NF-03-A-02	HOUSES & FLATS	NORWICH	98	Monday	22/10/2012	0.25	0.143	0.378
22	CH-03-A-06	SEMI-DET./BUNGALOWS	CREWE	129	Tuesday	14/10/2008	0.132	0.14	0.272
23	WK-03-A-01	TERRACED/SEMI/DET.	LEAMINGTON SPA	6	Friday	21/10/2011	0.167	0	0.167

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Ranking Type: TOTALS Time Range: 17:00-18:00

85th Percentile = no. 5

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	NY-03-A-11	PRIVATE HOUSING	BOROUGHBRIDGE	23	Wednesday	18/09/2013	1.304	0.261	1.565
2	WM-03-A-03	MIXED HOUSING	COVENTRY	84	Monday	24/09/2007	0.798	0.56	1.358
3	LN-03-A-02	MIXED HOUSES	LINCOLN	186	Monday	14/05/2007	0.769	0.548	1.317
4	SH-03-A-03	DETACHED	SHREWSBURY	10	Friday	26/06/2009	0.7	0.6	1.3
5	SF-03-A-02	SEMI DET./TERRACED	IPSWICH	230	Thursday	24/05/2007	0.778	0.517	1.295
6	CA-03-A-04	DETACHED	PETERBOROUGH	9	Tuesday	18/10/2011	1	0.222	1.222
7	CW-03-A-02	SEMI D./DETACHED	TRURO	73	Tuesday	18/09/2007	0.822	0.397	1.219
8	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	237	Tuesday	13/05/2008	0.675	0.481	1.156
9	WM-03-A-01	TERRACED	COVENTRY	79	Friday	03/02/2006	0.759	0.392	1.151
10	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	52	Monday	16/09/2013	0.827	0.269	1.096
11	CH-03-A-08	DETACHED	CHESTER	11	Tuesday	22/05/2012	0.818	0.273	1.091
12	CB-03-A-03	SEMI DETACHED	WORKINGTON	40	Thursday	20/11/2008	0.675	0.375	1.05
13	NF-03-A-01	SEMI DET. & BUNGALOWS	CAISTER-ON-SEA	27	Tuesday	16/10/2012	0.778	0.259	1.037
14	TW-03-A-02	SEMI-DETACHED	GATESHEAD	16	Monday	07/10/2013	0.625	0.25	0.875
15	SF-03-A-01	SEMI DETACHED	IPSWICH	77	Wednesday	23/05/2007	0.494	0.377	0.871
16	LN-03-A-01	MIXED HOUSES	LINCOLN	150	Tuesday	15/05/2007	0.587	0.28	0.867
17	ST-03-A-05	TERRACED & DETACHED	STOKE-ON-TRENT	14	Wednesday	26/11/2008	0.571	0.286	0.857
18	CH-03-A-05	DETACHED	CREWE	17	Tuesday	14/10/2008			

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 08:00-09:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	0.267	0.6	0.867
2	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	0.185	0.333	0.518
3	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	0.063	0.375	0.437
4	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	0.172	0.241	0.413
5	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	0.172	0.241	0.413
6	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	0.086	0.168	0.254

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 08:00-09:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	0.467	2.267	2.734
2	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	0.276	1.276	1.552
3	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	0.389	0.926	1.315
4	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	0.345	0.759	1.104
5	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	0.188	0.875	1.063
6	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	0.132	0.407	0.539

Reference	Description	Town/City	Area	Location	DWELLS
DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	DERBYSHIRE	Suburban Area (PPS6 Out of	29
LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	LANCASHIRE	Edge of Town Centre	15
MS-03-B-01	TERRACED	LIVERPOOL	MERseysIDE	Edge of Town	16
NY-03-B-01	TERRACED HOUSING	THIRSK	NORTH YORKSHIRE	Suburban Area (PPS6 Out of	280
WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	WEST YORKSHIRE	Edge of Town	54
WY-03-B-03	TERRACED HOUSES	LEEDS	WEST YORKSHIRE	Suburban Area (PPS6 Out of	29

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 17:00-18:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	0.333	0.467	0.8
2	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	0.375	0.25	0.625
3	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	0.207	0.103	0.31
4	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	0.175	0.132	0.307
5	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	0.172	0.103	0.275
6	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	0.148	0.111	0.259

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 17:00-18:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	0.667	1.733	2.4
2	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	1	0.897	1.897
3	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	0.552	0.345	0.897
4	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	0.563	0.25	0.812
5	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	0.519	0.167	0.686
6	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	0.289	0.279	0.568

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 07:00-19:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	2.933	3.6	6.533
2	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	2.138	2	4.138
3	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	2	2.037	4.037
4	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	1.625	1.938	3.563
5	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	1.69	1.655	3.345
6	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	1.146	1.168	2.314

TRICS 7.1.2

Trip Rate P Number of dwellings

RANK ORDER for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

Ranking Type: TOTALS Time Range: 07:00-19:00

85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Town/City	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-B-02	SEMI DETACHED/TERRACED	BLACKBURN	15	Monday	10/06/2013	9.067	13	22.067
2	WY-03-B-03	TERRACED HOUSES	LEEDS	29	Thursday	19/09/2013	6.414	6.586	13
3	DS-03-B-01	TERRACED/SEMI/BUNG.	DERBY	29	Monday	04/07/2011	5.103	5.034	10.137
4	WY-03-B-02	MIXED HOUSES	HUDDERSFIELD	54	Tuesday	17/09/2013	4.722	4.852	9.574
5	MS-03-B-01	TERRACED	LIVERPOOL	16	Tuesday	18/06/2013	3.25	3.688	6.938
6	NY-03-B-01	TERRACED HOUSING	THIRSK	280	Thursday	20/09/2007	2.014	2.157	4.171

**APPENDIX J: JUNCTION MODEL OUTPUTS: WITH DEVELOPMENT
SCENARIO WITHOUT SOUTH EAST BICESTER**

ARCADY 7
Version: 7.0.1.130 [12 March 2010] © Copyright Transport Research Laboratory 2009
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: 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

File: Q:\14-033 - Gavray Drive, Bicester\Trans\Arcady\Revision A\2014 Peregrine Way - Wretchwick Way roundabout.arc7
Report generation date: 10/04/2015 10:45:35

- » A1 - (Default Analysis Set) - D7 - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak, PM
- » A1 - (Default Analysis Set) - D8 - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak, AM

Summary of roundabout performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
(Default Analysis Set) - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak								
Arm A	0.31	0.03	0.24	A				
Arm B	0.31	0.06	0.23	A				
Arm C	0.85	0.05	0.46	A				
(Default Analysis Set) - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak								
Arm A					0.76	0.04	0.43	A
Arm B					0.29	0.08	0.23	A
Arm C					0.43	0.04	0.30	A

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

2014 PCU - Peregrine Way/Wretchwick Way PM Peak - PM runs from 16:45:00 to 18:15:00
 2014 PCU - Peregrine Way/Wretchwick Way AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD - Peregrine Way/Wretchwick Way PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD - Peregrine Way/Wretchwick Way AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD +DEV300 - Peregrine Way/Wretchwick Way PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD +DEV300 - Peregrine Way/Wretchwick Way AM Peak - AM runs from 07:45:00 to 09:15:00

File summary

File Description

Title	Peregrine Way/Wretchwick Way AM Peak
Location	Bicester
Date	13/07/2010
Status	TIA
Client	JJ Gallagher
Jobnumber	18578-01-1
Enumerator	Alexanders [CS5DG3J]
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

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	min	-Min	perMin

A1 - (Default Analysis Set) - D7 - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak, PM	2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way PM Peak	PM			Yes			16:45	18:15	90	15	Varies by Arm

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Neunkirchen Way	
B	Peregine Way	
C	Wretchwick Way North	

