Appendix H: Level Crossing Assessments

Prepared for

West of England Councils

April 2016

ch2m.

1 The Square
Temple Quay
Bristol BS1 6DG
United Kingdom

Contents

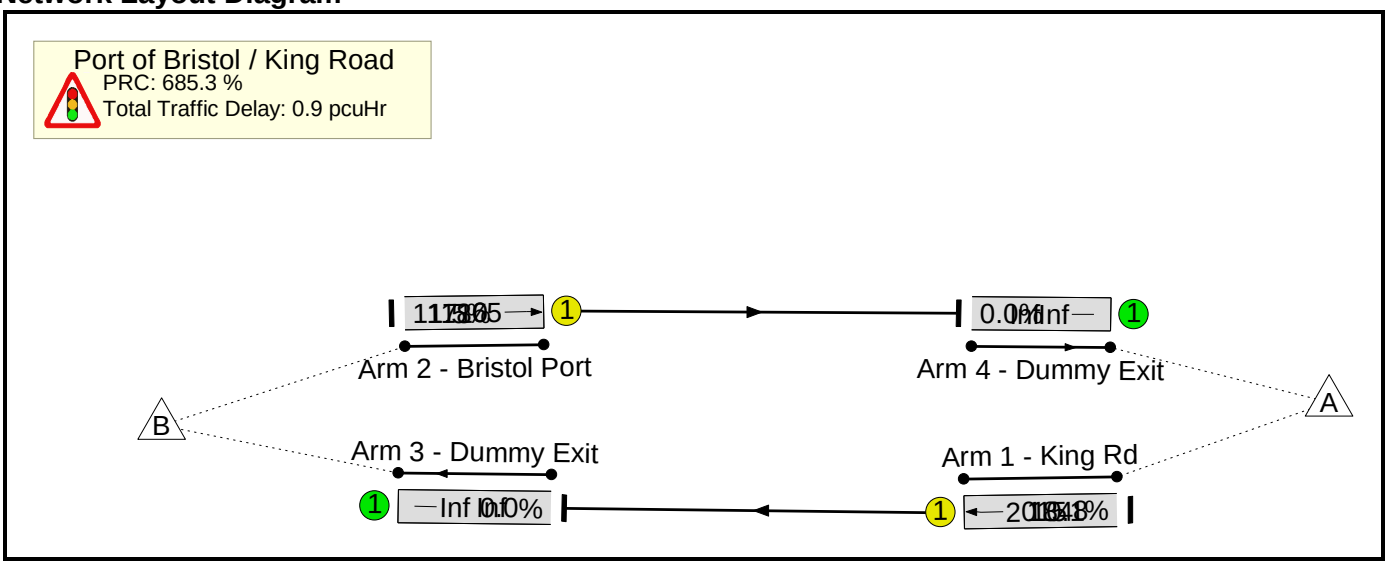
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	King Road - Port of Bristol 3600.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 1: '2015 Base AM' (FG1: '2015 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**11.5%**	**0**	**0**	**0**	**0.9**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**11.5%**	**0**	**0**	**0**	**0.9**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3299	-	187	2015	1848	10.1%	-	-	-	0.4	7.9	8.7
2/1	Bristol Port Ahead	U	B		2	3299	-	196	1865	1710	11.5%	-	-	-	0.4	8.1	9.2

C1

PRC for Signalled Lanes (%): 685.3
PRC Over All Lanes (%): 685.3

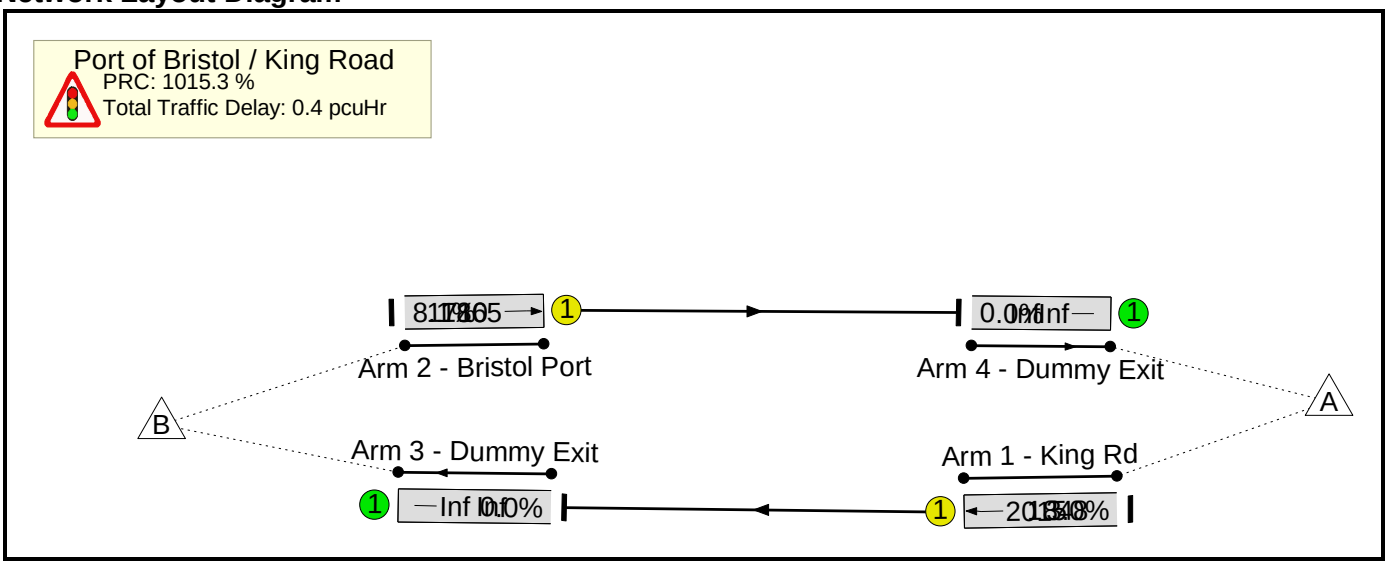
Total Delay for Signalled Lanes (pcuHr): 0.85
Total Delay Over All Lanes(pcuHr): 0.85

Cycle Time (s): 3600

Basic Results Summary

Scenario 2: '2015 Base PM' (FG2: '2015 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**8.1%**	**0**	**0**	**0**	**0.4**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**8.1%**	**0**	**0**	**0**	**0.4**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3299	-	56	2015	1848	3.0%	-	-	-	0.1	7.4	2.4
2/1	Bristol Port Ahead	U	B		2	3299	-	138	1865	1710	8.1%	-	-	-	0.3	7.8	6.2

C1

PRC for Signalled Lanes (%): 1015.3
PRC Over All Lanes (%): 1015.3

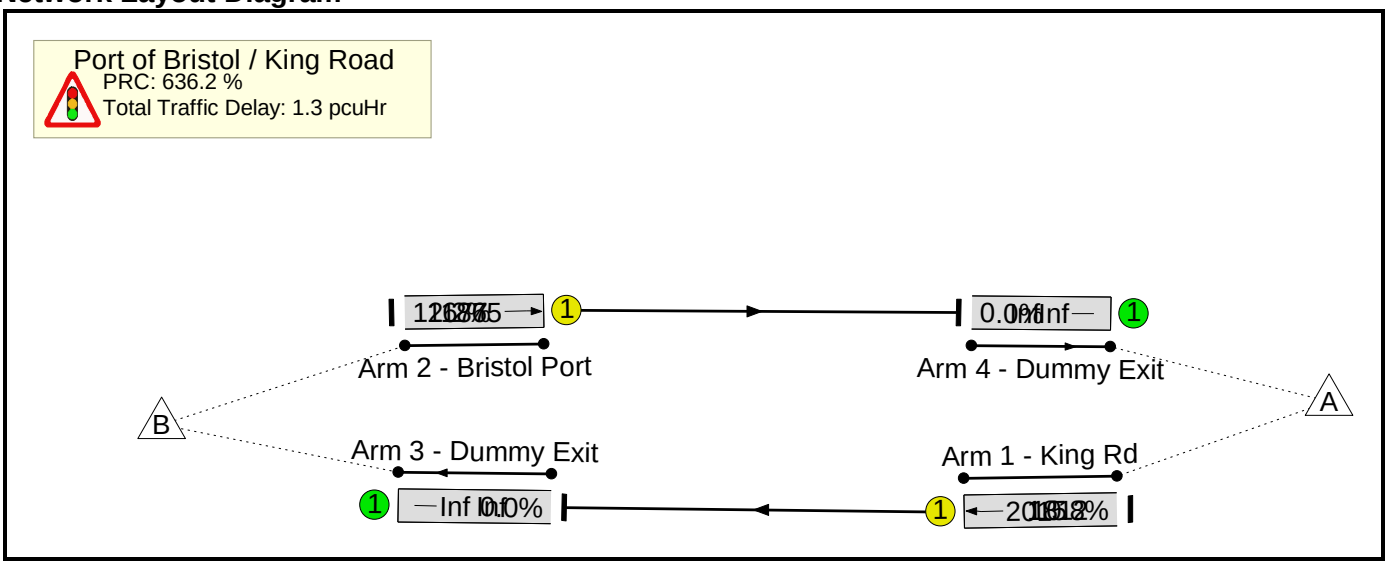
Total Delay for Signalled Lanes (pcuHr): 0.42
Total Delay Over All Lanes(pcuHr): 0.42

Cycle Time (s): 3600

Basic Results Summary

Scenario 3: '2019 Opening Year AM' (FG3: '2019 Opening Year AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**12.2%**	**0**	**0**	**0**	**1.3**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**12.2%**	**0**	**0**	**0**	**1.3**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3235	-	196	2015	1812	10.8%	-	-	-	0.6	11.5	12.7
2/1	Bristol Port Ahead	U	B		2	3235	-	205	1865	1677	12.2%	-	-	-	0.7	11.8	13.5

