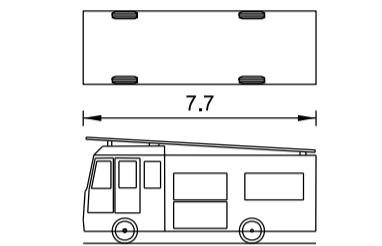


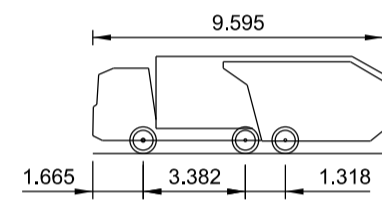


- Legend**
- Site Boundary
 - Large Refuse Vehicle Option 1
 - Large Refuse Vehicle Option 2
 - Fire Tender Option 1
 - Fire Tender Option 2

- Notes**
1. Do not scale from this drawing.
 2. The topographical survey detail shown on this drawing is based on a survey carried out by 'HSP Consulting' in July 2020. No responsibility can be taken for the accuracy of this survey.
 3. All levels are shown above ordnance datum (m AOD).
 4. Layouts are as received from Ares on 20.03.24 and are subject to ongoing coordination and further design development during subsequent stages.



- Dennis Sabre Fire Tender (LWB)
- Overall Length 7.700m
 - Overall Width 2.430m
 - Overall Body Height 3.512m
 - Min Body Ground Clearance 0.397m
 - Track Width 2.380m
 - Lock to Lock Time 5.00s
 - Kerb to Kerb Turning Radius 7.400m



- Phoenix 2-18W (with Elite 2 6x2MS chassis)
- Overall Length 9.595m
 - Overall Width 2.530m
 - Overall Body Height 3.205m
 - Min Body Ground Clearance 0.410m
 - Track Width 2.500m
 - Lock to lock time 4.00s
 - Kerb to Kerb Turning Radius 8.950m

P02	22/03/24	DS	CL	IA
Issued for Planning				
P01	24/11/23	AZ	CL	IA
Issued for RIBA Stage 3				
Issue	Date	By	Chkd	Appd

ARUP

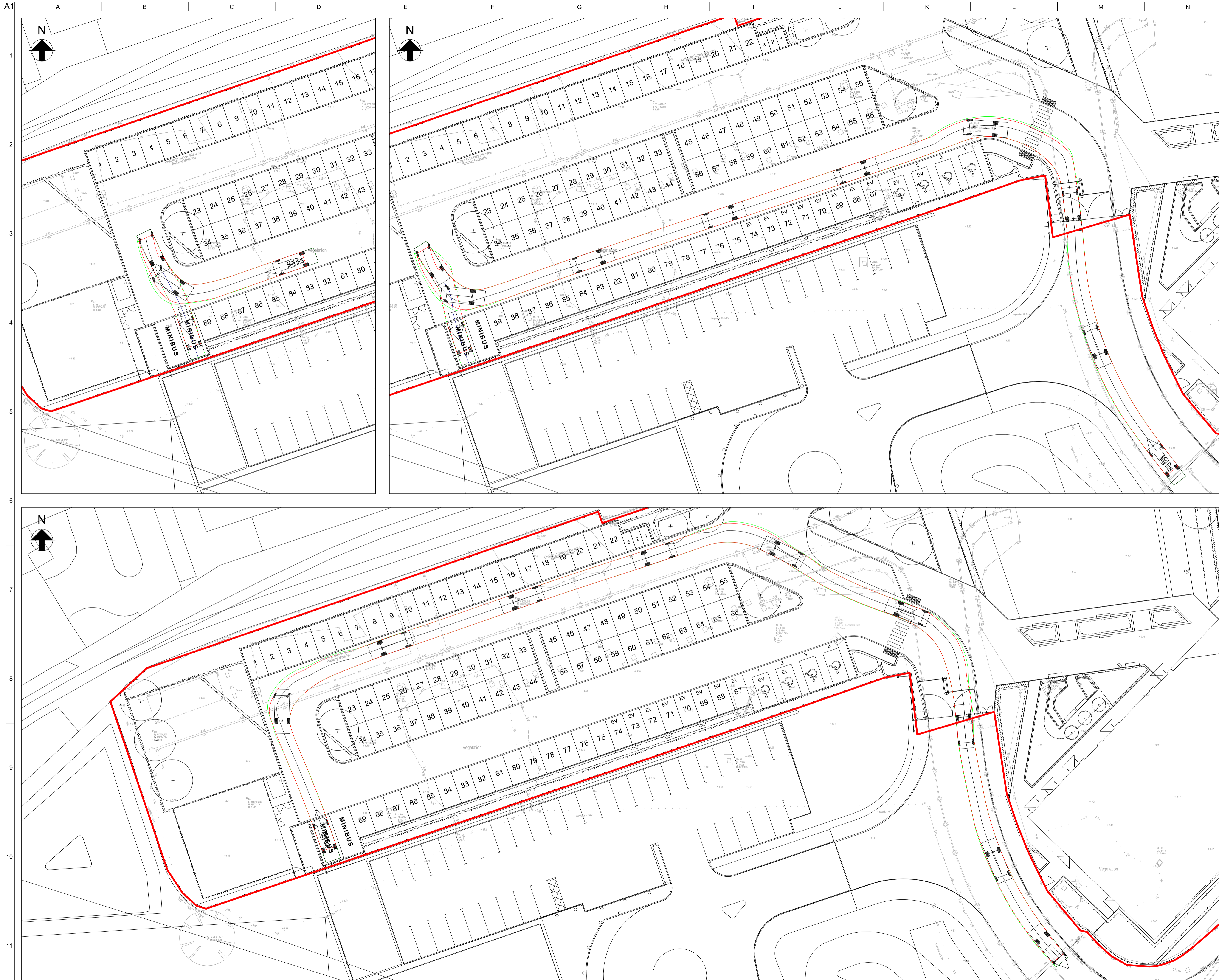
4 Pierhead St, Capital Waterside
Cardiff, CF10 4GP
T +44(0)29 20473727 F +44(0)29 20472277
www.arup.com

Client
WEPCo
Cardiff and Vale Colleges

Project Title
Barry Waterfront Campus (BWC)

Drawing Title
Swept Path Analysis

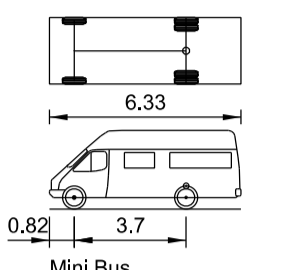
Scale at A1	1:500	Role	Civils
Suitability	S3 – Suitable for Review and Comment		
Job No	287279	Rev	P02
Drawing No	VG0201-ARP-ZZ-00-DR-C-00061		



Legend

— Site Boundary

- Notes**
1. Do not scale from this drawing.
 2. The topographical survey detail shown on this drawing is based on a survey carried out by HSP Consulting in July 2020. No responsibility can be taken for the accuracy of this survey.
 3. All levels are shown above ordnance datum (m AOD).
 4. Layouts are as received from Ares on 20.03.24 and are subject to ongoing coordination and further design development during subsequent stages.



Mini Bus
 Overall Length 6.330m
 Overall Width 2.192m
 Overall Body Height 2.291m
 Min Body Ground Clearance 0.374m
 Track Width 2.192m
 Lock to Lock Time 4.00s
 Kerb to Kerb Turning Radius 6.458m

P01	22/03/24	DS	CL	IA
Issued for Planning				
Issue	Date	By	Chkd	Appd

ARUP

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 www.arup.com

Client
WEPCo
 Cardiff and Vale Colleges

Project Title
Barry Waterfront Campus (BWC)

Drawing Title
**Mini Bus
 Sweepth path Analysis**

Scale at A1 1:250 Role Civil

Suitability S2 - Suitable for Information

Job No **287279** Rev **P01**

Drawing No **VG0201-ARP-ZZ-00-DR-C-00062**



Appendix F TRICS Output

Barry Waterfront Campus, Vale of Glamorgan

Transport Assessment

WEPCo Limited

SLR Project No.: 425.002058.00001

27 March 2024

Calculation Reference: AUDIT-529506-231207-1254

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION

Category : C - COLLEGE/UNIVERSITY

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
04	EAST ANGLIA	
	PB PETERBOROUGH	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	SW SWANSEA	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of students
Actual Range:	720 to 15500 (units:)
Range Selected by User:	360 to 16000 (units:)

Parking Spaces Range:	All Surveys Included
-----------------------	----------------------

Public Transport Provision:

Selection by:	Include all surveys
---------------	---------------------

Date Range:	01/01/10 to 06/04/22
-------------	----------------------

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
------------------------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	5
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:

Use Class:

F1(a)	5 days
-------	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included	
----------------------	--

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	5 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	ES-04-C-05 PENLAND ROAD BEXHILL ON SEA	COLLEGE		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of students: 1500 <i>Survey date: THURSDAY 03/11/11</i>			
	<i>Survey Type: MANUAL</i>			
2	ES-04-C-07 PARKER ROAD HASTINGS ORE	COLLEGE		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of students: 720 <i>Survey date: WEDNESDAY 30/05/12</i>			
	<i>Survey Type: MANUAL</i>			
3	PB-04-C-03 PARK CRESCENT PETERBOROUGH	COLLEGE		PETERBOROUGH
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of students: 15500 <i>Survey date: TUESDAY 18/10/16</i>			
	<i>Survey Type: MANUAL</i>			
4	SW-04-C-02 WALTER ROAD SWANSEA	COLLEGE		SWANSEA
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of students: 879 <i>Survey date: MONDAY 21/10/13</i>			
	<i>Survey Type: MANUAL</i>			
5	TW-04-C-01 HAWKEY'S LANE NORTH SHIELDS CHIRTON	COLLEGE		TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of students: 1495 <i>Survey date: THURSDAY 04/11/10</i>			
	<i>Survey Type: MANUAL</i>			

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CW-04-C-04	uni

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.33

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.010	5	4019	0.002	5	4019	0.012
08:00 - 09:00	5	4019	0.056	5	4019	0.015	5	4019	0.071
09:00 - 10:00	5	4019	0.022	5	4019	0.012	5	4019	0.034
10:00 - 11:00	5	4019	0.010	5	4019	0.006	5	4019	0.016
11:00 - 12:00	5	4019	0.012	5	4019	0.012	5	4019	0.024
12:00 - 13:00	5	4019	0.012	5	4019	0.014	5	4019	0.026
13:00 - 14:00	5	4019	0.012	5	4019	0.013	5	4019	0.025
14:00 - 15:00	5	4019	0.009	5	4019	0.015	5	4019	0.024
15:00 - 16:00	5	4019	0.011	5	4019	0.018	5	4019	0.029
16:00 - 17:00	5	4019	0.014	5	4019	0.034	5	4019	0.048
17:00 - 18:00	5	4019	0.009	5	4019	0.024	5	4019	0.033
18:00 - 19:00	4	4844	0.007	4	4844	0.007	4	4844	0.014
19:00 - 20:00	3	5958	0.003	3	5958	0.006	3	5958	0.009
20:00 - 21:00	3	5958	0.003	3	5958	0.010	3	5958	0.013
21:00 - 22:00	3	5958	0.000	3	5958	0.003	3	5958	0.003
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.190			0.191			0.381

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected: 720 - 15500 (units:)
 Survey date date range: 01/01/10 - 06/04/22
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL TAXIS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
08:00 - 09:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
09:00 - 10:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
10:00 - 11:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
11:00 - 12:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
12:00 - 13:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
13:00 - 14:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
14:00 - 15:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
15:00 - 16:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
16:00 - 17:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
17:00 - 18:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL OGVS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
08:00 - 09:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
09:00 - 10:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
10:00 - 11:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
11:00 - 12:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
12:00 - 13:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
13:00 - 14:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
14:00 - 15:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
15:00 - 16:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
16:00 - 17:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
17:00 - 18:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL PSVS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
08:00 - 09:00	5	4019	0.001	5	4019	0.001	5	4019	0.002
09:00 - 10:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
10:00 - 11:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
11:00 - 12:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
12:00 - 13:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
13:00 - 14:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
14:00 - 15:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
15:00 - 16:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
16:00 - 17:00	5	4019	0.001	5	4019	0.000	5	4019	0.001
17:00 - 18:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL CYCLISTS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.002	5	4019	0.000	5	4019	0.002
08:00 - 09:00	5	4019	0.005	5	4019	0.000	5	4019	0.005
09:00 - 10:00	5	4019	0.002	5	4019	0.000	5	4019	0.002
10:00 - 11:00	5	4019	0.001	5	4019	0.000	5	4019	0.001
11:00 - 12:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
12:00 - 13:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
13:00 - 14:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
14:00 - 15:00	5	4019	0.000	5	4019	0.002	5	4019	0.002
15:00 - 16:00	5	4019	0.000	5	4019	0.003	5	4019	0.003
16:00 - 17:00	5	4019	0.000	5	4019	0.003	5	4019	0.003
17:00 - 18:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.011			0.021

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.015	5	4019	0.003	5	4019	0.018
08:00 - 09:00	5	4019	0.088	5	4019	0.018	5	4019	0.106
09:00 - 10:00	5	4019	0.032	5	4019	0.014	5	4019	0.046
10:00 - 11:00	5	4019	0.015	5	4019	0.008	5	4019	0.023
11:00 - 12:00	5	4019	0.016	5	4019	0.014	5	4019	0.030
12:00 - 13:00	5	4019	0.018	5	4019	0.021	5	4019	0.039
13:00 - 14:00	5	4019	0.018	5	4019	0.017	5	4019	0.035
14:00 - 15:00	5	4019	0.011	5	4019	0.021	5	4019	0.032
15:00 - 16:00	5	4019	0.014	5	4019	0.026	5	4019	0.040
16:00 - 17:00	5	4019	0.018	5	4019	0.050	5	4019	0.068
17:00 - 18:00	5	4019	0.015	5	4019	0.042	5	4019	0.057
18:00 - 19:00	4	4844	0.012	4	4844	0.011	4	4844	0.023
19:00 - 20:00	3	5958	0.005	3	5958	0.010	3	5958	0.015
20:00 - 21:00	3	5958	0.004	3	5958	0.017	3	5958	0.021
21:00 - 22:00	3	5958	0.001	3	5958	0.004	3	5958	0.005
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.282			0.276			0.558

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.003	5	4019	0.000	5	4019	0.003
08:00 - 09:00	5	4019	0.022	5	4019	0.003	5	4019	0.025
09:00 - 10:00	5	4019	0.011	5	4019	0.003	5	4019	0.014
10:00 - 11:00	5	4019	0.008	5	4019	0.007	5	4019	0.015
11:00 - 12:00	5	4019	0.010	5	4019	0.008	5	4019	0.018
12:00 - 13:00	5	4019	0.008	5	4019	0.010	5	4019	0.018
13:00 - 14:00	5	4019	0.010	5	4019	0.008	5	4019	0.018
14:00 - 15:00	5	4019	0.004	5	4019	0.011	5	4019	0.015
15:00 - 16:00	5	4019	0.005	5	4019	0.011	5	4019	0.016
16:00 - 17:00	5	4019	0.001	5	4019	0.015	5	4019	0.016
17:00 - 18:00	5	4019	0.001	5	4019	0.006	5	4019	0.007
18:00 - 19:00	4	4844	0.000	4	4844	0.004	4	4844	0.004
19:00 - 20:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
20:00 - 21:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.083			0.088			0.171

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.002	5	4019	0.000	5	4019	0.002
08:00 - 09:00	5	4019	0.011	5	4019	0.000	5	4019	0.011
09:00 - 10:00	5	4019	0.008	5	4019	0.001	5	4019	0.009
10:00 - 11:00	5	4019	0.008	5	4019	0.002	5	4019	0.010
11:00 - 12:00	5	4019	0.005	5	4019	0.004	5	4019	0.009
12:00 - 13:00	5	4019	0.003	5	4019	0.006	5	4019	0.009
13:00 - 14:00	5	4019	0.005	5	4019	0.004	5	4019	0.009
14:00 - 15:00	5	4019	0.003	5	4019	0.008	5	4019	0.011
15:00 - 16:00	5	4019	0.002	5	4019	0.007	5	4019	0.009
16:00 - 17:00	5	4019	0.001	5	4019	0.011	5	4019	0.012
17:00 - 18:00	5	4019	0.000	5	4019	0.005	5	4019	0.005
18:00 - 19:00	4	4844	0.000	4	4844	0.002	4	4844	0.002
19:00 - 20:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
20:00 - 21:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.052			0.100

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
08:00 - 09:00	5	4019	0.001	5	4019	0.000	5	4019	0.001
09:00 - 10:00	5	4019	0.001	5	4019	0.000	5	4019	0.001
10:00 - 11:00	5	4019	0.001	5	4019	0.000	5	4019	0.001
11:00 - 12:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
12:00 - 13:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
13:00 - 14:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
14:00 - 15:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
15:00 - 16:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
16:00 - 17:00	5	4019	0.000	5	4019	0.001	5	4019	0.001
17:00 - 18:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.005			0.008