Capacity Options

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard 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
A	7.00	10.00	25.00	40.00	49.00	23.00	
B	3.00	6.50	15.00	60.00	49.00	24.50	
C	5.50	8.00	19.00	45.00	49.00	12.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.858	2913.181
B		((calculated))	((calculated))	0.608	1594.519
C		((calculated))	((calculated))	0.772	2396.694

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1124.00	100.000	N/A
B	ONE HOUR	Yes	208.00	100.000	N/A
C	ONE HOUR	Yes	615.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	846.21	846.21	N/A	N/A
16:45-17:00	B	156.59	156.59	N/A	N/A

16:45-17:00	C	463.00	463.00	N/A	N/A
17:00-17:15	A	1010.45	1010.45	N/A	N/A
17:00-17:15	B	186.99	186.99	N/A	N/A
17:00-17:15	C	552.87	552.87	N/A	N/A
17:15-17:30	A	1237.55	1237.55	N/A	N/A
17:15-17:30	B	229.01	229.01	N/A	N/A
17:15-17:30	C	677.13	677.13	N/A	N/A
17:30-17:45	A	1237.55	1237.55	N/A	N/A
17:30-17:45	B	229.01	229.01	N/A	N/A
17:30-17:45	C	677.13	677.13	N/A	N/A
17:45-18:00	A	1010.45	1010.45	N/A	N/A
17:45-18:00	B	186.99	186.99	N/A	N/A
17:45-18:00	C	552.87	552.87	N/A	N/A
18:00-18:15	A	846.21	846.21	N/A	N/A
18:00-18:15	B	156.59	156.59	N/A	N/A
18:00-18:15	C	463.00	463.00	N/A	N/A

Turning Proportions

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

		To		
		A	B	C
From	A	0.00	241.00	883.00
	B	157.00	0.00	51.00
	C	559.00	56.00	0.00

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

		To		
		A	B	C
From	A	0.00	0.21	0.79
	B	0.75	0.00	0.25
	C	0.91	0.09	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.43	0.04	0.76	A	1031.40	1547.10	51.43	0.03	0.57	51.44	0.03	0.858	2913.181
B	0.23	0.08	0.29	A	190.86	286.30	19.33	0.07	0.21	19.33	0.07	0.608	1594.519
C	0.30	0.04	0.43	A	564.33	846.50	29.78	0.04	0.33	29.78	0.04	0.772	2396.694

Main Results

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	846.21	211.55	844.54	537.68	42.07	0.00	2877.08	2738.98	0.294	0.00	0.42
B	156.59	39.15	155.99	223.15	663.46	0.00	1191.37	287.06	0.131	0.00	0.15
C	463.00	115.75	462.00	701.71	117.74	0.00	2305.86	2229.53	0.201	0.00	0.25

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1010.45	252.61	1009.95	643.27	50.32	0.00	2870.00	2738.98	0.352	0.42	0.54
B	186.99	46.75	186.79	266.86	793.40	0.00	1112.42	287.06	0.168	0.15	0.20
C	552.87	138.22	552.60	839.20	140.99	0.00	2287.92	2229.53	0.242	0.25	0.32

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1237.55	309.39	1236.68	787.66	61.62	0.00	2860.30	2738.98	0.433	0.54	0.76
B	229.01	57.25	228.64	326.78	971.52	0.00	1004.19	287.06	0.228	0.20	0.29
C	677.13	169.28	676.70	1027.58	172.58	0.00	2263.55	2229.53	0.299	0.32	0.43

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1237.55	309.39	1237.54	788.32	61.66	0.00	2860.27	2738.98	0.433	0.76	0.76
B	229.01	57.25	229.01	327.00	972.20	0.00	1003.77	287.06	0.228	0.29	0.29
C	677.13	169.28	677.12	1028.35	172.86	0.00	2263.34	2229.53	0.299	0.43	0.43

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1010.45	252.61	1011.32	644.33	50.38	0.00	2869.95	2738.98	0.352	0.76	0.55
B	186.99	46.75	187.35	267.22	794.48	0.00	1111.76	287.06	0.168	0.29	0.20
C	552.87	138.22	553.30	840.41	141.42	0.00	2287.59	2229.53	0.242	0.43	0.32

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	846.21	211.55	846.72	539.44	42.18	0.00	2876.98	2738.98	0.294	0.55	0.42
B	156.59	39.15	156.80	223.73	665.17	0.00	1190.34	287.06	0.132	0.20	0.15
C	463.00	115.75	463.27	703.61	118.35	0.00	2305.39	2229.53	0.201	0.32	0.25

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	6.15	0.41	0.029	A	A
B	2.22	0.15	0.058	A	A
C	3.71	0.25	0.033	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	8.04	0.54	0.032	A	A
B	2.97	0.20	0.065	A	A
C	4.72	0.31	0.035	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.23	0.75	0.037	A	A
B	4.32	0.29	0.077	A	A
C	6.30	0.42	0.038	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.41	0.76	0.037	A	A
B	4.41	0.29	0.077	A	A
C	6.39	0.43	0.038	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	8.28	0.55	0.032	A	A
B	3.10	0.21	0.065	A	A
C	4.85	0.32	0.035	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	6.33	0.42	0.030	A	A
B	2.32	0.15	0.058	A	A
C	3.82	0.25	0.033	A	A

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
A	7.00	10.00	25.00	40.00	49.00	23.00		0.858	2913.181
B	3.00	6.50	15.00	60.00	49.00	24.50		0.608	1594.519
C	5.50	8.00	19.00	45.00	49.00	12.00		0.772	2396.694

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	846.21	2877.08	0.294	0.00	0.00	0.42	6.15	(0.00)	0.029
16:45-17:00	B	156.59	1191.37	0.131	0.00	0.00	0.15	2.22	(0.00)	0.058
16:45-17:00	C	463.00	2305.86	0.201	0.00	0.00	0.25	3.71	(0.00)	0.033
17:00-17:15	A	1010.45	2870.00	0.352	0.00	0.42	0.54	8.04	(0.00)	0.032
17:00-17:15	B	186.99	1112.42	0.168	0.00	0.15	0.20	2.97	(0.00)	0.065
17:00-17:15	C	552.87	2287.92	0.242	0.00	0.25	0.32	4.72	(0.00)	0.035
17:15-17:30	A	1237.55	2860.30	0.433	0.00	0.54	0.76	11.23	(0.00)	0.037
17:15-17:30	B	229.01	1004.19	0.228	0.00	0.20	0.29	4.32	(0.00)	0.077
17:15-17:30	C	677.13	2263.55	0.299	0.00	0.32	0.43	6.30	(0.00)	0.038
17:30-17:45	A	1237.55	2860.27	0.433	0.00	0.76	0.76	11.41	(0.00)	0.037
17:30-17:45	B	229.01	1003.77	0.228	0.00	0.29	0.29	4.41	(0.00)	0.077
17:30-17:45	C	677.13	2263.34	0.299	0.00	0.43	0.43	6.39	(0.00)	0.038
17:45-18:00	A	1010.45	2869.95	0.352	0.00	0.76	0.55	8.28	(0.00)	0.032
17:45-18:00	B	186.99	1111.76	0.168	0.00	0.29	0.20	3.10	(0.00)	0.065
17:45-18:00	C	552.87	2287.59	0.242	0.00	0.43	0.32	4.85	(0.00)	0.035
18:00-18:15	A	846.21	2876.98	0.294	0.00	0.55	0.42	6.33	(0.00)	0.030
18:00-18:15	B	156.59	1190.34	0.132	0.00	0.20	0.15	2.32	(0.00)	0.058
18:00-18:15	C	463.00	2305.39	0.201	0.00	0.32	0.25	3.82	(0.00)	0.033