C1

PRC for Signalled Lanes (%): 636.2
PRC Over All Lanes (%): 636.2

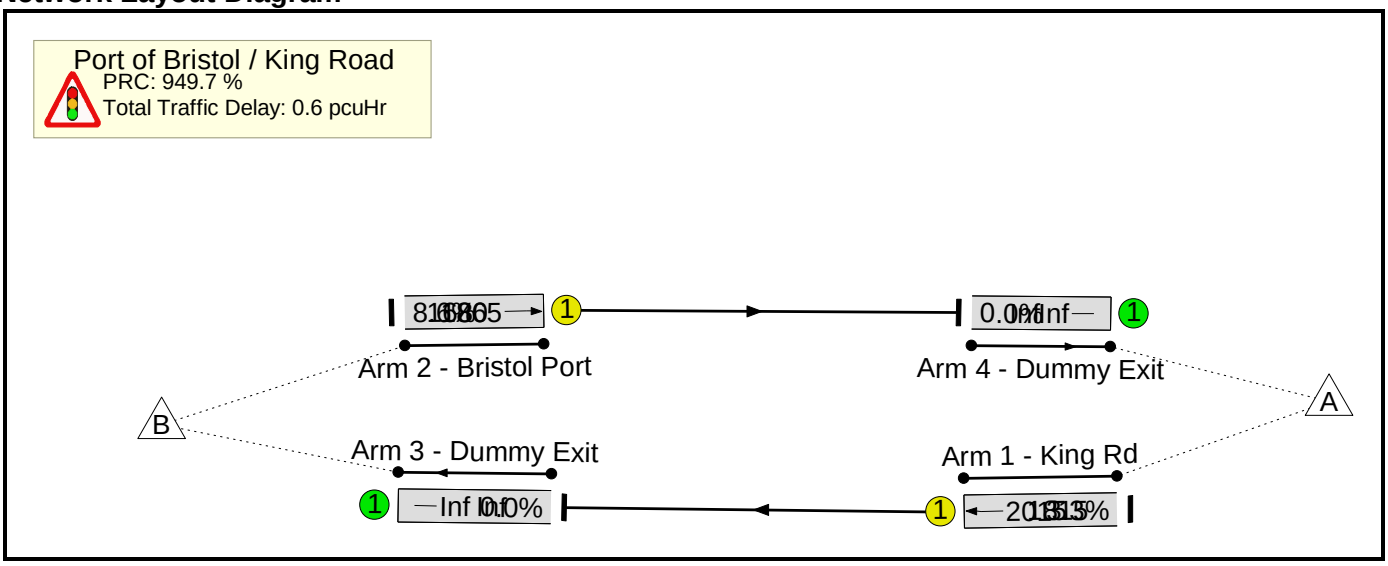
Total Delay for Signalled Lanes (pcuHr): 1.30
Total Delay Over All Lanes(pcuHr): 1.30

Cycle Time (s): 3600

Basic Results Summary

Scenario 4: '2019 Opening Year PM' (FG4: '2019 Opening Year PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**8.6%**	**0**	**0**	**0**	**0.6**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**8.6%**	**0**	**0**	**0**	**0.6**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3240	-	59	2015	1815	3.3%	-	-	-	0.2	10.4	3.5
2/1	Bristol Port Ahead	U	B		2	3240	-	144	1865	1680	8.6%	-	-	-	0.4	11.0	8.9

C1

PRC for Signalled Lanes (%): 949.7
PRC Over All Lanes (%): 949.7

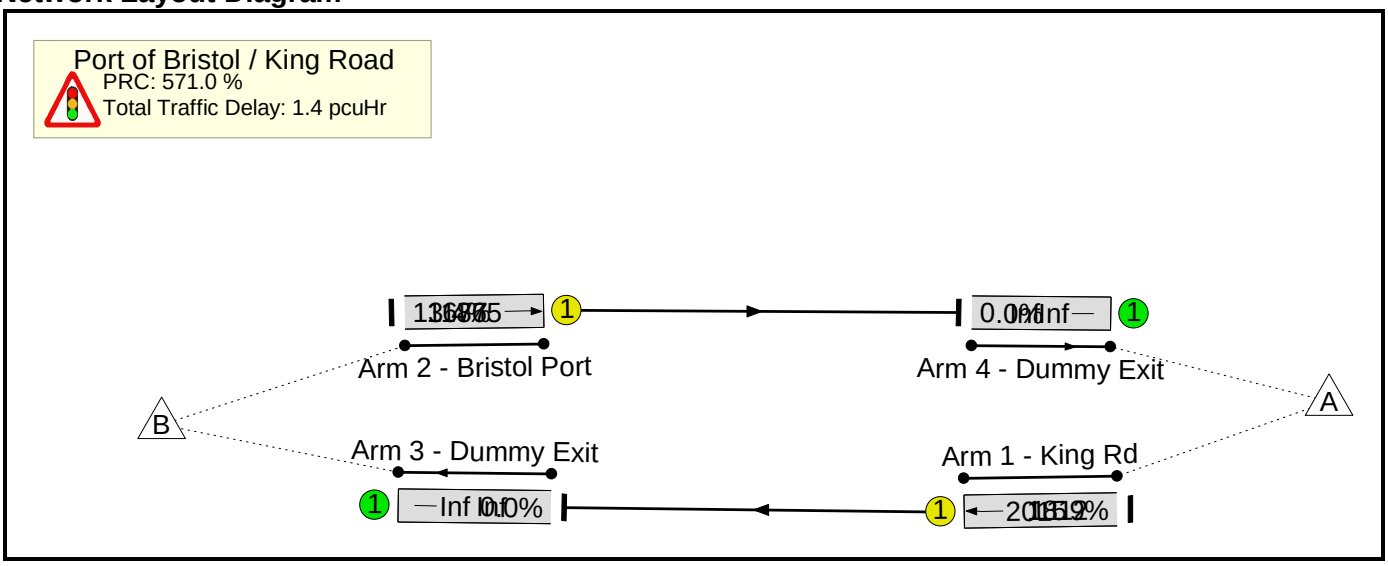
Total Delay for Signalled Lanes (pcuHr): 0.61
Total Delay Over All Lanes(pcuHr): 0.61

Cycle Time (s): 3600

Basic Results Summary

Scenario 5: '2029 Assessment AM' (FG5: '2029 Assessment AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

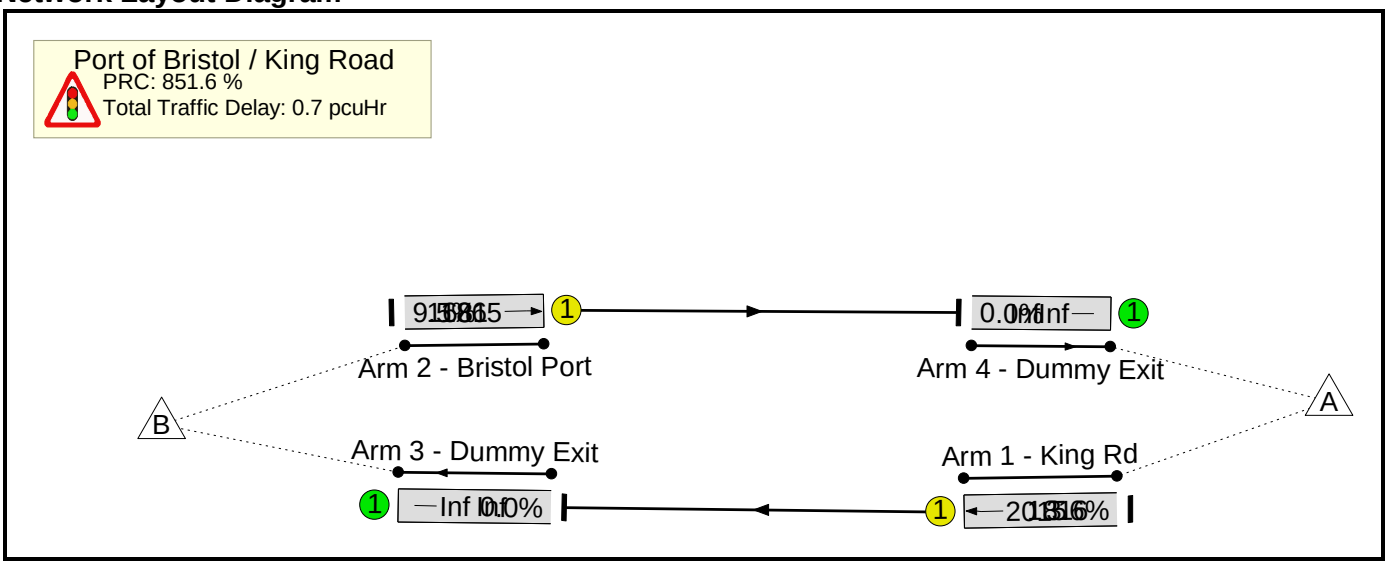
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.4%**	**0**	**0**	**0**	**1.4**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.4%**	**0**	**0**	**0**	**1.4**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3236	-	215	2015	1812	11.9%	-	-	-	0.7	11.5	13.9
2/1	Bristol Port Ahead	U	B		2	3236	-	225	1865	1677	13.4%	-	-	-	0.7	11.8	14.8

C1 PRC for Signalled Lanes (%): 571.0 Total Delay for Signalled Lanes (pcuHr): 1.43 Cycle Time (s): 3600
PRC Over All Lanes (%): 571.0 Total Delay Over All Lanes(pcuHr): 1.43

Basic Results Summary

Scenario 6: '2029 Assessment PM' (FG6: '2029 Assessment PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**9.5%**	**0**	**0**	**0**	**0.7**	**-**	**-**
Port of Bristol / King Road	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**9.5%**	**0**	**0**	**0**	**0.7**	**-**	**-**
1/1	King Rd Ahead	U	A		2	3243	-	65	2015	1816	3.6%	-	-	-	0.2	10.2	3.8
2/1	Bristol Port Ahead	U	B		2	3243	-	159	1865	1681	9.5%	-	-	-	0.5	10.9	9.8

C1

PRC for Signalled Lanes (%): 851.6
PRC Over All Lanes (%): 851.6

Total Delay for Signalled Lanes (pcuHr): 0.67
Total Delay Over All Lanes(pcuHr): 0.67

Cycle Time (s): 3600

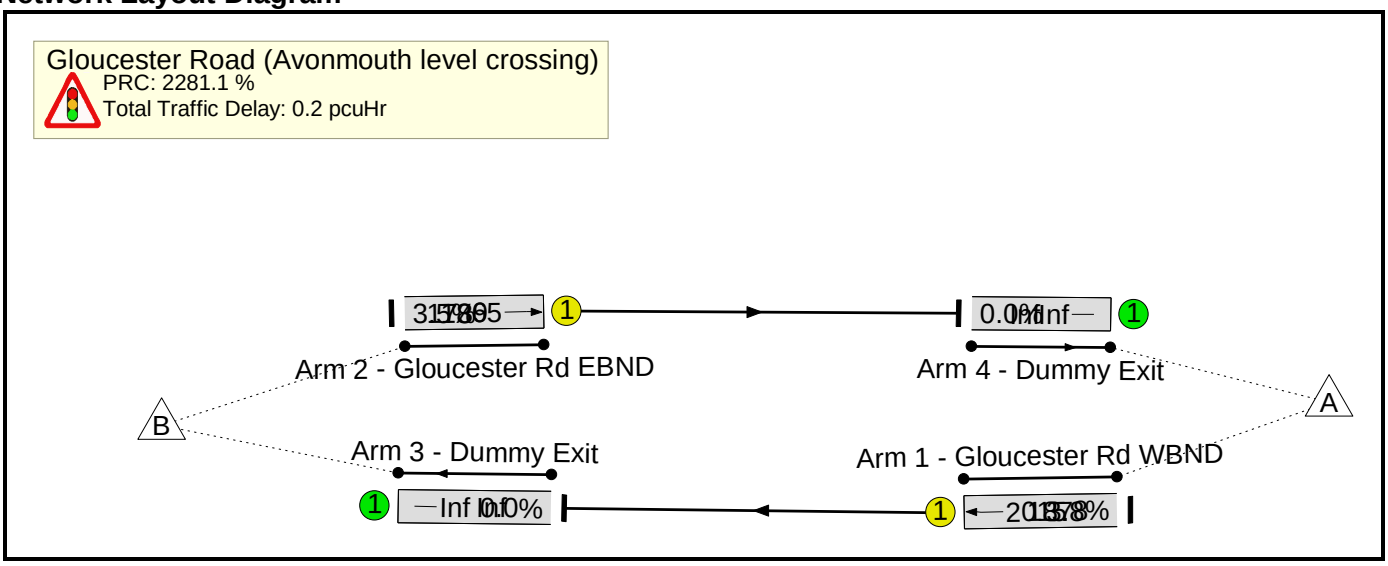
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	Avonmouth Level Crossing 3600.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 1: '2015 Base AM' (FG1: '2015 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.8%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.8%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3354	-	71	2015	1878	3.8%	-	-	-	0.1	5.3	2.5
2/1	Gloucester Rd EBND Ahead	U	B		2	3354	-	60	1865	1739	3.5%	-	-	-	0.1	5.3	2.1

