SOUTHBOURNE BROAD LOCATION FOR DEVELOPMENT, CHICHESTER

Level Crossing Assessment

December 2024

Metis Homes

RESIDENTIAL DEVELOPMENT
SOUTHBOURNE BROAD LOCATION FOR DEVELOPMENT
CHICHESTER

LEVEL CROSSING ASSESSMENT

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CHICHESTER

LEVEL CROSSING ASSESSMENT

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1. INTRODUCTION

1.1 This Level Crossing Assessment (LCA) has been prepared by Paul Basham Associates on behalf of Metis Homes Ltd to input into the Regulation 18 consultation on the Southbourne Allocation Development Plan Document (DPD) (September 2024), which is presenting options for the allocation of 800no. residential dwellings and associated infrastructure in Southbourne. This allocation is being made pursuant to Policy A13 of the emerging Chichester Local Plan Review (2021-2039), which is currently at Examination.

1.2 Policy A13 identifies a Broad Location for Development (BLD) encompassing the majority of Southbourne Parish and confirms that an allocation will be made through the DPD process for 1,050no. dwellings and associated infrastructure. As 250 dwellings have already been approved within the BLD area and are counted as commitments against the overall requirement of 1,050 dwellings, the DPD is seeking to allocate the residual 800no. dwellings requirement - this is directly referenced in the exhibition material presented by CDC to the local community.

1.3 Under the heading of 'Development and Infrastructure assumptions', the draft DPD states that a multi-modal bridge may be required as follows:

"5.8 The proposed allocation may safeguard land for future vehicular railway crossings depending on the scenario selected. Current evidence suggests that the bridge might be required to address traffic congestion if approximately 800 homes are delivered to the north of the railway. Concerns regarding the safety of existing road and pedestrian level crossings could also be addressed (partially or fully) by provision of a multi-modal bridge crossing"

1.4 The draft DPD does not clarify the evidential basis for this assumption. However, as part of evidence base for the emerging Local Plan Review process, Stantec have produced a Southbourne Level Crossing report (August 2020) and the Southbourne Level Crossing - Paramics Discovery Modelling Update (March 2023) which suggests that a vehicular bridge over the existing railway line "*may be of some benefit, if the traffic conditions cannot be otherwise mitigated by altering forecasted demand patterns*". This conclusion forms part of the development and infrastructure assumptions within the September 2024 Reg 18 consultation document which states in para 5.8 that "*current evidence suggests that a bridge might be required to address traffic congestion if approximately 800 homes are delivered to the north of the railway*".

1.5 The purpose of this assessment is to review the Stantec reports referenced above and to establish whether a multi-modal bridge would be required to mitigate the impact of development proposed under Policy A13 on the existing level crossings in Southbourne, including the impact of 250no. dwellings from existing commitments and the residual housing requirement of 800no. dwellings. This assessment has regard to respective merits of the three scenarios presented in consultation and also those presented in accompanying representations from Nova Planning Limited.

1.6 More specifically, this LCA will cover the following elements:

- Introduction
- Site location
- Policy review
- Stantec report review
- Traffic generation
- Traffic impact assessment
- Summary and conclusion

2. CHARACTERISTICS OF THE BLD LAND

2.1 The extent of at the proposed Southbourne BLD is illustrated at **Figure 1.**

Figure 1: Extent of BLD

Existing Site Conditions

2.2 The BLD is bound by the A27 to the north which runs east/west between Havant and Chichester, with the proposed development area enveloping Southbourne. To the south of the BLD is the A259 Main Road which routes through Emsworth to the west before users can join the A27 and east to join the A27 at Chichester.

2.3 The larger expanse of land within the BLD to the north of the railway line is inherently rural in character, comprising greenfield land surrounded by a rural road network and is more remote from local facilities. The land within the BLD to the south of the railway line has a contained urban-edge character and comprises formal land uses. It benefits from direct access to the strategic road network (Main Road A259) and lies in close proximity to existing facilities and services concentrated on the A259 corridor. It is also located adjacent to a high frequency bus route and cycle route on the A259 which provide links to local services in Southbourne Village and a wider range of services in Chichester, Emsworth, Havant and Portsmouth. As such, the land south of the railway line is inherently sustainable.

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3. POLICY CONTEXT

3.1 As noted above, the emerging Chichester Local Plan Review 2021-2039 is currently at examination. If the Plan is found to be sound, it will replace the current Chichester Local Plan Key Policies 2014-2029, which was adopted in 2015 and identifies Southbourne as a high order 'Settlement Hub' in the Settlement Hierarchy, and this status is carried into the emerging Local Plan Review 2021-2039. The identification of Southbourne as a 'Settlement Hub' is on the basis of its significant sustainability credentials and consequently it's suitability to accommodate strategic scale residential development.

3.2 The Council's transport strategy for the emerging Local Plan Review 2021-2039 (Policy T1) acknowledges that it is neither viable nor practical to increase junction capacity on the A27 to accommodate the planned level of growth. Therefore, the transport strategy is instead based on adopting targeted measures to reduce vehicular traffic generation on the A27. This is referred to as a 'Monitor and Manage' approach, whereby modal shift is promoted through sustainable and active travel improvements. These measures will be exhausted before considering measures to increase junction capacity and operational improvements for vehicular traffic.

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4. STANTEC LEVEL CROSSING BASELINE SAFETY REVIEW

4.1 One of the challenges identified with the Southbourne BLD is the number of level crossings in the area and the potential impact that large scale development could have on the operation of these.

4.2 As such, CDC commissioned Stantec to advise on the potential impacts that the proposed Southbourne BLD development would have on the Stein Road level crossing, which is commonly known as the Southbourne Level Crossing. As part of this work, Stantec also undertook a baseline review of the Inlands Road level crossing. Both of these level crossing locations are shown in **Figure 2**, with **Figure 3** showing these in the context of the BLD.

Figure 2: Level Crossing Locations

Figure 3: Level Crossing Locations in Context to Southbourne BLD

4.3 As part of the work Stantec undertook, a baseline review of both the Stein Road and Inlands Road level crossings was conducted using the All Level Crossing Risk Model (ALCRM) to give each crossing a score.

4.4 These assessments are carried out by Network Rail and provide a standardised assessment of the risk associated with all level crossings in England, Scotland and Wales. This risk is scored based on the number of trains travelling through a crossing per day, as well as the speed and type of trains. The Stein Road level crossing was given a score of G3, with the Inlands Road level crossing scored D2. These scores mean that both level crossings are considered 'High Risk'.

4.5 Stantec modelled five scenarios to assess the impact that each potential scale of development would have on the level crossings in a bid to establish a trigger point for when a bridge may be required over the railway line. Within the Reg 18 three scenarios have been identified to deliver and these are:

- Scenario 1: “Land to the West” (**Figure 4**)
- Scenario 2: “Land to the East” (**Figure 5**)
- Scenario 3: "Mixed Scenario” (**Figure 6**)

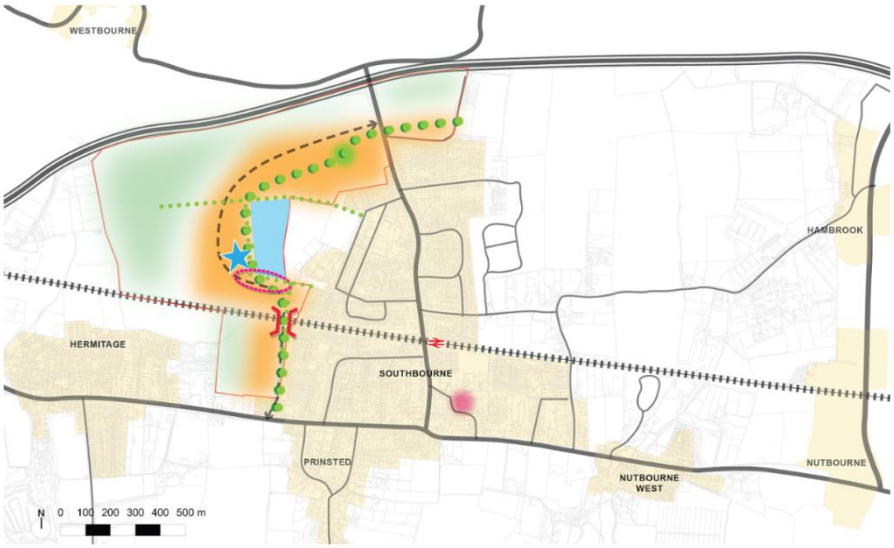


Figure 4: Scenario 1

Figure 5: Scenario 2

Figure 6: Scenario 3

4.6 The Regulation 18 consultation explains that all three of these scenarios can deliver circa 800 dwellings with a 2FE primary school located in various locations across the scenarios. Scenarios 1 and 2 propose a "multi modal bridge" which vehicles could use, however Scenario 3 does not. Scenarios 2 and 3 show a new pedestrian/cycle bridge across the existing railway line.

4.7 At the time of Stantec's report, to be consistent with the possible development scenarios up to 1,250 homes could be delivered over the plan period, the transport modelling work assumed this to be the upper limit.

4.8 The modelling scenarios assessed in Stantec's report were as follows:

- 250 dwellings
- 500 dwellings
- 750 dwellings
- 1,000 dwellings
- 1,250 dwellings

4.9 The Stantec (August 2020) report states that the expected number of crossings of the Stein Road level crossing in 2020, based on 2011 Census data, according to the ALCRM is 4,509 vehicles and 648 pedestrians or cyclists per day. For the Inlands Road level crossing this is 1,107 vehicles and 108 pedestrians or cyclists. It should be noted that the recorded surveys used for this report observed a 7 day AADT of 4,605 vehicles and 1,298 vehicles over the Stein Road level crossing and Inlands Road level crossing respectively. Pedestrian and cycle flows were also recorded however the Stein Road surveys included all users of the railway and therefore are not comparable to those suggested within the Stantec (August 2020) report.

4.10 Stantec devised a Paramics Discovery micro-simulation model, with the variation in maximum queue lengths the element that Stantec considered the most easily understandable parameter to inform when a new railway crossing bridge may be required.

4.11 Stantec's report concludes that queue lengths at the two level crossing points increase noticeably in the critical southbound direction by the 500 dwelling scenario, with it unsurprisingly increasing through the 750 to 1,250 dwelling scenarios. According to Stantec, the results indicate that the number of time slices with queues doubling increases sharply between the 750 dwelling and 1,000 dwelling scenarios. Stantec subsequently concluded that this appears 'appears to suggest the indicative threshold is reached by the 750 dwelling scenario or by the 1,000 dwelling scenario'.

4.12 There are a number of limitations to the work that Stantec conducted, as they admit themselves in Section 5.5.3 of their August 2020 report, saying: '*The outputs of this study are intended to provide an indicative trigger point for a bridge rather than prescribing when a bridge is required and must therefore be understood in the context of the limited nature of the modelling exercise to be indicative rather than prescriptive*'.

4.13 This section goes on to state: '*There may be other options available to reduce or manage car traffic during the peak period, including sustainable transport and additional local facilities in association with the new development*'.

4.14 This is the key takeaway from the Stantec reports, in that there are a range of potential options and scenarios which could reduce the dependence on private car, including Travel Plan measures, improvements to pedestrian and cycle infrastructure and other sustainable measures. Furthermore, Stantec's assessment does not account for the anticipated internalisation of trips, as well as the likelihood of a services, amenities and new education facilities being provided as part of any proposed development given the scale. In addition to this, the Stantec model did not include for any reduction in trips as a result of development being location south of the railway line. This would have a significant impact on vehicles having to travel over the level crossings at Stein Road and Inlands Road.

5. TRAFFIC GENERATION

5.1 For the purposes of Stantec's modelling contained within the March 2023 updated study, the trip generation assumed for the Southbourne development was used with these taken from the Local Plan. Given the anticipated increased use in the AM peak, the modelling and trip generation for the AM peak was used. The trip generation used for each scenario is presented in **Table 1**.

Test Scenario	No. of homes	Arrivals	Departures	Total Trip Generation
1	250	27	95	122
2	500	55	189	244
3	750	82	278	360
4	1,000	109	378	487
5	1,250	136	473	609

Table 1: Southbourne development trip generation

5.2 Stantec's report that used the trip generation shown in **Table 1** was published in 2020 and used again in the 2023 update. Since then, there has been an application (planning reference 22/01283/FULEIA) for 103 residential units and a nursery for 70 children at the Harris Scrapyard development site which has been consented.

5.3 For this application, it was agreed by WSCC that the vehicle trip generation was suitable. Given the Stantec report only considered the AM peak trip rates, the agreed AM peak trip rates from the Harris Scrapyard application are shown below in **Table 2**, as well as the number of vehicle trips it would generate when applied to each of the scenarios assessed in the Stantec report.

	AM Peak (08:00-09:00)		
	Arrivals	Departures	Total
Trip Rate per dwelling	0.134	0.371	0.505
Trip generation – 250 dwellings	34	93	126
Trip generation – 500 dwellings	67	186	253
Trip generation – 750 dwellings	101	279	379
Trip generation – 1,000 dwellings	134	371	505
Trip generation – 1,250 dwellings	168	464	631

Table 2: Agreed Harris Scrapyard trip rate applied to Stantec modelling scenarios

5.4 When comparing the estimated vehicle trip generation used in Stantec's report with the figure agreed for the Harris Scrapyard application, it can be seen that these are very similar. Therefore, for the purposes of continuity Stantec's agreed trip generation will be used as part of the modelling exercise undertaken to guide this report.

5.5 Using the parameters agreed for the trip rates in **Table 2**, a multi-modal TRICS assessment has been undertaken to understand the total number of person trips associated with the proposed 1,050 dwellings that the Southbourne BLD could potentially accommodate and the impact this will have on the Stein Road and Inlands Road level crossings.

5.6 The trip rate for the AM peak is demonstrated in **Table 3**, along with the number of multi-modal trips associated with each scenario to be assessed. The full multi-modal TRICS outputs have been included at **Appendix A**.

	AM Peak (08:00-09:00)		
	Arrivals	Departures	Total
Trip Rate per dwelling	0.224	0.776	1
Trip generation – 250 dwellings	56	194	250
Trip generation – 500 dwellings	112	388	500
Trip generation – 750 dwellings	168	582	750
Trip generation – 1,000 dwellings	224	776	1,000
Trip generation – 1,250 dwellings	280	970	1,250

Table 3: Proposed multi-modal trip rate as per agreed parameters

5.7 Given the parameters used to generate the multi-modal trip rate in **Table 3** are the same as those agreed as part of the Harris Scrapyard, it is assumed that these are agreed and have therefore been used for the modelling work undertaken as part of this report.

5.8 One of the main limits of the work undertaken by Stantec was the failure to account for the internalisation of vehicle trips as part of the assessment work. Given the Southbourne BLD is intended to supply 1,050 homes, there is anticipated to be services and amenities, as well as new education facilities associated with the development.

5.9 With Travel Plan measures designed to reduce the reliance on the private car, it would be reasonable to assume a 10% reduction in private car trips for the 1,050 dwellings proposed as part of the Southbourne BLD. This 10% reduction has been agreed for Harris Scrapyard and therefore this is considered robust.

5.10 Furthermore, given the development is expected to include services, amenities and education facilities, there is anticipated to be a proportion of vehicle trips associated with the proposed development that remain within the wider development site due to the potential on-site facilities a site of this size can generate, and therefore do not have an impact on the wider network. For the purposes of this report, this has been assumed to result in a 15% reduction of private vehicle trips on the existing highway network, meaning a 25% reduction when both Travel Plan measures and internalisation are considered.

5.11 With the push towards a more sustainable future, it is reasonable to assume a modal shift in travel behaviour for the Local Plan period (2021-2039) for which the Southbourne BLD is proposed. For the purposes of this report and the modelling exercise, this has been assumed at a cautionary 15%, meaning that when the Travel Plan measures, internalisation and modal shift are combined a 40% reduction of peak hour vehicular use has been applied for residents of the development site.

5.12 **Table 4** shows the vehicle trip generation in each scenario from the Stantec 2023 report, with the reductions associated with Travel Plan measures, internalisation of trips and modal shift.