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
08:00 - 09:00	5	4019	0.010	5	4019	0.000	5	4019	0.010
09:00 - 10:00	5	4019	0.002	5	4019	0.000	5	4019	0.002
10:00 - 11:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
11:00 - 12:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
12:00 - 13:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
13:00 - 14:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
14:00 - 15:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
15:00 - 16:00	5	4019	0.000	5	4019	0.002	5	4019	0.002
16:00 - 17:00	5	4019	0.000	5	4019	0.010	5	4019	0.010
17:00 - 18:00	5	4019	0.000	5	4019	0.000	5	4019	0.000
18:00 - 19:00	4	4844	0.000	4	4844	0.000	4	4844	0.000
19:00 - 20:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
20:00 - 21:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.002	5	4019	0.000	5	4019	0.002
08:00 - 09:00	5	4019	0.022	5	4019	0.000	5	4019	0.022
09:00 - 10:00	5	4019	0.011	5	4019	0.001	5	4019	0.012
10:00 - 11:00	5	4019	0.009	5	4019	0.002	5	4019	0.011
11:00 - 12:00	5	4019	0.006	5	4019	0.005	5	4019	0.011
12:00 - 13:00	5	4019	0.004	5	4019	0.006	5	4019	0.010
13:00 - 14:00	5	4019	0.006	5	4019	0.004	5	4019	0.010
14:00 - 15:00	5	4019	0.003	5	4019	0.009	5	4019	0.012
15:00 - 16:00	5	4019	0.003	5	4019	0.010	5	4019	0.013
16:00 - 17:00	5	4019	0.001	5	4019	0.022	5	4019	0.023
17:00 - 18:00	5	4019	0.000	5	4019	0.005	5	4019	0.005
18:00 - 19:00	4	4844	0.000	4	4844	0.002	4	4844	0.002
19:00 - 20:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
20:00 - 21:00	3	5958	0.000	3	5958	0.001	3	5958	0.001
21:00 - 22:00	3	5958	0.000	3	5958	0.000	3	5958	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.067			0.068			0.135

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 STUDEN

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.33

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate	No. Days	Ave. STUDEN	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	4019	0.022	5	4019	0.003	5	4019	0.025
08:00 - 09:00	5	4019	0.138	5	4019	0.021	5	4019	0.159
09:00 - 10:00	5	4019	0.056	5	4019	0.018	5	4019	0.074
10:00 - 11:00	5	4019	0.033	5	4019	0.018	5	4019	0.051
11:00 - 12:00	5	4019	0.033	5	4019	0.028	5	4019	0.061
12:00 - 13:00	5	4019	0.030	5	4019	0.038	5	4019	0.068
13:00 - 14:00	5	4019	0.034	5	4019	0.030	5	4019	0.064
14:00 - 15:00	5	4019	0.019	5	4019	0.044	5	4019	0.063
15:00 - 16:00	5	4019	0.021	5	4019	0.049	5	4019	0.070
16:00 - 17:00	5	4019	0.020	5	4019	0.091	5	4019	0.111
17:00 - 18:00	5	4019	0.016	5	4019	0.054	5	4019	0.070
18:00 - 19:00	4	4844	0.013	4	4844	0.017	4	4844	0.030
19:00 - 20:00	3	5958	0.005	3	5958	0.013	3	5958	0.018
20:00 - 21:00	3	5958	0.004	3	5958	0.020	3	5958	0.024
21:00 - 22:00	3	5958	0.001	3	5958	0.004	3	5958	0.005
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.445			0.448			0.893

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.



Appendix G

Junction Modelling Outputs

Barry Waterfront Campus, Vale of Glamorgan

Transport Assessment

WEPCo Limited

SLR Project No.: 425.002058.00001

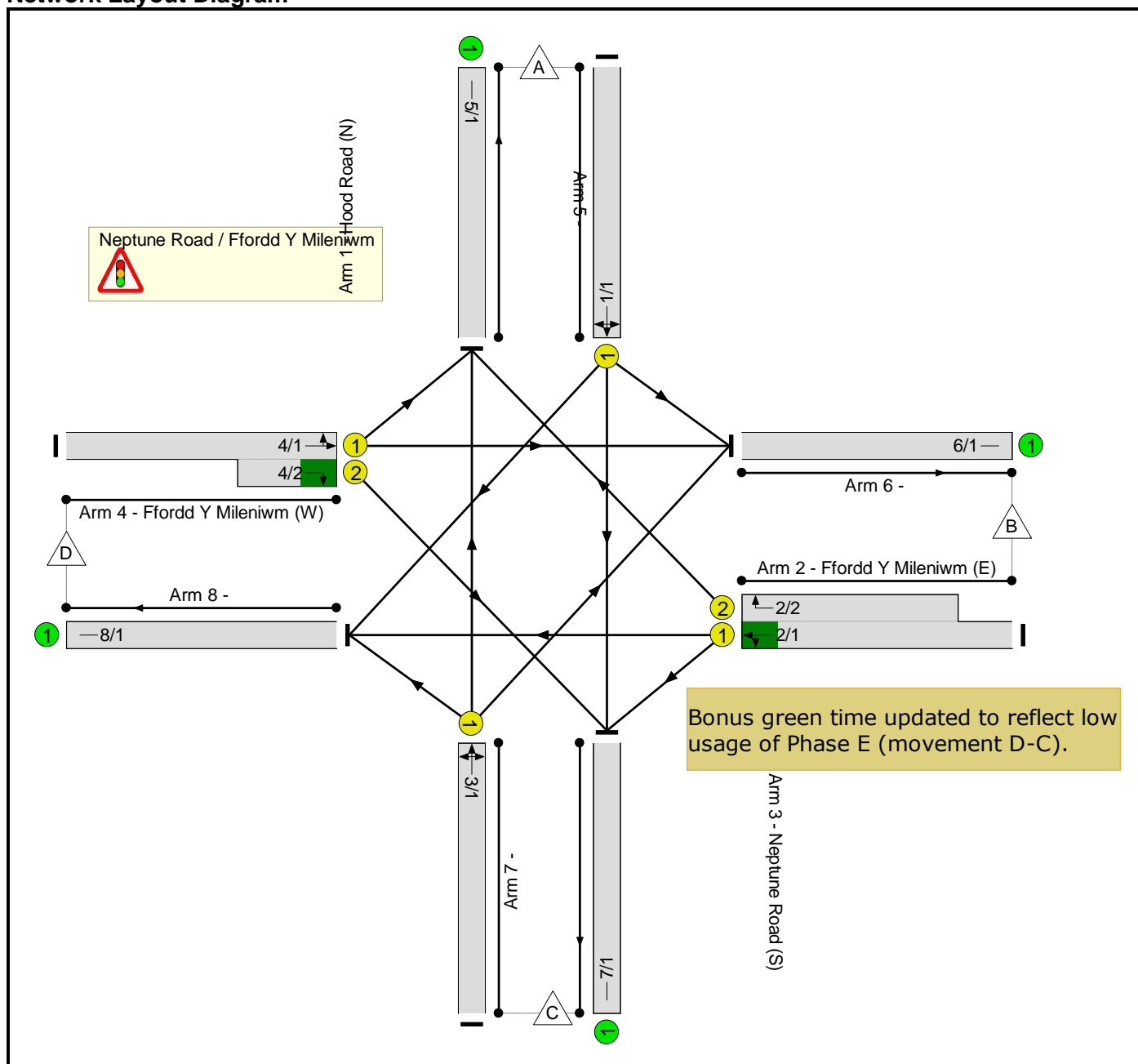
27 March 2024

Full Input Data And Results
Full Input Data And Results

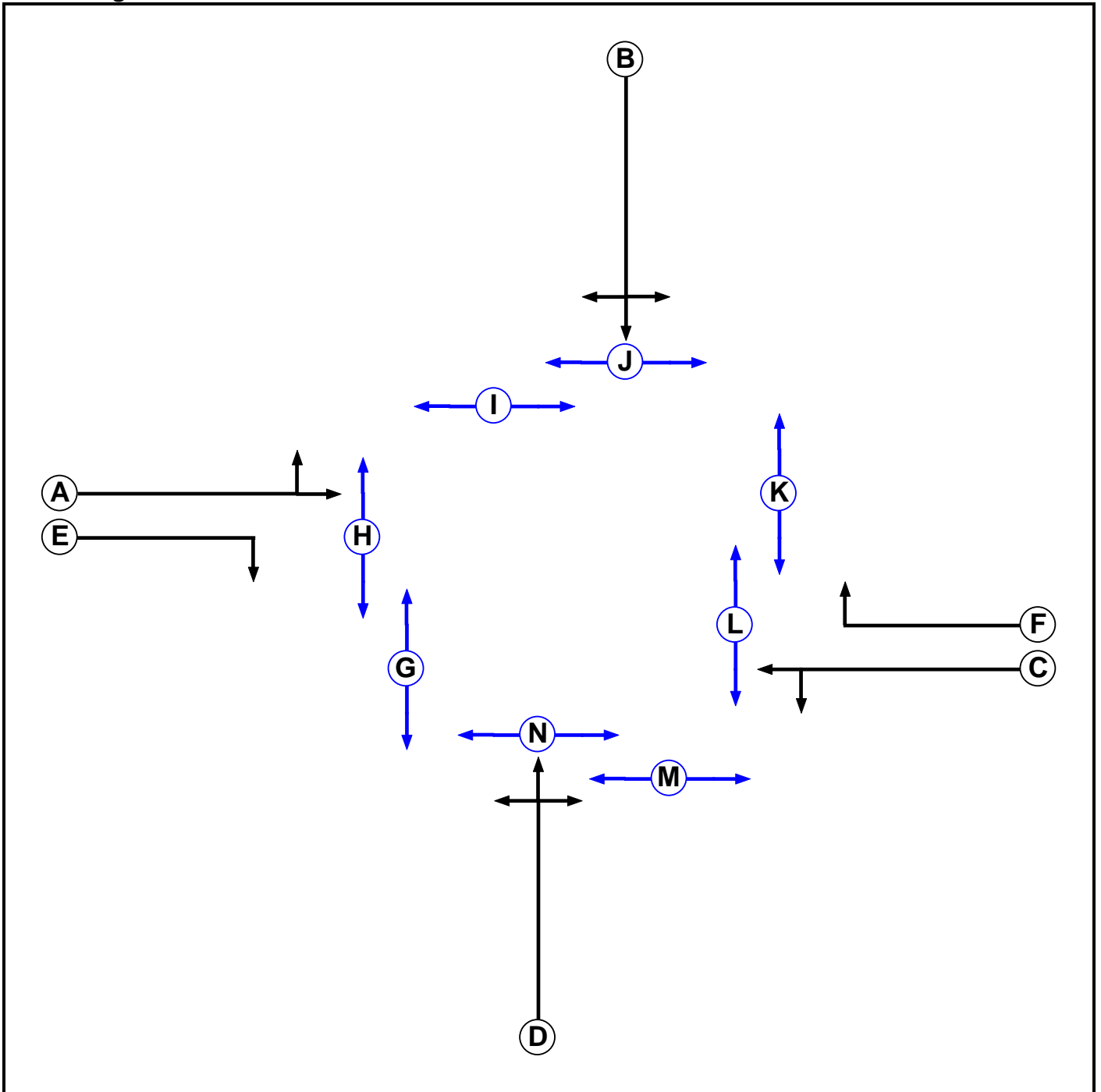
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	237449C-Neptune Road_Fford Y Mileniwm-V2.lsg3x
Author:	Ben Stone
Company:	SLR
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		6	6
H	Pedestrian		6	6
I	Pedestrian		6	6
J	Pedestrian		6	6
K	Pedestrian		6	6
L	Pedestrian		6	6
M	Pedestrian		6	6
N	Pedestrian		6	6

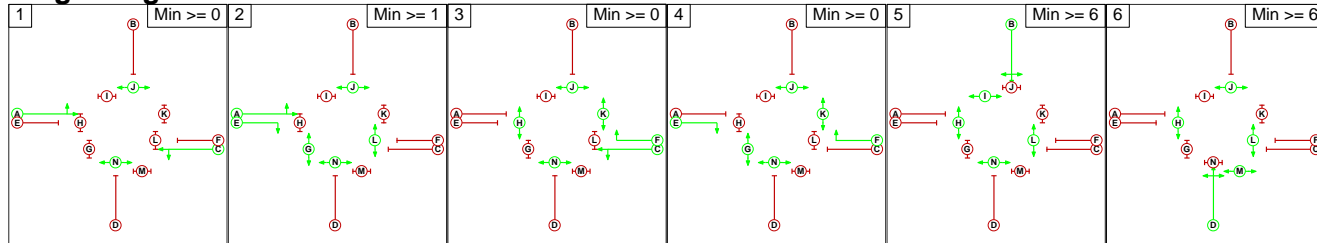
Phase Intergrens Matrix

	Starting Phase													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	-	7	-	5	-	5	-	5	9	-	11	-	-	-
B	5	-	7	5	7	7	11	-	-	5	8	-	8	-
C	-	5	-	6	5	-	10	-	-	-	-	5	11	-
D	6	5	6	-	6	8	8	-	11	-	12	-	-	5
E	-	7	5	5	-	-	-	5	-	-	-	-	11	-
F	5	5	-	6	-	-	-	-	9	-	-	5	-	-
G	-	4	4	4	-	-	-	-	-	-	-	-	-	-
H	3	-	-	-	3	-	-	-	-	-	-	-	-	-
I	5	-	-	5	-	5	-	-	-	-	-	-	-	-
J	-	3	-	-	-	-	-	-	-	-	-	-	-	-
K	6	6	-	6	-	-	-	-	-	-	-	-	-	-
L	-	-	8	-	-	8	-	-	-	-	-	-	-	-
M	-	3	3	-	3	-	-	-	-	-	-	-	-	-
N	-	-	-	3	-	-	-	-	-	-	-	-	-	-

Phases in Stage

Stage No.	Phases in Stage
1	A C J N
2	A E G J L N
3	C F H J K N
4	E F G J K N
5	B H I L N
6	D H J L M

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

	To Stage						
	1	2	3	4	5	6	
From Stage	1		10	11	11	9	11
	2	8		11	11	9	11
	3	6	10		10	9	11
	4	6	6	5		9	11
	5	8	11	8	11		8
	6	8	8	12	12	11	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Neptune Road / Ffordd Y Mileniwm

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Neptune Road / Ffordd Y Mileniwm												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Hood Road (N))	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Left	18.50
											Arm 7 Ahead	Inf
											Arm 8 Right	35.00
2/1 (Ffordd Y Mileniwm (E))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left	20.00
											Arm 8 Ahead	Inf
2/2 (Ffordd Y Mileniwm (E))	U	F	2	3	12.0	Geom	-	3.00	0.00	Y	Arm 5 Right	14.50
3/1 (Neptune Road (S))	U	D	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	30.00
											Arm 8 Left	17.00
4/1 (Ffordd Y Mileniwm (W))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	50.00
											Arm 6 Ahead	Inf
4/2 (Ffordd Y Mileniwm (W))	U	E	2	3	5.5	Geom	-	3.00	0.00	Y	Arm 7 Right	10.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Observed AM'	08:00	09:00	01:00	
2: '2023 Observed PM'	17:00	18:00	01:00	
3: '2033 Future AM'	08:00	09:00	01:00	
4: '2033 Future PM'	17:00	18:00	01:00	
5: '2033 + Dev AM'	08:00	09:00	01:00	
6: '2033 + Dev PM'	17:00	18:00	01:00	
7: '2033 + Dev AM Sensitivity'	08:00	09:00	01:00	
8: '2033 + Dev PM Sensitivity'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2023 Observed AM' (FG1: '2023 Observed AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	84	1	73	158
	B	135	0	4	428	567
	C	1	0	0	1	2
	D	94	428	1	0	523
	Tot.	230	512	6	502	1250

Traffic Lane Flows

Lane	Scenario 1: 2023 Observed AM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	158
2/1 (with short)	567(In) 432(Out)
2/2 (short)	135
3/1	2
4/1 (with short)	523(In) 522(Out)
4/2 (short)	1
5/1	230
6/1	512
7/1	6
8/1	502

Full Input Data And Results

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	53.2 %	1825	1825
				Arm 7 Ahead	Inf	0.6 %		
				Arm 8 Right	35.00	46.2 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	0.9 %	1914	1914
				Arm 8 Ahead	Inf	99.1 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	50.0 %	1844	1844
				Arm 6 Right	30.00	0.0 %		
				Arm 8 Left	17.00	50.0 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	18.0 %	1905	1905
				Arm 6 Ahead	Inf	82.0 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2023 Observed PM' (FG2: '2023 Observed PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	160	4	103	267
	B	144	0	8	537	689
	C	1	5	0	1	7
	D	77	473	1	0	551
	Tot.	222	638	13	641	1514