C1

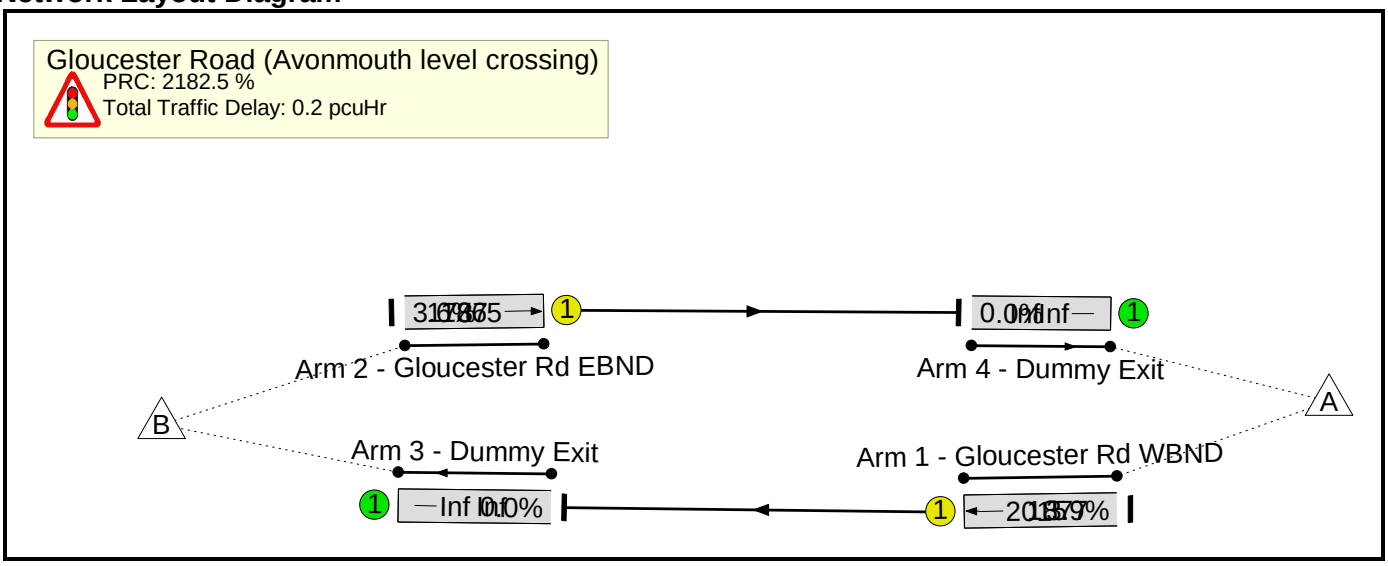
PRC for Signalled Lanes (%): 2281.1 Total Delay for Signalled Lanes (pcuHr): 0.19 Cycle Time (s): 3600

PRC Over All Lanes (%): 2281.1 Total Delay Over All Lanes(pcuHr): 0.19

Basic Results Summary

Scenario 2: '2015 Base PM' (FG2: '2015 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.9%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.9%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3351	-	74	2015	1877	3.9%	-	-	-	0.1	5.4	2.7
2/1	Gloucester Rd EBND Ahead	U	B		2	3351	-	63	1865	1737	3.6%	-	-	-	0.1	5.5	2.3

C1

PRC for Signalled Lanes (%): 2182.5
PRC Over All Lanes (%): 2182.5

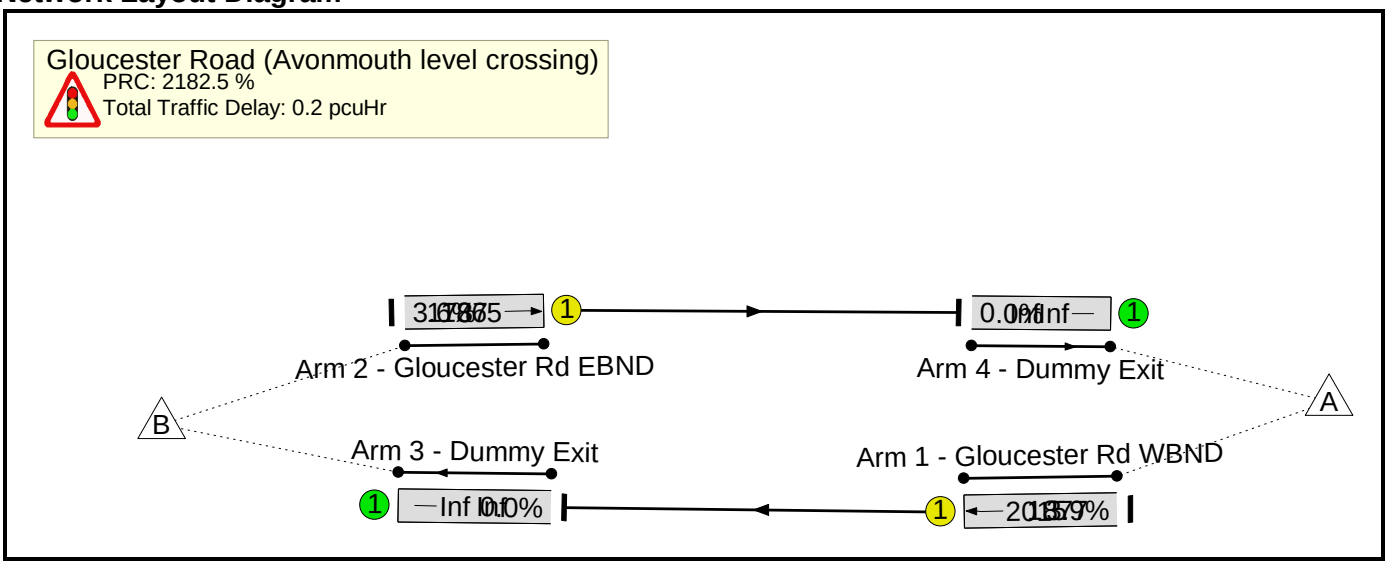
Total Delay for Signalled Lanes (pcuHr): 0.21
Total Delay Over All Lanes(pcuHr): 0.21

Cycle Time (s): 3600

Basic Results Summary

Scenario 3: '2019 Opening Year AM' (FG3: '2019 Opening Year AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.9%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**3.9%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3351	-	74	2015	1877	3.9%	-	-	-	0.1	5.4	2.7
2/1	Gloucester Rd EBND Ahead	U	B		2	3351	-	63	1865	1737	3.6%	-	-	-	0.1	5.5	2.3

C1

PRC for Signalled Lanes (%): 2182.5
PRC Over All Lanes (%): 2182.5

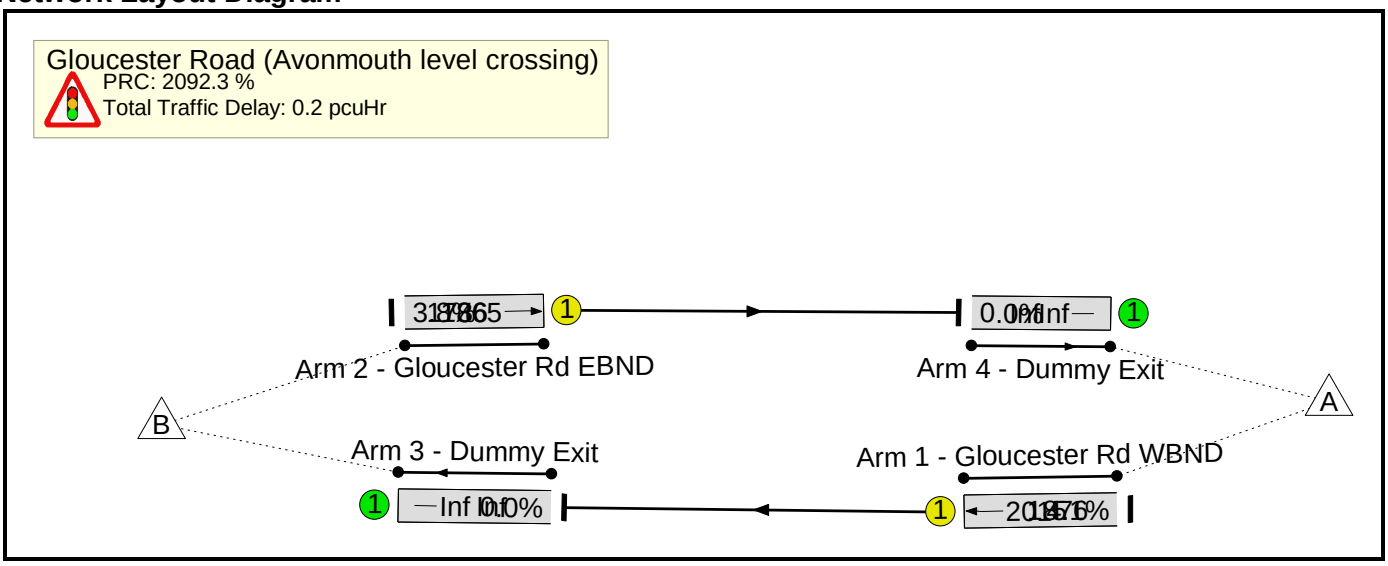
Total Delay for Signalled Lanes (pcuHr): 0.21
Total Delay Over All Lanes(pcuHr): 0.21

Cycle Time (s): 3600

Basic Results Summary

Scenario 4: '2019 Opening Year PM' (FG4: '2019 Opening Year PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.1%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.1%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3349	-	77	2015	1876	4.1%	-	-	-	0.1	5.5	2.8
2/1	Gloucester Rd EBND Ahead	U	B		2	3349	-	66	1865	1736	3.8%	-	-	-	0.1	5.5	2.4