	AM Peak (08:00-09:00)				
	Baseline	Baseline with Travel Plan (10% reduction)	Baseline with Internalisation (15% reduction)	Baseline with Modal Shift (15% reduction)	Baseline with All factors (40% reduction)
Trip generation – 250 dwellings	122	110	104	104	73
Trip generation – 500 dwellings	244	220	207	207	146
Trip generation – 750 dwellings	360	324	306	306	216
Trip generation – 1,000 dwellings	487	438	414	414	292
Trip generation – 1,250 dwellings	609	548	518	518	365

Table 4: Trip generation with private car reduction factors applied to Stantec report figures

5.13 **Table 4** demonstrates that there is likely to be a significant reduction in private car trips associated with the Travel Plan measures, internalisation of trips and anticipated modal shift.

5.14 However, for the purposes of robustness all three of these scenarios will be assessed incrementally, starting with the Travel Plan measures (10%), then with Travel Plan measures and internalisation (25%) and then with Travel Plan measures, internalisation and modal shift (40%).

5.15 The 10%, 15% and 15% reduction in trips associated with the different factors outlined above are considered modest assumptions, with the actual figure expected to be greater than the total 40% reduction in private car use.

5.16 West Sussex County Council are advocates of the shift to a Decide and Provide approach, with the West Sussex Transport Plan 2022-2036 setting out the Active Travel Strategy for the county. Objective 17 states: '*Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for distance trips and to transport interchanges*'.

5.17 The 40% reduction proposed for the purposes of this report and modelling exercises are considered more in line with the Decide and Provide approach which placed a greater emphasis on private vehicles. The Decide and Provide approach looks to encourage modal shift by making this a more attractive option for users and providing the necessary infrastructure to change travel behaviours, thus reducing the reliance on the private car. Therefore, the 40% figure is considered a very robust reduction to apply to the vehicle trip generation associated with the proposals.

6. TRAFFIC SURVEYS

6.1 As part of this report, updated traffic surveys were undertaken to ensure that a robust set of data was used and did not rely on the traffic flows used by Stantec which were not all publicly available at this time of writing this report. 7 day ATC surveys were recorded on Stein Road and Inlands Road both north and south of the railway lines in November 2024. Additionally, barrier down times were recorded for both crossings and the pedestrian and cycle flow across both level crossings was recorded. It should be noted that the pedestrian flows for Stein Road included those who used Southbourne Rail Station. The results of these are shown below and the raw data is contained within **Appendix B.**

	Vehicle Traffic Flows over Southbourne Level Crossings in peak times					
	AM NB	AM SB	AM Two-Way	PM NB	PM SB	PM Two-Way
Stein Road	180	261	441	208	209	417
Inlands Road	83	103	186	84	62	146

Table 5: Recorded vehicle flow over Stein Road and Inlands Road level crossings

	Daily Pedestrian and Cycle flow over Southbourne Level Crossings					
	Pedestrians			Cyclists		
	NB	SB	Two-Way	NB	SB	Two-Way
Stein Road	629	715	1,344	43	52	95
Inlands Road	40	23	63	21	20	41

Table 6: Recorded pedestrian and cycling flows over Stein Road and Inlands Road level crossings

Stein Road Level Crossing				
Time Barrier Down	Time Barrier Up	Barrier Duration (mm:ss)	Observed Queues	
			Northbound	Southbound
AM Peak				
08:03:29	08:06:50	03:21	22	16
08:10:00	08:13:48	03:48	26	23
08:20:30	08:25:45	05:15	18	25
08:30:10	08:32:00	01:50	5	15
08:36:52	08:40:30	03:38	12	6
08:52:05	08:54:27	02:22	17	16
PM Peak				
17:03:20	17:06:40	03:20	14	23
17:15:12	17:18:22	03:10	13	12
17:22:45	17:26:19	03:34	8	6
17:29:40	17:31:40	02:00	3	3
17:34:35	17:37:53	03:18	9	8
17:39:00	17:42:00	03:00	10	4
17:50:19	17:56:28	06:09	12	7

Table 7: Recorded barrier down time on Stein Road

Inlands Road Level Crossing				
Time Barrier Down	Time Barrier Up	Barrier Duration (mm:ss)	Observed Queues	
			Northbound	Southbound
AM Peak				
08:07:56	08:08:25	00:29	0	0
08:09:52	08:10:40	00:48	2	3
08:13:36	08:14:10	00:34	0	4
08:20:20	08:21:04	00:44	3	0
08:26:53	08:27:24	00:31	0	4
08:31:14	08:31:45	00:31	0	3
08:37:47	08:38:29	00:42	0	0
08:40:42	08:41:16	00:34	0	0
08:52:02	08:52:42	00:40	0	2
PM Peak				
17:07:34	17:08:10	00:36	0	3
17:15:56	17:16:35	00:39	0	0
17:17:30	17:18:12	00:42	0	0
17:27:20	17:27:50	00:30	2	2
17:30:50	17:31:30	00:40	0	0
17:37:20	17:40:11	02:51	3	2
17:50:18	17:50:54	00:36	0	0
17:57:15	17:57:50	00:35	0	0

Table 8: Recorded barrier down time on Inlands Road

6.2 When reviewing this against the available data that Stantec have used in their March 2023 and in particular Table 2-2, the recorded surveys used in this report saw more barrier down time when compared to the data used within the Stantec modelling. Table 2-2 in the Stantec report shows that the barrier is down for around 15 minutes and 30 seconds of the AM peak hour whereas the recorded barrier down time for this report is around 20 minutes and 15 seconds. This shows that this modelling assessment which has been undertaken as part of this report is overly robust. It also places importance on the daily variations of the barrier down time and there is no set timings each day.

7. TRAFFIC IMPACT ASSESSMENT

7.1 The Stein Road Level Crossing has been assessed to determine the impact that a range of development scenarios would have on the operation of the level crossing and mirrors the scenarios that Stantec produced within their report.

Scenarios

7.2 In order to assess the potential impact at the aforementioned level crossing a range of development scenarios have been assessed, in line with the work previously undertaken by Stantec and the previous Paramics assessment. These development scenarios include:

- 250 dwellings
- 500 dwellings
- 750 dwellings
- 1,000 dwellings

7.3 Furthermore, as part of the two larger development quantum scenarios, a series of trip rate adjustments have been applied based on various rationales as per Section 5 of this report. These are:

- A 10% reduction in vehicular trips as a result of the Travel Plan
- A further 15% (25% cumulative) reduction in vehicular trips as a result of Internalisation owing to facilities delivered as part of the wider site;
- A further 15% (40% cumulative) reduction as a result of mode shift away from car trips towards more sustainable modes as a result of more aggressive measures.

Traffic Growth

7.4 The above scenarios have been applied to a Forecast year of 2039 which aligns with the end of the draft Chichester Local Plan period. In order to adjust the baseline traffic surveys to a future Forecast year of 2039, NTEM adjusted growth factors have been obtained from TEMPro 7.2.

7.5 The TEMPro program is based on the National Trip End Model and takes into account changes in car ownership and local planning forecasts regarding housing and employment. This forecast has been based on 'All Roads' for the 'Chichester 007 MSOA in which the Southbourne BLD is located. The resulting growth factors are set out below:

- AM 2024-2039 TEMPRO Factor – 1.1029
- PM 2024-2039 TEMPRO Factor – 1.1028

7.6 Given the quantum of development assessed in the development scenarios amounts to the total of proposed development in the immediate local area, no further committed development sites have been manually added to the flows.

Distribution

7.7 The proposed development site area predominantly straddles an area to the north of the Stein Road Level crossing. As per the Stantec modelling, 20% of baseline and development traffic has been assigned to travel north towards Havant to avoid the level crossing in the peak times and this has also been reflected within the modelling.

Traffic flow Diagrams

7.8 For ease of reference, traffic flow diagrams are attached in **Appendix C**. The diagrams show baseline traffic flows from the traffic surveys; applies the TEMPro factors to predict traffic flows in future forecast years; and finally includes the range of development traffic scenarios detailed above.

Junction Modelling Software and Approach

7.9 Given the difficulty in modelling a level crossing in Junctions 10/11 software it is considered LinSig is the most appropriate software to model the performance of the Stein Road level crossing. LinSig provides a Degree of Saturation (DoS) value, which identifies the percentage of the junction's total capacity that is in use. DoS values exceeding 90% indicate that the junction is close to operating over capacity, and junction improvements or changes to the signal timings should be considered, whilst DoS values of 100% or greater indicate that the junction is operating over capacity, and not all queuing vehicles will be able to clear the junction within one signal cycle. LinSig software also outputs vehicle delay and queue values to provide indicative details on the operational performance of the junction.

7.10 As part of the survey data collected to inform the modelling, the length of barrier up or down time has been recorded. For the AM peak the barrier was down 6 times, with a total down time of 20 minutes over the hour and the longest period of down time totalling c. 5 minutes. For comparison, the barrier time identified for the Paramics was 15 times in the hour, but a barrier down time of c. 9 times per hour. Therefore, the barrier as observed in the 2024 survey data was down for a greater length of time in the AM peak, but was down for fewer occasions, therefore it could be that the timing of trains meant the barrier was kept down between trains rather than providing sufficient time to lift and relower the barrier.

7.11 In the PM peak period no data was provided within the Paramics report for the length of time the barrier was down, but the barrier was noted as down 8 times. In the 2024 survey data the barrier was down for a period of 25 minutes in the hour and the longest period of downtime totalling 6 minutes. The barrier was down 7 occasions in total.

7.12 On the basis of the above the AM peak has been modelled at a cycle time of 15 minutes at a ratio of 2:1 in terms of barrier downtime versus barrier up time to correspond with the longest period of down time and the barrier being up twice as long as it is down. This therefore reflects the observed 2024 patterns. Using the same approach, the PM peak has been modelled at a cycle time of 12 minutes with a ratio of 1:1 of the barrier being up as long as it is down. It is noted that there are variances between the barrier up/down times.

Capacity Modelling – Stein Road Level Crossing

7.13 Capacity analysis of the Stein Road level crossing has been undertaken utilising LinSig. **Table 5** sets out the summary results for the 2024 base, 2039 Forecast and various Proposed Development Scenarios for the AM and PM peak hours respectively. The full outputs are included at **Appendix D.** For information the arms of the junction are as follows:

- Arm A – Stein Road Northern (Southbound)
- Arm B – Stein Road Southern (Northbound)
- Arm C – West Coast Railway East
- Arm D – West Coast Railway West

		AM			PM		
		Max Q	Delay (s)	DoS	Max Q	Delay (s)	DoS
2024 Baseline	Arm A	31.5	65.1	24.4%	21.1	107.1	19.8%
	Arm B	19.3	60.9	15.9%	23.3	108.2	21.6%
2039 Forecast	Arm A	35.5	66.4	27.0%	23.5	108.3	21.9%
	Arm B	21.5	61.7	17.6%	26.0	109.6	23.9%
2039 Forecast + 250 dw	Arm A	48.1	70.7	34.4%	28.8	111.0	26.1%
	Arm B	25.7	63.1	20.5%	37.8	115.6	33.0%
2039 Forecast + 500 dw	Arm A	62.6	75.6	41.8%	34.4	113.8	30.4%
	Arm B	30.2	64.6	23.5%	51.0	122.3	42.1%
2039 Forecast + 750 dw	Arm A	79.0	81.3	49.3%	40.2	116.8	34.7%
	Arm B	34.8	66.2	26.5%	65.7	130.0	51.2%
2039 Forecast + 750 dw With Travel Plan	Arm A	74.0	79.5	47.1%	38.4	115.9	33.4%
	Arm B	33.4	65.7	25.6%	61.2	127.6	48.5%
2039 Forecast + 750 dw With Internalisation	Arm A	66.5	77.0	43.7%	35.8	114.5	31.5%
	Arm B	31.3	65.0	24.3%	54.4	124.1	44.3%
2039 Forecast + 750 dw With Mode Shift	Arm A	59.5	74.5	40.3%	33.3	113.2	29.6%
	Arm B	29.2	64.3	22.9%	48.3	120.9	40.3%
2039 Forecast + 750 dw With 20% assignment	Arm A	61.1	75.1	41.1%	32.4	112.8	28.9%
	Arm B	28.0	63.9	22.1%	52.0	122.8	42.7%
2039 Forecast + 1000 dw	Arm A	98.2	87.9	56.8%	46.3	119.9	39.0%
	Arm B	39.7	67.8	29.5%	82.4	138.8	60.3%
2039 Forecast + 1000 dw With Travel Plan	Arm A	90.2	85.1	53.8%	43.8	118.6	37.3%
	Arm B	37.7	67.2	28.3%	75.4	135.1	56.7%

2039 Forecast + 1000 dw With Internalisation	Arm A	79.0	81.3	49.3%	40.2	116.8	34.7%
	Arm B	34.8	66.2	26.5%	65.7	130.0	51.2%
2039 Forecast + 1000 dw With Mode Shift	Arm A	68.9	77.8	44.9%	36.7	115.0	32.1%
	Arm B	32.0	65.2	24.7%	56.6	125.2	45.7%
2039 Forecast + 1000 dw With 20% Assignment	Arm A	74.5	97.7	47.3%	31.1	115.2	32.5%
	Arm B	31.7	65.1	24.6%	64.3	129.2	50.3%

Table 9: Stein Road Level Crossing Modelling Results

7.14 The results above show that the Stein Road level crossing performs with a DoS of less than 90% in the worst case scenario of 1,000 dwellings in the 'Do Nothing' scenario, with Arm A operating at a DoS of 56.8% and Arm B at 29.5% in the AM peak and 39% and 60.3% respectively in the PM peak.

7.15 This demonstrates that in the worst case scenario, without the impact of Travel Plan measures, internalisation and modal shift, the Stein Road level crossing operates well within capacity, however with these measures in place the DoS at both arms of the level crossing reduce considerably, with the delay and maximum queue lengths also reducing. As per the Stantec (March 2023) report, the A259 Main Road/Stein Road junction is around 425m south of the level crossing, which equates to around 74 cars.

7.16 Therefore, even in the worst-case scenario with no reduction in vehicle trips associated with a Travel Plan, internalisation of trips or modal shift the modelling exercise shows that the 1,000 dwellings associated with the Southbourne BLD does not push the Stein Road level crossing to a level where it is approaching capacity in terms of DoS and therefore it is not considered a vehicle bridge is required in order to mitigate the impact of the proposed scale of development at this crossing point.

8. MODELLING THE BLD SCENARIO

8.1 As explained above, Policy A13 identifies a Broad Location for Development (BLD) encompassing the majority of Southbourne Parish and confirms that an allocation will be made through the DPD process for 1,050no. dwellings and associated infrastructure. As 250 dwellings have already been approved within the BLD area and are counted as commitments against the overall requirement of 1,050 dwellings, the DPD is seeking to allocate the residual 800no. dwellings requirement and this is directly referenced in the exhibition material presented by CDC to the local community.

8.2 To provide a robust model, two levels of development will be presented. The first will be for the full 1,050 dwellings as set out above. However, when accounting for the existing housing commitments which are included within the 1,050 dwellings, this includes two sites which are located south of the railway line equating to 199 dwellings. In addition, using information in the accompanying representations by Nova Planning Ltd, an additional 250 dwellings could be provided south of the railway line, equating to 450 dwellings of the 1,050 south of the railway line and 600 north. Therefore, the second level of development will assess for 600 dwellings north of the railway line.

8.3 The above 600 dwellings north of the railway line and 250 dwellings south of the railway are presented in the two below scenarios in Figures 7 and 8.