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2023 Observed PM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	267
2/1 (with short)	689(In) 545(Out)
2/2 (short)	144
3/1	7
4/1 (with short)	551(In) 550(Out)
4/2 (short)	1
5/1	222
6/1	638
7/1	13
8/1	641

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	59.9 %	1821	1821
				Arm 7 Ahead	Inf	1.5 %		
				Arm 8 Right	35.00	38.6 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	1.5 %	1913	1913
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 8 Ahead	Inf	98.5 %		
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
				Arm 5 Ahead	Inf	14.3 %		
				Arm 6 Right	30.00	71.4 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 8 Left	17.00	14.3 %	1836	1836
				Arm 5 Left	50.00	14.0 %		
				Arm 6 Ahead	Inf	86.0 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2033 Future AM' (FG3: '2033 Future AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	84	5	73	162
	B	135	0	59	428	622
	C	2	26	0	2	30
	D	94	428	1	0	523
	Tot.	231	538	65	503	1337

Traffic Lane Flows

Lane	Scenario 3: 2033 Future AM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	162
2/1 (with short)	622(In) 487(Out)
2/2 (short)	135
3/1	30
4/1 (with short)	523(In) 522(Out)
4/2 (short)	1
5/1	231
6/1	538
7/1	65
8/1	503

Full Input Data And Results

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	51.9 %	1828	1828
				Arm 7 Ahead	Inf	3.1 %		
				Arm 8 Right	35.00	45.1 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	12.1 %	1898	1898
				Arm 8 Ahead	Inf	87.9 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	6.7 %	1835	1835
				Arm 6 Right	30.00	86.7 %		
				Arm 8 Left	17.00	6.7 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	18.0 %	1905	1905
				Arm 6 Ahead	Inf	82.0 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2033 Future PM' (FG4: '2033 Future PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	160	6	103	269
	B	144	0	40	537	721
	C	5	67	0	1	73
	D	77	473	2	0	552
	Tot.	226	700	48	641	1615

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 Future PM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	269
2/1 (with short)	721(In) 577(Out)
2/2 (short)	144
3/1	73
4/1 (with short)	552(In) 550(Out)
4/2 (short)	2
5/1	226
6/1	700
7/1	48
8/1	641

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	59.5 %	1822	1822
				Arm 7 Ahead	Inf	2.2 %		
				Arm 8 Right	35.00	38.3 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	6.9 %	1905	1905
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 8 Ahead	Inf	93.1 %		
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
				Arm 5 Ahead	Inf	6.8 %		
				Arm 6 Right	30.00	91.8 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 8 Left	17.00	1.4 %	1838	1838
				Arm 5 Left	50.00	14.0 %		
				Arm 6 Ahead	Inf	86.0 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2033 + Dev AM' (FG5: '2033 + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	84	5	78	167
	B	135	0	59	535	729
	C	2	26	0	2	30
	D	94	439	1	0	534
	Tot.	231	549	65	615	1460

Traffic Lane Flows

Lane	Scenario 5: 2033 + Dev AM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	167
2/1 (with short)	729(In) 594(Out)
2/2 (short)	135
3/1	30
4/1 (with short)	534(In) 533(Out)
4/2 (short)	1
5/1	231
6/1	549
7/1	65
8/1	615

Full Input Data And Results

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	50.3 %	1829	1829
				Arm 7 Ahead	Inf	3.0 %		
				Arm 8 Right	35.00	46.7 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	9.9 %	1901	1901
				Arm 8 Ahead	Inf	90.1 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	6.7 %	1835	1835
				Arm 6 Right	30.00	86.7 %		
				Arm 8 Left	17.00	6.7 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	17.6 %	1905	1905
				Arm 6 Ahead	Inf	82.4 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2033 + Dev PM' (FG6: '2033 + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	160	6	104	270	
B	144	0	40	550	734	
C	5	67	0	1	73	
D	79	508	2	0	589	
Tot.	228	735	48	655	1666	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2033 + Dev PM
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	270
2/1 (with short)	734(In) 590(Out)
2/2 (short)	144
3/1	73
4/1 (with short)	589(In) 587(Out)
4/2 (short)	2
5/1	228
6/1	735
7/1	48
8/1	655

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	59.3 %	1822	1822
				Arm 7 Ahead	Inf	2.2 %		
				Arm 8 Right	35.00	38.5 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	6.8 %	1905	1905
				Arm 8 Ahead	Inf	93.2 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	6.8 %	1838	1838
				Arm 6 Right	30.00	91.8 %		
				Arm 8 Left	17.00	1.4 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	13.5 %	1907	1907
				Arm 6 Ahead	Inf	86.5 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2033 + Dev AM Sensitivity' (FG7: '2033 + Dev AM Sensitivity', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	84	5	78	167
	B	135	0	59	554	748
	C	2	26	0	2	30
	D	94	441	1	0	536
	Tot.	231	551	65	634	1481

Traffic Lane Flows

Lane	Scenario 7: 2033 + Dev AM Sensitivity
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	167
2/1 (with short)	748(In) 613(Out)
2/2 (short)	135
3/1	30
4/1 (with short)	536(In) 535(Out)
4/2 (short)	1
5/1	231
6/1	551
7/1	65
8/1	634

Full Input Data And Results

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	50.3 %	1829	1829
				Arm 7 Ahead	Inf	3.0 %		
				Arm 8 Right	35.00	46.7 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	9.6 %	1901	1901
				Arm 8 Ahead	Inf	90.4 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	6.7 %	1835	1835
				Arm 6 Right	30.00	86.7 %		
				Arm 8 Left	17.00	6.7 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	17.6 %	1905	1905
				Arm 6 Ahead	Inf	82.4 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2033 + Dev PM Sensitivity' (FG8: '2033 + Dev PM Sensitivity', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	160	6	104	270
	B	144	0	40	552	736
	C	5	67	0	1	73
	D	79	514	2	0	595
	Tot.	228	741	48	657	1674

Full Input Data And Results

Traffic Lane Flows

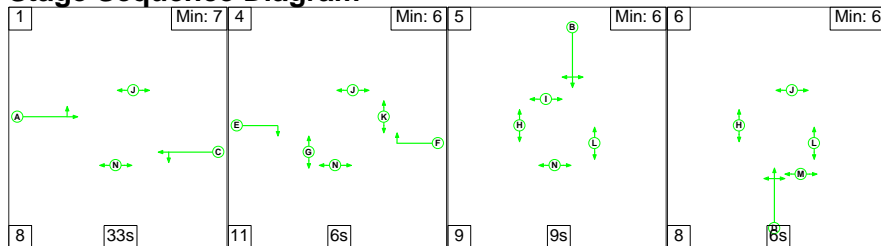
Lane	Scenario 8: 2033 + Dev PM Sensitivity
Junction: Neptune Road / Ffordd Y Mileniwm	
1/1	270
2/1 (with short)	736(In) 592(Out)
2/2 (short)	144
3/1	73
4/1 (with short)	595(In) 593(Out)
4/2 (short)	2
5/1	228
6/1	741
7/1	48
8/1	657

Lane Saturation Flows

Junction: Neptune Road / Ffordd Y Mileniwm								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hood Road (N))	3.25	0.00	Y	Arm 6 Left	18.50	59.3 %	1822	1822
				Arm 7 Ahead	Inf	2.2 %		
				Arm 8 Right	35.00	38.5 %		
2/1 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 7 Left	20.00	6.8 %	1905	1905
				Arm 8 Ahead	Inf	93.2 %		
2/2 (Ffordd Y Mileniwm (E))	3.00	0.00	Y	Arm 5 Right	14.50	100.0 %	1735	1735
3/1 (Neptune Road (S))	3.10	0.00	Y	Arm 5 Ahead	Inf	6.8 %	1838	1838
				Arm 6 Right	30.00	91.8 %		
				Arm 8 Left	17.00	1.4 %		
4/1 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 5 Left	50.00	13.3 %	1907	1907
				Arm 6 Ahead	Inf	86.7 %		
4/2 (Ffordd Y Mileniwm (W))	3.00	0.00	Y	Arm 7 Right	10.00	100.0 %	1665	1665
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2023 Observed AM' (FG1: '2023 Observed AM', Plan 1: 'Network Control Plan 1')

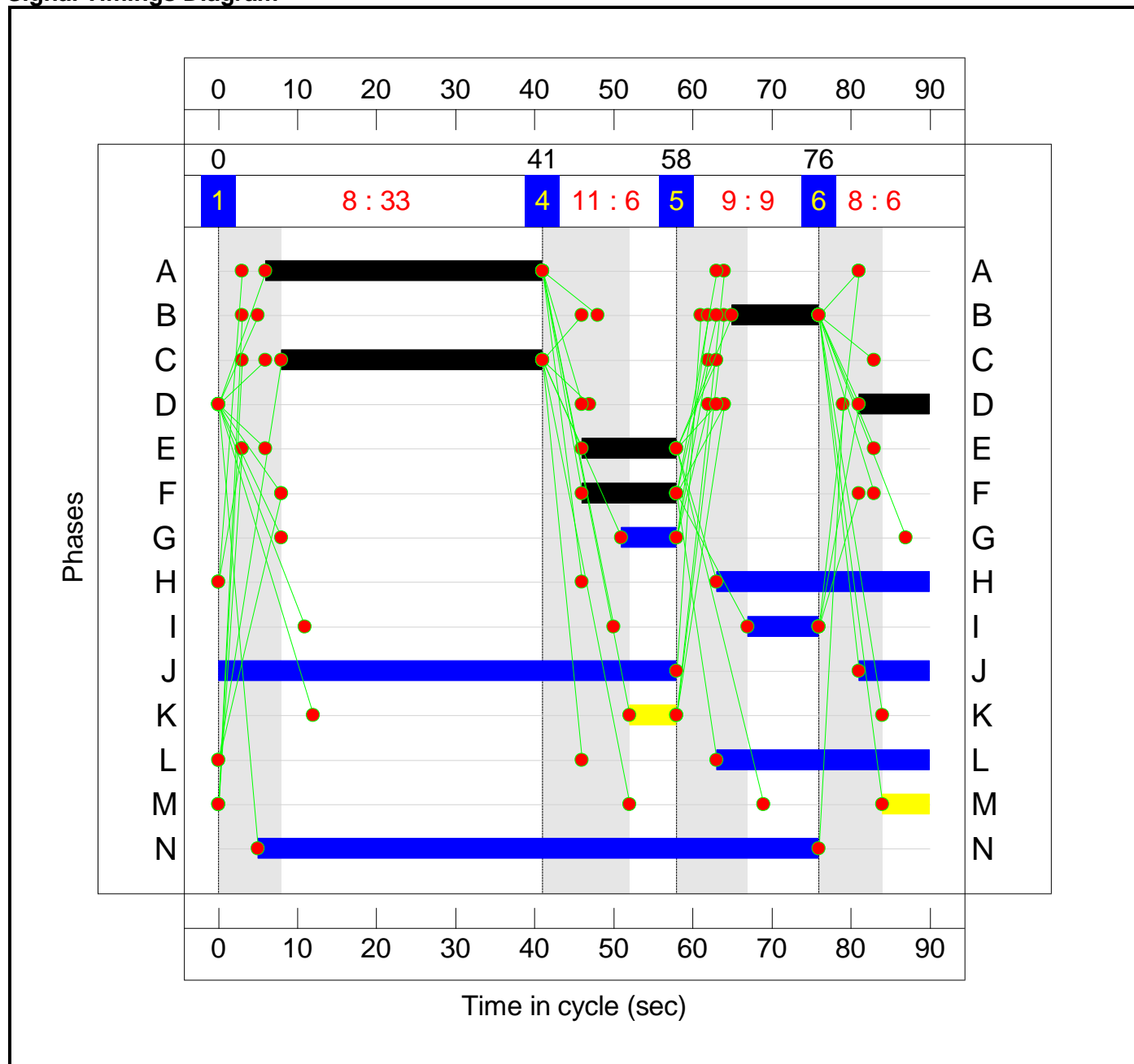
Stage Sequence Diagram

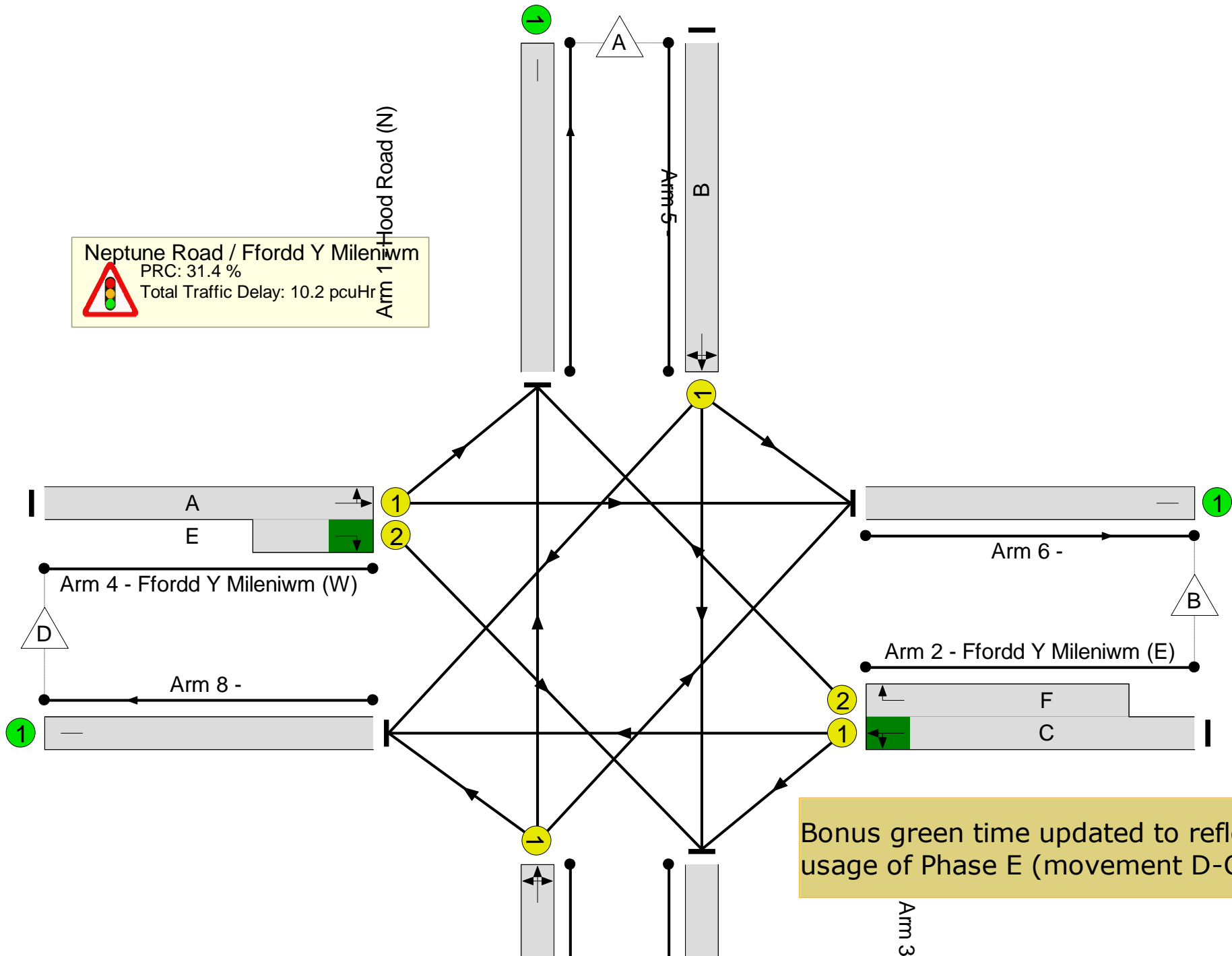


Stage Timings

Stage	1	4	5	6
Duration	33	6	9	6
Change Point	0	41	58	76

Signal Timings Diagram





Full Input Data And Results

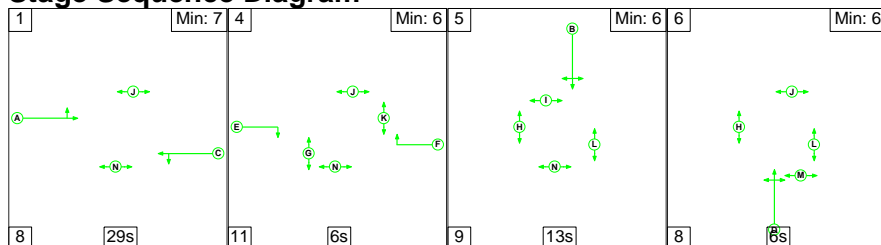
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	10.2	68.5%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	10.2	68.5%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	11	-	1825	2.5	64.9%	57.7	4.6	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	33:12	-	1914:1735	3.3	48.5 : 53.9%	20.8	6.7	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1844	0.0	1.0%	44.9	0.0	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	35:12	-	1905:1665	4.3	68.5 : 68.5%	29.8	11.8	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	31.4	Total Delay for Signalled Lanes (pcuHr):			10.16	Cycle Time (s):			90			
			PRC Over All Lanes (%):	31.4	Total Delay Over All Lanes(pcuHr):			10.16							