C1

PRC for Signalled Lanes (%): 2092.3
PRC Over All Lanes (%): 2092.3

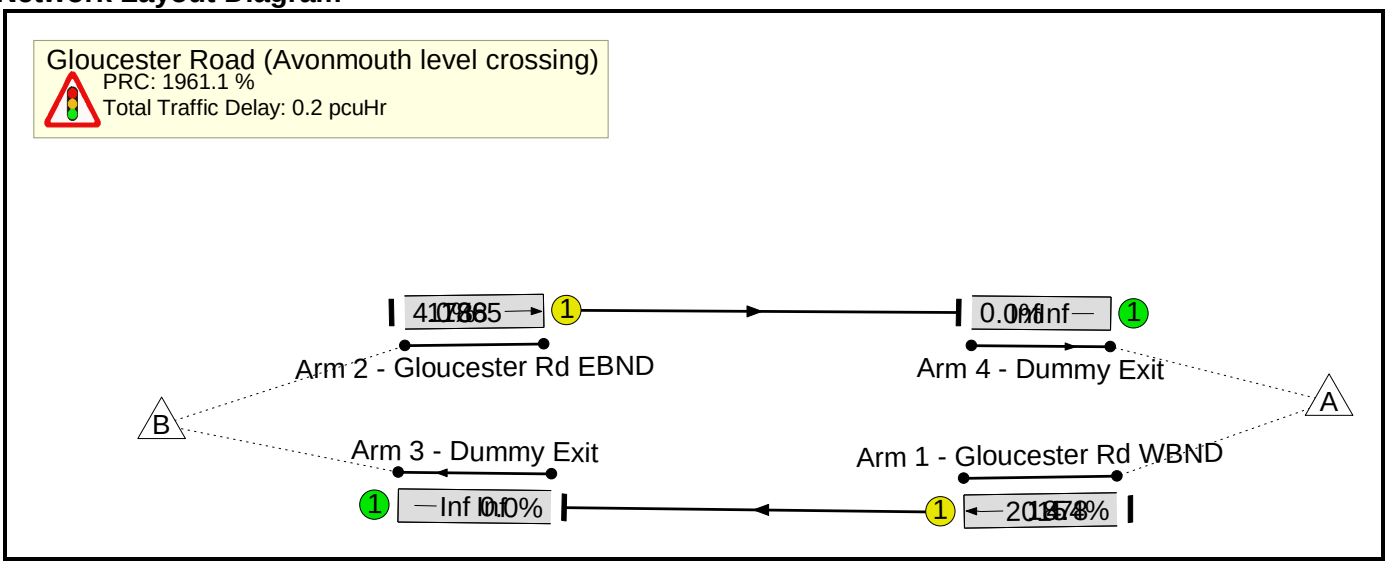
Total Delay for Signalled Lanes (pcuHr): 0.22
Total Delay Over All Lanes(pcuHr): 0.22

Cycle Time (s): 3600

Basic Results Summary

Scenario 5: '2029 Assessment AM' (FG5: '2029 Assessment AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.4%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.4%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3353	-	82	2015	1878	4.4%	-	-	-	0.1	5.3	2.9
2/1	Gloucester Rd EBND Ahead	U	B		2	3353	-	69	1865	1738	4.0%	-	-	-	0.1	5.4	2.5

C1

PRC for Signalled Lanes (%): 1961.1
PRC Over All Lanes (%): 1961.1

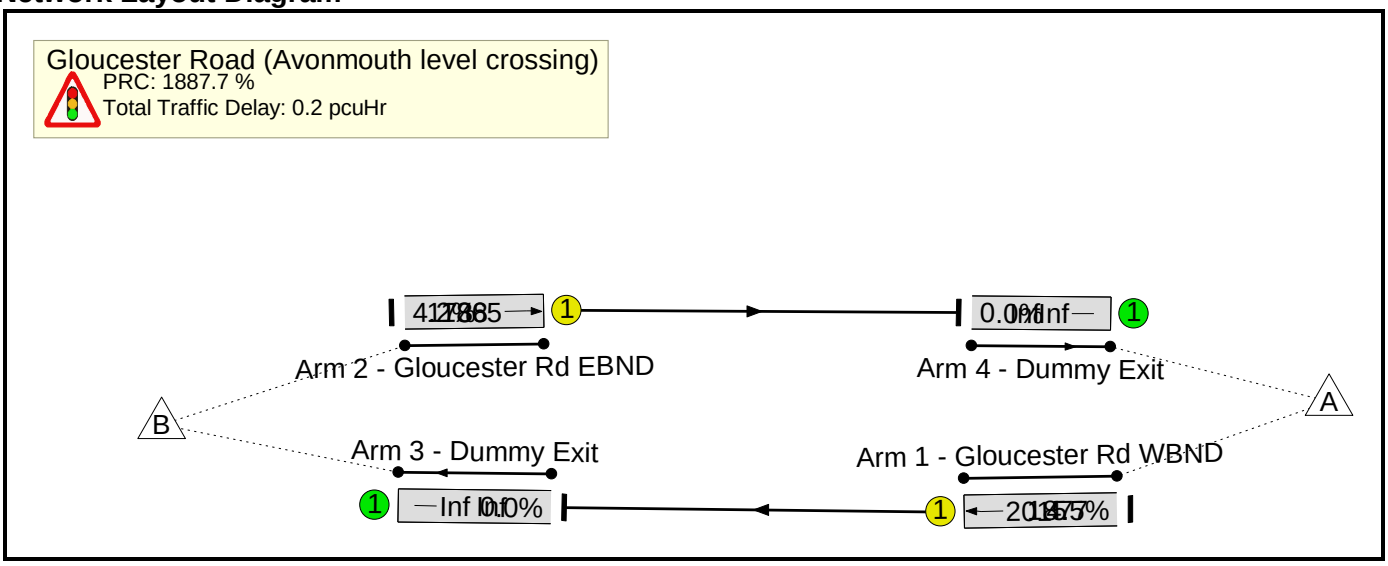
Total Delay for Signalled Lanes (pcuHr): 0.23
Total Delay Over All Lanes(pcuHr): 0.23

Cycle Time (s): 3600

Basic Results Summary

Scenario 6: '2029 Assessment PM' (FG6: '2029 Assessment PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.5%**	**0**	**0**	**0**	**0.2**	**-**	**-**
Gloucester Road (Avonmouth level crossing)	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**4.5%**	**0**	**0**	**0**	**0.2**	**-**	**-**
1/1	Gloucester Rd WBND Ahead	U	A		2	3352	-	85	2015	1877	4.5%	-	-	-	0.1	5.4	3.1
2/1	Gloucester Rd EBND Ahead	U	B		2	3352	-	73	1865	1738	4.2%	-	-	-	0.1	5.5	2.7

C1 PRC for Signalled Lanes (%): 1887.7 Total Delay for Signalled Lanes (pcuHr): 0.24 Cycle Time (s): 3600
PRC Over All Lanes (%): 1887.7 Total Delay Over All Lanes(pcuHr): 0.24

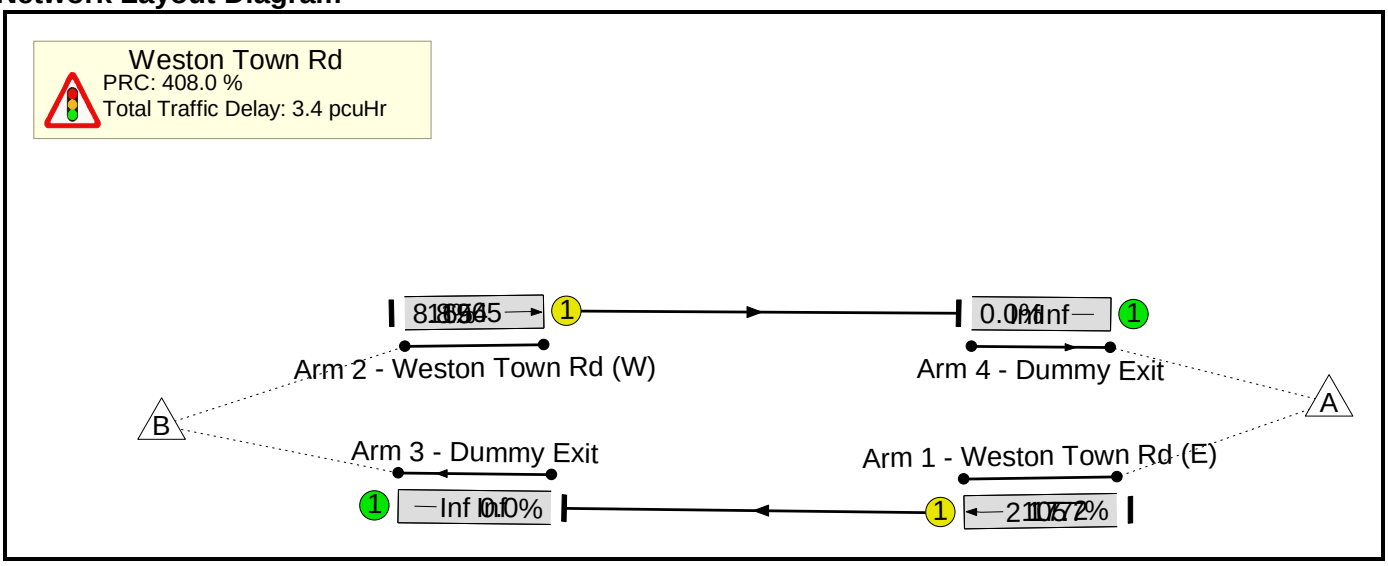
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	Portway_West Town Rd 3600.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 1: '2015 Base AM' (FG1: '2015 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**17.7%**	**0**	**0**	**0**	**3.4**	**-**	**-**
Weston Town Rd	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**17.7%**	**0**	**0**	**0**	**3.4**	**-**	**-**
1/1	Weston Town Rd (E) Ahead	U	A		2	3029	-	314	2105	1772	17.7%	-	-	-	2.4	27.7	29.2
2/1	Weston Town Rd (W) Ahead	U	B		2	3029	-	146	1965	1654	8.8%	-	-	-	1.0	25.5	12.5