Figure 7: Scenario 4

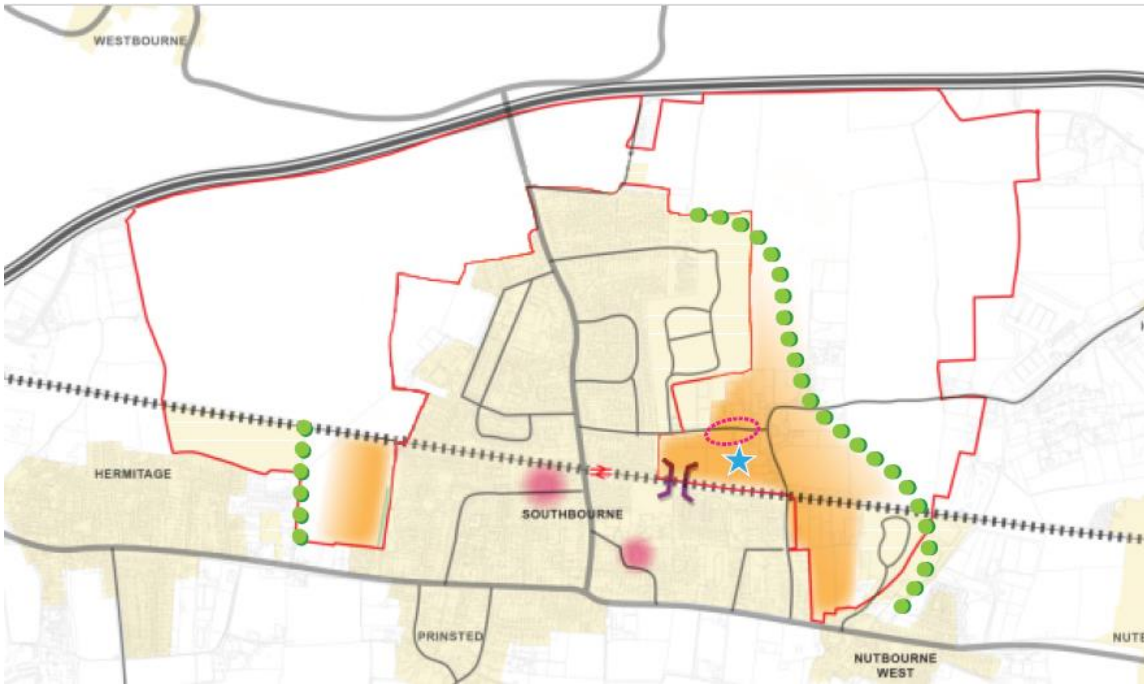


Figure 8: Scenario 5

8.4 The modelling results for the two assessments are shown below in **Table 10**.

		AM			PM		
		Max Q	Delay (s)	DoS	Max Q	Delay (s)	DoS
2039 Forecast + 1,050 dw	Arm A	102.4	89.3	58.2%	47.6	120.6	39.8%
	Arm B	40.5	68.1	30.1%	86.0	140.7	62.1%
2039 Forecast + 1,050 dw With Travel Plan	Arm A	93.8	86.3	55.1%	44.9	119.2	38.0%
	Arm B	38.6	67.5	28.9%	78.7	136.8	58.4%
2039 Forecast + 1,050 dw With Internalisation	Arm A	81.7	82.2	50.4%	41.1	117.2	35.3%
	Arm B	35.5	66.4	27.0%	68.2	131.2	52.6%
2039 Forecast + 1,050 dw With Mode Shift	Arm A	70.9	78.4	45.7%	37.4	115.3	32.7%
	Arm B	32.5	65.4	25.0%	58.5	126.1	46.8%
2039 Forecast + 1,050 dw With 20% assignment	Arm A	77.4	80.7	48.6%	38.1	115.7	33.2%
	Arm B	32.6	65.4	25.1%	66.8	130.5	51.8%
2039 Forecast + 600 dw	Arm A	68.9	77.8	44.9%	36.7	115.0	32.1%
	Arm B	32.0	65.2	24.7%	56.6	125.2	45.7%
2039 Forecast + 600 dw With Travel Plan	Arm A	65.0	76.4	43.0%	35.2	114.2	31.1%
	Arm B	30.9	64.9	24.0%	53.3	123.5	43.6%
2039 Forecast + 600 dw With Internalisation	Arm A	59.5	74.5	40.3%	33.3	113.2	29.6%
	Arm B	29.2	64.3	22.9%	48.3	120.9	40.3%
2039 Forecast + 600 dw With Mode Shift	Arm A	54.3	72.8	37.7%	32.2	112.2	28.0%
	Arm B	27.6	63.8	21.9%	43.5	118.5	37.1%

Table 10: Stein Road Level Crossing Modelling Results for BLD Scenario

8.5 The above results show that the 1,050 dwellings all modelled north of the railway line shows that a there is no queuing back onto the A259 when Travel Plan mitigation and internalisation factors have been taken into account, points that were missed during the Stantec modelling. When modelling the 1,050 for 20% of traffic rerouting through Havant to the northwest, this would also not result in any queuing back onto the A259 without any mitigation.

8.6 The results also show that with 600 dwellings north of the railway line with the remaining dwellings being delivered south of the railway line, without any mitigation, there is no queuing back onto the A259. Once mitigation is added, the queuing reduces and if looking at the full mitigation, i.e. with Mode Shift, Internalisation and Travel Plan, the results show that when compared to the baseline 2039 Forecast (**Table 9**) without any development there is only an increase of 19 vehicles on the northern arm and 6 vehicles on the southern arm in the AM peak and an increase of 9 vehicles on the northern arm and 17 vehicles on the southern arm in the PM peak.

8.7 Additionally, journey time delay is only increased by 10 seconds through the junction in the AM peak and 13 seconds in the PM peak.

8.8 By maximising development south of the railway line this would mitigate against the impact on the existing level crossing as the majority of vehicle trips would not travel over the railway line and would therefore not impact on the level crossings. The southern parcels of development could be delivered earlier than the northern parcels, assisting with the housing demand within the Chichester authority. These parcels have already been found to be sustainable through various planning applications, including those known as Harris Scrapyard (23/00942) and Land East of Inlands Road (24/01161).

8.9 Scenario 3, as shown in **Figure 3**, shows all development to the north of the railway line, which will put the most pressure on the level crossings and the distribution east and west undermines internalisation and early delivery of development. This also generates a requirement for two ped/cycle connections to service both sides of the settlement which reduces land available for development.

9. VEHICLE BRIDGE REQUIREMENT

9.1 Having regard to the above, it can be seen that the level crossing operates in a way that manages to clear all vehicle traffic on average in both the AM and PM peak times and the surveyed Stein Road level crossing has enough gaps during these hours for all vehicles to pass through the level crossing.

9.2 The results above are similar to the outputs of the Stantec report in the sense that the delay is similar across all scenarios. The delay is purely down to the amount of down time for the level crossing and is not related directly to the number of vehicles using Stein Road. The queue lengths do become greater as more dwellings are added, which is understandable, but do not reach a point whereby they severely impact on the strategic route of the A259. As highlighted above, we have shown a more robust vehicle distribution and assigned all vehicle traffic through the level crossing, where in reality, some would divert through Havant as per the Stantec report.

9.3 As such, it is concluded that based on the above there is no requirement for a vehicular bridge to be provided to support the BLD.

9.4 Notwithstanding the fact that the modelling assessment above and the Stantec report do not show the need for a vehicle bridge, requiring one would be against the vision of the Monitor and Manage approach set out by CDC through their Local Plan process and the need to provide for sustainable infrastructure first and not rely on providing more vehicular capacity on the local road network.

10. SUMMARY AND CONCLUSIONS

10.1 This Level Crossing Assessment has been prepared by Paul Basham Associates on behalf of Metis Homes Ltd to input into the current consultation on the Southbourne Broad Location for Development (BLD) DPD (January 2023) which is assessing the potential allocation of 1,050 residential dwellings in Southbourne as part of the emerging Chichester Local Plan (2021-2039).

10.2 In August 2020, Stantec produced a Southbourne Level Crossing report which suggested that a vehicular bridge in land under the ownership of the client would "*be of some benefit, if the traffic conditions cannot be otherwise mitigated by altering forecasted demand patterns*".

10.3 The work undertaken by Stantec concluded that the results of their assessment 'appears to suggest the indicative threshold (of the level crossing) is reached by the 750 dwelling scenario or by the 1,000 dwelling scenario', but could not specify a figure within this range.

10.4 The assessment work conducted by Stantec had various limitations and the report itself admitted that: '*The outputs of this study are intended to provide an indicative trigger point for a bridge rather than prescribing when a bridge is required and must therefore be understood in the context of the limited nature of the modelling exercise to be indicative rather than prescriptive'. It also commented: 'There may be other options available to reduce or manage car traffic during the peak period, including sustainable transport and additional local facilities in association with the new development*'.

10.5 For the purposes of continuity, comparison and robustness, the vehicle trip rates used to inform Stantec's modelling work have been used as the basis of the capacity assessment of the Stein Road level crossing within this report. However, unlike in Stantec's report, the impact on factors such as a Travel Plan, internalisation of trips, and modal shift on the number of vehicle trips has been considered with a reduction of 10%, 15% and 15% applied respectively and assessed incrementally until a 40% reduction has been assessed with all of these measures in place.

10.6 Linsig has been used to model the Stein Road level crossing with a proposed development quantum of 250, 500, 750 and 1,000 dwellings with a forecast future year of 2039 in line with the end of the emerging Local Plan period. This shows that even in the worst case 'Do Nothing' scenario with no reduction applied to vehicle trips, the Stein Road level crossing operates well within capacity with a Degree of Saturation (DoS) on Arm A of 56.8% and Arm B at 29.5% in the AM peak and 39% and 60.3% respectively in the PM peak.

10.7 To provide a model which reflects the BLD proposal, two levels of development have been presented. The first is for the full 1,050 dwellings as set out above. The second level of development will assess for 600 dwellings north of the railway line which accounts for 450 dwellings which have already been contested or could be delivered south of the railway line through land within the BLD extent.

10.8 The results show that the 1,050 dwellings all modelled north of the railway line shows that a there is no queuing back onto the A259 when Travel Plan mitigation and internalisation factors have been taken into account, points that were missed during the Stantec modelling. When modelling the 1,050 for 20% of traffic rerouting through Havant to the northwest, this would also not result in any queuing back onto the A259 without any mitigation.

10.9 The results also show that with 600 dwellings north of the railway line with the remaining dwellings being delivered south of the railway line, without any mitigation, there is no queuing back onto the A259. Once mitigation is added, the queuing reduces and if looking at the full mitigation, i.e. with Mode Shift, Internalisation and Travel Plan, the results show that when compared to the baseline 2039 Forecast (Table 9) without any development there is only an increase of 19 vehicles on the northern arm and 6 vehicles on the southern arm in the AM peak and an increase of 9 vehicles on the northern arm and 17 vehicles on the southern arm in the PM peak.

10.10 By maximising development south of the railway line this would mitigate against the impact on the existing level crossing as the majority of vehicle trips would not travel over the railway line and would therefore not impact on the level crossings. The southern parcels of development could be delivered earlier than the northern parcels, assisting with the housing demand within the Chichester authority.

Appendix A

Calculation Reference: AUDIT-247601-241125-1127

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	CT	CENTRAL BEDFORDSHIRE	1 days
	ES	EAST SUSSEX	6 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	12 days
	HF	HERTFORDSHIRE	3 days
	KC	KENT	7 days
	MW	MEDWAY	1 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 days
	WB	WEST BERKSHIRE	1 days
	WS	WEST SUSSEX	7 days
03	SOUTH WEST		
	DC	DORSET	2 days
	SD	SWINDON	1 days
04	EAST ANGLIA		
	NF	NORFOLK	17 days
	PB	PETERBOROUGH	1 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days
09	NORTH		
	DH	DURHAM	2 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: No of Dwellings
Actual Range: 8 to 1146 (units:)
Range Selected by User: 6 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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	11 days
Tuesday	30 days
Wednesday	15 days
Thursday	13 days
Friday	5 days

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

Selected survey types:

Manual count	74 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	11
Edge of Town	63

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	66
Village	1
Out of Town	4
No Sub Category	3

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	27 days - Selected
Servicing vehicles Excluded	65 days - Selected

Secondary Filtering selection:

Use Class:

C3	74 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:

1,001 to 5,000	5 days
5,001 to 10,000	20 days
10,001 to 15,000	23 days
15,001 to 20,000	13 days
20,001 to 25,000	10 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	9 days
50,001 to 75,000	11 days
75,001 to 100,000	9 days
100,001 to 125,000	2 days
125,001 to 250,000	30 days
250,001 to 500,000	5 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	18 days
1.1 to 1.5	51 days
1.6 to 2.0	5 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	53 days
No	21 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	74 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 AC-03-A-04 TOWN HOUSES CHESHIRE WEST & CHESTER
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

2 CT-03-A-03 MIXED HOUSES CENTRAL BEDFORDSHIRE
ARLESEY ROAD
STOTFOLD

Edge of Town
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY *27/06/23* *Survey Type: MANUAL*

3 DC-03-A-10 MIXED HOUSES DORSET
ADDISON CLOSE
GILLINGHAM

Edge of Town
Residential Zone
Total No of Dwellings: 26
Survey date: WEDNESDAY *09/11/22* *Survey Type: MANUAL*

4 DC-03-A-11 MIXED HOUSES DORSET
A350
SHAFTESBURY

Edge of Town
No Sub Category
Total No of Dwellings: 141
Survey date: TUESDAY *31/10/23* *Survey Type: MANUAL*

5 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

6 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

7 DY-03-A-01 MIXED HOUSES DERBY
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

9 ES-03-A-07 MIXED HOUSES & FLATS EAST SUSSEX
NEW ROAD
HAILSHAM
HELLINGLY
Edge of Town
Residential Zone
Total No of Dwellings: 91
Survey date: THURSDAY *07/11/19* *Survey Type: MANUAL*

10 ES-03-A-08 MIXED HOUSES & FLATS EAST SUSSEX
WRESTWOOD ROAD
BEXHILL

Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: WEDNESDAY *12/10/22* *Survey Type: MANUAL*

11 ES-03-A-09 DETACHED & SEMI-DETACHED EAST SUSSEX
THE FAIRWAY
NEWHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 47
Survey date: MONDAY *13/03/23* *Survey Type: MANUAL*

12 ES-03-A-10 MIXED HOUSES & FLATS EAST SUSSEX
WATERGATE
BEXHILL-ON-SEA

Edge of Town
Residential Zone
Total No of Dwellings: 139
Survey date: THURSDAY *28/09/23* *Survey Type: MANUAL*

13 ES-03-A-14 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 120
Survey date: TUESDAY *30/04/24* *Survey Type: MANUAL*

14 EX-03-A-03 MIXED HOUSES ESSEX
KESTREL GROVE
RAYLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 123
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

15 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total No of Dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

16 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY 31/10/18 Survey Type: MANUAL

17 HC-03-A-23 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY 19/11/19 Survey Type: MANUAL

18 HC-03-A-26 MIXED HOUSES & FLATS HAMPSHIRE
BOTLEY ROAD
WHITELEY

Edge of Town
Out of Town
Total No of Dwellings: 270
Survey date: THURSDAY 24/06/21 Survey Type: MANUAL

19 HC-03-A-27 MIXED HOUSES HAMPSHIRE
DAIRY ROAD
ANDOVER

Edge of Town
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY 16/11/21 Survey Type: MANUAL

20 HC-03-A-28 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY 08/11/21 Survey Type: MANUAL

21 HC-03-A-31 MIXED HOUSES & FLATS HAMPSHIRE
KILN ROAD
LIPHOOK

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: FRIDAY 07/10/22 Survey Type: MANUAL

22 HC-03-A-33 MIXED HOUSES & FLATS HAMPSHIRE
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Total No of Dwellings: 195
Survey date: TUESDAY 04/07/23 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

23 HC-03-A-34 MIXED HOUSES & FLATS HAMPSHIRE
STONEHAM LANE
EASTLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 243
Survey date: TUESDAY *14/11/23* *Survey Type: MANUAL*

24 HC-03-A-35 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 289
Survey date: TUESDAY *31/10/23* *Survey Type: MANUAL*

25 HC-03-A-36 MIXED HOUSES & FLATS HAMPSHIRE
HAVANT ROAD
EMSWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 145
Survey date: TUESDAY *12/09/23* *Survey Type: MANUAL*