Full Input Data And Results

Scenario 2: '2023 Observed PM' (FG2: '2023 Observed PM', Plan 1: 'Network Control Plan 1')

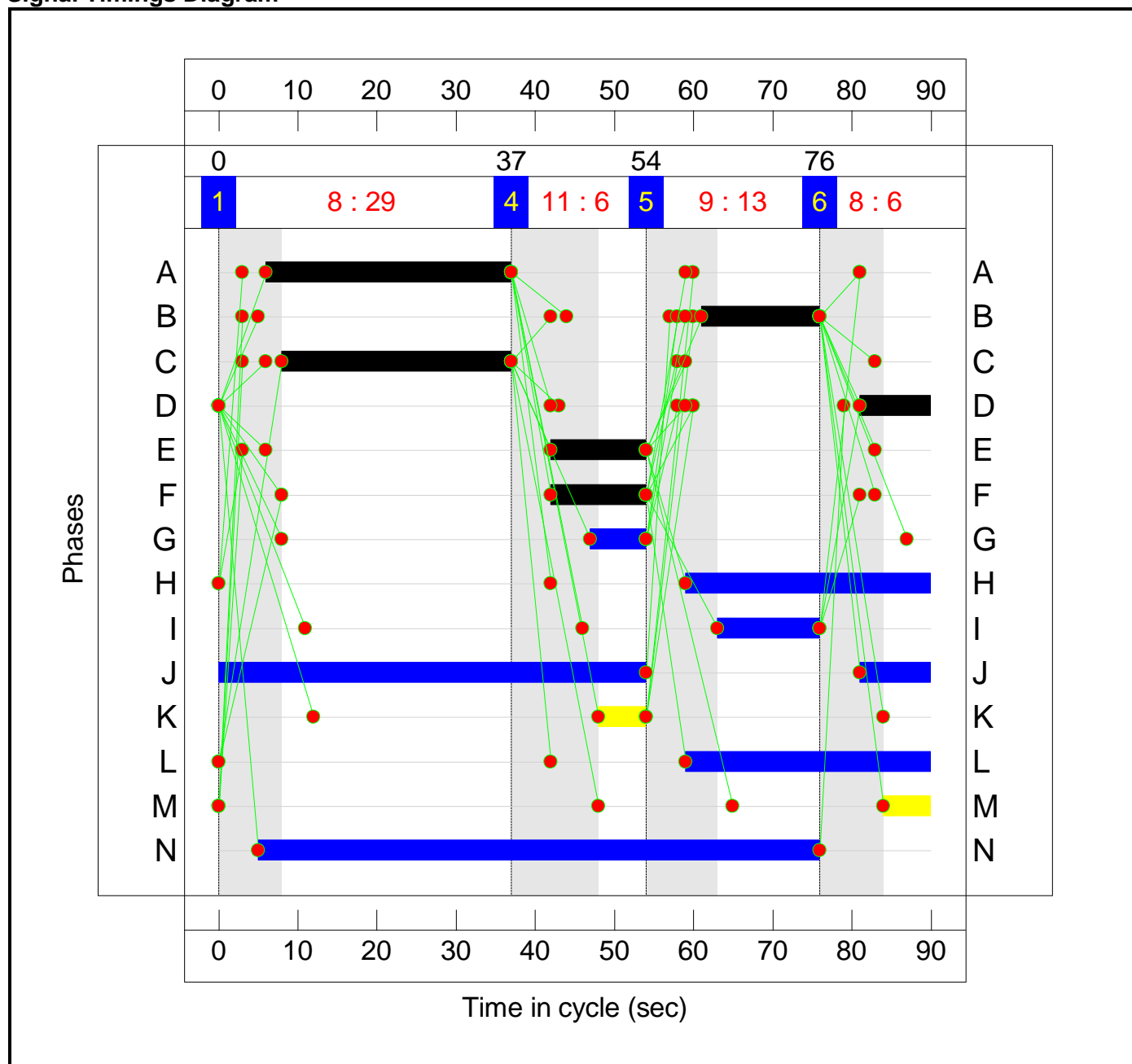
Stage Sequence Diagram

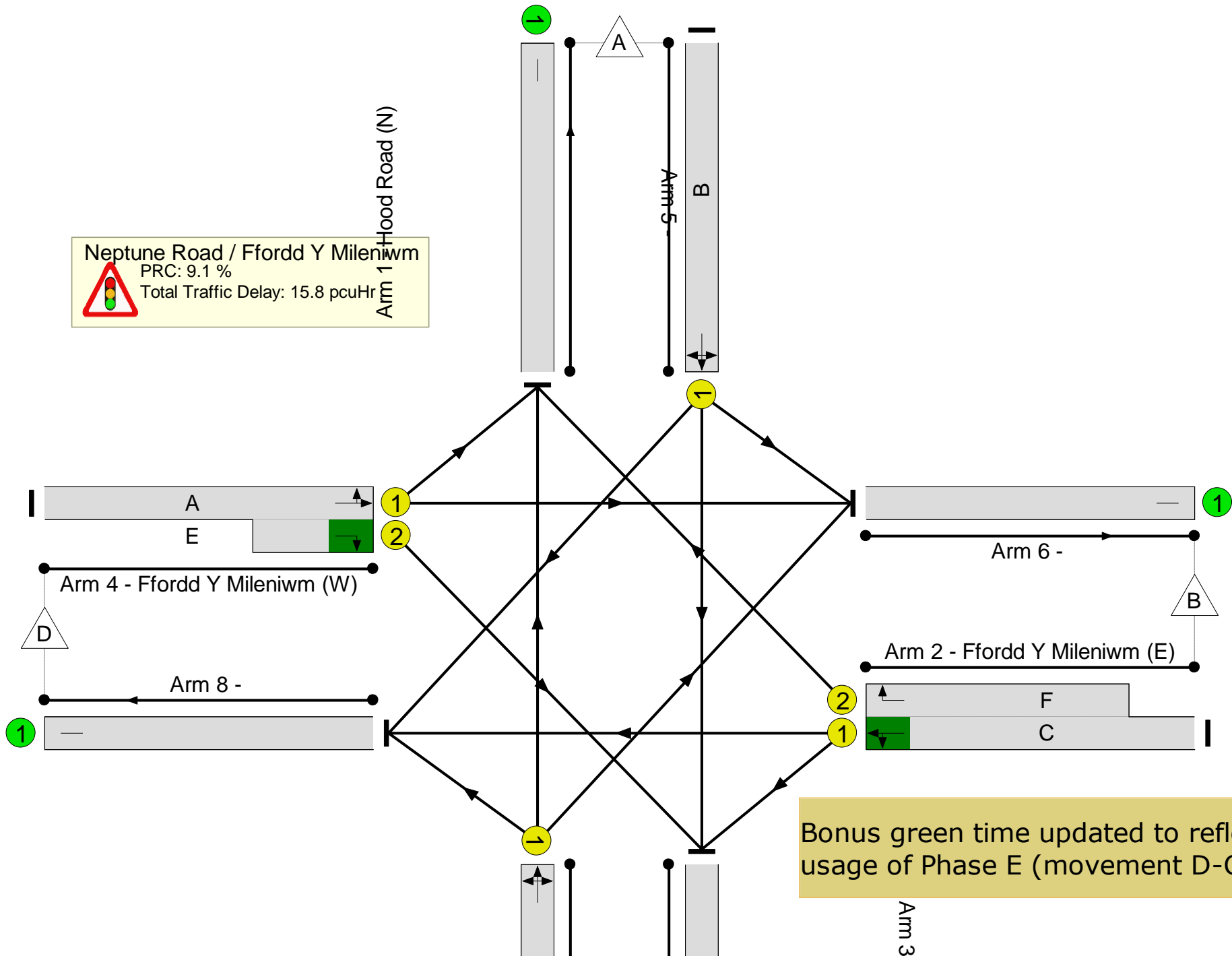


Stage Timings

Stage	1	4	5	6
Duration	29	6	13	6
Change Point	0	37	54	76

Signal Timings Diagram





Bonus green time updated to reflect low usage of Phase E (movement D-C).

Full Input Data And Results

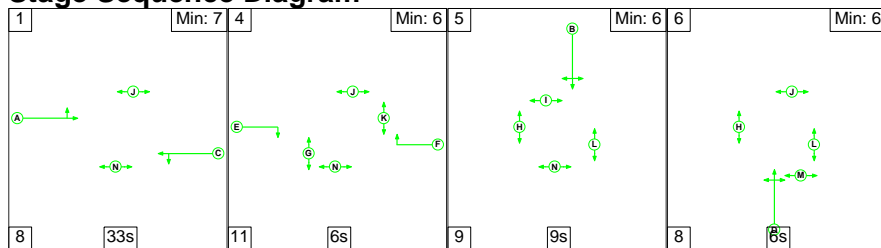
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	15.8	82.5%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	15.8	82.5%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	15	-	1821	4.8	82.5%	65.1	8.6	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	29:12	-	1913:1735	4.7	64.7 : 64.7%	24.7	10.3	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1836	0.1	3.4%	45.1	0.2	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	31:12	-	1907:1665	6.1	81.1 : 81.1%	39.9	14.5	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	9.1	Total Delay for Signalled Lanes (pcuHr):			15.75	Cycle Time (s):			90			
			PRC Over All Lanes (%):	9.1	Total Delay Over All Lanes(pcuHr):			15.75							

Full Input Data And Results

Scenario 3: '2033 Future AM' (FG3: '2033 Future AM', Plan 1: 'Network Control Plan 1')

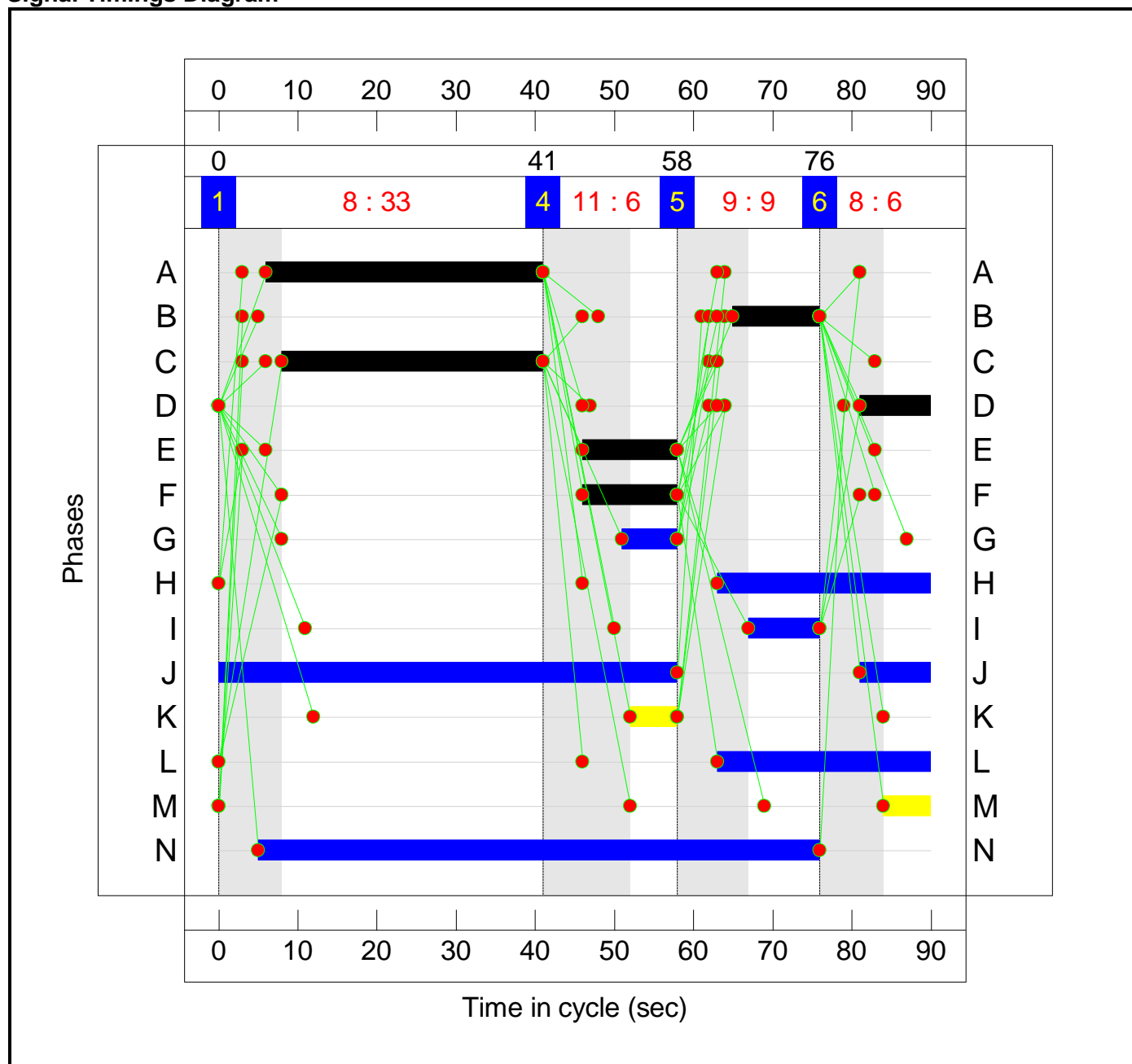
Stage Sequence Diagram

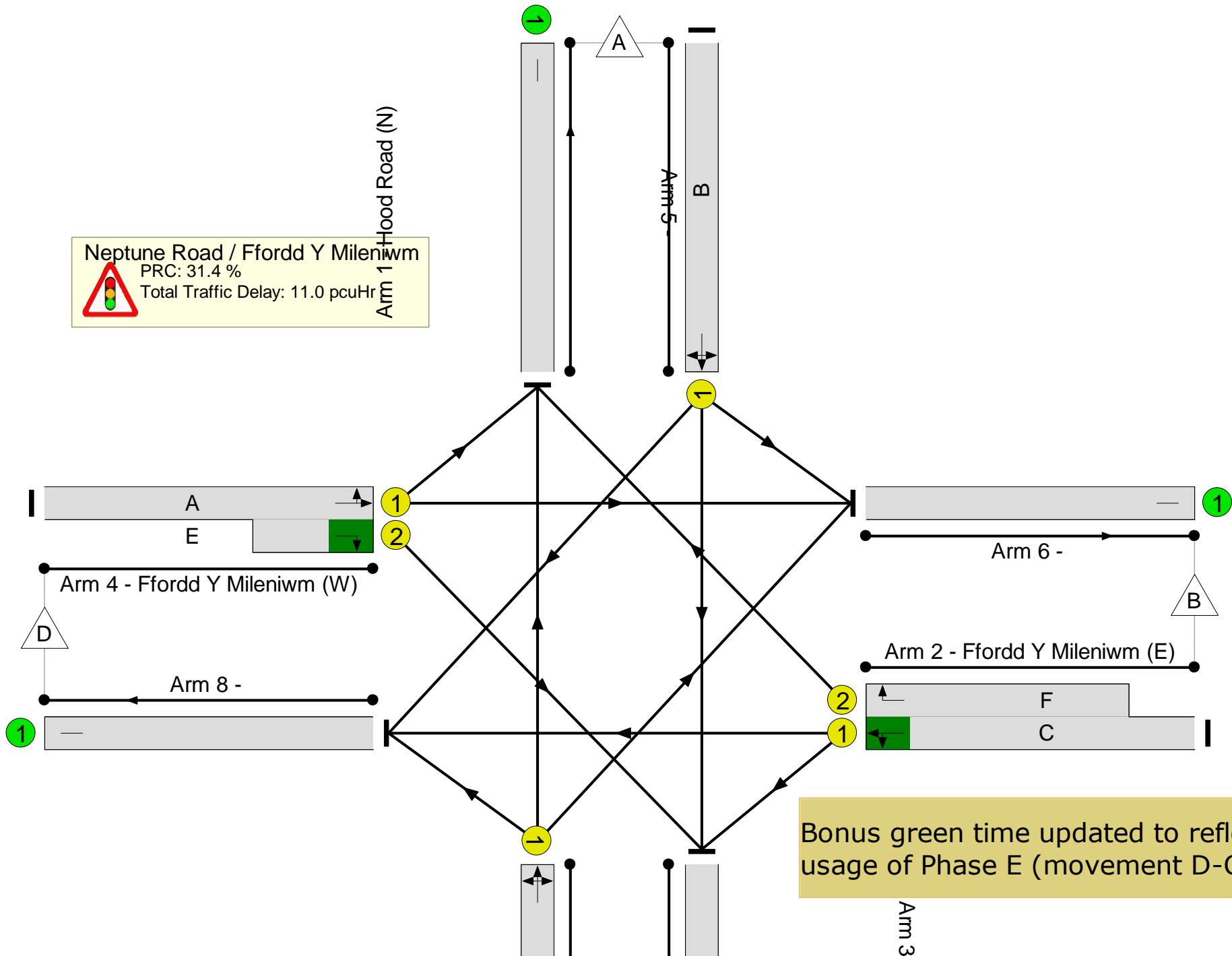


Stage Timings

Stage	1	4	5	6
Duration	33	6	9	6
Change Point	0	41	58	76

Signal Timings Diagram





Bonus green time updated to reflect low usage of Phase E (movement D-C).