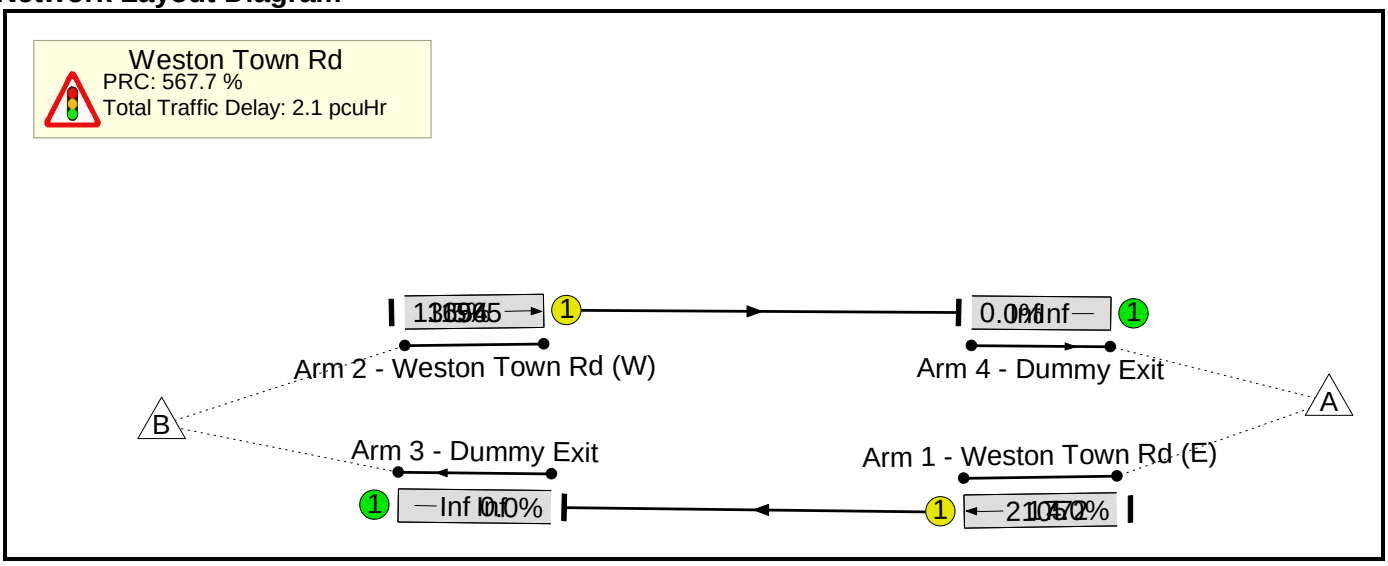
C1 PRC for Signalled Lanes (%): 408.0 Total Delay for Signalled Lanes (pcuHr): 3.45 Cycle Time (s): 3600

PRC Over All Lanes (%): 408.0 Total Delay Over All Lanes(pcuHr): 3.45

Basic Results Summary

Scenario 2: '2015 Base PM' (FG2: '2015 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.5%**	**0**	**0**	**0**	**2.1**	**-**	**-**
Weston Town Rd	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.5%**	**0**	**0**	**0**	**2.1**	**-**	**-**
1/1	Weston Town Rd (E) Ahead	U	A		2	3029	-	71	2105	1772	4.0%	-	-	-	0.5	24.3	5.8
2/1	Weston Town Rd (W) Ahead	U	B		2	3029	-	223	1965	1654	13.5%	-	-	-	1.6	26.6	20.0

C1

PRC for Signalled Lanes (%): 567.7
PRC Over All Lanes (%): 567.7

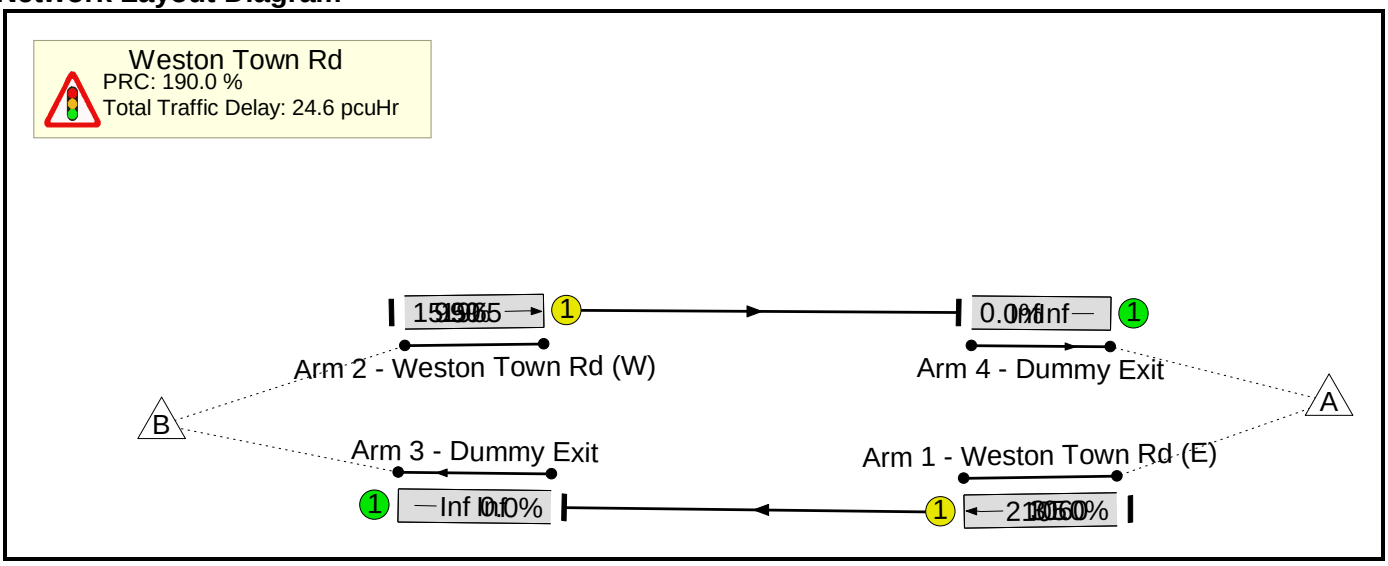
Total Delay for Signalled Lanes (pcuHr): 2.13
Total Delay Over All Lanes(pcuHr): 2.13

Cycle Time (s): 3600

Basic Results Summary

Scenario 3: '2019 Opening Year AM' (FG3: '2019 Opening Year AM', Plan 2: 'Proposed closure 1800s')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**31.0%**	**0**	**0**	**0**	**24.6**	-	-
Weston Town Rd	-	-	-		-	-	-	-	-	-	**31.0%**	**0**	**0**	**0**	**24.6**	-	-
1/1	Weston Town Rd (E) Ahead	U	A		3	1810	-	329	2105	1060	31.0%	-	-	-	17.2	188.6	86.8
2/1	Weston Town Rd (W) Ahead	U	B		3	1810	-	153	1965	990	15.5%	-	-	-	7.3	172.4	36.9

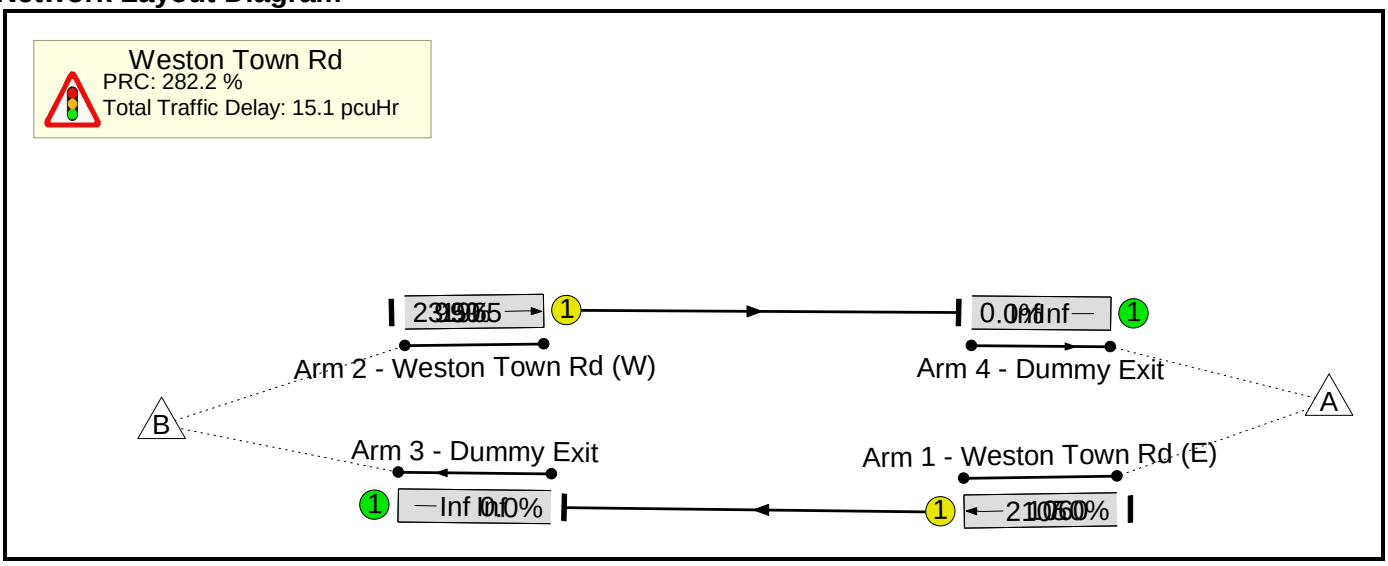
C1 PRC for Signalled Lanes (%): 190.0 Total Delay for Signalled Lanes (pcuHr): 24.56 Cycle Time (s): 3600

PRC Over All Lanes (%): 190.0 Total Delay Over All Lanes(pcuHr): 24.56

Basic Results Summary

Scenario 4: '2019 Opening Year PM' (FG4: '2019 Opening Year PM', Plan 2: 'Proposed closure 1800s')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**23.5%**	**0**	**0**	**0**	**15.1**	**-**	**-**
Weston Town Rd	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**23.5%**	**0**	**0**	**0**	**15.1**	**-**	**-**
1/1	Weston Town Rd (E) Ahead	U	A		3	1810	-	74	2105	1060	7.0%	-	-	-	3.4	164.6	17.1
2/1	Weston Town Rd (W) Ahead	U	B		3	1810	-	233	1965	990	23.5%	-	-	-	11.7	180.5	58.8

C1

PRC for Signalled Lanes (%): 282.2
PRC Over All Lanes (%): 282.2

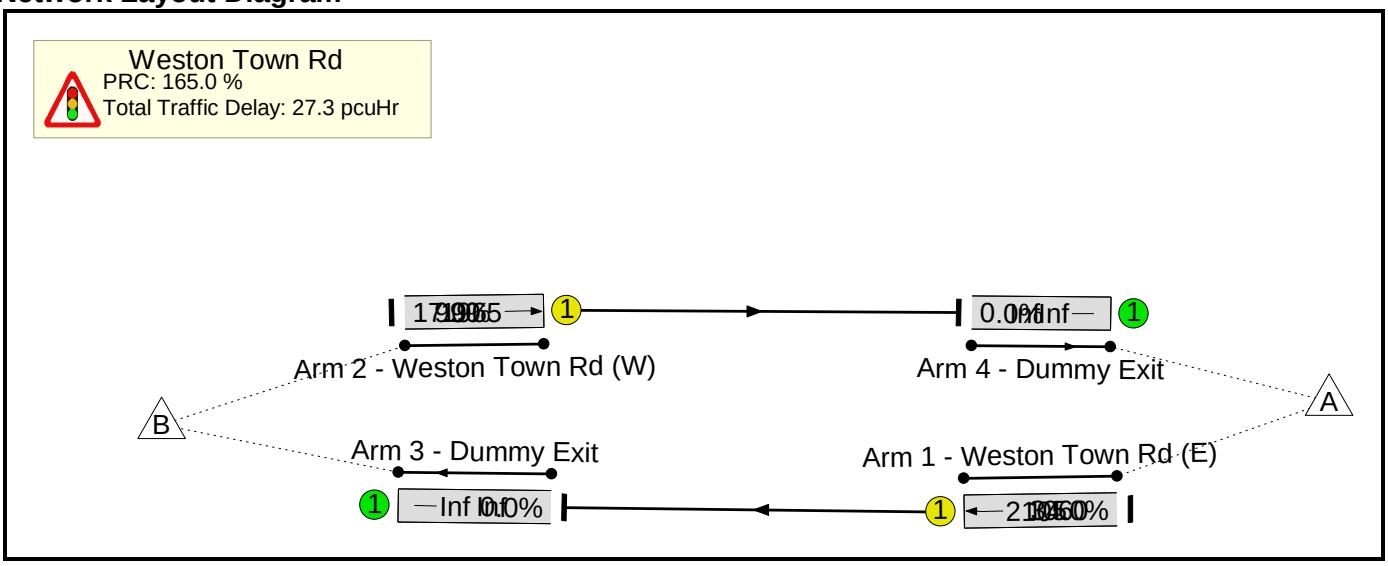
Total Delay for Signalled Lanes (pcuHr): 15.07
Total Delay Over All Lanes(pcuHr): 15.07