A1 - (Default Analysis Set) - D8 - 2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak, AM	2020 PCU + CD +DEV180 - Peregrine Way/Wretchwick Way AM Peak	AM			Yes			07:45	09:15	90	15	Varies by Arm

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Neunkirchen Way	
B	Peregine Way	
C	Wretchwick Way North	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard 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
A	7.00	10.00	25.00	40.00	49.00	23.00	
B	3.00	6.50	15.00	60.00	49.00	24.50	
C	5.50	8.00	19.00	45.00	49.00	12.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.858	2913.181
B		((calculated))	((calculated))	0.608	1594.519
C		((calculated))	((calculated))	0.772	2396.694

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	619.00	100.000	N/A
B	ONE HOUR	Yes	273.00	100.000	N/A
C	ONE HOUR	Yes	920.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	466.02	466.02	N/A	N/A
07:45-08:00	B	205.53	205.53	N/A	N/A
07:45-08:00	C	692.62	692.62	N/A	N/A
08:00-08:15	A	556.47	556.47	N/A	N/A
08:00-08:15	B	245.42	245.42	N/A	N/A
08:00-08:15	C	827.06	827.06	N/A	N/A
08:15-08:30	A	681.53	681.53	N/A	N/A
08:15-08:30	B	300.58	300.58	N/A	N/A
08:15-08:30	C	1012.94	1012.94	N/A	N/A
08:30-08:45	A	681.53	681.53	N/A	N/A
08:30-08:45	B	300.58	300.58	N/A	N/A
08:30-08:45	C	1012.94	1012.94	N/A	N/A
08:45-09:00	A	556.47	556.47	N/A	N/A
08:45-09:00	B	245.42	245.42	N/A	N/A
08:45-09:00	C	827.06	827.06	N/A	N/A
09:00-09:15	A	466.02	466.02	N/A	N/A
09:00-09:15	B	205.53	205.53	N/A	N/A
09:00-09:15	C	692.62	692.62	N/A	N/A

Turning Proportions

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

		To		
		A	B	C
From	A	0.00	150.00	469.00
	B	225.00	0.00	48.00
	C	894.00	26.00	0.00

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

		To		
		A	B	C
From	A	0.00	0.24	0.76
	B	0.82	0.00	0.18
	C	0.97	0.03	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.24	0.03	0.31	A	568.01	852.01	22.10	0.03	0.25	22.10	0.03	0.858	2913.181
B	0.23	0.06	0.31	A	250.51	375.76	21.07	0.06	0.23	21.07	0.06	0.608	1594.519
C	0.46	0.05	0.85	A	844.21	1266.31	55.87	0.04	0.62	55.87	0.04	0.772	2396.694

Main Results

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	466.02	116.50	465.25	840.16	19.52	0.00	2896.43	2859.35	0.161	0.00	0.19
B	205.53	51.38	204.83	132.27	352.51	0.00	1380.32	278.10	0.149	0.00	0.17
C	692.62	173.16	690.87	388.52	168.82	0.00	2266.45	2219.87	0.306	0.00	0.44

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	556.47	139.12	556.28	1005.24	23.36	0.00	2893.14	2859.35	0.192	0.19	0.24
B	245.42	61.36	245.22	158.16	421.48	0.00	1338.41	278.10	0.183	0.17	0.22
C	827.06	206.77	826.49	464.60	202.11	0.00	2240.77	2219.87	0.369	0.44	0.58

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	681.53	170.38	681.25	1230.76	28.60	0.00	2888.64	2859.35	0.236	0.24	0.31
B	300.58	75.14	300.25	193.68	516.17	0.00	1280.88	278.10	0.235	0.22	0.31
C	1012.94	253.23	1011.89	568.96	247.46	0.00	2205.78	2219.87	0.459	0.58	0.84

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	681.53	170.38	681.53	1232.03	28.63	0.00	2888.62	2859.35	0.236	0.31	0.31
B	300.58	75.14	300.58	193.78	516.38	0.00	1280.75	278.10	0.235	0.31	0.31

B	300.00	75.14	300.00	155.16	319.00	0.00	1200.75	278.10	0.233	0.31	0.31
C	1012.94	253.23	1012.93	569.23	247.73	0.00	2205.57	2219.87	0.459	0.84	0.85

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	556.47	139.12	556.75	1007.23	23.40	0.00	2893.10	2859.35	0.192	0.31	0.24
B	245.42	61.36	245.74	158.32	421.83	0.00	1338.20	278.10	0.183	0.31	0.23
C	827.06	206.77	828.10	465.04	202.53	0.00	2240.44	2219.87	0.369	0.85	0.59

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	466.02	116.50	466.20	843.17	19.59	0.00	2896.37	2859.35	0.161	0.24	0.19
B	205.53	51.38	205.73	132.56	353.23	0.00	1379.88	278.10	0.149	0.23	0.18
C	692.62	173.16	693.21	389.40	169.56	0.00	2265.88	2219.87	0.306	0.59	0.44

Queueing Delay Results
Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	2.84	0.19	0.025	A	A
B	2.57	0.17	0.051	A	A
C	6.47	0.43	0.038	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.54	0.24	0.026	A	A
B	3.31	0.22	0.055	A	A
C	8.62	0.57	0.042	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	4.58	0.31	0.027	A	A
B	4.50	0.30	0.061	A	A
C	12.43	0.83	0.050	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	4.62	0.31	0.027	A	A
B	4.58	0.31	0.061	A	A
C	12.68	0.85	0.050	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.61	0.24	0.026	A	A
B	3.44	0.23	0.055	A	A
C	8.96	0.60	0.043	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
-----	--------------------------------	--------------------------------------	------------------------------------------	-------------------------------	-----------------------------

Arm	(min)	min/min)	(min)	Service	Service
A	2.90	0.19	0.025	A	A
B	2.67	0.18	0.051	A	A
C	6.71	0.45	0.038	A	A

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
A	7.00	10.00	25.00	40.00	49.00	23.00		0.858	2913.181
B	3.00	6.50	15.00	60.00	49.00	24.50		0.608	1594.519
C	5.50	8.00	19.00	45.00	49.00	12.00		0.772	2396.694

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	466.02	2896.43	0.161	0.00	0.00	0.19	2.84	(0.00)	0.025
07:45-08:00	B	205.53	1380.32	0.149	0.00	0.00	0.17	2.57	(0.00)	0.051
07:45-08:00	C	692.62	2266.45	0.306	0.00	0.00	0.44	6.47	(0.00)	0.038
08:00-08:15	A	556.47	2893.14	0.192	0.00	0.19	0.24	3.54	(0.00)	0.026
08:00-08:15	B	245.42	1338.41	0.183	0.00	0.17	0.22	3.31	(0.00)	0.055
08:00-08:15	C	827.06	2240.77	0.369	0.00	0.44	0.58	8.62	(0.00)	0.042
08:15-08:30	A	681.53	2888.64	0.236	0.00	0.24	0.31	4.58	(0.00)	0.027
08:15-08:30	B	300.58	1280.88	0.235	0.00	0.22	0.31	4.50	(0.00)	0.061
08:15-08:30	C	1012.94	2205.78	0.459	0.00	0.58	0.84	12.43	(0.00)	0.050
08:30-08:45	A	681.53	2888.62	0.236	0.00	0.31	0.31	4.62	(0.00)	0.027
08:30-08:45	B	300.58	1280.75	0.235	0.00	0.31	0.31	4.58	(0.00)	0.061
08:30-08:45	C	1012.94	2205.57	0.459	0.00	0.84	0.85	12.68	(0.00)	0.050
08:45-09:00	A	556.47	2893.10	0.192	0.00	0.31	0.24	3.61	(0.00)	0.026
08:45-09:00	B	245.42	1338.20	0.183	0.00	0.31	0.23	3.44	(0.00)	0.055
08:45-09:00	C	827.06	2240.44	0.369	0.00	0.85	0.59	8.96	(0.00)	0.043
09:00-09:15	A	466.02	2896.37	0.161	0.00	0.24	0.19	2.90	(0.00)	0.025
09:00-09:15	B	205.53	1379.88	0.149	0.00	0.23	0.18	2.67	(0.00)	0.051
09:00-09:15	C	692.62	2265.88	0.306	0.00	0.59	0.44	6.71	(0.00)	0.038