Full Input Data And Results

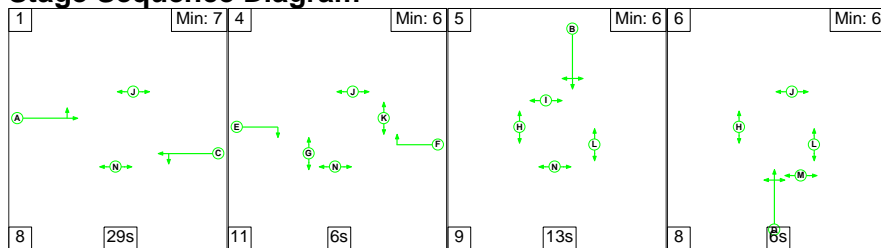
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	11.0	68.5%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	11.0	68.5%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	11	-	1828	2.6	66.5%	58.6	4.8	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	33:12	-	1898:1735	3.6	54.1 : 54.1%	21.0	8.0	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1835	0.4	14.7%	46.6	0.8	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	35:12	-	1905:1665	4.3	68.5 : 68.5%	29.8	11.8	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	31.4	Total Delay for Signalled Lanes (pcuHr):			10.98	Cycle Time (s):			90			
			PRC Over All Lanes (%):	31.4	Total Delay Over All Lanes(pcuHr):			10.98							

Full Input Data And Results

Scenario 4: '2033 Future PM' (FG4: '2033 Future PM', Plan 1: 'Network Control Plan 1')

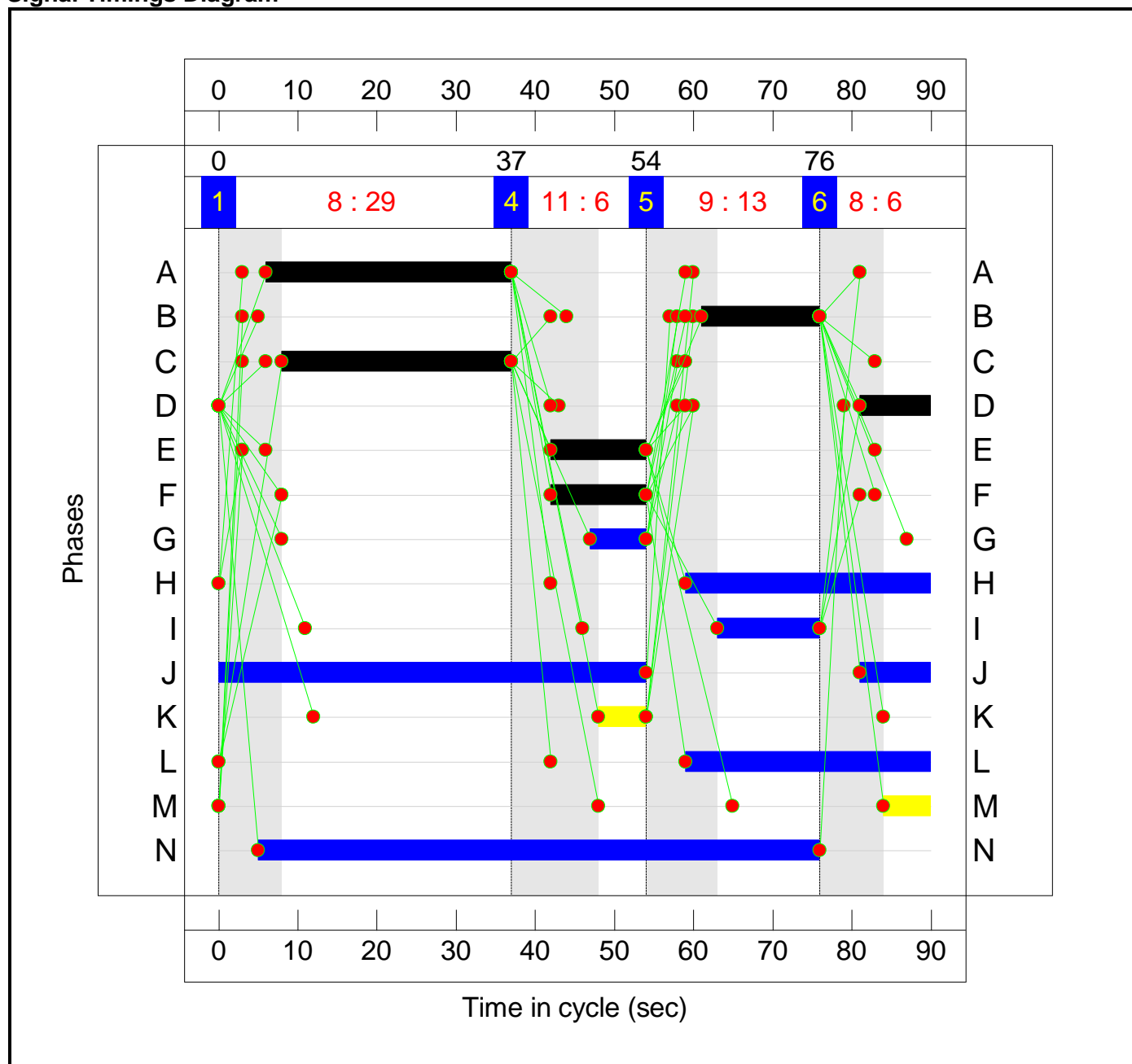
Stage Sequence Diagram

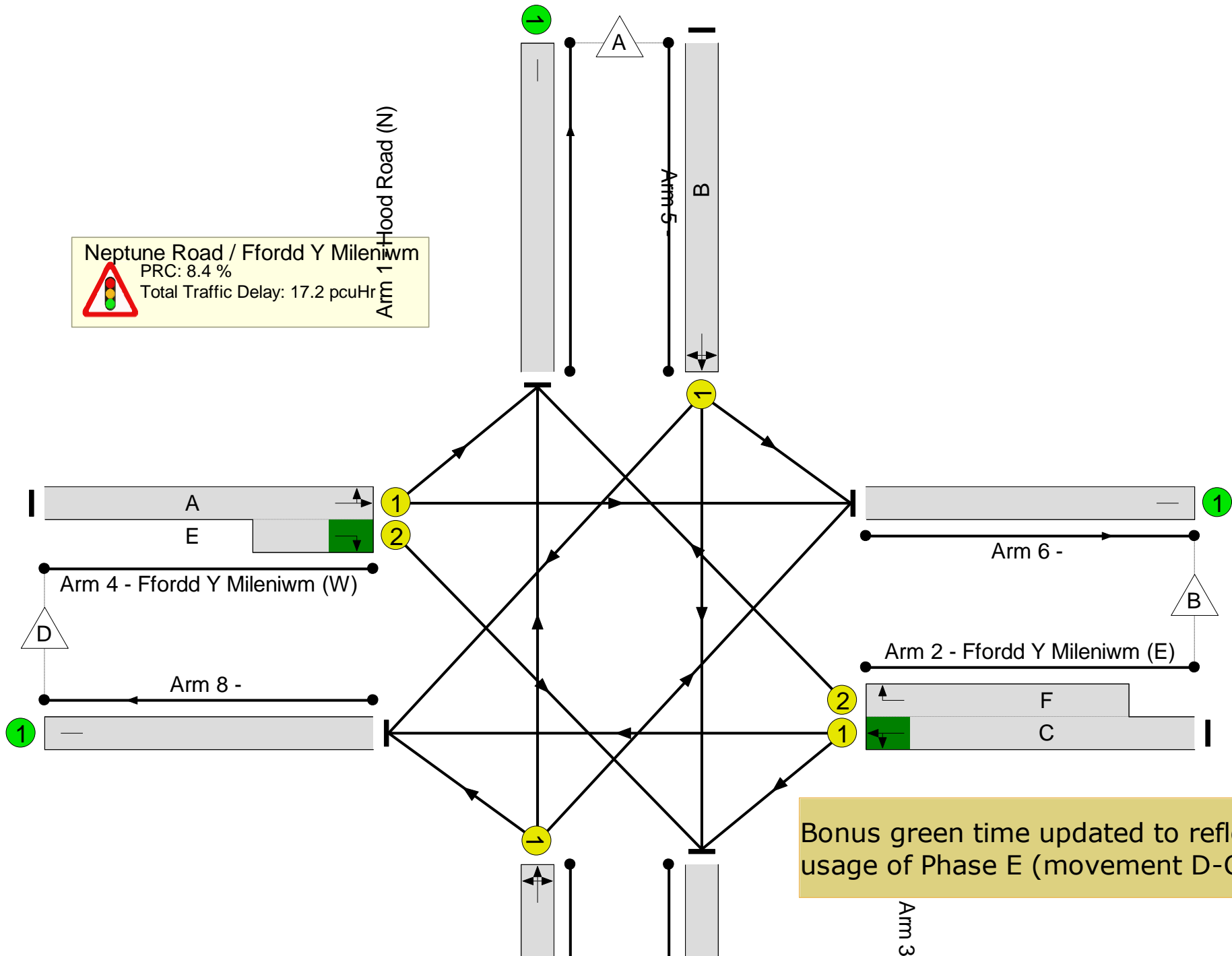


Stage Timings

Stage	1	4	5	6
Duration	29	6	13	6
Change Point	0	37	54	76

Signal Timings Diagram





Bonus green time updated to reflect low usage of Phase E (movement D-C).

Full Input Data And Results

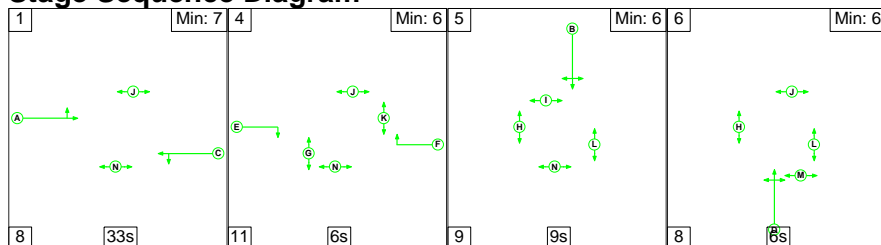
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	17.2	83.0%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	17.2	83.0%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	15	-	1822	4.9	83.0%	66.0	8.7	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	29:12	-	1905:1735	5.1	68.2 : 68.2%	25.4	11.3	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1838	1.0	35.7%	50.7	2.0	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	31:12	-	1907:1665	6.1	81.1 : 81.1%	39.9	14.5	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	8.4	Total Delay for Signalled Lanes (pcuHr):			17.17	Cycle Time (s):			90			
			PRC Over All Lanes (%):	8.4	Total Delay Over All Lanes(pcuHr):			17.17							

Full Input Data And Results

Scenario 5: '2033 + Dev AM' (FG5: '2033 + Dev AM', Plan 1: 'Network Control Plan 1')