Cycle Time (s): 3600

Basic Results Summary

Scenario 5: '2029 Assessment AM' (FG5: '2029 Assessment AM', Plan 2: 'Proposed closure 1800s')

Network Layout Diagram



Basic Results Summary

Network Results

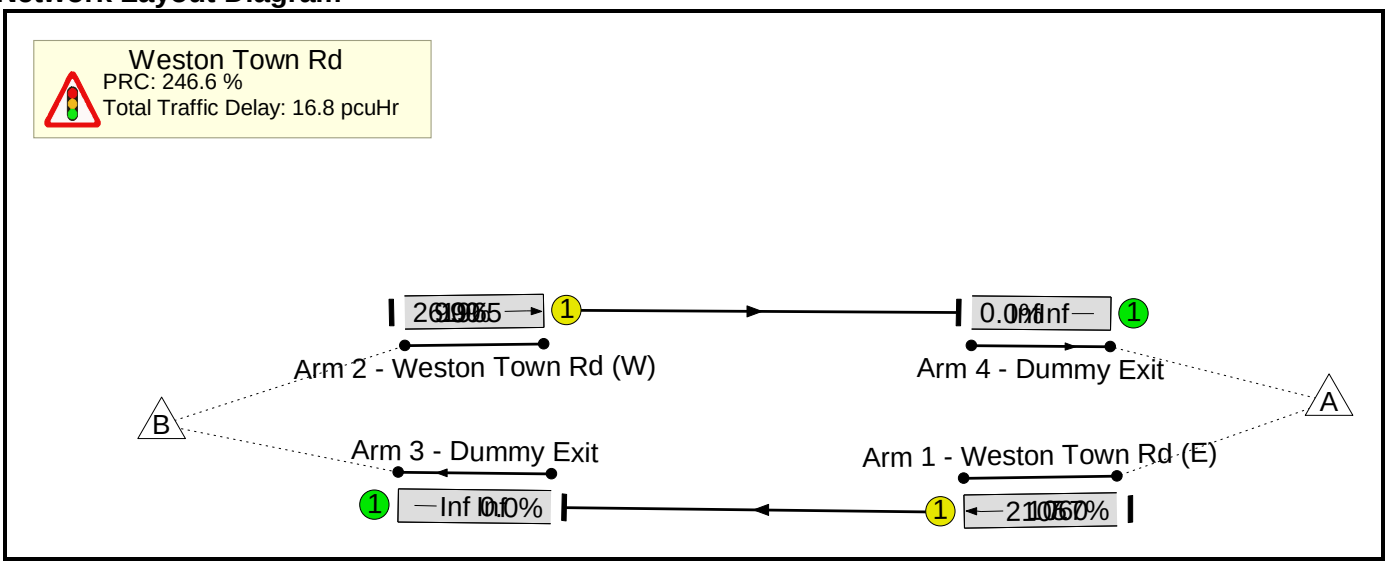
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**34.0%**	**0**	**0**	**0**	**27.3**	-	-
Weston Town Rd	-	-	-		-	-	-	-	-	-	**34.0%**	**0**	**0**	**0**	**27.3**	-	-
1/1	Weston Town Rd (E) Ahead	U	A		3	1810	-	360	2105	1060	34.0%	-	-	-	19.2	192.0	96.6
2/1	Weston Town Rd (W) Ahead	U	B		3	1810	-	168	1965	990	17.0%	-	-	-	8.1	173.9	40.8

C1 PRC for Signalled Lanes (%): 165.0 Total Delay for Signalled Lanes (pcuHr): 27.31 Cycle Time (s): 3600
PRC Over All Lanes (%): 165.0 Total Delay Over All Lanes(pcuHr): 27.31

Basic Results Summary

Scenario 6: '2029 Assessment PM' (FG6: '2029 Assessment PM', Plan 2: 'Proposed closure 1800s')

Network Layout Diagram



Basic Results Summary

Network Results

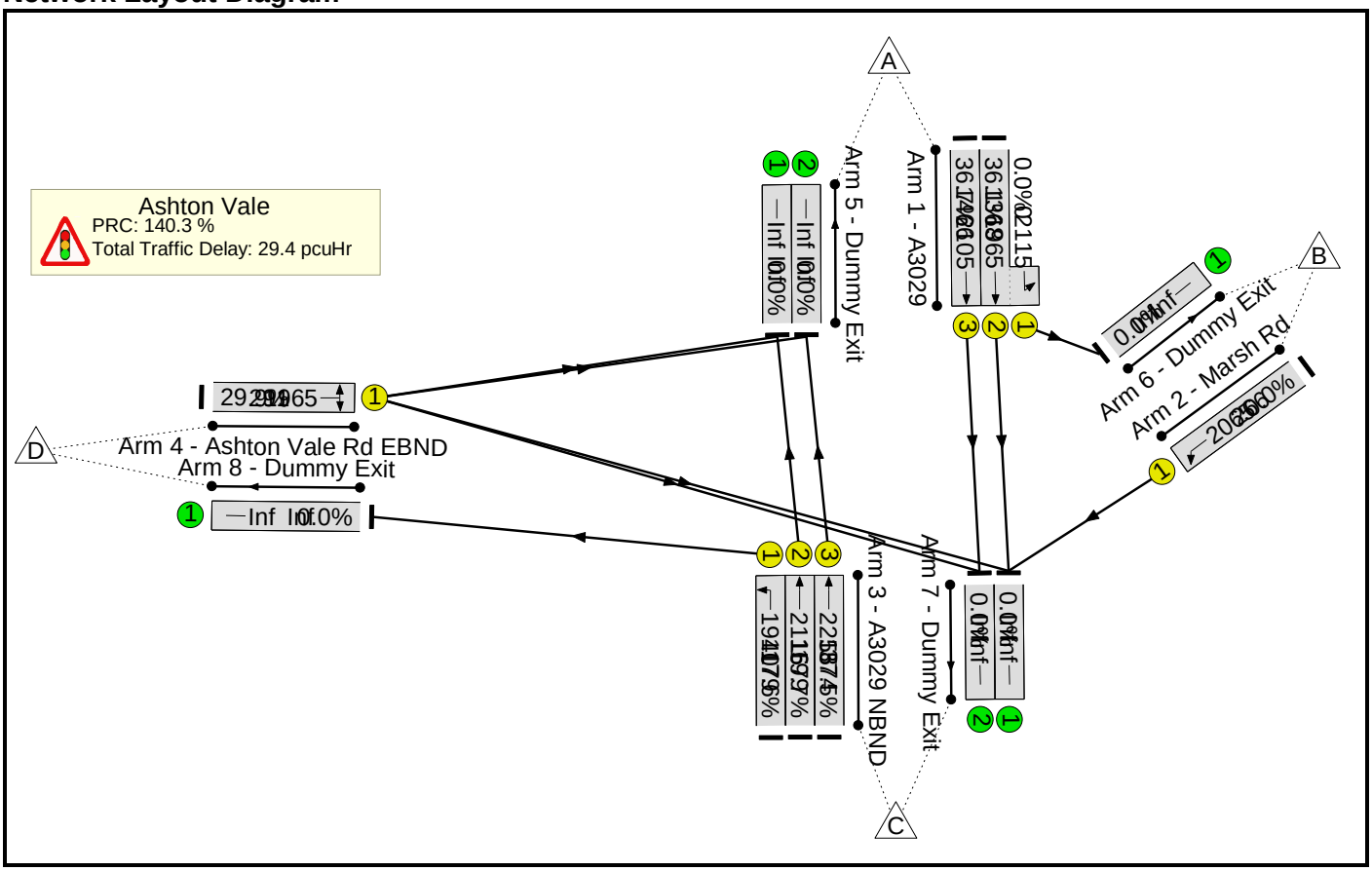
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**26.0%**	**0**	**0**	**0**	**16.8**	**-**	**-**
Weston Town Rd	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**26.0%**	**0**	**0**	**0**	**16.8**	**-**	**-**
1/1	Weston Town Rd (E) Ahead	U	A		3	1810	-	82	2105	1060	7.7%	-	-	-	3.8	165.2	19.0
2/1	Weston Town Rd (W) Ahead	U	B		3	1810	-	257	1965	990	26.0%	-	-	-	13.1	183.1	65.8

C1 PRC for Signalled Lanes (%): 246.6 Total Delay for Signalled Lanes (pcuHr): 16.83 Cycle Time (s): 3600
PRC Over All Lanes (%): 246.6 Total Delay Over All Lanes(pcuHr): 16.83

Basic Results Summary

Scenario 7: 'With scheme 2019 AM' (FG4: '2019 AM', Plan 7: 'With scheme 810s closure')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.5%**	**0**	**0**	**0**	**29.4**	**-**	**-**
Ashton Vale	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.5%**	**0**	**0**	**0**	**29.4**	**-**	**-**
1/2+1/1	A3029 Left Ahead	U	I M		5:6	2503:2366	-	494	1965:2115	1368+0	36.1 : 0.0%	-	-	-	6.7	48.7	49.0
1/3	A3029 Ahead	U	I		5	2503	-	538	2105	1466	36.7%	-	-	-	7.3	48.7	53.6
2/1	Marsh Rd Left	U	J		5	459	-	0	2065	266	0.0%	-	-	-	0.0	0.0	0.0
3/1	A3029 NBND Left	U	C		8	2179	-	208	1940	1179	17.6%	-	-	-	2.8	49.0	19.9
3/2	A3029 NBND Ahead	U	A		6	2852	-	330	2115	1679	19.7%	-	-	-	1.5	16.8	16.6
3/3	A3029 NBND Ahead	U	G		5	2987	-	702	2255	1874	37.5%	-	-	-	3.3	16.8	43.8
4/1	Ashton Vale Rd EBND Left Right	U	B		5	528	-	87	1965	291	29.9%	-	-	-	7.8	323.5	23.8