ARCADY 7

Version: 7.0.1.130 [12 March 2010]
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File: Q:\14-033 - Gavray Drive, Bicester\Trans\Arcady\Revision A\2014 Seel Way - A41 East - Grav Rd N - A41 W - B4100.arc7
Report generation date: 10/04/2015 10:34:19

- » A1 - (Default Analysis Set) - D11 - 2020 PCU + CD + DEV180 -AM Peak, AM
- » A1 - (Default Analysis Set) - D12 - 2020 PCU + CD + DEV180 - PM Peak, PM

Summary of roundabout performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
(Default Analysis Set) - 2020 PCU + CD + DEV180 - PM Peak								
Arm A					1.48	0.12	0.60	A
Arm B					5.35	0.23	0.85	B
Arm C					0.37	0.19	0.27	B
Arm D					66.87	2.04	1.07	F
Arm E					3.16	0.26	0.77	C
(Default Analysis Set) - 2020 PCU + CD + DEV180 -AM Peak								
Arm A	7.49	0.39	0.89	C				
Arm B	5.14	0.24	0.84	B				
Arm C	0.83	0.30	0.46	C				
Arm D	2.58	0.13	0.72	A				
Arm E	0.79	0.09	0.44	A				

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

2014 PCU -AM Peak - AM runs from 07:45:00 to 09:15:00
 2014 PCU- PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD -AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD - PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD + DEV180 -AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD + DEV180 - PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD + DEV300 -AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD + DEV300 - PM Peak - PM runs from 16:45:00 to 18:15:00

File summary

File Description

Title	Seelshield Way/A41 East/Gravenhill Road North/A41 West/B4100 London Road AM Peak
Location	Bicester
Date	13/07/2010
Status	TIA
Client	JJ Gallagher Ltd
Jobnumber	18578-01-1
Enumerator	Alexanders [CS5DG3J]
Results Upto Date	False

Analysis Options

[No text visible in this block]

KPC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

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	min	-Min	perMin

A1 - (Default Analysis Set) - D11 - 2020 PCU + CD + DEV180 -AM Peak, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2020 PCU + CD + DEV180 - AM Peak, AM	2020 PCU + CD + DEV180 - AM Peak	AM			Yes			07:45	09:15	90	15	Varies by Arm

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Seelshield Way	
B	A41 East	
C	Gravenhill Road North	

D	A41 West	
E	B4100 London Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard 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
A	7.00	7.00	0.00	20.00	70.00	31.00	
B	5.25	8.50	20.00	20.00	70.00	31.00	
C	3.50	7.00	5.00	20.00	70.00	20.00	
D	5.00	9.00	20.00	20.00	70.00	42.00	
E	7.00	7.00	0.00	20.00	70.00	39.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Arm Intercept Adjustments

Arm	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
A	Yes	(ARCADY 6 CT10 Import)	0.00
B	Yes	(ARCADY 6 CT10 Import)	0.00
C	Yes	(ARCADY 6 CT10 Import)	0.00
D	Yes	(ARCADY 6 CT10 Import)	0.00
E	Yes	(ARCADY 6 CT10 Import)	0.00

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.570	2113.640
B		((calculated))	((calculated))	0.588	2230.844
C		((calculated))	((calculated))	0.472	1435.972
D		((calculated))	((calculated))	0.568	2160.167
E		((calculated))	((calculated))	0.554	2054.761

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

Traffic Flows

Demand Set Data Options

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

			Yes	HV Percentages	2.00				Yes	Yes
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Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1103.00	100.000	N/A
B	ONE HOUR	Yes	1207.00	100.000	N/A
C	ONE HOUR	Yes	153.00	100.000	N/A
D	ONE HOUR	Yes	1130.00	100.000	N/A
E	ONE HOUR	Yes	503.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	830.40	830.40	N/A	N/A
07:45-08:00	B	908.69	908.69	N/A	N/A
07:45-08:00	C	115.19	115.19	N/A	N/A
07:45-08:00	D	850.72	850.72	N/A	N/A
07:45-08:00	E	378.68	378.68	N/A	N/A
08:00-08:15	A	991.57	991.57	N/A	N/A
08:00-08:15	B	1085.07	1085.07	N/A	N/A
08:00-08:15	C	137.54	137.54	N/A	N/A
08:00-08:15	D	1015.85	1015.85	N/A	N/A
08:00-08:15	E	452.19	452.19	N/A	N/A
08:15-08:30	A	1214.43	1214.43	N/A	N/A
08:15-08:30	B	1328.93	1328.93	N/A	N/A
08:15-08:30	C	168.46	168.46	N/A	N/A
08:15-08:30	D	1244.15	1244.15	N/A	N/A
08:15-08:30	E	553.81	553.81	N/A	N/A
08:30-08:45	A	1214.43	1214.43	N/A	N/A
08:30-08:45	B	1328.93	1328.93	N/A	N/A
08:30-08:45	C	168.46	168.46	N/A	N/A
08:30-08:45	D	1244.15	1244.15	N/A	N/A
08:30-08:45	E	553.81	553.81	N/A	N/A
08:45-09:00	A	991.57	991.57	N/A	N/A
08:45-09:00	B	1085.07	1085.07	N/A	N/A
08:45-09:00	C	137.54	137.54	N/A	N/A
08:45-09:00	D	1015.85	1015.85	N/A	N/A
08:45-09:00	E	452.19	452.19	N/A	N/A
09:00-09:15	A	830.40	830.40	N/A	N/A
09:00-09:15	B	908.69	908.69	N/A	N/A
09:00-09:15	C	115.19	115.19	N/A	N/A
09:00-09:15	D	850.72	850.72	N/A	N/A
09:00-09:15	E	378.68	378.68	N/A	N/A

Turning Proportions

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

		To				
		A	B	C	D	E
From	A	0.00	364.00	41.00	517.00	181.00
	B	207.00	0.00	33.00	705.00	262.00
	C	19.00	13.00	0.00	97.00	24.00
	D	324.00	693.00	59.00	0.00	54.00
	E	65.00	220.00	29.00	189.00	0.00

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

		To				
		A	B	C	D	E
From	A	0.00	0.33	0.04	0.47	0.16
	B	0.17	0.00	0.03	0.58	0.22
	C	0.12	0.08	0.00	0.63	0.16
	D	0.29	0.61	0.05	0.00	0.05
	E	0.13	0.44	0.06	0.38	0.00

Vehicle Mix

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

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.89	0.39	7.49	C	1012.13	1518.20	287.53	0.19	3.19	287.55	0.19	0.570	2113.640
B	0.84	0.24	5.14	B	1107.56	1661.35	225.54	0.14	2.51	225.56	0.14	0.588	2230.844
C	0.46	0.30	0.83	C	140.40	210.59	39.08	0.19	0.43	39.08	0.19	0.472	1435.972
D	0.72	0.13	2.58	A	1036.91	1555.36	138.46	0.09	1.54	138.47	0.09	0.568	2160.167
E	0.44	0.09	0.79	A	461.56	692.34	47.57	0.07	0.53	47.57	0.07	0.554	2054.761