26 HC-03-A-37 MIXED HOUSES HAMPSHIRE
REDFIELDS LANE
FLEET
CHURCH CROOKHAM
Edge of Town
Residential Zone
Total No of Dwellings: 50
Survey date: WEDNESDAY *27/03/24* *Survey Type: MANUAL*

27 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

28 HF-03-A-05 TERRACED HOUSES HERTFORDSHIRE
HOLMSIDE RISE
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Total No of Dwellings: 8
Survey date: MONDAY *05/06/23* *Survey Type: MANUAL*

29 HF-03-A-06 MIXED HOUSES & FLATS HERTFORDSHIRE
A505
ROYSTON

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: TUESDAY *28/11/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

30 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

31 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

32 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

33 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

34 KC-03-A-10 MIXED HOUSES KENT
HEADCORN ROAD
STAPLEHURST

Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date: TUESDAY *09/05/23* *Survey Type: MANUAL*

35 KC-03-A-11 MIXED HOUSES & FLATS KENT
COLDHARBOUR ROAD
GRAVESEND

Edge of Town
No Sub Category
Total No of Dwellings: 375
Survey date: MONDAY *20/03/23* *Survey Type: MANUAL*

36 KC-03-A-12 MIXED HOUSES & FLATS KENT
WESTERN LINK
FAVERSHAM
DAVINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 186
Survey date: TUESDAY *19/09/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

37 MW-03-A-02 MIXED HOUSES MEDWAY
OTTERHAM QUAY LANE
RAINHAM

Edge of Town
Residential Zone
Total No of Dwellings: 19
Survey date: MONDAY *06/06/22* *Survey Type: MANUAL*

38 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

39 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

40 NF-03-A-09 MIXED HOUSES & FLATS NORFOLK
ROUND HOUSE WAY
NORWICH
CRINGLEFORD
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date: TUESDAY *24/09/19* *Survey Type: MANUAL*

41 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date: WEDNESDAY *22/09/21* *Survey Type: MANUAL*

42 NF-03-A-25 MIXED HOUSES & FLATS NORFOLK
WOODFARM LANE
GORLESTON-ON-SEA

Edge of Town
Residential Zone
Total No of Dwellings: 55
Survey date: TUESDAY *21/09/21* *Survey Type: MANUAL*

43 NF-03-A-28 MIXED HOUSES & FLATS NORFOLK
ATLANTIC AVENUE
NORWICH
SPROWSTON
Edge of Town
Residential Zone
Total No of Dwellings: 1146
Survey date: THURSDAY *22/09/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

44 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

45 NF-03-A-33 MIXED HOUSES NORFOLK
LONDON ROAD
ATTLEBOROUGH

Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

46 NF-03-A-34 MIXED HOUSES NORFOLK
NORWICH ROAD
SWAFFHAM

Edge of Town
Out of Town
Total No of Dwellings: 80
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

47 NF-03-A-35 MIXED HOUSES & FLATS NORFOLK
REPTON AVENUE
NORWICH

Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date: WEDNESDAY *28/09/22* *Survey Type: MANUAL*

48 NF-03-A-36 MIXED HOUSES NORFOLK
LONDON ROAD
WYMONDHAM

Edge of Town
No Sub Category
Total No of Dwellings: 75
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

49 NF-03-A-37 MIXED HOUSES NORFOLK
GREENFIELDS ROAD
DEREHAM

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

50 NF-03-A-38 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 537
Survey date: TUESDAY *20/09/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

51 NF-03-A-39 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

52 NF-03-A-46 MIXED HOUSES & FLATS NORFOLK
BURGH ROAD
AYLSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 300
Survey date: TUESDAY *14/09/21* *Survey Type: MANUAL*

53 NF-03-A-51 SEMI-DETACHED NORFOLK
CITY ROAD
NORWICH
LAKENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 34
Survey date: TUESDAY *13/09/22* *Survey Type: MANUAL*

54 NF-03-A-52 MIXED HOUSES NORFOLK
LYNNSPORT WAY
KING'S LYNN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 130
Survey date: TUESDAY *07/11/23* *Survey Type: MANUAL*

55 NT-03-A-08 DETACHED HOUSES NOTTINGHAMSHIRE
WIGHAY ROAD
HUCKNALL

Edge of Town
Residential Zone
Total No of Dwellings: 36
Survey date: MONDAY *18/10/21* *Survey Type: MANUAL*

56 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

57 NY-03-A-14 DETACHED & BUNGALOWS NORTH YORKSHIRE
PALACE ROAD
RIPON

Edge of Town
Residential Zone
Total No of Dwellings: 45
Survey date: WEDNESDAY *18/05/22* *Survey Type: MANUAL*

58 PB-03-A-04 DETACHED HOUSES PETERBOROUGH
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

59 SC-03-A-08 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 790
Survey date: WEDNESDAY *04/05/22* *Survey Type: MANUAL*

60 SC-03-A-11 MIXED HOUSES SURREY
FOLLY HILL
FARNHAM

Edge of Town
Residential Zone
Total No of Dwellings: 96
Survey date: TUESDAY *14/05/24* *Survey Type: MANUAL*

61 SD-03-A-01 SEMI DETACHED SWINDON
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

62 SF-03-A-09 MIXED HOUSES & FLATS SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 179
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

63 SF-03-A-10 TERRACED & SEMI-DETACHED SUFFOLK
LOVETOFTS DRIVE
IPSWICH
WHITEHOUSE
Edge of Town
Residential Zone
Total No of Dwellings: 149
Survey date: TUESDAY *22/06/21* *Survey Type: MANUAL*

64 SP-03-A-02 MIXED HOUSES & FLATS SOUTHAMPTON
BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY *12/10/21* *Survey Type: MANUAL*

65 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

66 WB-03-A-03 MIXED HOUSES WEST BERKSHIRE
DORKING WAY
READING
CALCOT
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: FRIDAY *09/09/22* *Survey Type: MANUAL*

67 WK-03-A-04 DETACHED HOUSES WARWICKSHIRE
DALEHOUSE LANE
KENILWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 49
Survey date: FRIDAY *27/09/19* *Survey Type: MANUAL*

68 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

69 WS-03-A-11 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY *02/04/19* *Survey Type: MANUAL*

70 WS-03-A-12 MIXED HOUSES WEST SUSSEX
MADGWICK LANE
CHICHESTER
WESTHAMPNETT
Edge of Town
Village
Total No of Dwellings: 152
Survey date: WEDNESDAY *16/06/21* *Survey Type: MANUAL*

71 WS-03-A-13 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: WEDNESDAY *23/06/21* *Survey Type: MANUAL*

72 WS-03-A-14 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total No of Dwellings: 117
Survey date: WEDNESDAY *20/10/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

73	WS-03-A-22 SHOPWHYKE ROAD CHICHESTER	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	129	
	Survey date: TUESDAY	*19/03/24*	*Survey Type: MANUAL*
74	WS-03-A-23 TURNERS HILL ROAD EAST GRINSTEAD	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	197	
	Survey date: TUESDAY	*14/05/24*	*Survey Type: MANUAL*

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.69

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	74	187	0.076	74	187	0.300	74	187	0.376
08:00 - 09:00	74	187	0.150	74	187	0.375	74	187	0.525
09:00 - 10:00	74	187	0.132	74	187	0.160	74	187	0.292
10:00 - 11:00	74	187	0.112	74	187	0.136	74	187	0.248
11:00 - 12:00	74	187	0.121	74	187	0.129	74	187	0.250
12:00 - 13:00	74	187	0.144	74	187	0.140	74	187	0.284
13:00 - 14:00	74	187	0.147	74	187	0.136	74	187	0.283
14:00 - 15:00	74	187	0.149	74	187	0.172	74	187	0.321
15:00 - 16:00	74	187	0.250	74	187	0.161	74	187	0.411
16:00 - 17:00	74	187	0.267	74	187	0.156	74	187	0.423
17:00 - 18:00	74	187	0.340	74	187	0.160	74	187	0.500
18:00 - 19:00	74	187	0.278	74	187	0.143	74	187	0.421
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.166			2.168			4.334

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.*

Parameter summary

Trip rate parameter range selected:	8 - 1146 (units:)
Survey date date range:	01/01/16 - 14/05/24
Number of weekdays (Monday-Friday):	74
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	18
Surveys manually removed from selection:	0

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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.69

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	74	187	0.108	74	187	0.495	74	187	0.603
08:00 - 09:00	74	187	0.224	74	187	0.776	74	187	1.000
09:00 - 10:00	74	187	0.200	74	187	0.258	74	187	0.458
10:00 - 11:00	74	187	0.170	74	187	0.217	74	187	0.387
11:00 - 12:00	74	187	0.190	74	187	0.208	74	187	0.398
12:00 - 13:00	74	187	0.222	74	187	0.217	74	187	0.439
13:00 - 14:00	74	187	0.228	74	187	0.207	74	187	0.435
14:00 - 15:00	74	187	0.243	74	187	0.268	74	187	0.511
15:00 - 16:00	74	187	0.552	74	187	0.274	74	187	0.826
16:00 - 17:00	74	187	0.505	74	187	0.258	74	187	0.763
17:00 - 18:00	74	187	0.559	74	187	0.269	74	187	0.828
18:00 - 19:00	74	187	0.454	74	187	0.246	74	187	0.700
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.655			3.693			7.348

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 B

Southbourne ATC, Stein Road (Southern Site)

Direction: Northbound

Hour Beginning	Tue 12/11/2024	Wed 13/11/2024	Thu 14/11/2024	Fri 15/11/2024	Sat 16/11/2024	Sun 17/11/2024	Mon 18/11/2024	5-Day Ave.	7-Day Ave.
00:00	4	1	4	6	6	13	3	4	5
01:00	4	2	3	2	2	7	1	2	3
02:00	2	0	0	1	2	5	1	1	2
03:00	1	0	3	1	1	1	0	1	1
04:00	2	3	3	2	4	0	3	3	2
05:00	9	12	12	20	5	3	10	13	10
06:00	40	40	43	48	20	11	48	44	36
07:00	166	150	173	231	45	20	168	178	136
08:00	187	169	159	218	107	44	168	180	150
09:00	131	151	152	184	115	80	170	158	140
10:00	151	141	145	196	154	116	162	159	152
11:00	148	136	151	198	164	110	154	157	152
12:00	146	162	147	178	133	161	177	162	158
13:00	125	154	154	148	146	127	159	148	145
14:00	169	159	179	185	124	130	159	170	158
15:00	197	178	161	179	155	112	180	179	166
16:00	206	220	200	195	119	124	218	208	183
17:00	181	175	192	178	134	82	203	186	164
18:00	167	171	147	134	90	70	139	152	131
19:00	102	111	110	116	72	58	93	106	95
20:00	64	69	64	65	40	52	38	60	56
21:00	43	44	52	48	56	18	42	46	43
22:00	37	45	48	47	50	29	23	40	40
23:00	11	15	13	28	30	7	4	14	15
Total									
12H(7-19)	1974	1966	1960	2224	1486	1176	2057	2036	1835
16H(6-22)	2223	2230	2229	2501	1674	1315	2278	2292	2064
18H(6-24)	2271	2290	2290	2576	1754	1351	2305	2346	2120
24H(0-24)	2293	2308	2315	2608	1774	1380	2323	2369	2143
AM Peak	08:00	08:00	07:00	07:00	11:00	10:00	09:00	08:00	10:00
	187	169	173	231	164	116	170	180	152
PM Peak	16:00	16:00	16:00	16:00	15:00	12:00	16:00	16:00	16:00
	206	220	200	195	155	161	218	208	183

Paul Castle Associates

Direction: Southbound

Hour Beginning	Tue 12/11/2024	Wed 13/11/2024	Thu 14/11/2024	Fri 15/11/2024	Sat 16/11/2024	Sun 17/11/2024	Mon 18/11/2024	5-Day Ave.	7-Day Ave.
00:00	0	2	3	4	8	13	1	2	4
01:00	0	1	3	3	2	6	0	1	2
02:00	4	2	1	4	1	6	0	2	3
03:00	3	3	7	5	1	0	1	4	3
04:00	9	7	7	10	4	1	8	8	7
05:00	24	27	25	22	9	10	26	25	20
06:00	78	77	64	76	20	13	72	73	57
07:00	170	180	186	184	58	34	172	178	141
08:00	266	260	236	279	127	75	263	261	215
09:00	177	194	203	241	184	141	186	200	189
10:00	171	168	153	222	165	150	197	182	175
11:00	152	168	159	183	166	125	151	163	158
12:00	167	139	171	200	164	163	167	169	167
13:00	155	151	139	151	136	141	156	150	147
14:00	175	179	193	248	139	122	200	199	179
15:00	197	186	180	194	124	114	178	187	168
16:00	193	223	198	219	131	102	212	209	183
17:00	172	149	165	131	112	94	166	157	141
18:00	123	128	153	140	96	74	113	131	118
19:00	110	135	125	127	60	61	93	118	102
20:00	90	101	60	63	31	46	75	78	67
21:00	45	50	37	35	35	11	34	40	35
22:00	19	28	20	29	35	17	23	24	24
23:00	5	10	6	15	11	6	4	8	8
Total									
12H(7-19)	2118	2125	2136	2392	1602	1335	2161	2186	1981
16H(6-22)	2441	2488	2422	2693	1748	1466	2435	2496	2242
18H(6-24)	2465	2526	2448	2737	1794	1489	2462	2528	2274
24H(0-24)	2505	2568	2494	2785	1819	1525	2498	2570	2313
AM Peak	08:00	08:00	08:00	08:00	09:00	10:00	08:00	08:00	08:00
	266	260	236	279	184	150	263	261	215
PM Peak	15:00	16:00	16:00	14:00	12:00	12:00	16:00	16:00	16:00
	197	223	198	248	164	163	212	209	183

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Tue 12/11/2024	Wed 13/11/2024	Thu 14/11/2024	Fri 15/11/2024	Sat 16/11/2024	Sun 17/11/2024	Mon 18/11/2024	5-Day Ave.	7-Day Ave.
00:00	4	3	7	10	14	26	4	6	10
01:00	4	3	6	5	4	13	1	4	5
02:00	6	2	1	5	3	11	1	3	4
03:00	4	3	10	6	2	1	1	5	4
04:00	11	10	10	12	8	1	11	11	9
05:00	33	39	37	42	14	13	36	37	31
06:00	118	117	107	124	40	24	120	117	93
07:00	336	330	359	415	103	54	340	356	277
08:00	453	429	395	497	234	119	431	441	365
09:00	308	345	355	425	299	221	356	358	330
10:00	322	309	298	418	319	266	359	341	327
11:00	300	304	310	381	330	235	305	320	309
12:00	313	301	318	378	297	324	344	331	325
13:00	280	305	293	299	282	268	315	298	292
14:00	344	338	372	433	263	252	359	369	337
15:00	394	364	341	373	279	226	358	366	334
16:00	399	443	398	414	250	226	430	417	366
17:00	353	324	357	309	246	176	369	342	305
18:00	290	299	300	274	186	144	252	283	249
19:00	212	246	235	243	132	119	186	224	196
20:00	154	170	124	128	71	98	113	138	123
21:00	88	94	89	83	91	29	76	86	79
22:00	56	73	68	76	85	46	46	64	64
23:00	16	25	19	43	41	13	8	22	24
Total									
12H(7-19)	4092	4091	4096	4616	3088	2511	4218	4223	3816
16H(6-22)	4664	4718	4651	5194	3422	2781	4713	4788	4306
18H(6-24)	4736	4816	4738	5313	3548	2840	4767	4874	4394
24H(0-24)	4798	4876	4809	5393	3593	2905	4821	4939	4456
AM Peak	08:00	08:00	08:00	08:00	11:00	10:00	08:00	08:00	08:00
	453	429	395	497	330	266	431	441	365
PM Peak	16:00	16:00	16:00	14:00	12:00	12:00	16:00	16:00	16:00
	399	443	398	433	297	324	430	417	366