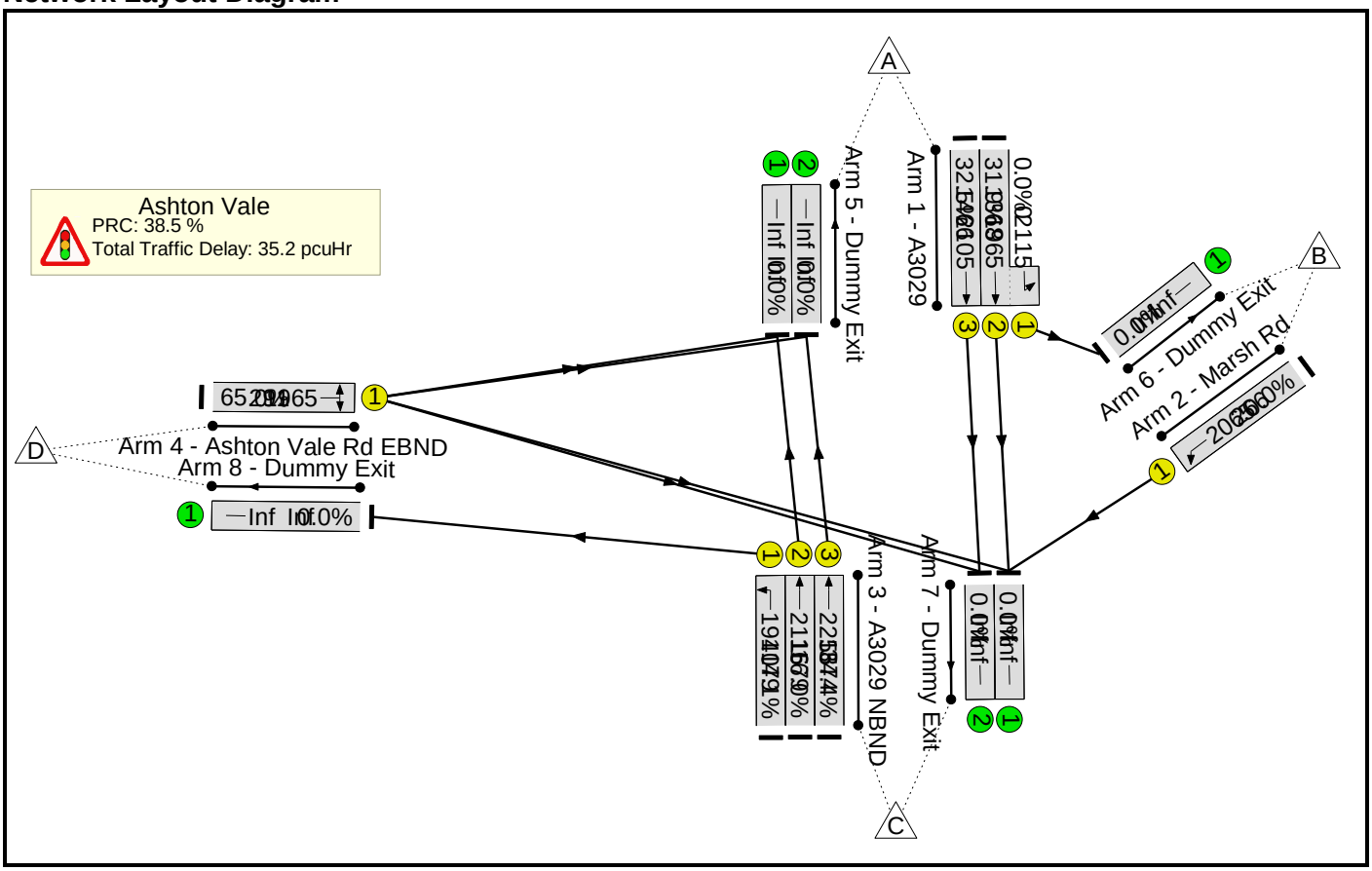
C1 PRC for Signalled Lanes (%): 140.3 Total Delay for Signalled Lanes (pcuHr): 29.42 Cycle Time (s): 3600

PRC Over All Lanes (%): 140.3 Total Delay Over All Lanes(pcuHr): 29.42

Basic Results Summary

Scenario 8: 'With scheme 2019 PM' (FG5: '2019 PM', Plan 7: 'With scheme 810s closure')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.0%**	**0**	**0**	**0**	**35.2**	**-**	**-**
Ashton Vale	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**65.0%**	**0**	**0**	**0**	**35.2**	**-**	**-**
1/2+1/1	A3029 Left Ahead	U	I M		5:6	2503:2366	-	437	1965:2115	1368+0	31.9 : 0.0%	-	-	-	5.7	46.8	41.7
1/3	A3029 Ahead	U	I		5	2503	-	477	2105	1466	32.5%	-	-	-	6.2	46.8	45.7
2/1	Marsh Rd Left	U	J		5	459	-	0	2065	266	0.0%	-	-	-	0.0	0.0	0.0
3/1	A3029 NBND Left	U	C		8	2179	-	48	1940	1179	4.1%	-	-	-	0.6	44.8	4.2
3/2	A3029 NBND Ahead	U	A		6	2852	-	269	2115	1679	16.0%	-	-	-	1.2	16.2	13.1
3/3	A3029 NBND Ahead	U	G		5	2987	-	645	2255	1874	34.4%	-	-	-	2.9	16.2	38.8
4/1	Ashton Vale Rd EBND Left Right	U	B		5	528	-	189	1965	291	65.0%	-	-	-	18.6	353.7	54.8

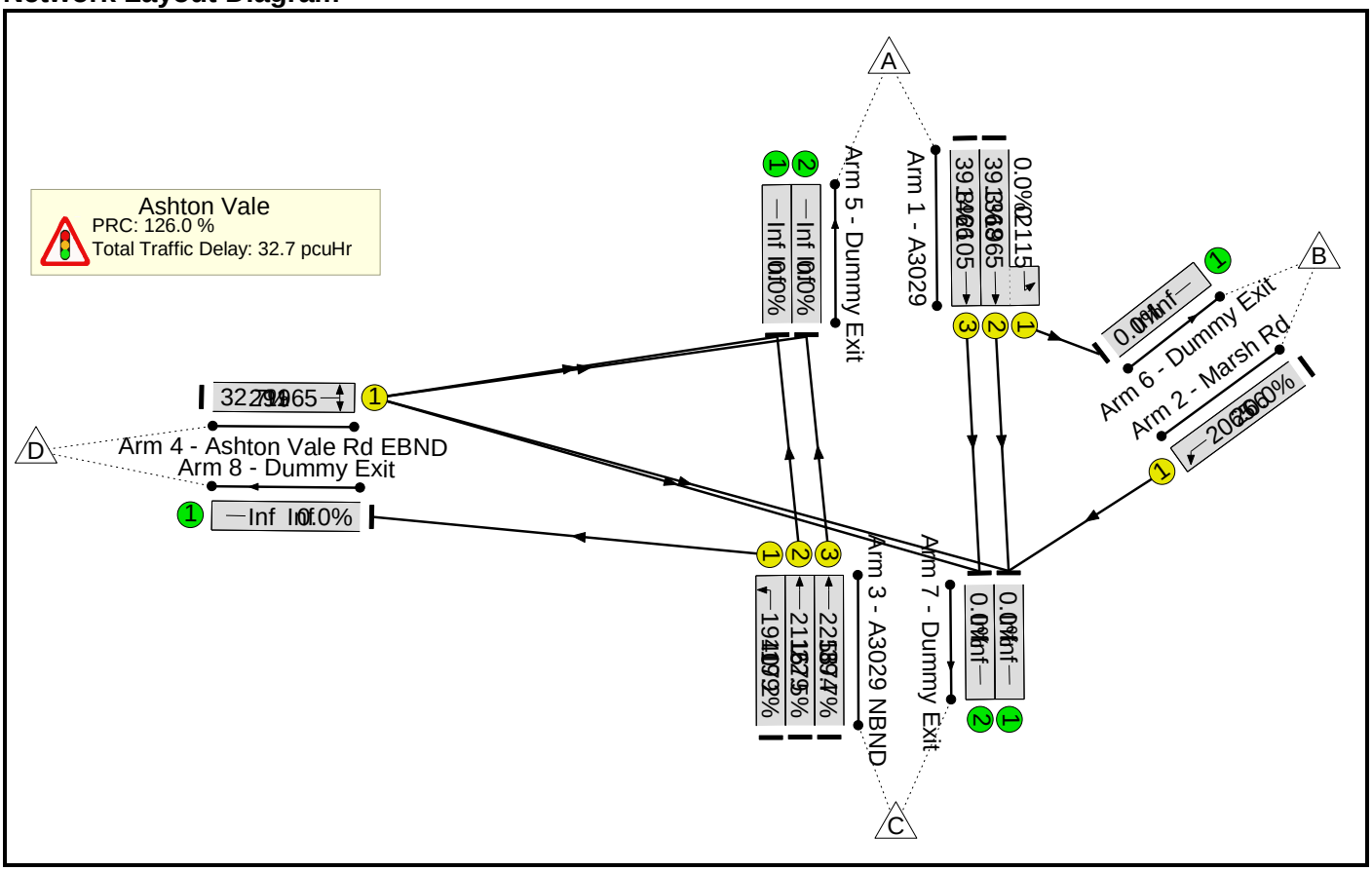
C1 PRC for Signalled Lanes (%): 38.5 Total Delay for Signalled Lanes (pcuHr): 35.16 Cycle Time (s): 3600

PRC Over All Lanes (%): 38.5 Total Delay Over All Lanes(pcuHr): 35.16

Basic Results Summary

Scenario 9: 'With scheme 2029 AM' (FG7: '2029 AM', Plan 7: 'With scheme 810s closure')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.8%**	**0**	**0**	**0**	**32.7**	**-**	**-**
Ashton Vale	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.8%**	**0**	**0**	**0**	**32.7**	**-**	**-**
1/2+1/1	A3029 Left Ahead	U	I M		5:6	2503:2366	-	538	1965:2115	1368+0	39.3 : 0.0%	-	-	-	7.5	50.2	55.0
1/3	A3029 Ahead	U	I		5	2503	-	584	2105	1466	39.8%	-	-	-	8.1	50.2	60.0
2/1	Marsh Rd Left	U	J		5	459	-	0	2065	266	0.0%	-	-	-	0.0	0.0	0.0
3/1	A3029 NBND Left	U	C		8	2179	-	226	1940	1179	19.2%	-	-	-	3.1	49.6	21.8
3/2	A3029 NBND Ahead	U	A		6	2852	-	378	2115	1679	22.5%	-	-	-	1.8	17.3	19.6
3/3	A3029 NBND Ahead	U	G		5	2987	-	744	2255	1874	39.7%	-	-	-	3.6	17.3	47.7
4/1	Ashton Vale Rd EBND Left Right	U	B		5	528	-	95	1965	291	32.7%	-	-	-	8.6	325.2	26.1