Main Results

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	830.40	207.60	826.12	461.07	902.23	0.00	1599.56	972.43	0.519	0.00	1.07
B	908.69	227.17	904.57	967.07	761.28	0.00	1783.04	1542.60	0.510	0.00	1.03
C	115.19	28.80	114.41	121.44	1544.42	0.00	706.51	260.12	0.163	0.00	0.19
D	850.72	212.68	847.38	1129.90	528.93	0.00	1859.73	1674.98	0.457	0.00	0.84
E	378.68	94.67	377.35	390.36	985.94	0.00	1508.63	994.62	0.251	0.00	0.33

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	991.57	247.89	988.19	551.74	1079.76	0.00	1498.40	972.43	0.662	1.07	1.91
B	1085.07	271.27	1082.20	1157.19	910.76	0.00	1695.11	1542.60	0.640	1.03	1.75
C	137.54	34.39	137.04	145.31	1847.65	0.00	563.29	260.12	0.244	0.19	0.32
D	1015.85	253.96	1014.08	1351.87	632.82	0.00	1800.72	1674.98	0.564	0.84	1.28
E	452.19	113.05	451.63	467.03	1179.87	0.00	1401.21	994.62	0.323	0.33	0.47

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1214.43	303.61	1194.74	673.20	1319.99	0.00	1361.52	972.43	0.892	1.91	6.83
B	1328.93	332.23	1316.59	1410.08	1104.66	0.00	1581.06	1542.60	0.841	1.75	4.83
C	168.46	42.11	166.59	176.97	2244.28	0.00	375.95	260.12	0.448	0.32	0.79
D	1244.15	311.04	1239.18	1642.26	768.61	0.00	1723.59	1674.98	0.722	1.28	2.52
E	553.81	138.45	552.59	567.19	1440.60	0.00	1256.78	994.62	0.441	0.47	0.78

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	1214.43	303.61	1211.79	676.83	1324.35	0.00	1359.04	972.43	0.894	6.83	7.49
B	1328.93	332.23	1327.72	1419.29	1116.85	0.00	1573.89	1542.60	0.844	4.83	5.14
C	168.46	42.11	168.27	178.22	2266.35	0.00	365.53	260.12	0.461	0.79	0.83
D	1244.15	311.04	1243.94	1658.26	776.35	0.00	1719.19	1674.98	0.724	2.52	2.58
E	553.81	138.45	553.78	572.90	1447.39	0.00	1253.02	994.62	0.442	0.78	0.79

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	991.57	247.89	1013.48	556.97	1086.04	0.00	1494.82	972.43	0.663	7.49	2.02
B	1085.07	271.27	1098.24	1170.69	928.83	0.00	1684.49	1542.60	0.644	5.14	1.84
C	137.54	34.39	139.52	147.14	1879.93	0.00	548.05	260.12	0.251	0.83	0.34
D	1015.85	253.96	1020.87	1375.33	644.11	0.00	1794.30	1674.98	0.566	2.58	1.32
E	452.19	113.05	453.41	475.37	1189.61	0.00	1395.81	994.62	0.324	0.79	0.48

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	830.40	207.60	834.08	464.23	907.48	0.00	1596.57	972.43	0.520	2.02	1.10
B	908.69	227.17	911.85	973.85	767.72	0.00	1779.26	1542.60	0.511	1.84	1.05
C	115.19	28.80	115.75	122.32	1557.25	0.00	700.45	260.12	0.164	0.34	0.20
D	850.72	212.68	852.60	1139.45	533.55	0.00	1857.10	1674.98	0.458	1.32	0.85

E	378.68	94.67	379.26	393.71	992.45	0.00	1505.03	994.62	0.252	0.48	0.34
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Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.44	1.03	0.077	A	A
B	14.94	1.00	0.068	A	A
C	2.81	0.19	0.101	A	A
D	12.21	0.81	0.059	A	A
E	4.90	0.33	0.053	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	27.32	1.82	0.117	A	A
B	25.16	1.68	0.097	A	A
C	4.64	0.31	0.141	A	A
D	18.64	1.24	0.076	A	A
E	6.97	0.46	0.063	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	85.02	5.67	0.327	C	B
B	64.11	4.27	0.217	B	B
C	10.97	0.73	0.284	C	B
D	35.65	2.38	0.123	A	A
E	11.38	0.76	0.085	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	108.37	7.22	0.392	C	C
B	75.30	5.02	0.241	B	B
C	12.27	0.82	0.304	C	B
D	38.34	2.56	0.126	A	A
E	11.77	0.78	0.086	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	34.38	2.29	0.130	A	A
B	29.74	1.98	0.105	A	A
C	5.34	0.36	0.148	A	A
D	20.54	1.37	0.078	A	A
E	7.39	0.49	0.064	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	17.00	1.13	0.079	A	A
B	16.28	1.09	0.069	A	A
C	3.06	0.20	0.103	A	A
D	13.08	0.87	0.060	A	A

E	5.15	0.34	0.053	A	A
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Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
A	7.00	7.00	0.00	20.00	70.00	31.00		0.570	2113.640
B	5.25	8.50	20.00	20.00	70.00	31.00		0.588	2230.844
C	3.50	7.00	5.00	20.00	70.00	20.00		0.472	1435.972
D	5.00	9.00	20.00	20.00	70.00	42.00		0.568	2160.167
E	7.00	7.00	0.00	20.00	70.00	39.00		0.554	2054.761

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	830.40	1599.56	0.519	0.00	0.00	1.07	15.44	(0.00)	0.077
07:45-08:00	B	908.69	1783.04	0.510	0.00	0.00	1.03	14.94	(0.00)	0.068
07:45-08:00	C	115.19	706.51	0.163	0.00	0.00	0.19	2.81	(0.00)	0.101
07:45-08:00	D	850.72	1859.73	0.457	0.00	0.00	0.84	12.21	(0.00)	0.059
07:45-08:00	E	378.68	1508.63	0.251	0.00	0.00	0.33	4.90	(0.00)	0.053
08:00-08:15	A	991.57	1498.40	0.662	0.00	1.07	1.91	27.32	(0.00)	0.117
08:00-08:15	B	1085.07	1695.11	0.640	0.00	1.03	1.75	25.16	(0.00)	0.097
08:00-08:15	C	137.54	563.29	0.244	0.00	0.19	0.32	4.64	(0.00)	0.141
08:00-08:15	D	1015.85	1800.72	0.564	0.00	0.84	1.28	18.64	(0.00)	0.076
08:00-08:15	E	452.19	1401.21	0.323	0.00	0.33	0.47	6.97	(0.00)	0.063
08:15-08:30	A	1214.43	1361.52	0.892	0.00	1.91	6.83	85.02	(0.00)	0.327
08:15-08:30	B	1328.93	1581.06	0.841	0.00	1.75	4.83	64.11	(0.00)	0.217
08:15-08:30	C	168.46	375.95	0.448	0.00	0.32	0.79	10.97	(0.00)	0.284
08:15-08:30	D	1244.15	1723.59	0.722	0.00	1.28	2.52	35.65	(0.00)	0.123
08:15-08:30	E	553.81	1256.78	0.441	0.00	0.47	0.78	11.38	(0.00)	0.085
08:30-08:45	A	1214.43	1359.04	0.894	0.00	6.83	7.49	108.37	(0.00)	0.392
08:30-08:45	B	1328.93	1573.89	0.844	0.00	4.83	5.14	75.30	(0.00)	0.241
08:30-08:45	C	168.46	365.53	0.461	0.00	0.79	0.83	12.27	(0.00)	0.304
08:30-08:45	D	1244.15	1719.19	0.724	0.00	2.52	2.58	38.34	(0.00)	0.126
08:30-08:45	E	553.81	1253.02	0.442	0.00	0.78	0.79	11.77	(0.00)	0.086
08:45-09:00	A	991.57	1494.82	0.663	0.00	7.49	2.02	34.38	(0.00)	0.130
08:45-09:00	B	1085.07	1684.49	0.644	0.00	5.14	1.84	29.74	(0.00)	0.105
08:45-09:00	C	137.54	548.05	0.251	0.00	0.83	0.34	5.34	(0.00)	0.148
08:45-09:00	D	1015.85	1794.30	0.566	0.00	2.58	1.32	20.54	(0.00)	0.078
08:45-09:00	E	452.19	1395.81	0.324	0.00	0.79	0.48	7.39	(0.00)	0.064
09:00-09:15	A	830.40	1596.57	0.520	0.00	2.02	1.10	17.00	(0.00)	0.079
09:00-09:15	B	908.69	1779.26	0.511	0.00	1.84	1.05	16.28	(0.00)	0.069
09:00-09:15	C	115.19	700.45	0.164	0.00	0.34	0.20	3.06	(0.00)	0.103
09:00-09:15	D	850.72	1857.10	0.458	0.00	1.32	0.85	13.08	(0.00)	0.060
09:00-09:15	E	378.68	1505.03	0.252	0.00	0.48	0.34	5.15	(0.00)	0.053