Paul Castle Associates

Southbourne, Wednesday 13th November 2024

Approach: Stein Road

	Northbound			Southbound		
TIME	PEDESTRIAN	CYCLE	TOTAL	PEDESTRIAN	CYCLE	TOTAL
00:00 - 00:15	0	0	0	0	0	0
00:15 - 00:30	0	0	0	0	0	0
00:30 - 00:45	0	0	0	0	0	0
00:45 - 01:00	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**
01:00 - 01:15	0	0	0	0	0	0
01:15 - 01:30	0	0	0	0	0	0
01:30 - 01:45	0	0	0	0	0	0
01:45 - 02:00	0	0	0	1	0	1
Hourly Total	**0**	**0**	**0**	**1**	**0**	**1**
02:00 - 02:15	0	0	0	0	0	0
02:15 - 02:30	0	0	0	0	0	0
02:30 - 02:45	0	0	0	0	0	0
02:45 - 03:00	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**
03:00 - 03:15	0	0	0	0	0	0
03:15 - 03:30	0	0	0	0	0	0
03:30 - 03:45	0	0	0	0	0	0
03:45 - 04:00	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**
04:00 - 04:15	0	0	0	0	0	0
04:15 - 04:30	0	0	0	0	0	0
04:30 - 04:45	0	0	0	0	0	0
04:45 - 05:00	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**
05:00 - 05:15	0	0	0	0	0	0
05:15 - 05:30	0	0	0	0	0	0
05:30 - 05:45	0	0	0	0	0	0
05:45 - 06:00	2	0	2	0	0	0
Hourly Total	**2**	**0**	**2**	**0**	**0**	**0**
06:00 - 06:15	3	0	3	2	0	2
06:15 - 06:30	0	0	0	2	1	3
06:30 - 06:45	4	0	4	3	1	4
06:45 - 07:00	0	0	0	4	1	5
Hourly Total	**7**	**0**	**7**	**11**	**3**	**14**
07:00 - 07:15	8	0	8	4	0	4
07:15 - 07:30	8	0	8	5	1	6
07:30 - 07:45	5	1	6	3	0	3
07:45 - 08:00	22	1	23	9	0	9
Hourly Total	**43**	**2**	**45**	**21**	**1**	**22**
08:00 - 08:15	50	4	54	7	0	7
08:15 - 08:30	16	4	20	27	0	27
08:30 - 08:45	12	0	12	96	1	97
08:45 - 09:00	60	1	61	12	1	13
Hourly Total	**138**	**9**	**147**	**142**	**2**	**144**
09:00 - 09:15	11	2	13	13	1	14
09:15 - 09:30	2	2	4	7	2	9
09:30 - 09:45	7	4	11	10	0	10
09:45 - 10:00	5	0	5	6	1	7
Hourly Total	**25**	**8**	**33**	**36**	**4**	**40**
10:00 - 10:15	6	0	6	6	1	7
10:15 - 10:30	2	1	3	4	1	5
10:30 - 10:45	3	0	3	5	0	5
10:45 - 11:00	5	1	6	5	0	5
Hourly Total	**16**	**2**	**18**	**20**	**2**	**22**
11:00 - 11:15	4	1	5	1	1	2
11:15 - 11:30	10	1	11	6	1	7
11:30 - 11:45	1	1	2	5	0	5
11:45 - 12:00	10	0	10	8	0	8
Hourly Total	**25**	**3**	**28**	**20**	**2**	**22**
12:00 - 12:15	4	3	7	5	0	5
12:15 - 12:30	6	0	6	3	2	5
12:30 - 12:45	3	0	3	3	0	3
12:45 - 13:00	6	0	6	8	0	8
Hourly Total	**19**	**3**	**22**	**19**	**2**	**21**
13:00 - 13:15	5	1	6	14	0	14
13:15 - 13:30	5	0	5	5	0	5
13:30 - 13:45	4	2	6	9	0	9
13:45 - 14:00	3	0	3	3	2	5
Hourly Total	**17**	**3**	**20**	**31**	**2**	**33**
14:00 - 14:15	5	1	6	2	0	2
14:15 - 14:30	4	1	5	5	1	6
14:30 - 14:45	11	0	11	132	12	144
14:45 - 15:00	10	2	12	28	3	31
Hourly Total	**30**	**4**	**34**	**167**	**16**	**183**
15:00 - 15:15	10	0	10	43	1	44
15:15 - 15:30	66	0	66	11	4	15
15:30 - 15:45	68	0	68	15	3	18
15:45 - 16:00	14	2	16	13	1	14
Hourly Total	**158**	**2**	**160**	**82**	**9**	**91**
16:00 - 16:15	17	0	17	13	1	14
16:15 - 16:30	9	0	9	22	2	24
16:30 - 16:45	18	0	18	9	2	11
16:45 - 17:00	10	0	10	10	0	10
Hourly Total	**54**	**0**	**54**	**54**	**5**	**59**
17:00 - 17:15	7	2	9	21	0	21
17:15 - 17:30	12	1	13	7	0	7
17:30 - 17:45	2	0	2	10	0	10
17:45 - 18:00	8	1	9	7	0	7
Hourly Total	**29**	**4**	**33**	**45**	**0**	**45**
18:00 - 18:15	2	2	4	3	0	3
18:15 - 18:30	15	1	16	8	0	8
18:30 - 18:45	10	0	10	2	0	2
18:45 - 19:00	8	0	8	12	1	13
Hourly Total	**35**	**3**	**38**	**25**	**1**	**26**
19:00 - 19:15	1	0	1	4	1	5
19:15 - 19:30	3	0	3	3	1	4
19:30 - 19:45	2	0	2	3	0	3
19:45 - 20:00	2	0	2	3	0	3
Hourly Total	**8**	**0**	**8**	**13**	**2**	**15**
20:00 - 20:15	0	0	0	5	0	5
20:15 - 20:30	2	0	2	7	0	7
20:30 - 20:45	2	0	2	2	0	2
20:45 - 21:00	1	0	1	0	0	0
Hourly Total	**5**	**0**	**5**	**14**	**0**	**14**
21:00 - 21:15	0	0	0	1	0	1
21:15 - 21:30	0	0	0	0	0	0
21:30 - 21:45	1	0	1	0	0	0
21:45 - 22:00	2	0	2	1	0	1
Hourly Total	**3**	**0**	**3**	**2**	**0**	**2**
22:00 - 22:15	2	0	2	1	0	1
22:15 - 22:30	2	0	2	0	0	0
22:30 - 22:45	0	0	0	6	1	7
22:45 - 23:00	4	0	4	1	0	1
Hourly Total	**8**	**0**	**8**	**8**	**1**	**9**
23:00 - 23:15	2	0	2	0	0	0
23:15 - 23:30	4	0	4	0	0	0
23:30 - 23:45	1	0	1	4	0	4
23:45 - 00:00	0	0	0	0	0	0
Hourly Total	**7**	**0**	**7**	**4**	**0**	**4**
TOTAL	**629**	**43**	**672**	**715**	**52**	**767**

Southbourne, Wednesday 13th November 2024

Approach: Stein Road

Time Barrier Down	Time Barrier Up	Barrier Duration (mm:ss)	Queues	
			Northbound	Southbound
00:02:30	00:05:03	02:33		
00:06:00	00:09:12	03:12		
04:56:25	04:58:40	02:15		
05:00:40	05:02:56	02:16		
05:10:40	05:12:47	02:07		
05:14:55	05:17:05	02:10		
05:26:20	05:28:18	01:58		
05:30:35	05:34:21	03:46		4
05:51:30	05:55:09	03:39		5
06:06:15	06:09:06	02:51	3	4
06:13:20	06:17:00	03:40	6	4
06:25:10	06:28:20	03:10		4
06:37:30	06:42:10	04:40		3
06:47:15	06:49:56	02:41	7	
06:51:00	06:56:24	05:24	9	6
07:04:55	07:07:15	02:20	3	2
07:09:44	07:14:00	04:16	10	12
07:20:30	07:23:00	02:30	2	
07:24:24	07:27:00	02:36	4	6
07:29:20	07:31:20	02:00	4	3
07:31:50	07:34:24	02:34	13	8
07:44:44	07:47:13	02:29	8	6
07:53:00	07:56:45	03:45	20	15
08:03:29	08:06:50	03:21	22	16
08:10:00	08:13:48	03:48	26	23
08:20:30	08:25:45	05:15	18	25
08:30:10	08:32:00	01:50	5	15
08:36:52	08:40:30	03:38	12	6
08:52:05	08:54:27	02:22	17	16
09:05:05	09:07:30	02:25	9	17
09:09:35	09:12:11	02:36	3	12
09:17:10	09:19:13	02:03	4	3
09:26:53	09:28:30	01:37	3	3
09:30:10	09:33:33	03:23	5	7
09:35:00	09:37:15	02:15	9	8
09:38:40	09:40:45	02:05		6
09:51:30	09:54:57	03:27	15	8
10:05:08	10:08:02	02:54	12	10
10:11:20	10:13:20	02:00	4	5
10:14:32	10:16:44	02:12		
10:26:43	10:30:15	03:32	11	16

10:31:24	10:33:14	01:50	6	3
10:36:39	10:40:48	04:09	7	14
10:49:45	10:51:48	02:03	7	3
10:53:00	10:56:38	03:38	9	8
11:03:45	11:07:15	03:30	14	18
11:09:27	11:15:13	05:46	14	15
11:24:50	11:28:48	03:58	12	12
11:30:27	11:32:47	02:20	4	2
11:40:50	11:43:02	02:12	5	9
11:43:28	11:46:35	03:07	8	11
11:49:30	11:52:15	02:45	11	11
11:53:50	11:57:30	03:40	9	11
12:05:55	12:08:55	03:00	7	6
12:09:50	12:12:16	02:26	12	3
12:14:10	12:16:25	02:15	11	4
12:20:26	12:23:10	02:44	4	3
12:25:29	12:29:00	03:31	9	6
12:32:55	12:34:35	01:40	5	6
12:35:09	12:38:30	03:21	10	7
12:39:08	12:41:25	02:17	9	14
12:49:47	12:54:04	04:17	16	11
13:04:00	13:06:22	02:22	5	10
13:11:45	13:13:39	01:54	7	2
13:16:09	13:18:32	02:23	8	8
13:26:45	13:31:20	04:35	10	10
13:34:00	13:37:20	03:20	5	9
13:39:49	13:42:05	02:16	5	7
13:51:30	13:54:02	02:32	6	6
14:07:22	14:10:58	03:36	16	10
14:12:15	14:14:45	02:30	10	7
14:18:45	14:20:09	01:24	4	3
14:22:18	14:23:47	01:29	4	4
14:25:29	14:29:10	03:41	14	11
14:30:35	14:32:39	02:04	8	4
14:37:34	14:40:15	02:41	13	16
14:47:20	14:53:12	05:52	19	25
15:07:20	15:10:27	03:07	9	10
15:11:50	15:13:44	01:54	6	7
15:19:18	15:22:05	02:47	9	13
15:23:08	15:25:53	02:45	13	12
15:29:47	15:31:43	01:56	16	7
15:35:14	15:38:14	03:00	13	6
15:39:01	15:40:40	01:39	6	5
15:48:58	15:54:30	05:32	16	20
16:03:39	16:07:26	03:47	15	10
16:09:25	16:11:10	01:45	10	17
16:12:25	16:15:00	02:35	15	8
16:21:24	16:25:26	04:02	16	18
16:29:16	16:31:24	02:08	10	10
16:34:33	16:38:00	03:27	15	18

16:39:44	16:43:50	04:06	19	13
16:49:30	16:54:45	05:15	17	16
17:03:20	17:06:40	03:20	14	23
17:15:12	17:18:22	03:10	13	12
17:22:45	17:26:19	03:34	8	6
17:29:40	17:31:40	02:00	3	3
17:34:35	17:37:53	03:18	9	8
17:39:00	17:42:00	03:00	10	4
17:50:19	17:56:28	06:09	12	7
18:02:40	18:05:43	03:03	12	8
18:13:05	18:15:20	02:15	7	6
18:18:35	18:20:40	02:05	4	3
18:23:15	18:27:10	03:55	8	10
18:28:37	18:31:24	02:47	6	5
18:36:48	18:40:51	04:03	10	8
18:52:00	18:58:09	06:09	13	16
19:09:50	19:12:35	02:45	7	11
19:14:35	19:16:05	01:30	7	9
19:29:15	19:33:08	03:53	12	6
19:34:47	19:36:46	01:59	3	
19:40:45	19:42:36	01:51	6	3
19:51:19	19:55:57	04:38	5	6
20:08:49	20:11:15	02:26	3	7
20:13:44	20:17:48	04:04	3	6
20:19:50	20:22:10	02:20	2	
20:25:40	20:28:50	03:10	3	
20:38:49	20:42:54	04:05		
20:54:30	20:57:53	03:23	3	4
21:03:08	21:06:45	03:37	5	5
21:09:55	21:12:30	02:35		
21:15:40	21:16:10	00:30		
21:26:20	21:29:21	03:01	2	2
21:33:55	21:37:37	03:42	2	2
21:47:00	21:51:33	04:33		
21:52:38	21:55:30	02:52		
22:07:24	22:10:00	02:36		
22:10:15	22:15:27	05:12	4	4
22:26:10	22:30:00	03:50		
22:42:00	22:44:38	02:38		
22:52:00	22:55:32	03:32		
23:09:10	23:13:18	04:08		
23:14:49	23:16:55	02:06		
23:26:50	23:29:17	02:27		
23:38:40	23:42:23	03:43		2
23:55:40	23:57:16	01:36		

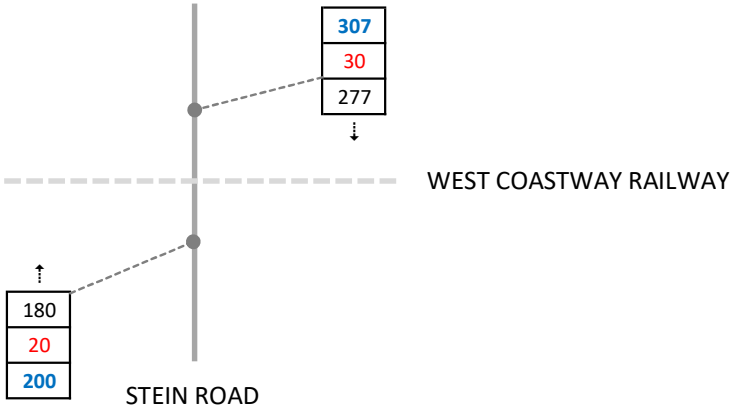
Appendix C

Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

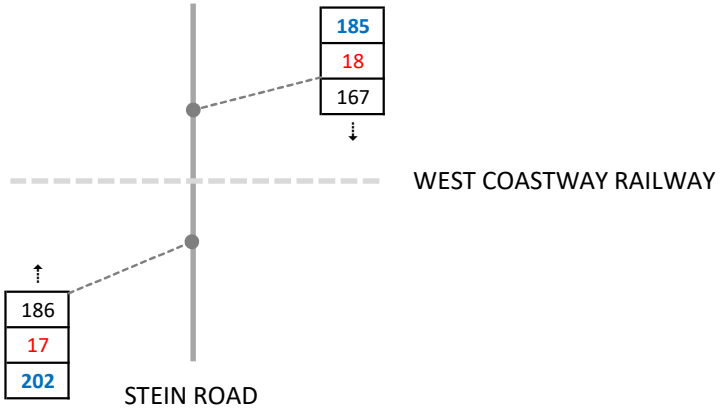
Scenario: Base

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



Notes:

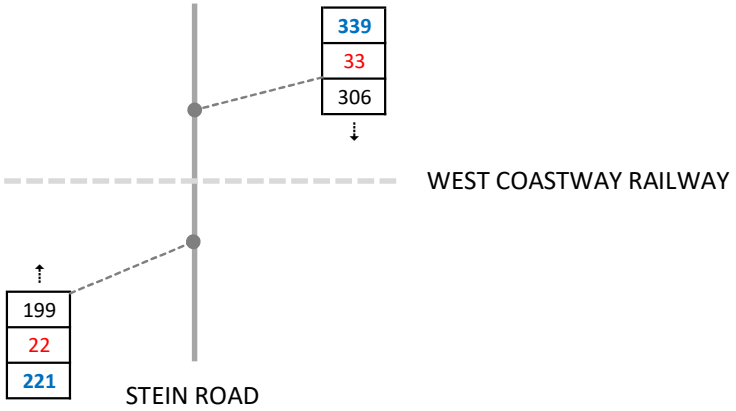
Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