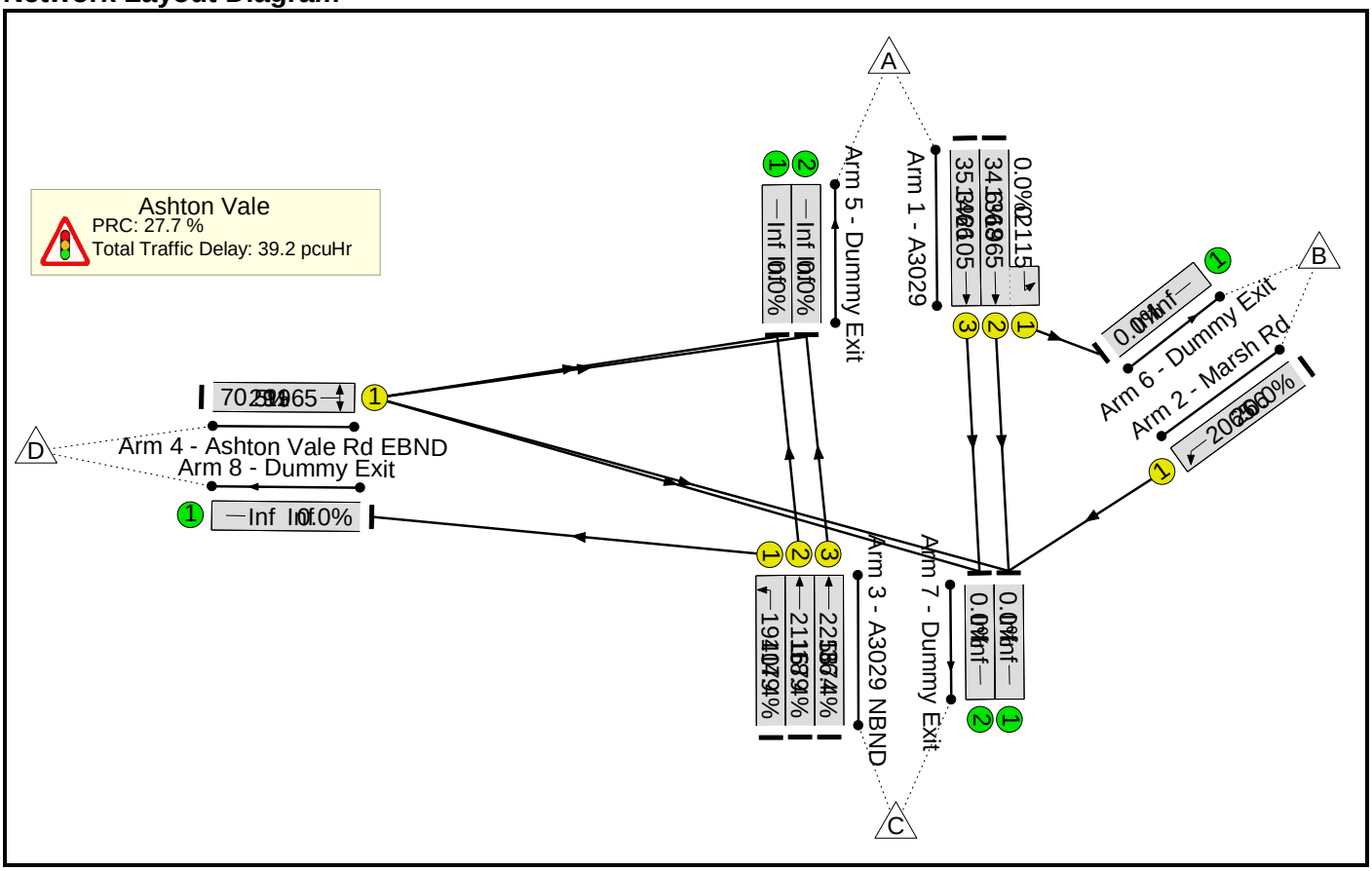
C1 PRC for Signalled Lanes (%): 126.0 Total Delay for Signalled Lanes (pcuHr): 32.72 Cycle Time (s): 3600

PRC Over All Lanes (%): 126.0 Total Delay Over All Lanes(pcuHr): 32.72

Basic Results Summary

Scenario 10: 'With scheme 2029 PM' (FG8: '2029 PM', Plan 7: 'With scheme 810s closure')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.5%**	**0**	**0**	**0**	**39.2**	**-**	**-**
Ashton Vale	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.5%**	**0**	**0**	**0**	**39.2**	**-**	**-**
1/2+1/1	A3029 Left Ahead	U	I M		5:6	2503:2366	-	474	1965:2115	1368+0	34.6 : 0.0%	-	-	-	6.3	48.0	46.5
1/3	A3029 Ahead	U	I		5	2503	-	517	2105	1466	35.3%	-	-	-	6.9	48.0	50.8
2/1	Marsh Rd Left	U	J		5	459	-	0	2065	266	0.0%	-	-	-	0.0	0.0	0.0
3/1	A3029 NBND Left	U	C		8	2179	-	52	1940	1179	4.4%	-	-	-	0.6	44.9	4.6
3/2	A3029 NBND Ahead	U	A		6	2852	-	309	2115	1679	18.4%	-	-	-	1.4	16.6	15.4
3/3	A3029 NBND Ahead	U	G		5	2987	-	682	2255	1874	36.4%	-	-	-	3.1	16.6	42.0
4/1	Ashton Vale Rd EBND Left Right	U	B		5	528	-	205	1965	291	70.5%	-	-	-	20.8	364.5	59.6

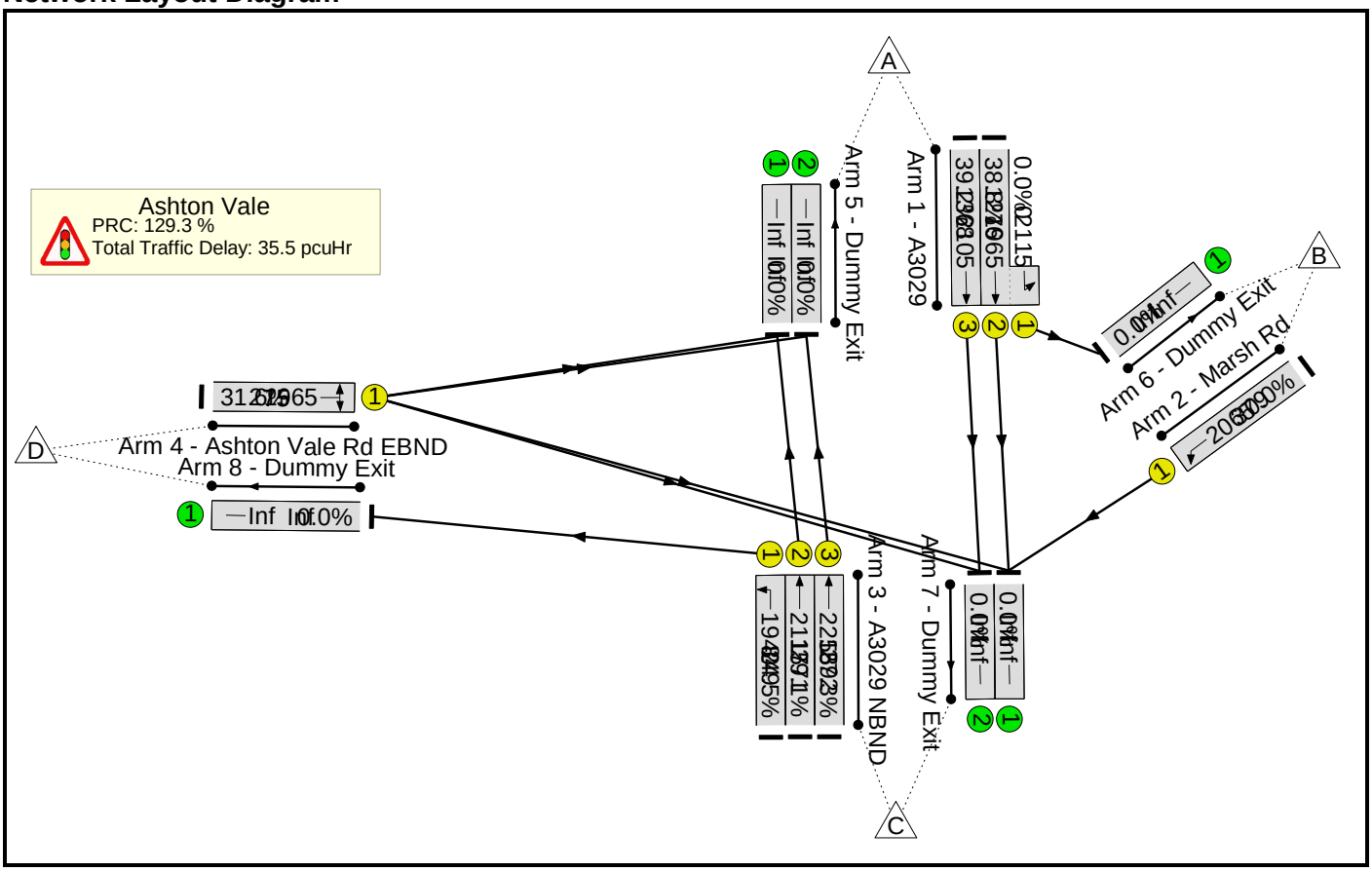
C1 PRC for Signalled Lanes (%): 27.7 Total Delay for Signalled Lanes (pcuHr): 39.19 Cycle Time (s): 3600

PRC Over All Lanes (%): 27.7 Total Delay Over All Lanes(pcuHr): 39.19

Basic Results Summary

Scenario 11: 'with scheme worst case 2019 AM (MW1 + Base Case Max Commercial Rights)' (FG4: '2019 AM', Plan 6: 'Worst case with scheme 1440s closure')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.2%**	**0**	**0**	**0**	**35.5**	**-**	**-**
Ashton Vale	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.2%**	**0**	**0**	**0**	**35.5**	**-**	**-**
1/2+1/1	A3029 Left Ahead	U	I M		5:6	2335:2326	-	495	1965:2115	1276+0	38.8 : 0.0%	-	-	-	9.1	66.1	63.3
1/3	A3029 Ahead	U	I		5	2335	-	537	2105	1368	39.2%	-	-	-	9.9	66.0	68.9
2/1	Marsh Rd Left	U	J		5	656	-	0	2065	379	0.0%	-	-	-	0.0	0.0	0.0
3/1	A3029 NBND Left	U	C		10	1565	-	208	1940	849	24.5%	-	-	-	5.2	90.5	33.6
3/2	A3029 NBND Ahead	U	A		6	3009	-	516	2115	1771	29.1%	-	-	-	2.0	13.9	26.3
3/3	A3029 NBND Ahead	U	G		5	3016	-	516	2255	1892	27.3%	-	-	-	2.0	13.9	26.1
4/1	Ashton Vale Rd EBND Left Right	U	B		5	499	-	87	1965	275	31.6%	-	-	-	7.4	306.2	22.2

C1 PRC for Signalled Lanes (%): 129.3 Total Delay for Signalled Lanes (pcuHr): 35.54 Cycle Time (s): 3600

PRC Over All Lanes (%): 129.3 Total Delay Over All Lanes(pcuHr): 35.54

Basic Results Summary

Scenario 12: 'with scheme worst case 2019 PM (MW1 + Base Case Max Commercial Rights)' (FG5: '2019 PM', Plan 6: 'Worst case with scheme 1440s closure')

Network Layout Diagram