A1 - (Default Analysis Set) - D12 - 2020 PCU + CD +

DEV180 - PM Peak, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2020 PCU + CD + DEV180 - PM Peak, PM	2020 PCU + CD + DEV180 - PM Peak	PM			Yes			16:45	18:15	90	15	Varies by Arm

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Seelshield Way	
B	A41 East	
C	Gravenhill Road North	
D	A41 West	
E	B4100 London Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

V - Approach road half	E - Entry width	L - Effective flare	R - Entry radius	D - Inscribed circle	PHI - Conflict (entry) angle	Exit
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Arm	Approach Road width (m)	Entry width (m)	Approach Road length (m)	Entry length (m)	Circle Road entry diameter (m)	Circle Road entry angle (deg)	Exit Only
A	7.00	7.00	0.00	20.00	70.00	31.00	
B	5.25	8.50	20.00	20.00	70.00	31.00	
C	3.50	7.00	5.00	20.00	70.00	20.00	
D	5.00	9.00	20.00	20.00	70.00	42.00	
E	7.00	7.00	0.00	20.00	70.00	39.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Arm Intercept Adjustments

Arm	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
A	Yes	(ARCADY 6 CT10 Import)	0.00
B	Yes	(ARCADY 6 CT10 Import)	0.00
C	Yes	(ARCADY 6 CT10 Import)	0.00
D	Yes	(ARCADY 6 CT10 Import)	0.00
E	Yes	(ARCADY 6 CT10 Import)	0.00

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.570	2113.640
B		((calculated))	((calculated))	0.588	2230.844
C		((calculated))	((calculated))	0.472	1435.972
D		((calculated))	((calculated))	0.568	2160.167
E		((calculated))	((calculated))	0.554	2054.761

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	694.00	100.000	N/A
B	ONE HOUR	Yes	1314.00	100.000	N/A
C	ONE HOUR	Yes	106.00	100.000	N/A
D	ONE HOUR	Yes	1601.00	100.000	N/A
E	ONE HOUR	Yes	690.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	522.48	522.48	N/A	N/A
16:45-17:00	B	989.25	989.25	N/A	N/A
16:45-17:00	C	79.80	79.80	N/A	N/A
16:45-17:00	D	1205.32	1205.32	N/A	N/A
16:45-17:00	E	519.47	519.47	N/A	N/A
17:00-17:15	A	623.89	623.89	N/A	N/A
17:00-17:15	B	1181.26	1181.26	N/A	N/A
17:00-17:15	C	95.29	95.29	N/A	N/A
17:00-17:15	D	1439.27	1439.27	N/A	N/A
17:00-17:15	E	620.30	620.30	N/A	N/A
17:15-17:30	A	764.11	764.11	N/A	N/A
17:15-17:30	B	1446.74	1446.74	N/A	N/A
17:15-17:30	C	116.71	116.71	N/A	N/A
17:15-17:30	D	1762.73	1762.73	N/A	N/A
17:15-17:30	E	759.70	759.70	N/A	N/A
17:30-17:45	A	764.11	764.11	N/A	N/A
17:30-17:45	B	1446.74	1446.74	N/A	N/A
17:30-17:45	C	116.71	116.71	N/A	N/A
17:30-17:45	D	1762.73	1762.73	N/A	N/A
17:30-17:45	E	759.70	759.70	N/A	N/A
17:45-18:00	A	623.89	623.89	N/A	N/A
17:45-18:00	B	1181.26	1181.26	N/A	N/A
17:45-18:00	C	95.29	95.29	N/A	N/A
17:45-18:00	D	1439.27	1439.27	N/A	N/A
17:45-18:00	E	620.30	620.30	N/A	N/A
18:00-18:15	A	522.48	522.48	N/A	N/A
18:00-18:15	B	989.25	989.25	N/A	N/A
18:00-18:15	C	79.80	79.80	N/A	N/A
18:00-18:15	D	1205.32	1205.32	N/A	N/A
18:00-18:15	E	519.47	519.47	N/A	N/A

Turning Proportions

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

		To				
		A	B	C	D	E
From	A	0.00	200.00	30.00	334.00	130.00
	B	360.00	0.00	16.00	658.00	280.00
	C	24.00	0.00	0.00	67.00	15.00
	D	608.00	728.00	121.00	0.00	144.00
	E	142.00	341.00	25.00	182.00	0.00

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

		To				
		A	B	C	D	E
A	0.00	0.20	0.03	0.48	0.19	

From	A	0.00	0.29	0.04	0.40	0.19
	B	0.27	0.00	0.01	0.50	0.21
	C	0.23	0.00	0.00	0.63	0.14
	D	0.38	0.45	0.08	0.00	0.09
	E	0.21	0.49	0.04	0.26	0.00

Vehicle Mix

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

From	To					
		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
E	1.00	1.00	1.00	1.00	1.00	

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.60	0.12	1.48	A	636.83	955.24	84.35	0.09	0.94	84.36	0.09	0.570	2113.640
B	0.85	0.23	5.35	B	1205.75	1808.62	239.46	0.13	2.66	239.48	0.13	0.588	2230.844
C	0.27	0.19	0.37	B	97.27	145.90	19.97	0.14	0.22	19.97	0.14	0.472	1435.972
D	1.07	2.04	66.87	F	1469.11	2203.66	1742.95	0.79	19.37	1743.02	0.79	0.568	2160.167
E	0.77	0.26	3.16	C	633.16	949.73	149.16	0.16	1.66	149.17	0.16	0.554	2054.761

Main Results

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	522.48	130.62	520.39	848.91	1045.51	0.00	1517.92	1183.38	0.344	0.00	0.52
B	989.25	247.31	984.79	949.93	615.97	0.00	1868.52	1487.93	0.529	0.00	1.11
C	79.80	19.95	79.33	143.72	1457.04	0.00	747.78	242.71	0.107	0.00	0.12
D	1205.32	301.33	1197.57	930.05	606.32	0.00	1815.77	1571.89	0.664	0.00	1.94
E	519.47	129.87	516.80	426.27	1377.62	0.00	1291.67	1006.13	0.402	0.00	0.67

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
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A	623.89	155.97	622.80	1014.44	1249.14	0.00	1401.89	1183.38	0.445	0.52	0.79
B	1181.26	295.31	1178.19	1135.09	736.85	0.00	1797.41	1487.93	0.657	1.11	1.88
C	95.29	23.82	95.04	171.71	1743.32	0.00	612.57	242.71	0.156	0.12	0.18
D	1439.27	359.82	1429.55	1112.88	725.48	0.00	1748.09	1571.89	0.823	1.94	4.37
E	620.30	155.07	618.30	509.75	1645.28	0.00	1143.41	1006.13	0.543	0.67	1.17