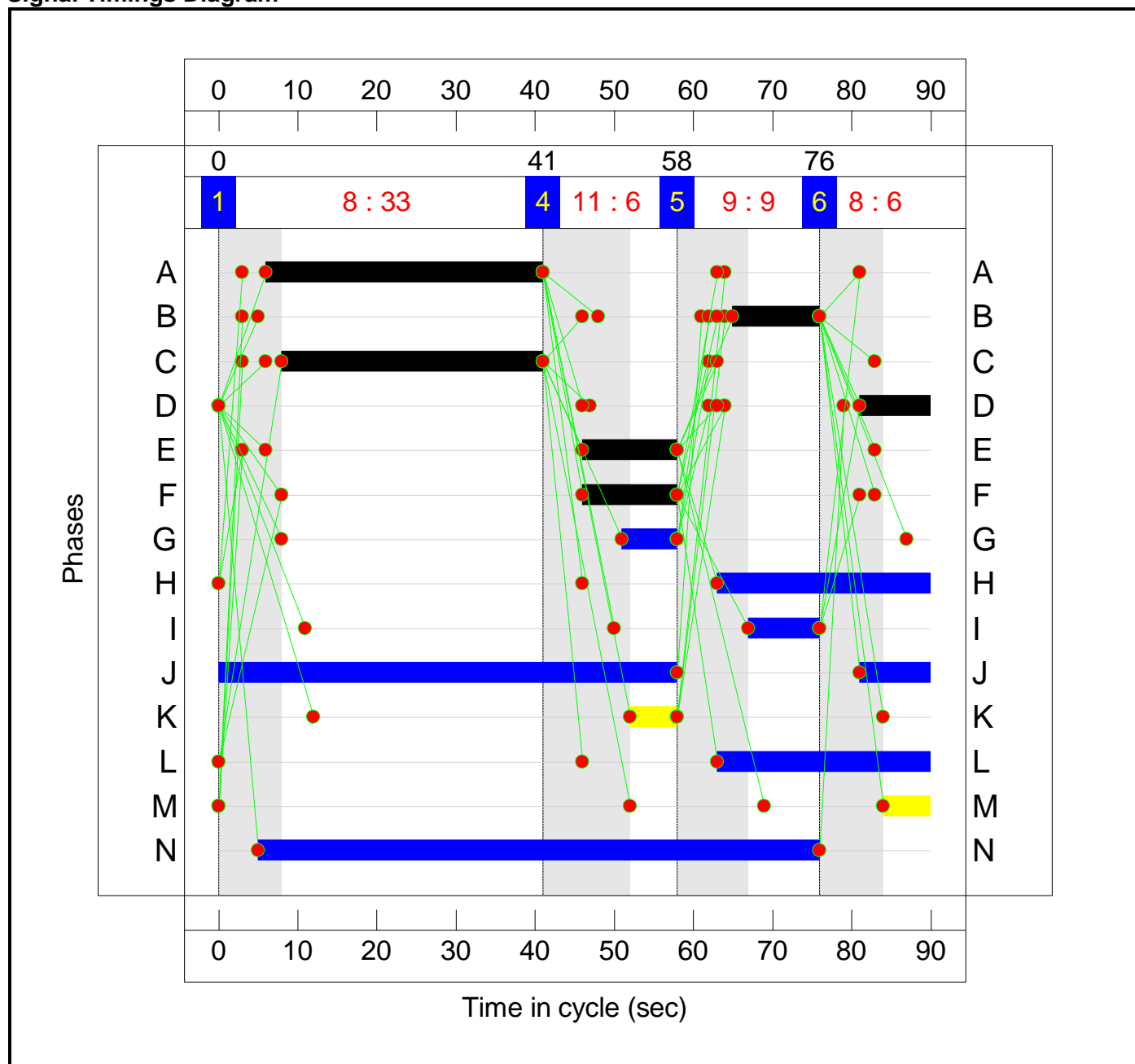
Stage Sequence Diagram

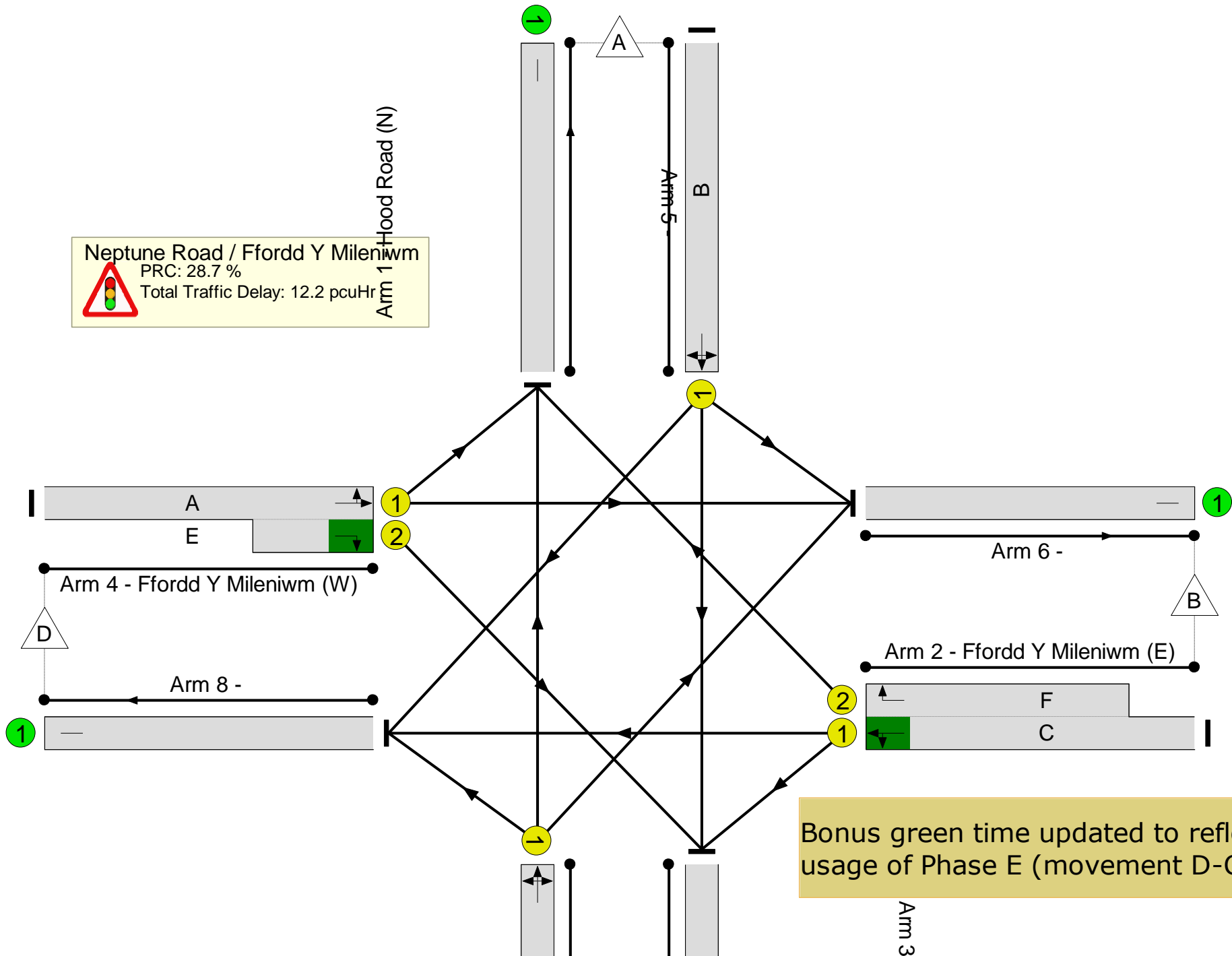


Stage Timings

Stage	1	4	5	6
Duration	33	6	9	6
Change Point	0	41	58	76

Signal Timings Diagram





Full Input Data And Results

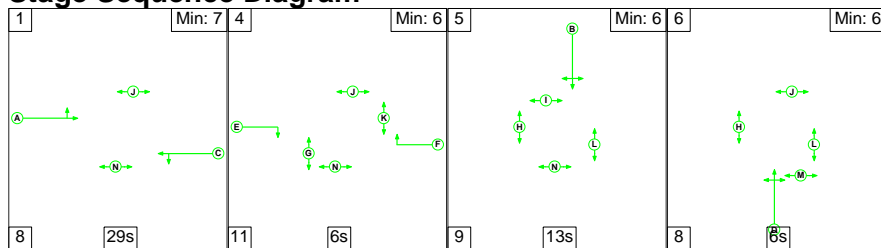
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	12.2	69.9%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	12.2	69.9%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	11	-	1829	2.8	68.5%	60.0	5.0	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	33:12	-	1901:1735	4.5	64.6 : 64.6%	22.2	10.6	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1835	0.4	14.7%	46.6	0.8	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	35:12	-	1905:1665	4.5	69.9 : 69.9%	30.3	12.1	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	28.7	Total Delay for Signalled Lanes (pcuHr):			12.16	Cycle Time (s):			90			
			PRC Over All Lanes (%):	28.7	Total Delay Over All Lanes(pcuHr):			12.16							

Full Input Data And Results

Scenario 6: '2033 + Dev PM' (FG6: '2033 + Dev PM', Plan 1: 'Network Control Plan 1')

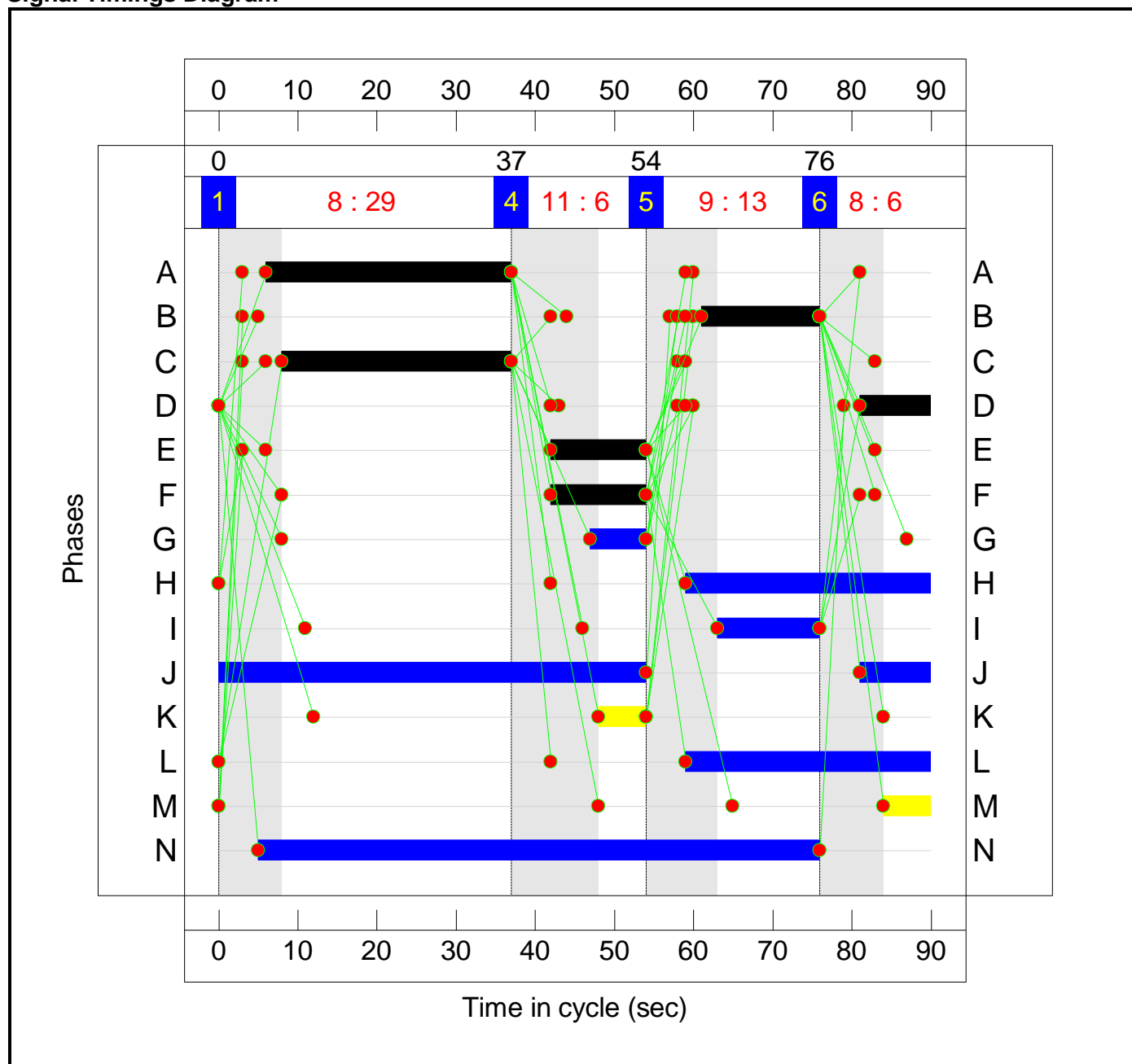
Stage Sequence Diagram

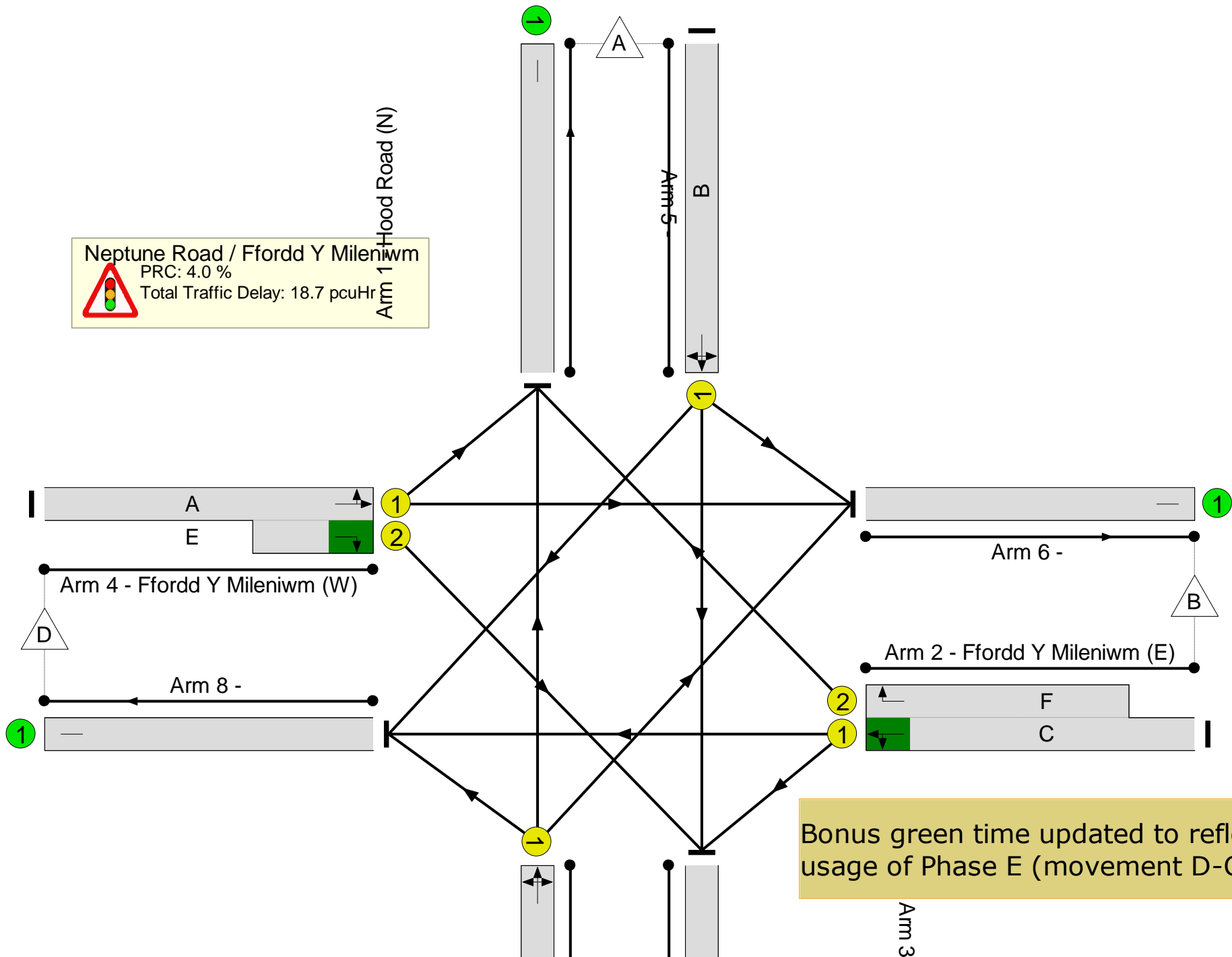


Stage Timings

Stage	1	4	5	6
Duration	29	6	13	6
Change Point	0	37	54	76

Signal Timings Diagram





Bonus green time updated to reflect low usage of Phase E (movement D-C).

Full Input Data And Results

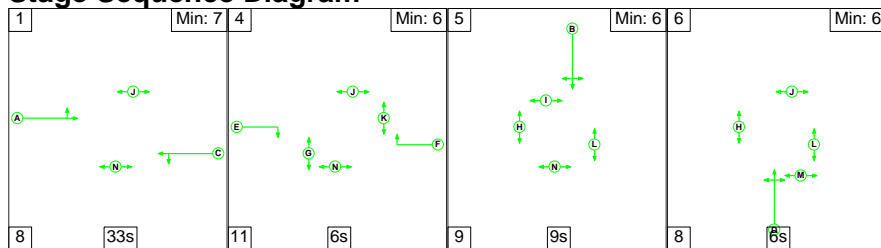
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	18.7	86.6%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	18.7	86.6%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	15	-	1822	5.0	83.4%	66.5	8.8	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	29:12	-	1905:1735	5.2	69.6 : 69.6%	25.7	11.8	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1838	1.0	35.7%	50.7	2.0	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	31:12	-	1907:1665	7.5	86.6 : 86.6%	45.5	16.6	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	4.0	Total Delay for Signalled Lanes (pcuHr):			18.71	Cycle Time (s):			90			
			PRC Over All Lanes (%):	4.0	Total Delay Over All Lanes(pcuHr):			18.71							

Full Input Data And Results

Scenario 7: '2033 + Dev AM Sensitivity' (FG7: '2033 + Dev AM Sensitivity', Plan 1: 'Network Control Plan 1')