Scenario: 2039 Forecast

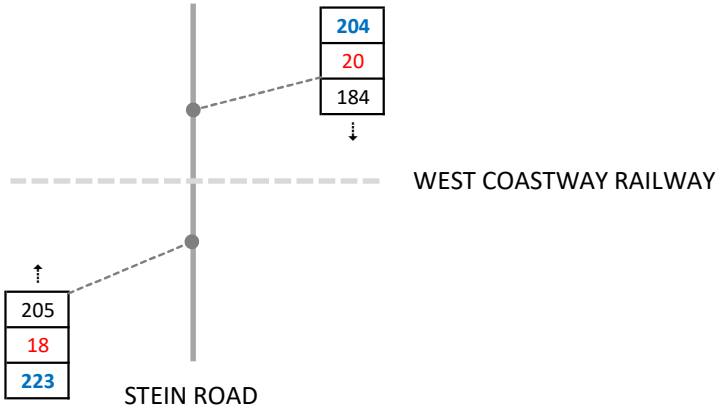
XXX Total Vehicles
XXX HGVs
XXX PCUs

1.1029 AM 2024-2039 TEMPRO Factor
1.1028 PM 2024-2039 TEMPRO Factor

AM Peak: 0800-0900



PM Peak: 1700-1800



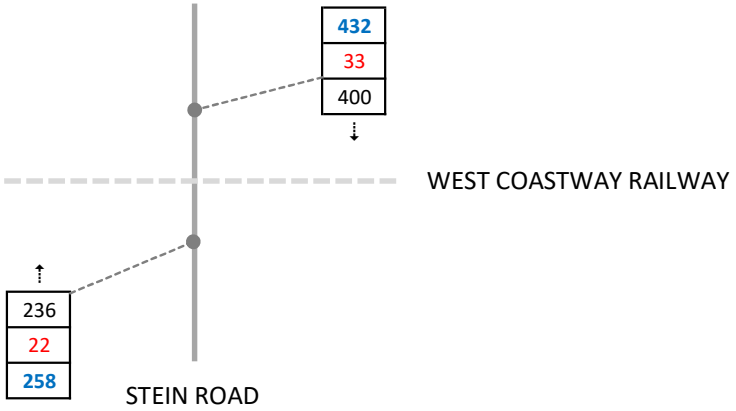
Notes:

Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

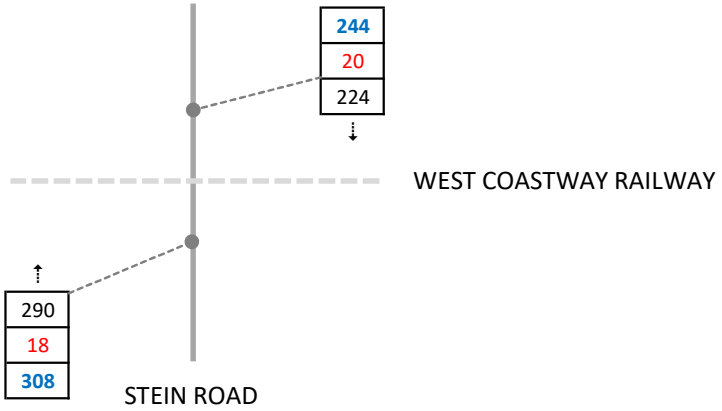
Scenario: 2039 Forecast + 250dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



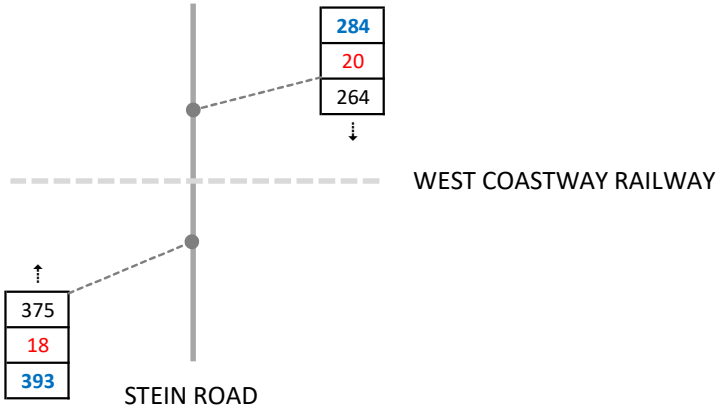
Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

Scenario: 2039 Forecast + 500dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900

PM Peak: 1700-1800

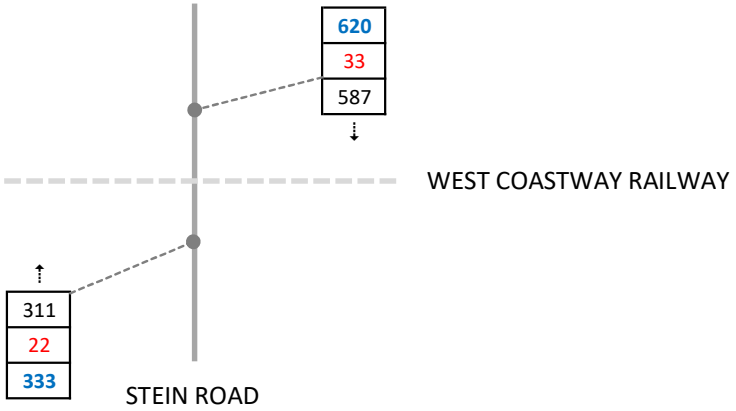


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

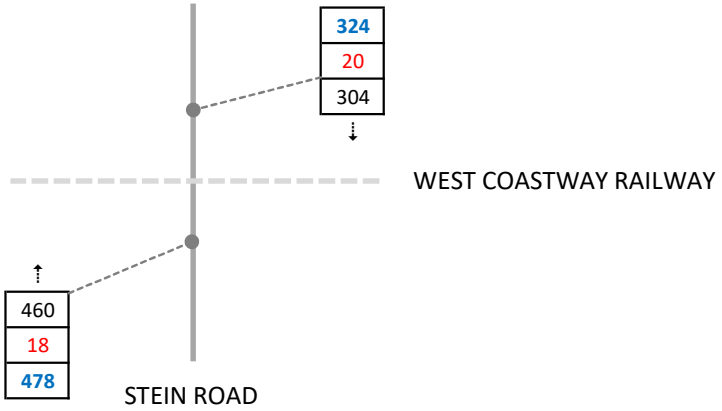
Scenario: 2039 Forecast + 750dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



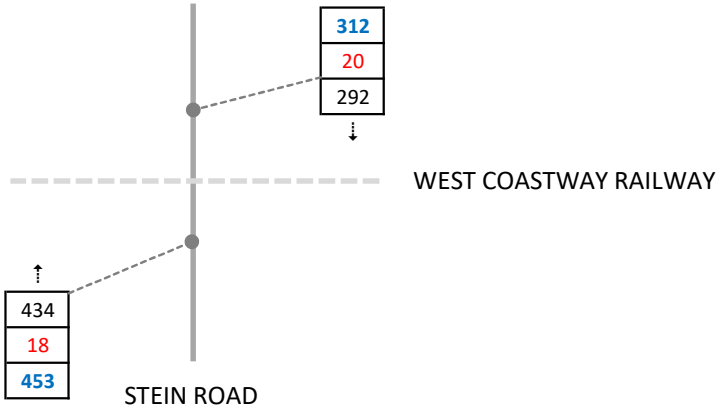
Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

Scenario: 2039 Forecast + 750dw + TP

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900

PM Peak: 1700-1800

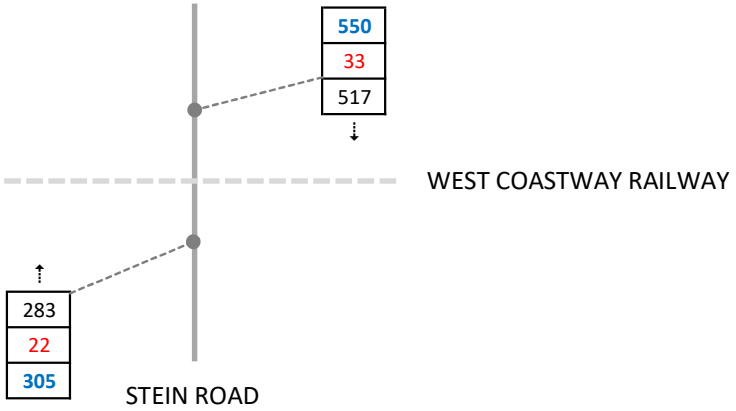


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

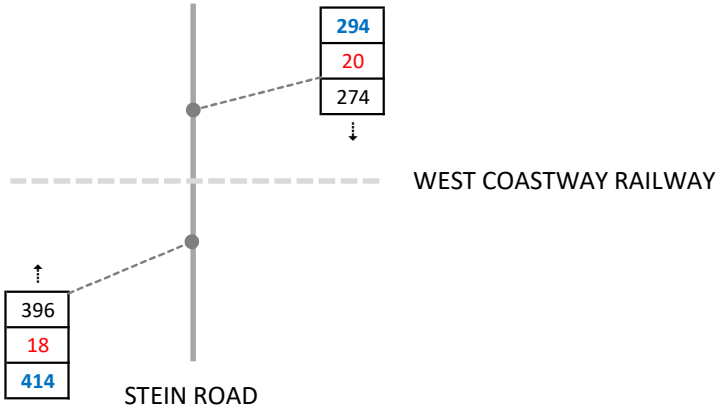
Scenario: 2039 Forecast + 750dw + Internalisation

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

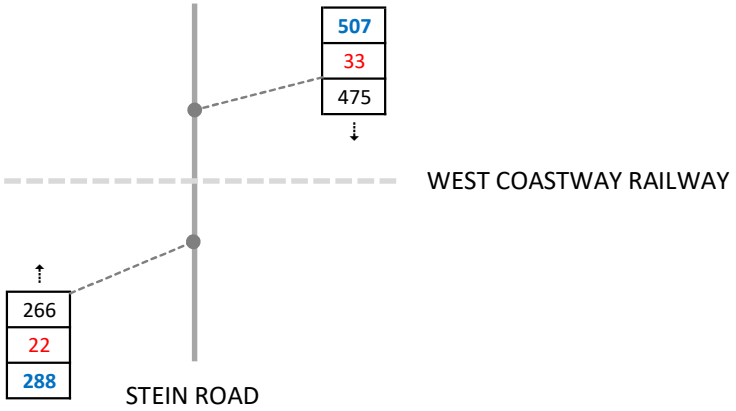


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

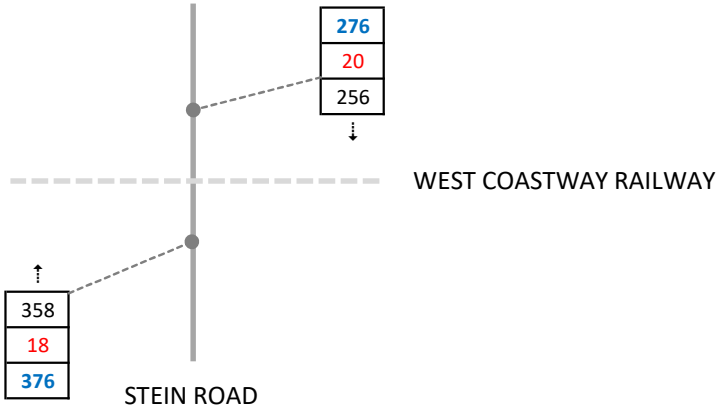
Scenario: 2039 Forecast + 750dw + Mode Shift

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

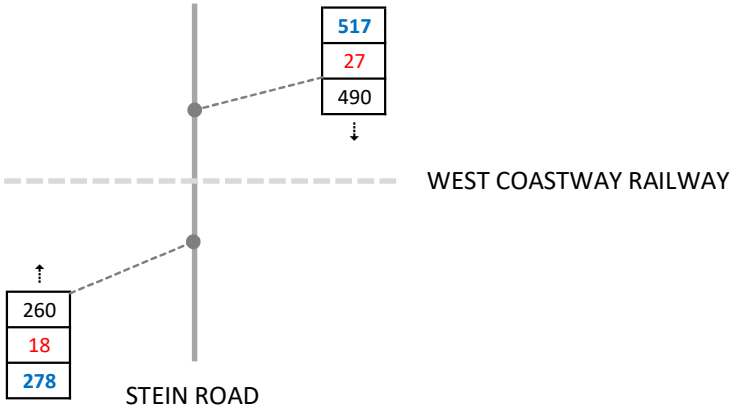


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

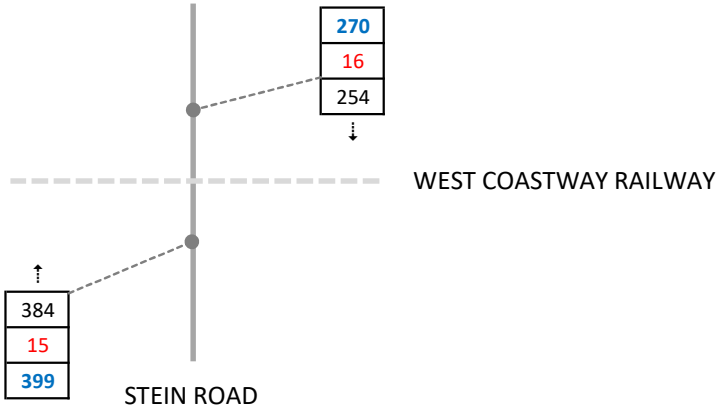
Scenario: 2039 Forecast + 750dw -20% Adjustment

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



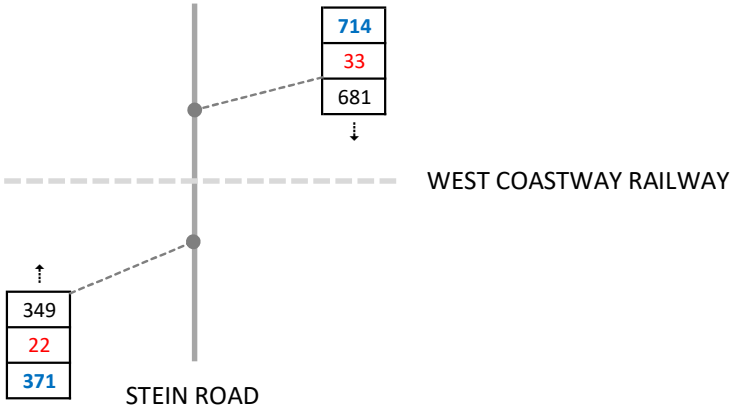
Notes: A 20% adjustment was applied to the 83% fo westbound traffic for both the Forecast and Proposed Development flows to account for route choice when the network is congested. This works out as a 16.6% reduction in overall trips (20% of 83%)

Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

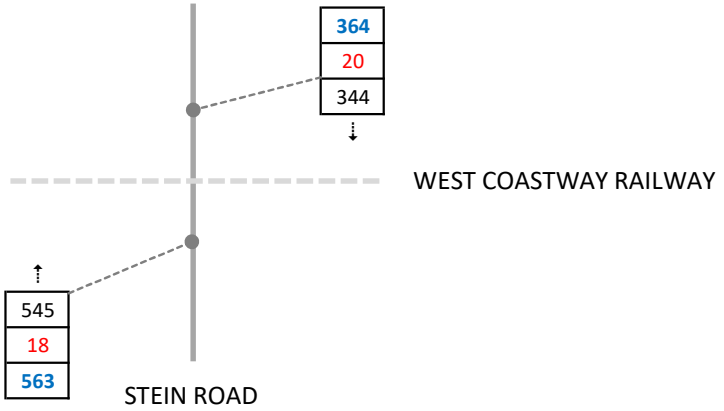
Scenario: 2039 Forecast + 1000dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