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	764.11	191.03	761.49	1191.95	1460.62	0.00	1281.39	1183.38	0.596	0.79	1.45
B	1446.74	361.69	1433.89	1331.31	890.80	0.00	1706.86	1487.93	0.848	1.88	5.09
C	116.71	29.18	115.99	200.63	2124.06	0.00	432.73	242.71	0.270	0.18	0.36
D	1762.73	440.68	1627.22	1356.34	883.71	0.00	1658.21	1571.89	1.063	4.37	38.24
E	759.70	189.93	752.60	610.96	1899.97	0.00	1002.33	1006.13	0.758	1.17	2.94

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	764.11	191.03	763.97	1204.61	1476.74	0.00	1272.21	1183.38	0.601	1.45	1.48
B	1446.74	361.69	1445.72	1344.68	896.03	0.00	1703.78	1487.93	0.849	5.09	5.35
C	116.71	29.18	116.67	202.69	2139.06	0.00	425.65	242.71	0.274	0.36	0.37
D	1762.73	440.68	1648.24	1365.54	890.19	0.00	1654.53	1571.89	1.065	38.24	66.87
E	759.70	189.93	758.86	615.93	1922.50	0.00	989.85	1006.13	0.767	2.94	3.16

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	623.89	155.97	626.22	1117.08	1389.97	0.00	1321.65	1183.38	0.472	1.48	0.90
B	1181.26	295.31	1194.66	1255.31	760.88	0.00	1783.28	1487.93	0.662	5.35	2.00
C	95.29	23.82	96.03	191.51	1764.03	0.00	602.78	242.71	0.158	0.37	0.19
D	1439.27	359.82	1682.94	1125.55	734.51	0.00	1742.96	1571.89	0.826	66.87	5.95
E	620.30	155.07	626.44	536.83	1880.62	0.00	1013.05	1006.13	0.612	3.16	1.62

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	522.48	130.62	523.96	861.47	1063.01	0.00	1507.95	1183.38	0.346	0.90	0.53
B	989.25	247.31	992.69	964.77	622.20	0.00	1864.85	1487.93	0.530	2.00	1.14
C	79.80	19.95	80.08	145.98	1468.91	0.00	742.18	242.71	0.108	0.19	0.12
D	1205.32	301.33	1221.02	937.88	611.11	0.00	1813.05	1571.89	0.665	5.95	2.02
E	519.47	129.87	523.18	430.83	1401.30	0.00	1278.55	1006.13	0.406	1.62	0.69

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	7.64	0.51	0.060	A	A
B	16.16	1.08	0.068	A	A
C	1.73	0.12	0.090	A	A
D	27.52	1.83	0.096	A	A
E	9.69	0.65	0.077	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.62	0.77	0.077	A	A
B	27.08	1.81	0.096	A	A
C	2.67	0.18	0.116	A	A
D	59.23	3.95	0.183	B	B
E	16.82	1.12	0.114	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	20.81	1.39	0.115	A	A
B	67.59	4.51	0.211	B	B
C	5.22	0.35	0.189	B	B
D	342.82	22.85	0.952	F	E
E	39.92	2.66	0.234	B	B

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	22.10	1.47	0.118	A	A
B	78.76	5.25	0.230	B	B
C	5.55	0.37	0.194	B	B
D	790.07	52.67	2.037	F	F
E	46.21	3.08	0.258	C	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	14.00	0.93	0.087	A	A
B	32.24	2.15	0.104	A	A
C	2.94	0.20	0.119	A	A
D	490.44	32.70	1.217	F	E
E	25.79	1.72	0.158	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	8.18	0.55	0.061	A	A
B	17.64	1.18	0.069	A	A
C	1.86	0.12	0.091	A	A
D	32.88	2.19	0.104	A	A
E	10.72	0.71	0.080	A	A

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
A	7.00	7.00	0.00	20.00	70.00	31.00		0.570	2113.640
B	5.25	8.50	20.00	20.00	70.00	31.00		0.588	2230.844
C	3.50	7.00	5.00	20.00	70.00	20.00		0.472	1435.972
D	5.00	9.00	20.00	20.00	70.00	42.00		0.568	2160.167
E	7.00	7.00	0.00	20.00	70.00	39.00		0.554	2054.761

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	522.48	1517.92	0.344	0.00	0.00	0.52	7.64	(0.00)	0.060
16:45-17:00	B	989.25	1868.52	0.529	0.00	0.00	1.11	16.16	(0.00)	0.068
16:45-17:00	C	79.80	747.78	0.107	0.00	0.00	0.12	1.73	(0.00)	0.090
16:45-17:00	D	1205.32	1815.77	0.664	0.00	0.00	1.94	27.52	(0.00)	0.096
16:45-17:00	E	519.47	1291.67	0.402	0.00	0.00	0.67	9.69	(0.00)	0.077
17:00-17:15	A	623.89	1401.89	0.445	0.00	0.52	0.79	11.62	(0.00)	0.077
17:00-17:15	B	1181.26	1797.41	0.657	0.00	1.11	1.88	27.08	(0.00)	0.096
17:00-17:15	C	95.29	612.57	0.156	0.00	0.12	0.18	2.67	(0.00)	0.116
17:00-17:15	D	1439.27	1748.09	0.823	0.00	1.94	4.37	59.23	(0.00)	0.183
17:00-17:15	E	620.30	1143.41	0.543	0.00	0.67	1.17	16.82	(0.00)	0.114
17:15-17:30	A	764.11	1281.39	0.596	0.00	0.79	1.45	20.81	(0.00)	0.115
17:15-17:30	B	1446.74	1706.86	0.848	0.00	1.88	5.09	67.59	(0.00)	0.211
17:15-17:30	C	116.71	432.73	0.270	0.00	0.18	0.36	5.22	(0.00)	0.189
17:15-17:30	D	1762.73	1658.21	1.063	0.00	4.37	38.24	342.82	(0.00)	0.952
17:15-17:30	E	759.70	1002.33	0.758	0.00	1.17	2.94	39.92	(0.00)	0.234
17:30-17:45	A	764.11	1272.21	0.601	0.00	1.45	1.48	22.10	(0.00)	0.118
17:30-17:45	B	1446.74	1703.78	0.849	0.00	5.09	5.35	78.76	(0.00)	0.230
17:30-17:45	C	116.71	425.65	0.274	0.00	0.36	0.37	5.55	(0.00)	0.194
17:30-17:45	D	1762.73	1654.53	1.065	0.00	38.24	66.87	790.07	(0.00)	2.037
17:30-17:45	E	759.70	989.85	0.767	0.00	2.94	3.16	46.21	(0.00)	0.258
17:45-18:00	A	623.89	1321.65	0.472	0.00	1.48	0.90	14.00	(0.00)	0.087
17:45-18:00	B	1181.26	1783.28	0.662	0.00	5.35	2.00	32.24	(0.00)	0.104
17:45-18:00	C	95.29	602.78	0.158	0.00	0.37	0.19	2.94	(0.00)	0.119
17:45-18:00	D	1439.27	1742.96	0.826	0.00	66.87	5.95	490.44	(0.00)	1.217
17:45-18:00	E	620.30	1013.05	0.612	0.00	3.16	1.62	25.79	(0.00)	0.158
18:00-18:15	A	522.48	1507.95	0.346	0.00	0.90	0.53	8.18	(0.00)	0.061
18:00-18:15	B	989.25	1864.85	0.530	0.00	2.00	1.14	17.64	(0.00)	0.069
18:00-18:15	C	79.80	742.18	0.108	0.00	0.19	0.12	1.86	(0.00)	0.091
18:00-18:15	D	1205.32	1813.05	0.665	0.00	5.95	2.02	32.88	(0.00)	0.104
18:00-18:15	E	519.47	1278.55	0.406	0.00	1.62	0.69	10.72	(0.00)	0.080