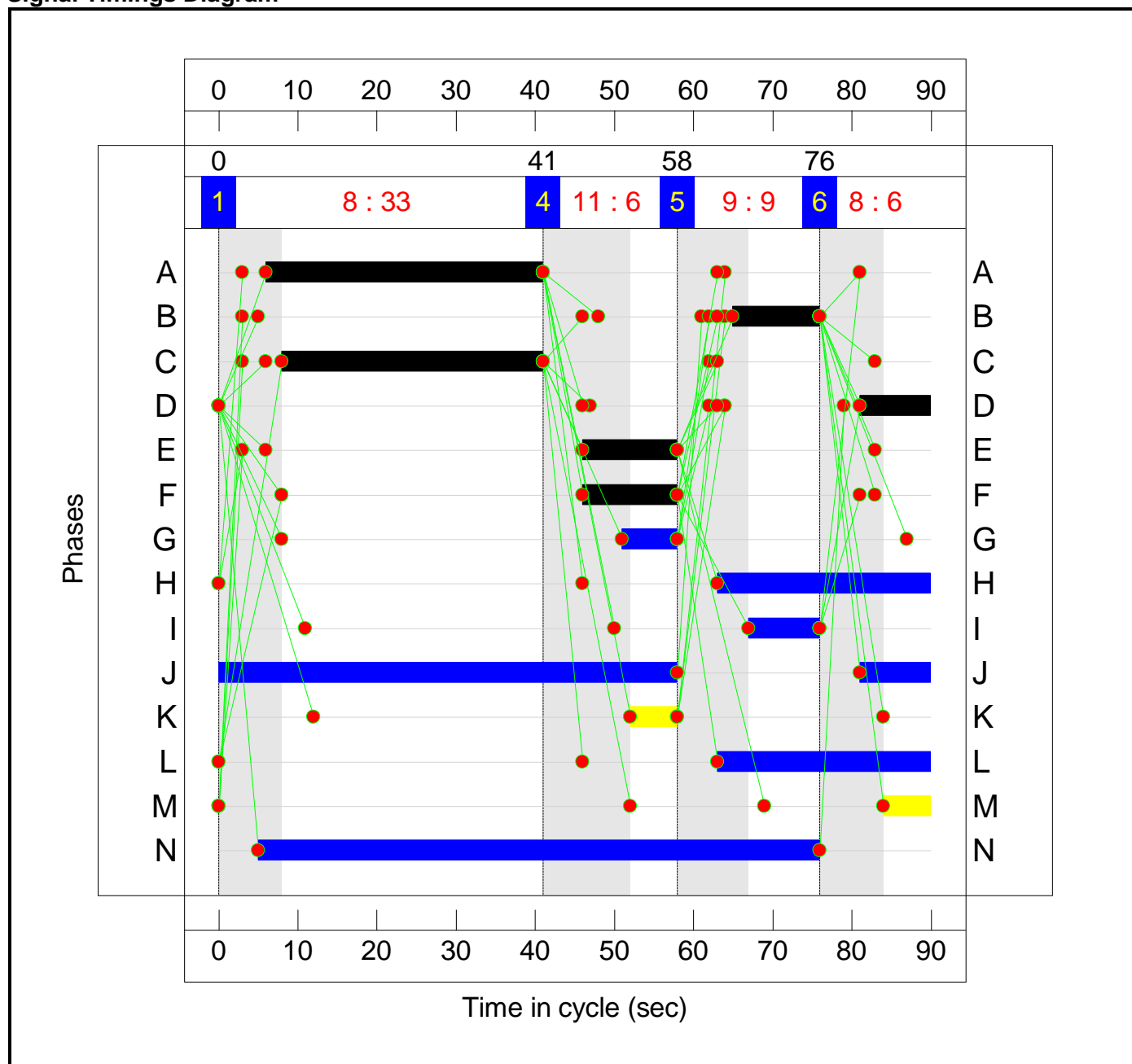
Stage Sequence Diagram

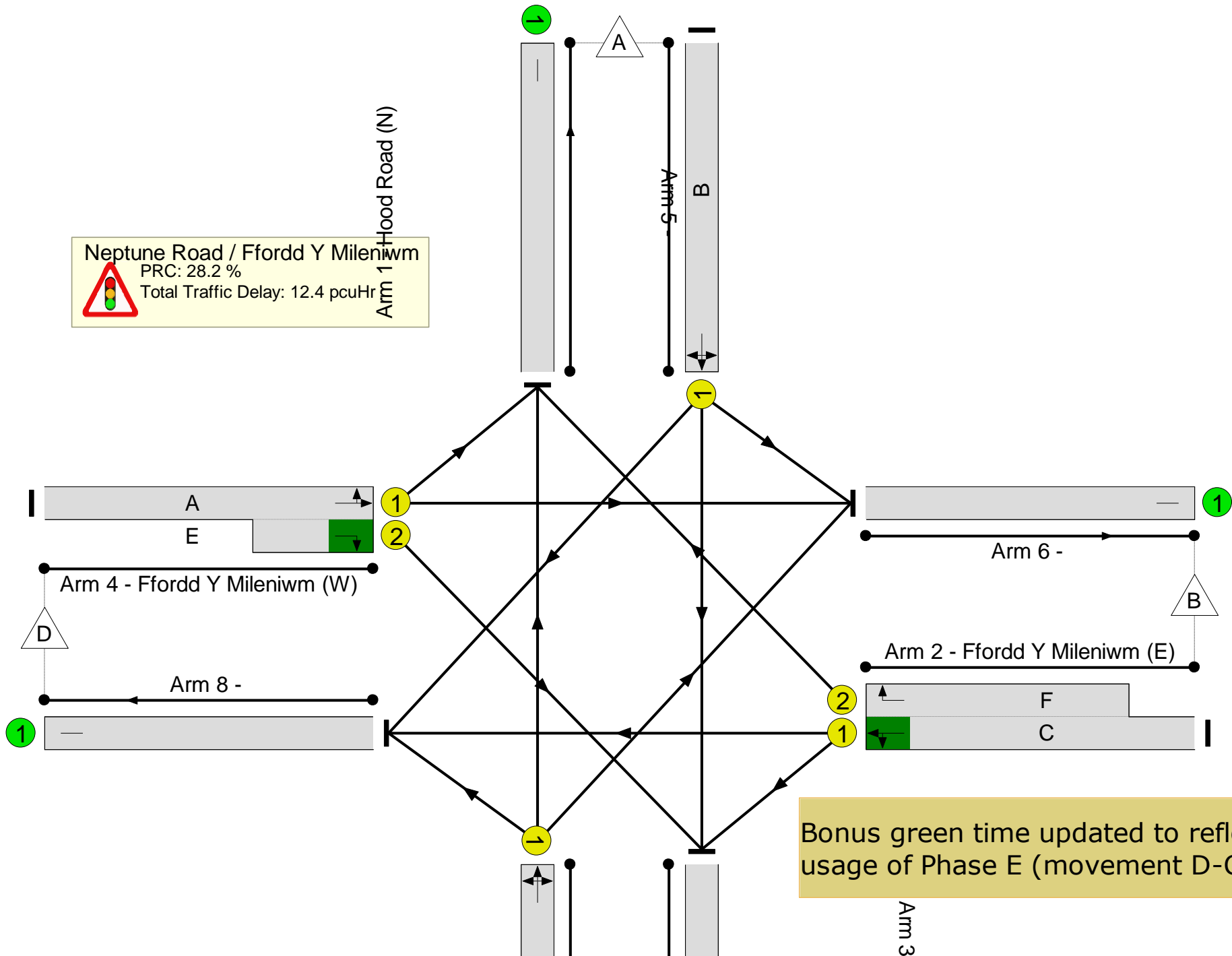


Stage Timings

Stage	1	4	5	6
Duration	33	6	9	6
Change Point	0	41	58	76

Signal Timings Diagram





Full Input Data And Results

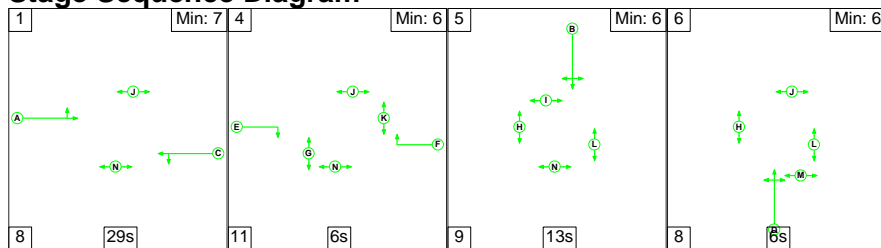
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	12.4	70.2%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	12.4	70.2%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	11	-	1829	2.8	68.5%	60.0	5.0	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	33:12	-	1901:1735	4.7	66.5 : 66.5%	22.5	11.2	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1835	0.4	14.7%	46.6	0.8	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	35:12	-	1905:1665	4.5	70.2 : 70.2%	30.4	12.3	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	28.2	Total Delay for Signalled Lanes (pcuHr):			12.37	Cycle Time (s):			90			
			PRC Over All Lanes (%):	28.2	Total Delay Over All Lanes(pcuHr):			12.37							

Full Input Data And Results

Scenario 8: '2033 + Dev PM Sensitivity' (FG8: '2033 + Dev PM Sensitivity', Plan 1: 'Network Control Plan 1')

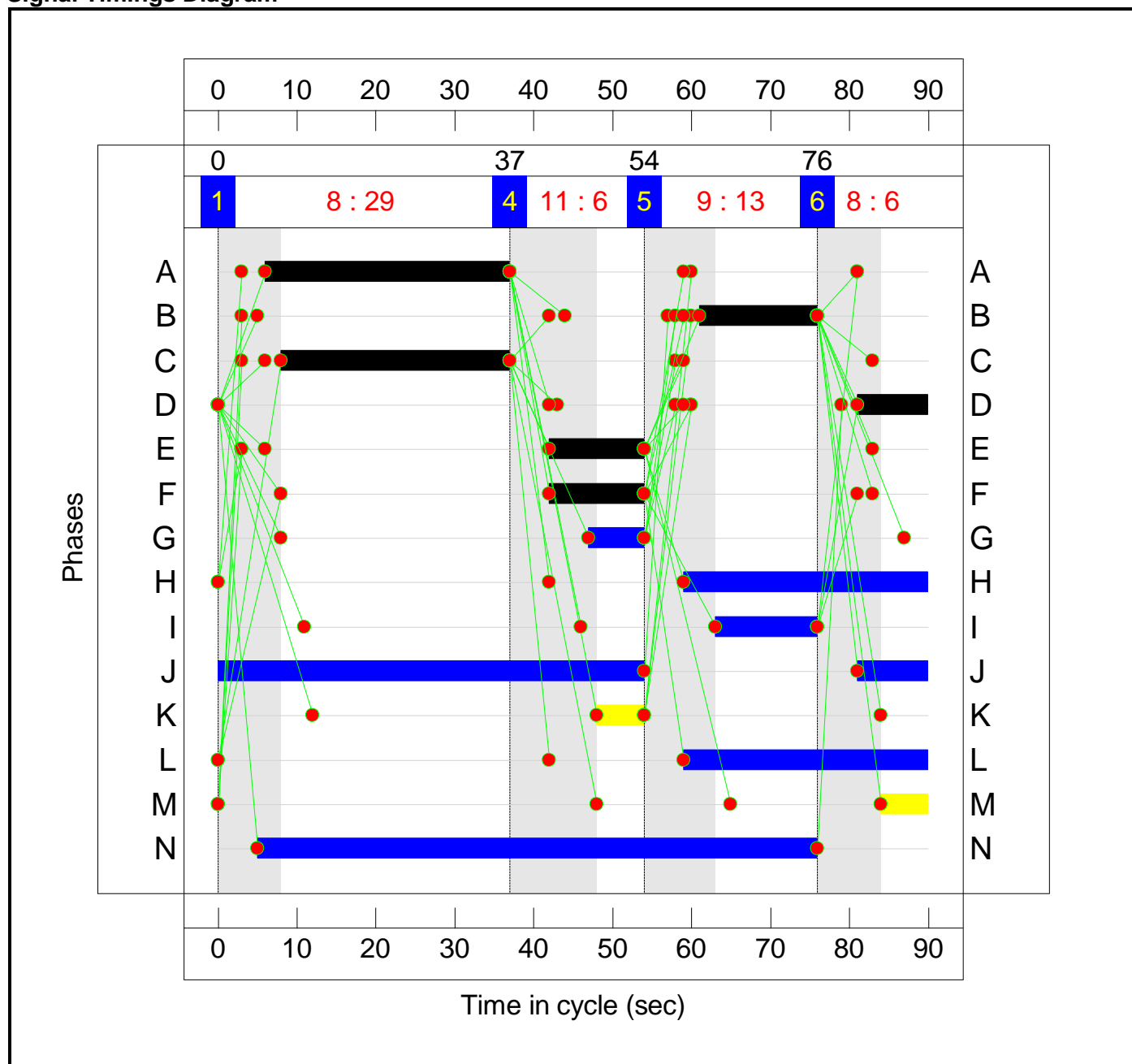
Stage Sequence Diagram

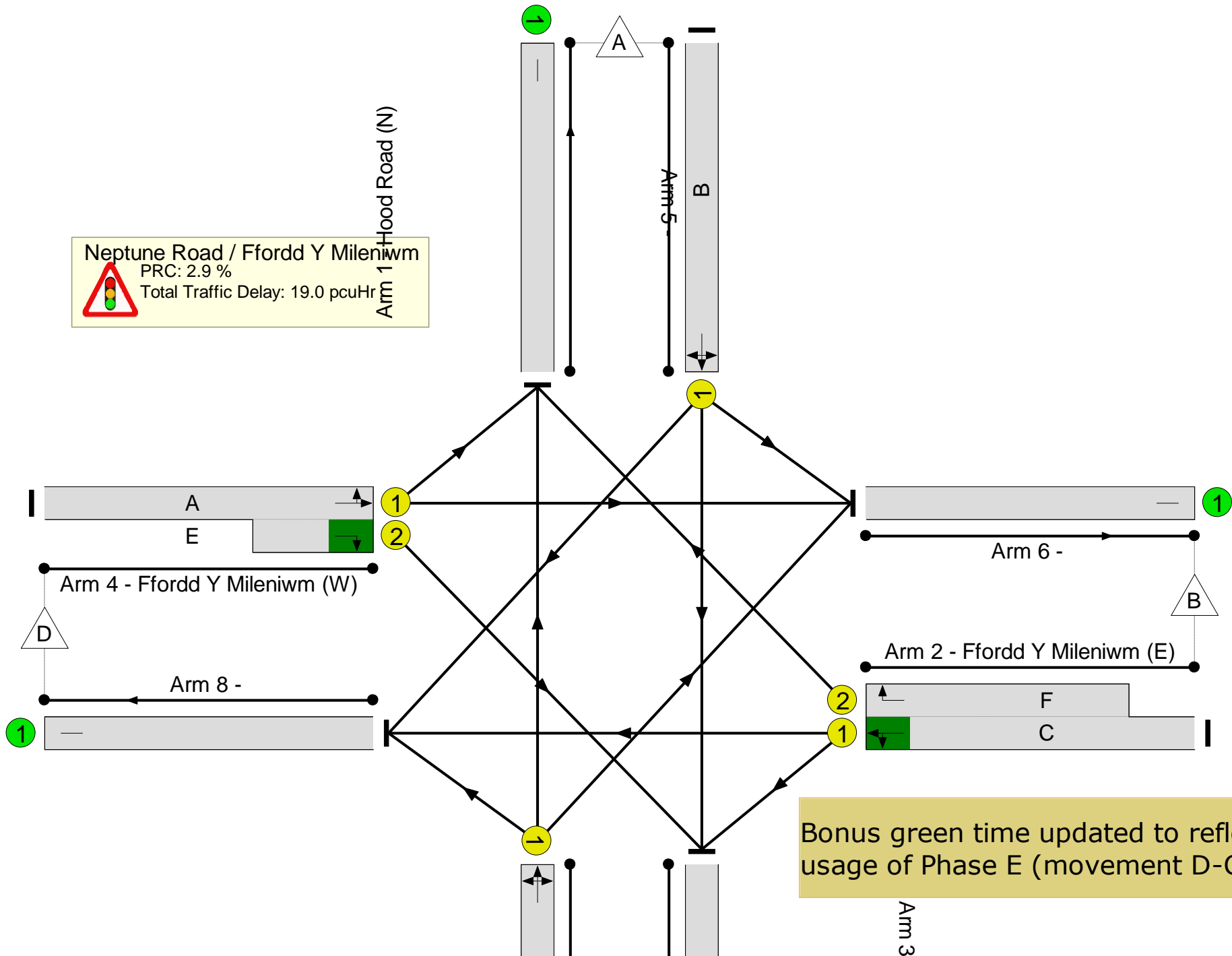


Stage Timings

Stage	1	4	5	6
Duration	29	6	13	6
Change Point	0	37	54	76

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Sat Flow (pcu/Hr)	Total Delay (pcuHr)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	N/A	-	-		-	-	-	-	19.0	87.5%	-	-	
Neptune Road / Ffordd Y Mileniwm	-	-	N/A	-	-		-	-	-	-	19.0	87.5%	-	-	
1/1	Hood Road (N) Left Ahead Right	U	N/A	N/A	B		1	15	-	1822	5.0	83.4%	66.5	8.8	
2/1+2/2	Ffordd Y Mileniwm (E) Right Left Ahead	U	N/A	N/A	C F		1	29:12	-	1905:1735	5.3	69.9 : 69.9%	25.8	11.8	
3/1	Neptune Road (S) Ahead Right Left	U	N/A	N/A	D		1	9	-	1838	1.0	35.7%	50.7	2.0	
4/1+4/2	Ffordd Y Mileniwm (W) Left Ahead Right	U	N/A	N/A	A E		1	31:12	-	1907:1665	7.7	87.5 : 87.5%	46.8	17.1	
5/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
6/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
7/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
8/1		U	N/A	N/A	-		-	-	-	Inf	0.0	0.0%	0.0	0.0	
C1			PRC for Signalled Lanes (%):	2.9	Total Delay for Signalled Lanes (pcuHr):			19.02	Cycle Time (s):			90			
			PRC Over All Lanes (%):	2.9	Total Delay Over All Lanes(pcuHr):			19.02							

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: Fford Y Mileniwm Site Access Junction.j9
Path: H:\Vectos\CardiffShare\Projects\W230000\237449 - CAVC Advanced Technology Centre, Vale of Glamorgan\Technical\C - BWC Site\Modelling\Picady
Report generation date: 20/03/2024 14:41:04

- »2023, AM
- »2023, PM
- »2033, AM
- »2033, PM
- »2033 + Development, AM
- »2033 + Development, PM
- »2033 + Development (SENS), AM
- »2033 + Development (SENS), PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2023										
Stream B-C	D1	0.0	6.42	0.02	A	D2	0.0	6.66	0.01	A
Stream B-A		0.0	0.00	0.00	A		0.0	13.28	0.01	B
Stream C-AB		0.0	7.83	0.03	A		0.0	6.78	0.03	A
2033										
Stream B-C	D3	0.0	6.42	0.02	A	D4	0.0	6.66	0.01	A
Stream B-A		0.0	0.00	0.00	A		0.0	13.29	0.01	B
Stream C-AB		0.0	7.83	0.03	A		0.0	6.78	0.03	A
2033 + Development										
Stream B-C	D5	0.0	6.58	0.04	A	D6	0.1	7.11	0.09	A
Stream B-A		0.0	0.00	0.00	A		0.0	13.95	0.01	B
Stream C-AB		0.4	10.15	0.25	B		0.1	6.97	0.05	A
2033 + Development (SENS)										
Stream B-C	D7	0.0	6.61	0.04	A	D8	0.1	7.20	0.10	A
Stream B-A		0.0	0.00	0.00	A		0.0	14.03	0.01	B
Stream C-AB		0.5	10.68	0.29	B		0.1	7.01	0.06	A

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

File summary

File Description

Title	Fford Y Mileniwm/Site Access Junction
Location	
Site number	
Date	24/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\jameswalker
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2033	AM	ONE HOUR	07:45	09:15	15
D4	2033	PM	ONE HOUR	16:45	18:15	15
D5	2033 + Development	AM	ONE HOUR	07:45	09:15	15
D6	2033 + Development	PM	ONE HOUR	16:45	18:15	15
D7	2033 + Development (SENS)	AM	ONE HOUR	07:45	09:15	15
D8	2033 + Development (SENS)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Fford Y Mileniwm South		Major
B	Fford Y Mileniwm		Minor
C	Fford Y Mileniwm North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Fford Y Mileniwm North	6.25		✓	3.43	88.0	✓	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Fford Y Mileniwm	One lane plus flare	10.00	8.24	4.58	3.03	2.68	✓	1.00	53	54