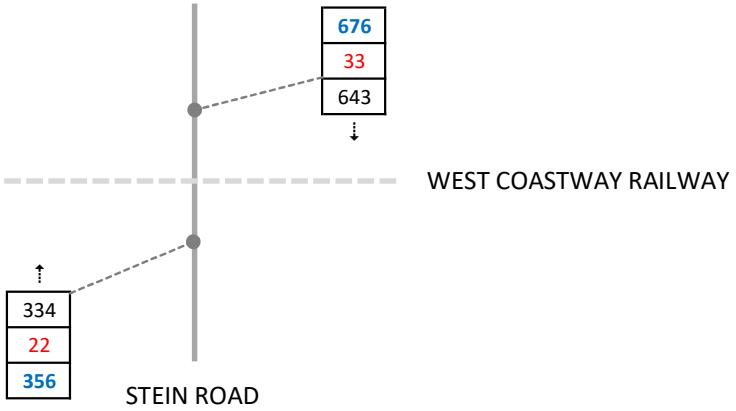


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

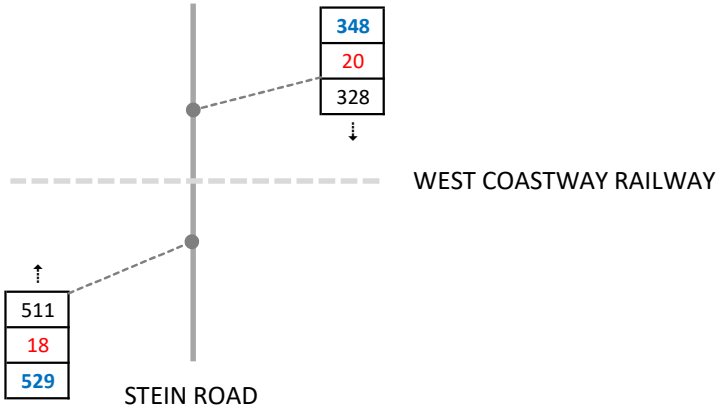
Scenario: 2039 Forecast + 1000dw + TP

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

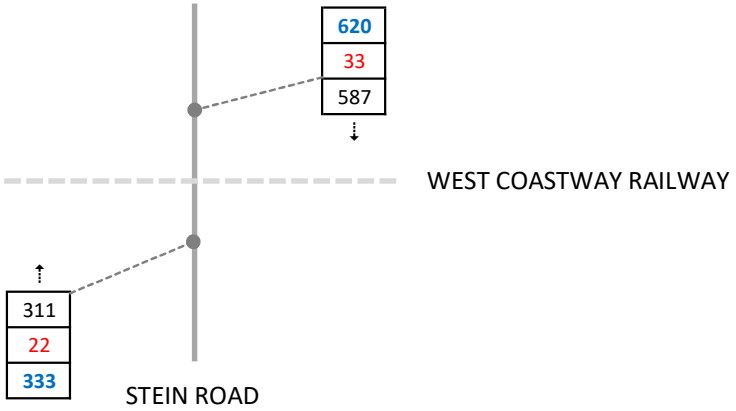


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

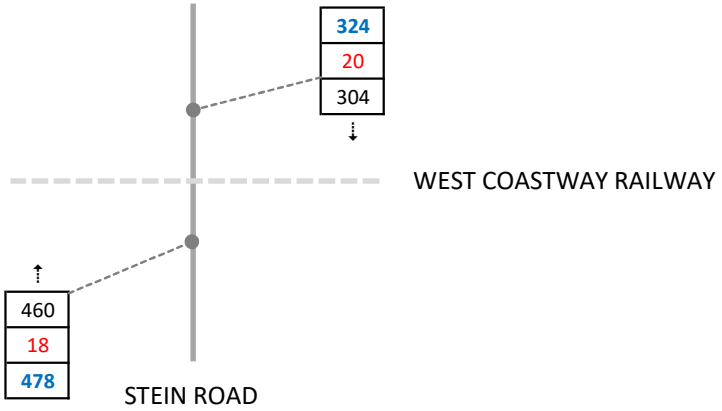
Scenario: 2039 Forecast + 1000dw + Internalisation

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

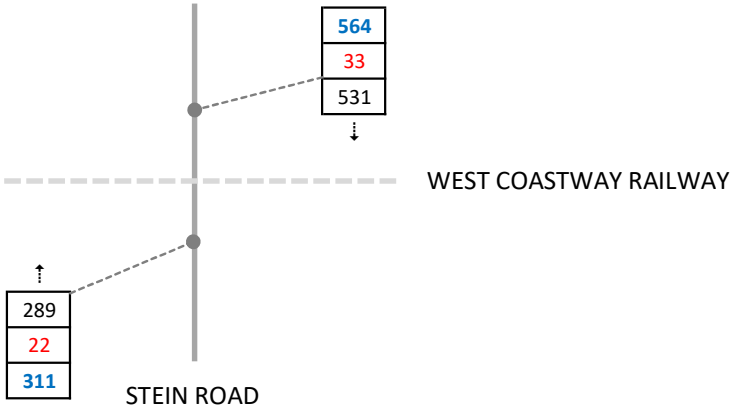


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

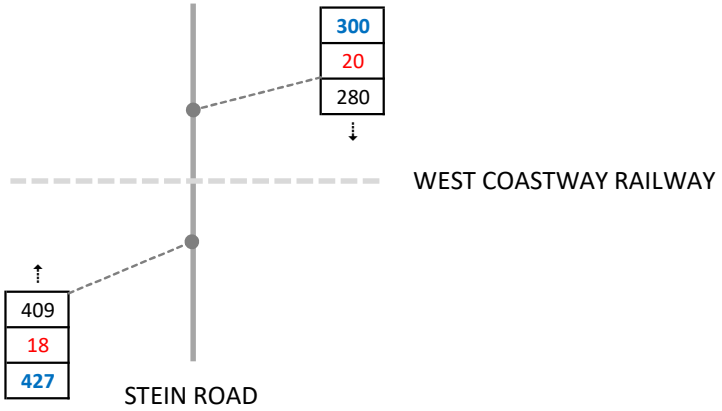
Scenario: 2039 Forecast + 1000dw + Mode Shift

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

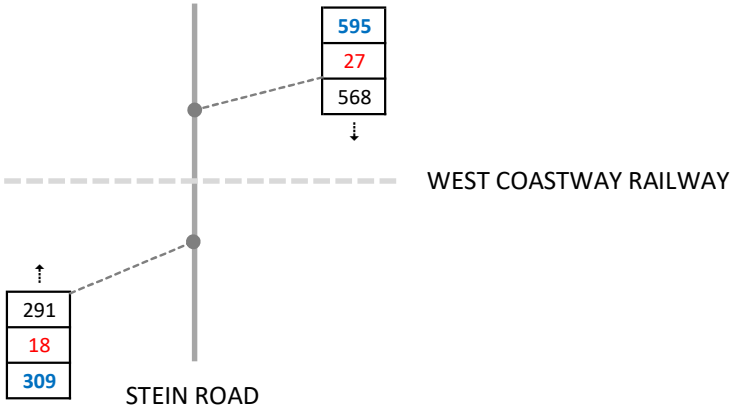


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

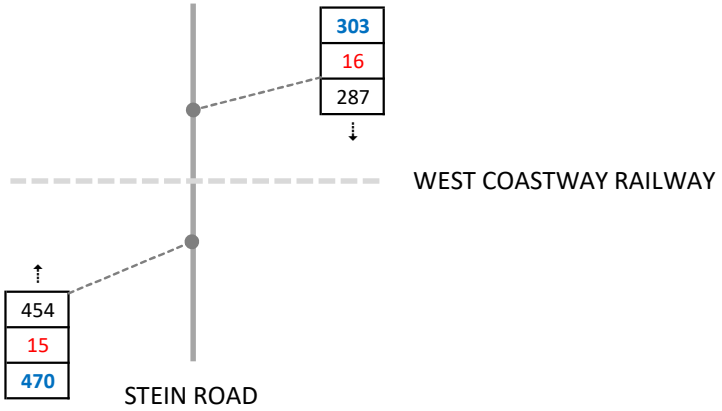
Scenario: 2039 Forecast + 1000dw -20% Adjustment

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



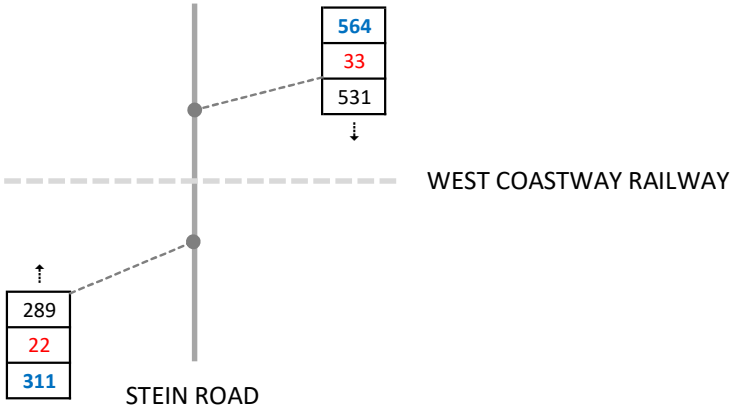
Notes: A 20% adjustment was applied to the 83% fo westbound traffic for both the Forecast and Proposed Development flows to account for route choice when the network is congested. This works out as a 16.6% reduction in overall trips (20% of 83%)

Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

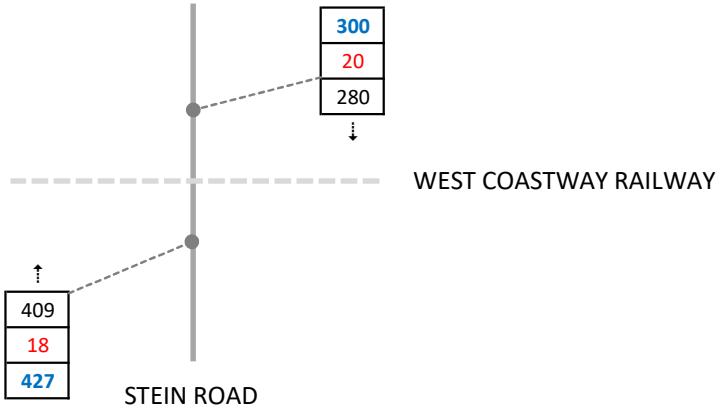
Scenario: 2039 Forecast + 600dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

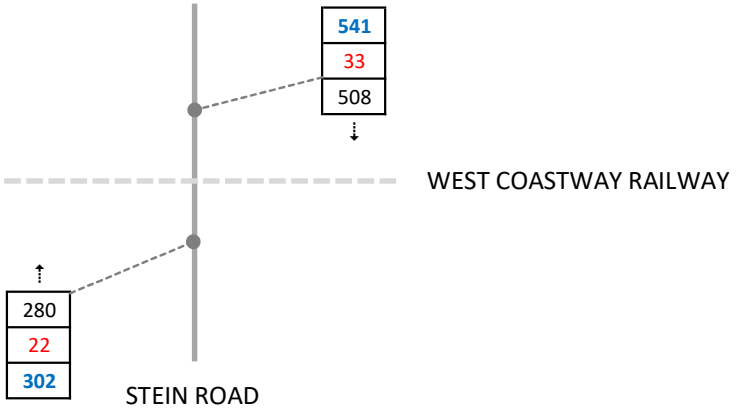


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

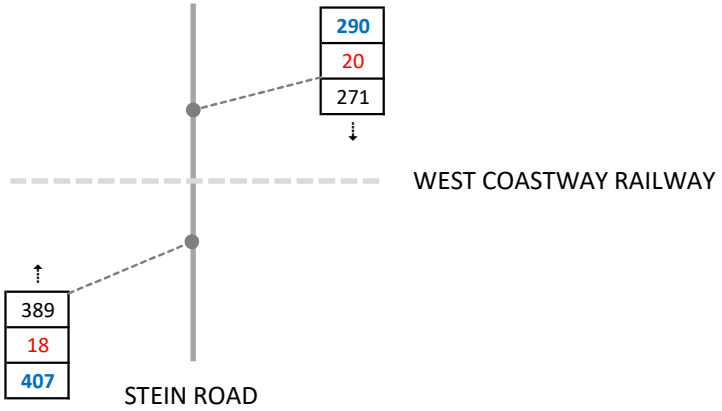
Scenario: 2039 Forecast +600dw + TP

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

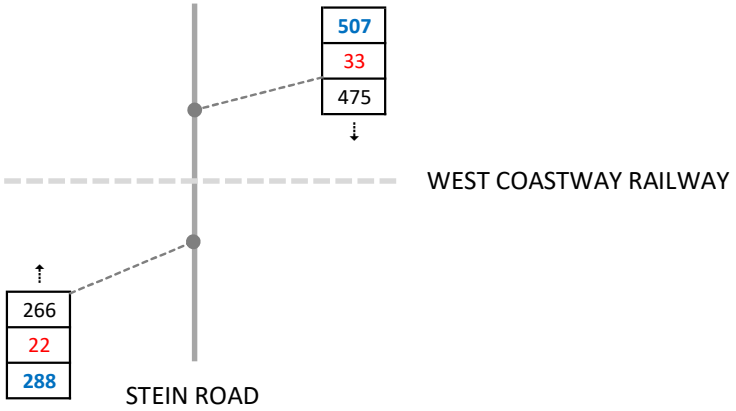


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

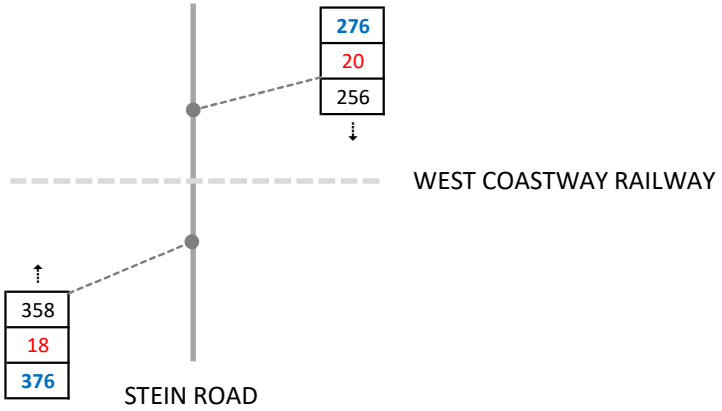
Scenario: 2039 Forecast + 600dw + Internalisation

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

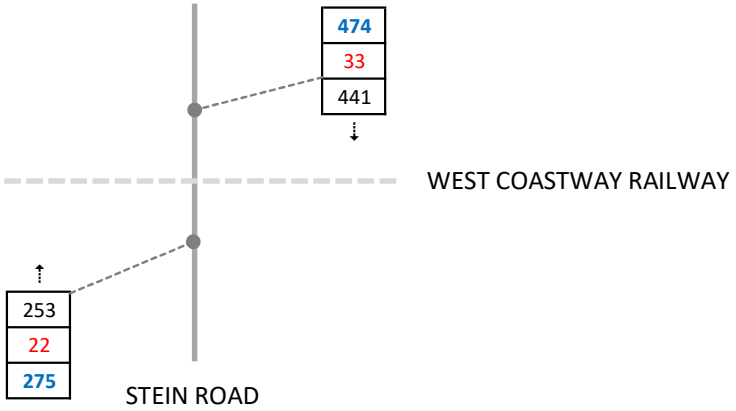


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

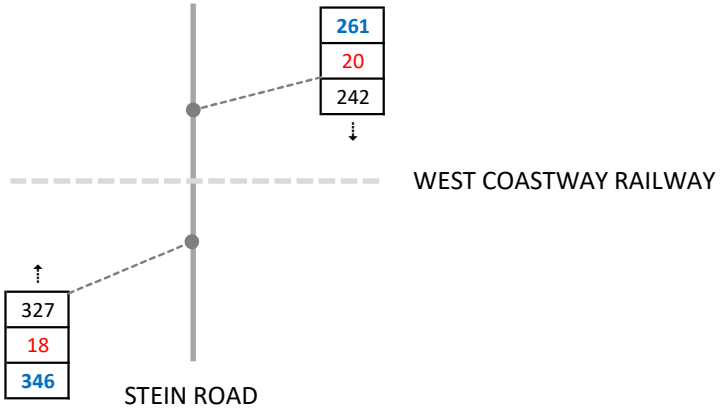
Scenario: 2039 Forecast + 600dw + Mode Shift