ARCADY 7
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File: Q:\14-033 - Gavray Drive, Bicester\Trans\Arcady\Revision A\2014 Wretchwick - Gavray Drive - Charbridge AM Peak REV.arc7
Report generation date: 10/04/2015 10:54:11

- » A1 - (Default Analysis Set) - D11 - 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak, AM
- » A1 - (Default Analysis Set) - D12 - 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge PM Peak, PM

Summary of roundabout performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
(Default Analysis Set) - 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak								
Arm A	0.46	0.04	0.32	A				
Arm B	0.17	0.06	0.15	A				
Arm C	0.89	0.06	0.47	A				
(Default Analysis Set) - 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge PM Peak								
Arm A					0.93	0.06	0.48	A
Arm B					0.14	0.07	0.13	A
Arm C					0.60	0.05	0.38	A

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

2014 PCU - Wretchwick - Gavray Drive - Charbridge AM Peak - AM runs from 07:45:00 to 09:15:00
 2014 PCU - Wretchwick - Gavray Drive - Charbridge PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD - Wretchwick - Gavray Drive - Charbridge AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD - Wretchwick - Gavray Drive - Charbridge PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge PM Peak - PM runs from 16:45:00 to 18:15:00
 2020 PCU + CD + DEV300 - Wretchwick - Gavray Drive - Charbridge AM Peak - AM runs from 07:45:00 to 09:15:00
 2020 PCU + CD + DEV300 - Wretchwick - Gavray Drive - Charbridge PM Peak - PM runs from 16:45:00 to 18:15:00

File summary

File Description

Title	Wretchwick - Gavray Drive - Charbridge AM Peak
Location	Bicester
Date	13/07/2010
Client	JJ Gallagher
Jobnumber	18578-01-1
Enumerator	Alexanders [CS5DG3J]
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

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	min	-Min	perMin

A1 - (Default Analysis Set) - D11 - 2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak, AM	2020 PCU + CD + DEV180 - Wretchwick - Gavray Drive - Charbridge AM Peak	AM			Yes			07:45	09:15	90	15	Varies by Arm

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Wretchwick	
B	Gavray Drive	
C	Charbridge	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard 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
A	6.00	8.00	15.00	20.00	45.00	49.00	
B	3.50	7.00	10.00	20.00	45.00	44.00	
C	5.75	7.00	10.00	35.00	45.00	34.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.685	2094.901
B		((calculated))	((calculated))	0.571	1484.915
C		((calculated))	((calculated))	0.694	2027.030

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	598.00	100.000	N/A
B	ONE HOUR	Yes	157.00	100.000	N/A
C	ONE HOUR	Yes	841.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	450.21	450.21	N/A	N/A

07:45-08:00	B	118.20	118.20	N/A	N/A
07:45-08:00	C	633.15	633.15	N/A	N/A
08:00-08:15	A	537.59	537.59	N/A	N/A
08:00-08:15	B	141.14	141.14	N/A	N/A
08:00-08:15	C	756.04	756.04	N/A	N/A
08:15-08:30	A	658.41	658.41	N/A	N/A
08:15-08:30	B	172.86	172.86	N/A	N/A
08:15-08:30	C	925.96	925.96	N/A	N/A
08:30-08:45	A	658.41	658.41	N/A	N/A
08:30-08:45	B	172.86	172.86	N/A	N/A
08:30-08:45	C	925.96	925.96	N/A	N/A
08:45-09:00	A	537.59	537.59	N/A	N/A
08:45-09:00	B	141.14	141.14	N/A	N/A
08:45-09:00	C	756.04	756.04	N/A	N/A
09:00-09:15	A	450.21	450.21	N/A	N/A
09:00-09:15	B	118.20	118.20	N/A	N/A
09:00-09:15	C	633.15	633.15	N/A	N/A

Turning Proportions

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

		To		
		A	B	C
From	A	0.00	79.00	519.00
	B	91.00	0.00	66.00
	C	817.00	24.00	0.00

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

		To		
		A	B	C
From	A	0.00	0.13	0.87
	B	0.58	0.00	0.42
	C	0.97	0.03	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

RESULTS

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.32	0.04	0.46	A	548.74	823.10	32.51	0.04	0.36	32.51	0.04	0.685	2094.901
B	0.15	0.06	0.17	A	144.07	216.10	12.23	0.06	0.14	12.23	0.06	0.571	1484.915
C	0.47	0.06	0.89	A	771.72	1157.57	59.27	0.05	0.66	59.28	0.05	0.694	2027.030

Main Results

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	450.21	112.55	449.11	681.53	18.02	0.00	2082.55	2058.90	0.216	0.00	0.27
B	118.20	29.55	117.79	77.35	389.78	0.00	1262.18	463.81	0.094	0.00	0.10
C	633.15	158.29	631.28	439.29	68.27	0.00	1979.67	1840.52	0.320	0.00	0.47

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	537.59	134.40	537.30	815.62	21.56	0.00	2080.12	2058.90	0.258	0.27	0.35
B	141.14	35.28	141.03	92.54	466.32	0.00	1218.44	463.81	0.116	0.10	0.13
C	756.04	189.01	755.44	525.61	81.74	0.00	1970.32	1840.52	0.384	0.47	0.62

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	658.41	164.60	657.95	998.57	26.39	0.00	2076.81	2058.90	0.317	0.35	0.46
B	172.86	43.22	172.68	113.31	571.03	0.00	1158.61	463.81	0.149	0.13	0.17
C	925.96	231.49	924.87	643.62	100.09	0.00	1957.59	1840.52	0.473	0.62	0.89

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	658.41	164.60	658.41	999.71	26.42	0.00	2076.79	2058.90	0.317	0.46	0.46
B	172.86	43.22	172.86	113.40	571.43	0.00	1158.38	463.81	0.149	0.17	0.17
C	925.96	231.49	925.95	644.09	100.19	0.00	1957.52	1840.52	0.473	0.89	0.89

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	537.59	134.40	538.04	817.42	21.61	0.00	2080.09	2058.90	0.258	0.46	0.35
B	141.14	35.28	141.31	92.69	466.96	0.00	1218.07	463.81	0.116	0.17	0.13
C	756.04	189.01	757.12	526.37	81.91	0.00	1970.21	1840.52	0.384	0.89	0.63

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

Arm	Demand (PCU/hr)	Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)
A	450.21	112.55	450.50	684.25	18.09	0.00	2082.50	2058.90	0.216	0.35	0.28
B	118.20	29.55	118.31	77.60	390.98	0.00	1261.49	463.81	0.094	0.13	0.10
C	633.15	158.29	633.76	440.72	68.57	0.00	1979.46	1840.52	0.320	0.63	0.47

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	4.06	0.27	0.037	A	A
B	1.52	0.10	0.052	A	A
C	6.89	0.46	0.044	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	5.15	0.34	0.039	A	A
B	1.93	0.13	0.056	A	A
C	9.15	0.61	0.049	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	6.84	0.46	0.042	A	A
B	2.58	0.17	0.061	A	A
C	13.09	0.87	0.058	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	6.94	0.46	0.042	A	A
B	2.62	0.17	0.061	A	A
C	13.40	0.89	0.058	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	5.31	0.35	0.039	A	A
B	2.00	0.13	0.056	A	A
C	9.56	0.64	0.049	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	4.19	0.28	0.037	A	A
B	1.58	0.11	0.053	A	A
C	7.19	0.48	0.045	A	A

Overview: Standard Roundabout Geometry

Standard 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	Final Slope	Final Intercept (PCU/hr)
A	6.00	8.00	15.00	20.00	45.00	49.00		0.685	2094.901
B	3.50	7.00	10.00	20.00	45.00	44.00		0.571	1484.915
C	5.75	7.00	10.00	35.00	45.00	34.00		0.694	2027.030

Overview: Time Segment Results