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	508.269	0.092	0.231	0.146	0.331
B-C	727.622	0.110	0.279	-	-
C-B	708.581	0.272	0.272	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	519.00	100.000
B - Fford Y Mileniwm		✓	8.00	100.000
C - Fford Y Mileniwm North		✓	500.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	5.00	514.00
	B - Fford Y Mileniwm	0.00	0.00	8.00
	C - Fford Y Mileniwm North	486.00	14.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	25	1
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	0	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.42	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.03	7.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.02	619.30	0.010	5.98	0.0	5.869	A
B-A	0.00	361.60	0.000	0.00	0.0	0.000	A
C-AB	10.54	602.48	0.017	10.46	0.0	7.114	A
C-A	365.89			365.89			
A-B	3.76			3.76			
A-C	386.97			386.97			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.19	598.28	0.012	7.18	0.0	6.089	A
B-A	0.00	333.11	0.000	0.00	0.0	0.000	A
C-AB	12.59	581.88	0.022	12.57	0.0	7.397	A
C-A	436.90			436.90			
A-B	4.49			4.49			
A-C	462.08			462.08			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8.81	569.21	0.015	8.79	0.0	6.423	A
B-A	0.00	293.74	0.000	0.00	0.0	0.000	A
C-AB	15.41	553.41	0.028	15.38	0.0	7.828	A
C-A	535.10			535.10			
A-B	5.51			5.51			
A-C	565.92			565.92			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8.81	569.21	0.015	8.81	0.0	6.423	A
B-A	0.00	293.73	0.000	0.00	0.0	0.000	A
C-AB	15.41	553.41	0.028	15.41	0.0	7.828	A
C-A	535.10			535.10			
A-B	5.51			5.51			
A-C	565.92			565.92			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.19	598.28	0.012	7.21	0.0	6.092	A
B-A	0.00	333.09	0.000	0.00	0.0	0.000	A
C-AB	12.59	581.88	0.022	12.61	0.0	7.398	A
C-A	436.90			436.90			
A-B	4.49			4.49			
A-C	462.08			462.08			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.02	619.30	0.010	6.03	0.0	5.871	A
B-A	0.00	361.57	0.000	0.00	0.0	0.000	A
C-AB	10.54	602.48	0.017	10.56	0.0	7.118	A
C-A	365.89			365.89			
A-B	3.76			3.76			
A-C	386.97			386.97			

2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	546.00	100.000
B - Fford Y Mileniwm		✓	9.00	100.000
C - Fford Y Mileniwm North		✓	639.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	0.00	546.00
	B - Fford Y Mileniwm	2.00	0.00	7.00
	C - Fford Y Mileniwm North	626.00	13.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	0	2
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.66	0.0	A
B-A	0.01	13.28	0.0	B
C-AB	0.03	6.78	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.27	601.06	0.009	5.23	0.0	6.041	A
B-A	1.51	353.16	0.004	1.49	0.0	10.236	B
C-AB	9.79	596.96	0.016	9.72	0.0	6.130	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.06			411.06			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.29	579.01	0.011	6.28	0.0	6.285	A
B-A	1.80	319.63	0.006	1.79	0.0	11.326	B
C-AB	11.69	575.29	0.020	11.67	0.0	6.386	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	490.84			490.84			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.71	548.51	0.014	7.69	0.0	6.655	A
B-A	2.20	273.25	0.008	2.19	0.0	13.281	B
C-AB	14.31	545.33	0.026	14.29	0.0	6.778	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	601.16			601.16			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.71	548.49	0.014	7.71	0.0	6.656	A
B-A	2.20	273.26	0.008	2.20	0.0	13.280	B
C-AB	14.31	545.33	0.026	14.31	0.0	6.778	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	601.16			601.16			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.29	578.96	0.011	6.31	0.0	6.288	A
B-A	1.80	319.66	0.006	1.81	0.0	11.328	B
C-AB	11.69	575.29	0.020	11.71	0.0	6.389	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	490.84			490.84			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.27	600.99	0.009	5.28	0.0	6.042	A
B-A	1.51	353.20	0.004	1.51	0.0	10.236	B
C-AB	9.79	596.96	0.016	9.80	0.0	6.133	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.06			411.06			

2033, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	519.00	100.000
B - Fford Y Mileniwm		✓	8.00	100.000
C - Fford Y Mileniwm North		✓	501.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	5.00	514.00
	B - Fford Y Mileniwm	0.00	0.00	8.00
	C - Fford Y Mileniwm North	487.00	14.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	25	1
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	0	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.42	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.03	7.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.02	619.30	0.010	5.98	0.0	5.869	A
B-A	0.00	361.49	0.000	0.00	0.0	0.000	A
C-AB	10.54	602.48	0.017	10.46	0.0	7.114	A
C-A	366.64			366.64			
A-B	3.76			3.76			
A-C	386.97			386.97			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.19	598.28	0.012	7.18	0.0	6.089	A
B-A	0.00	332.98	0.000	0.00	0.0	0.000	A
C-AB	12.59	581.88	0.022	12.57	0.0	7.397	A
C-A	437.80			437.80			
A-B	4.49			4.49			
A-C	462.08			462.08			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8.81	569.21	0.015	8.79	0.0	6.423	A
B-A	0.00	293.58	0.000	0.00	0.0	0.000	A
C-AB	15.41	553.41	0.028	15.38	0.0	7.828	A
C-A	536.20			536.20			
A-B	5.51			5.51			
A-C	565.92			565.92			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8.81	569.21	0.015	8.81	0.0	6.423	A
B-A	0.00	293.57	0.000	0.00	0.0	0.000	A
C-AB	15.41	553.41	0.028	15.41	0.0	7.828	A
C-A	536.20			536.20			
A-B	5.51			5.51			
A-C	565.92			565.92			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.19	598.28	0.012	7.21	0.0	6.092	A
B-A	0.00	332.96	0.000	0.00	0.0	0.000	A
C-AB	12.59	581.88	0.022	12.61	0.0	7.401	A
C-A	437.80			437.80			
A-B	4.49			4.49			
A-C	462.08			462.08			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.02	619.30	0.010	6.03	0.0	5.871	A
B-A	0.00	361.46	0.000	0.00	0.0	0.000	A
C-AB	10.54	602.48	0.017	10.56	0.0	7.118	A
C-A	366.64			366.64			
A-B	3.76			3.76			
A-C	386.97			386.97			

2033, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	547.00	100.000
B - Fford Y Mileniwm		✓	9.00	100.000
C - Fford Y Mileniwm North		✓	639.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	0.00	547.00
	B - Fford Y Mileniwm	2.00	0.00	7.00
	C - Fford Y Mileniwm North	626.00	13.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	0	2
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.66	0.0	A
B-A	0.01	13.29	0.0	B
C-AB	0.03	6.78	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.27	600.85	0.009	5.23	0.0	6.043	A
B-A	1.51	352.98	0.004	1.49	0.0	10.241	B
C-AB	9.79	596.75	0.016	9.72	0.0	6.132	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.29	578.76	0.011	6.28	0.0	6.287	A
B-A	1.80	319.42	0.006	1.79	0.0	11.333	B
C-AB	11.69	575.05	0.020	11.67	0.0	6.389	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.71	548.21	0.014	7.69	0.0	6.659	A
B-A	2.20	272.98	0.008	2.19	0.0	13.294	B
C-AB	14.31	545.03	0.026	14.29	0.0	6.782	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.71	548.19	0.014	7.71	0.0	6.659	A
B-A	2.20	272.99	0.008	2.20	0.0	13.293	B
C-AB	14.31	545.03	0.026	14.31	0.0	6.782	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6.29	578.71	0.011	6.31	0.0	6.291	A
B-A	1.80	319.44	0.006	1.81	0.0	11.335	B
C-AB	11.69	575.05	0.020	11.71	0.0	6.392	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.27	600.79	0.009	5.28	0.0	6.044	A
B-A	1.51	353.02	0.004	1.51	0.0	10.243	B
C-AB	9.79	596.75	0.016	9.80	0.0	6.135	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			

2033 + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		1.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2033 + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	522.00	100.000
B - Fford Y Mileniwm		✓	20.00	100.000
C - Fford Y Mileniwm North		✓	612.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	8.00	514.00
	B - Fford Y Mileniwm	0.00	0.00	20.00
	C - Fford Y Mileniwm North	487.00	125.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	25	1
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	0	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	6.58	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.25	10.15	0.4	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15.06	619.05	0.024	14.96	0.0	5.959	A
B-A	0.00	333.65	0.000	0.00	0.0	0.000	A
C-AB	94.11	601.87	0.156	93.25	0.2	8.267	A
C-A	366.64			366.64			
A-B	6.02			6.02			
A-C	386.97			386.97			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.98	597.98	0.030	17.96	0.0	6.206	A
B-A	0.00	299.48	0.000	0.00	0.0	0.000	A
C-AB	112.38	581.17	0.193	112.13	0.3	8.975	A
C-A	437.80			437.80			
A-B	7.19			7.19			
A-C	462.08			462.08			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.02	568.84	0.039	21.98	0.0	6.582	A
B-A	0.00	252.53	0.000	0.00	0.0	0.000	A
C-AB	137.66	552.65	0.249	137.24	0.4	10.129	B
C-A	536.16			536.16			
A-B	8.81			8.81			
A-C	565.92			565.92			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.02	568.84	0.039	22.02	0.0	6.582	A
B-A	0.00	252.40	0.000	0.00	0.0	0.000	A
C-AB	137.66	552.64	0.249	137.65	0.4	10.148	B
C-A	536.16			536.16			
A-B	8.81			8.81			
A-C	565.92			565.92			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.98	597.98	0.030	18.02	0.0	6.209	A
B-A	0.00	299.25	0.000	0.00	0.0	0.000	A
C-AB	112.38	581.16	0.193	112.78	0.3	9.000	A
C-A	437.80			437.80			
A-B	7.19			7.19			
A-C	462.08			462.08			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15.06	619.05	0.024	15.08	0.0	5.960	A
B-A	0.00	333.28	0.000	0.00	0.0	0.000	A
C-AB	94.11	601.87	0.156	94.37	0.2	8.305	A
C-A	366.64			366.64			
A-B	6.02			6.02			
A-C	386.97			386.97			

2033 + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2033 + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	547.00	100.000
B - Fford Y Mileniwm		✓	47.00	100.000
C - Fford Y Mileniwm North		✓	652.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	0.00	547.00
	B - Fford Y Mileniwm	3.00	0.00	44.00
	C - Fford Y Mileniwm North	626.00	26.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	0	2
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	7.11	0.1	A
B-A	0.01	13.95	0.0	B
C-AB	0.05	6.97	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33.13	608.53	0.054	32.90	0.1	6.249	A
B-A	2.26	341.19	0.007	2.23	0.0	10.620	B
C-AB	19.57	596.75	0.033	19.44	0.0	6.234	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39.56	586.06	0.067	39.50	0.1	6.586	A
B-A	2.70	307.72	0.009	2.69	0.0	11.801	B
C-AB	23.37	575.05	0.041	23.34	0.0	6.524	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48.44	554.92	0.087	48.35	0.1	7.107	A
B-A	3.30	261.44	0.013	3.29	0.0	13.945	B
C-AB	28.63	545.03	0.053	28.57	0.1	6.970	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48.44	554.91	0.087	48.44	0.1	7.107	A
B-A	3.30	261.43	0.013	3.30	0.0	13.945	B
C-AB	28.63	545.03	0.053	28.63	0.1	6.970	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39.56	586.03	0.068	39.64	0.1	6.589	A
B-A	2.70	307.70	0.009	2.71	0.0	11.805	B
C-AB	23.37	575.05	0.041	23.42	0.0	6.526	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33.13	608.50	0.054	33.19	0.1	6.257	A
B-A	2.26	341.16	0.007	2.27	0.0	10.622	B
C-AB	19.57	596.75	0.033	19.61	0.0	6.239	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			

2033 + Development (SENS), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		1.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 + Development (SENS)	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	522.00	100.000
B - Fford Y Mileniwm		✓	22.00	100.000
C - Fford Y Mileniwm North		✓	631.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	8.00	514.00
	B - Fford Y Mileniwm	0.00	0.00	22.00
	C - Fford Y Mileniwm North	487.00	144.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	25	1
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	0	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	6.61	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.29	10.68	0.5	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16.56	619.05	0.027	16.45	0.0	5.974	A
B-A	0.00	328.92	0.000	0.00	0.0	0.000	A
C-AB	108.41	601.88	0.180	107.40	0.3	8.501	A
C-A	366.64			366.64			
A-B	6.02			6.02			
A-C	386.97			386.97			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19.78	597.98	0.033	19.75	0.0	6.225	A
B-A	0.00	293.78	0.000	0.00	0.0	0.000	A
C-AB	129.47	581.21	0.223	129.16	0.3	9.310	A
C-A	437.79			437.79			
A-B	7.19			7.19			
A-C	462.08			462.08			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24.22	568.84	0.043	24.18	0.0	6.609	A
B-A	0.00	245.55	0.000	0.00	0.0	0.000	A
C-AB	158.63	552.83	0.287	158.10	0.5	10.653	B
C-A	536.11			536.11			
A-B	8.81			8.81			
A-C	565.92			565.92			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24.22	568.84	0.043	24.22	0.0	6.609	A
B-A	0.00	245.37	0.000	0.00	0.0	0.000	A
C-AB	158.63	552.82	0.287	158.62	0.5	10.683	B
C-A	536.11			536.11			
A-B	8.81			8.81			
A-C	565.92			565.92			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19.78	597.98	0.033	19.82	0.0	6.226	A
B-A	0.00	293.50	0.000	0.00	0.0	0.000	A
C-AB	129.47	581.18	0.223	129.98	0.3	9.344	A
C-A	437.79			437.79			
A-B	7.19			7.19			
A-C	462.08			462.08			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16.56	619.05	0.027	16.59	0.0	5.977	A
B-A	0.00	328.48	0.000	0.00	0.0	0.000	A
C-AB	108.41	601.87	0.180	108.73	0.3	8.546	A
C-A	366.64			366.64			
A-B	6.02			6.02			
A-C	386.97			386.97			

2033 + Development (SENS), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fford Y Mileniwm/Site Access Junction	T-Junction	Two-way		0.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 + Development (SENS)	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Fford Y Mileniwm South		✓	547.00	100.000
B - Fford Y Mileniwm		✓	53.00	100.000
C - Fford Y Mileniwm North		✓	655.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0.00	0.00	547.00
	B - Fford Y Mileniwm	3.00	0.00	50.00
	C - Fford Y Mileniwm North	626.00	29.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Fford Y Mileniwm South	B - Fford Y Mileniwm	C - Fford Y Mileniwm North
From	A - Fford Y Mileniwm South	0	0	2
	B - Fford Y Mileniwm	0	0	0
	C - Fford Y Mileniwm North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	7.20	0.1	A
B-A	0.01	14.03	0.0	B
C-AB	0.06	7.01	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37.64	608.90	0.062	37.38	0.1	6.296	A
B-A	2.26	340.03	0.007	2.23	0.0	10.657	B
C-AB	21.83	596.75	0.037	21.68	0.0	6.258	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44.95	586.41	0.077	44.88	0.1	6.647	A
B-A	2.70	306.42	0.009	2.69	0.0	11.852	B
C-AB	26.07	575.05	0.045	26.03	0.0	6.556	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55.05	555.25	0.099	54.94	0.1	7.193	A
B-A	3.30	259.96	0.013	3.29	0.0	14.025	B
C-AB	31.93	545.03	0.059	31.87	0.1	7.015	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55.05	555.23	0.099	55.05	0.1	7.196	A
B-A	3.30	259.95	0.013	3.30	0.0	14.026	B
C-AB	31.93	545.03	0.059	31.93	0.1	7.015	A
C-A	689.24			689.24			
A-B	0.00			0.00			
A-C	602.26			602.26			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44.95	586.38	0.077	45.05	0.1	6.653	A
B-A	2.70	306.40	0.009	2.71	0.0	11.856	B
C-AB	26.07	575.05	0.045	26.13	0.0	6.560	A
C-A	562.76			562.76			
A-B	0.00			0.00			
A-C	491.74			491.74			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37.64	608.86	0.062	37.71	0.1	6.305	A
B-A	2.26	339.99	0.007	2.27	0.0	10.661	B
C-AB	21.83	596.75	0.037	21.87	0.0	6.261	A
C-A	471.29			471.29			
A-B	0.00			0.00			
A-C	411.81			411.81			



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