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

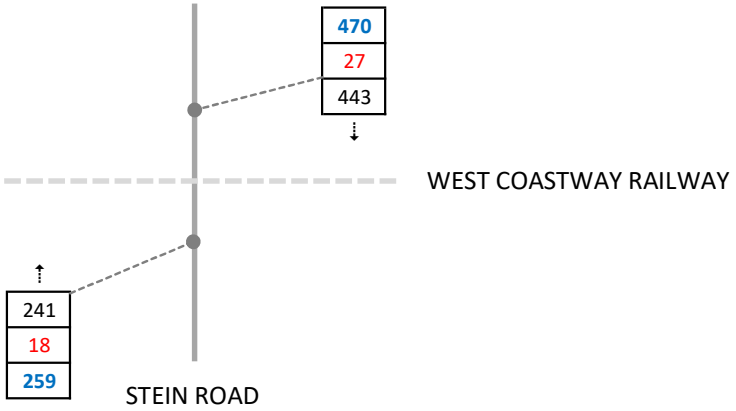


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

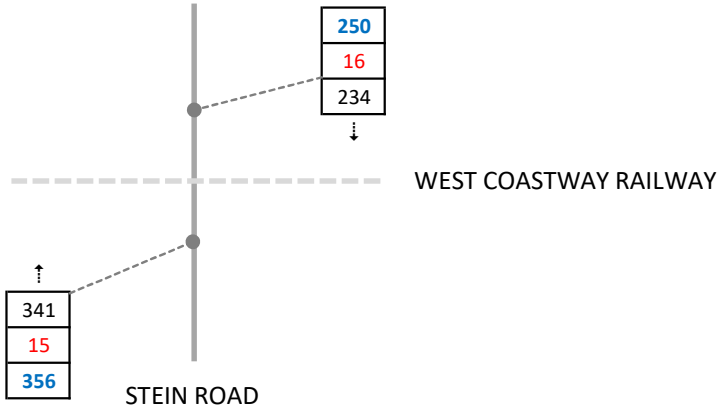
Scenario: 2039 Forecast +600dw -20% Adjustment

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



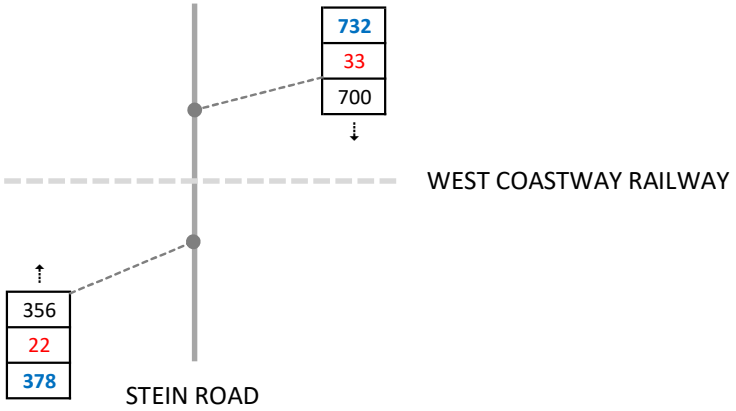
Notes: A 20% adjustment was applied to the 83% fo westbound traffic for both the Forecast and Proposed Development flows to account for route choice when the network is congested. This works out as a 16.6% reduction in overall trips (20% of 83%)

Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

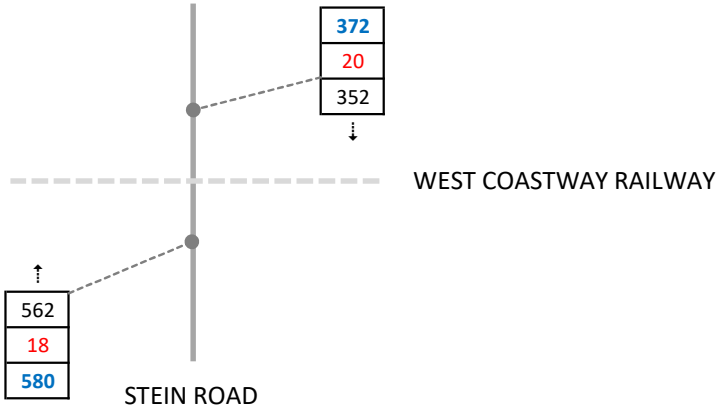
Scenario: 2039 Forecast + 1050dw

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



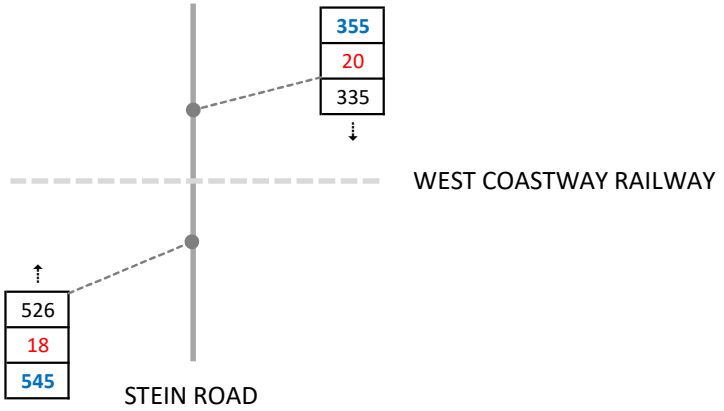
Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

Scenario: 2039 Forecast + 1050dw + TP

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900

PM Peak: 1700-1800

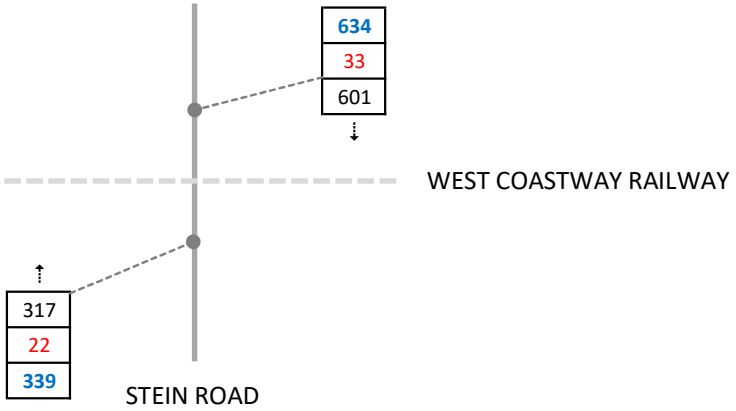


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

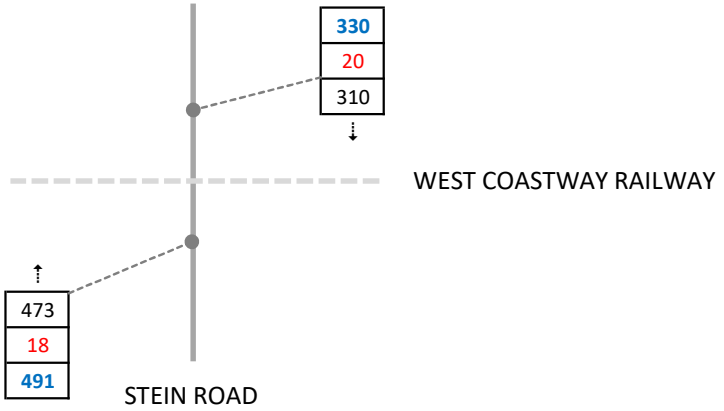
Scenario: 2039 Forecast + 1050dw + Internalisation

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

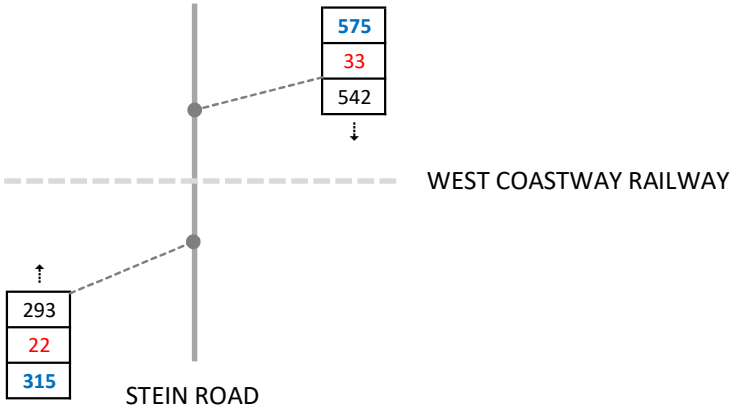


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

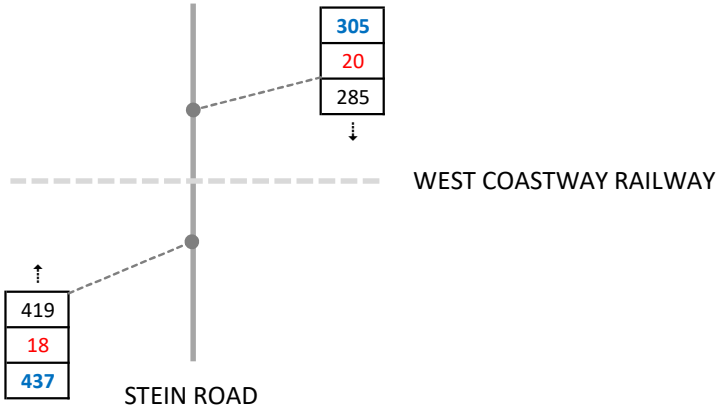
Scenario: 2039 Forecast + 1050dw + Mode Shift

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800

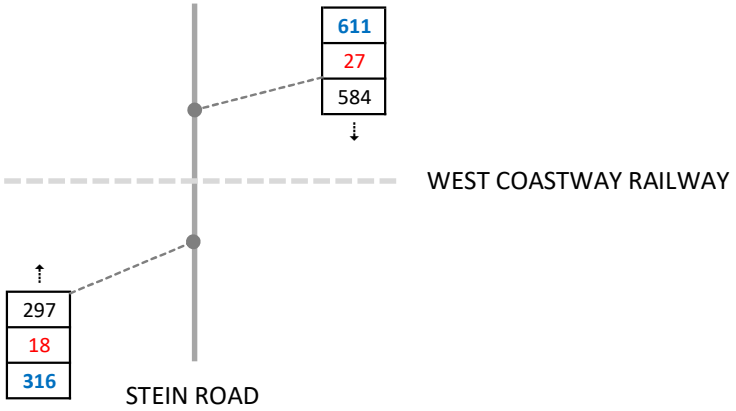


Project Name: Southborne
Project Number: 110.0013
Drawn By: TP
Approved By: TF

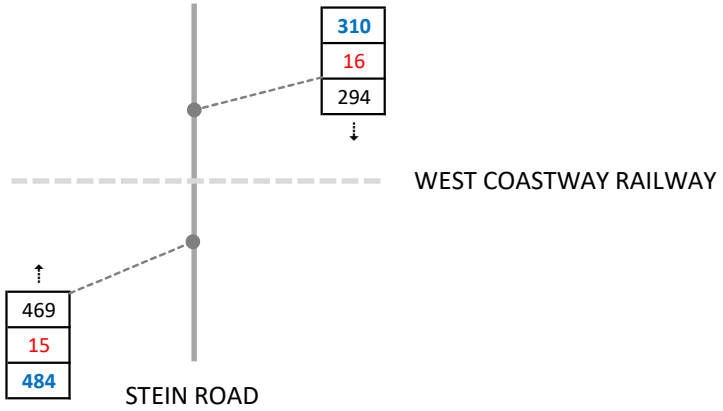
Scenario: 2039 Forecast + 1050dw -20% Adjustment

XXX Total Vehicles
XXX HGVs
XXX PCUs

AM Peak: 0800-0900



PM Peak: 1700-1800



Notes: A 20% adjustment was applied to the 83% fo westbound traffic for both the Forecast and Proposed Development flows to account for route choice when the network is congested. This works out as a 16.6% reduction in overall trips (20% of 83%)

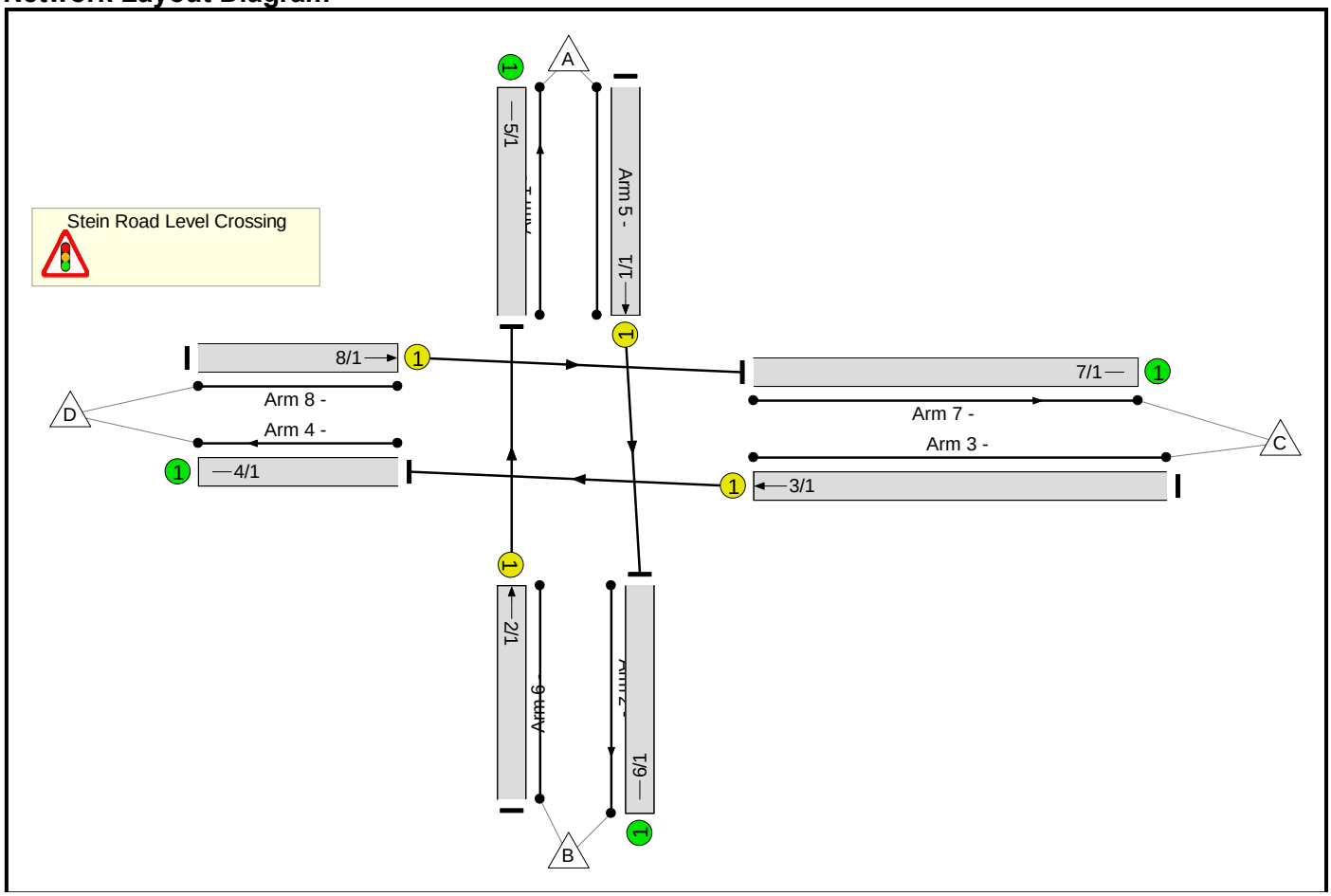
Appendix D

Full Input Data And Results

User and Project Details

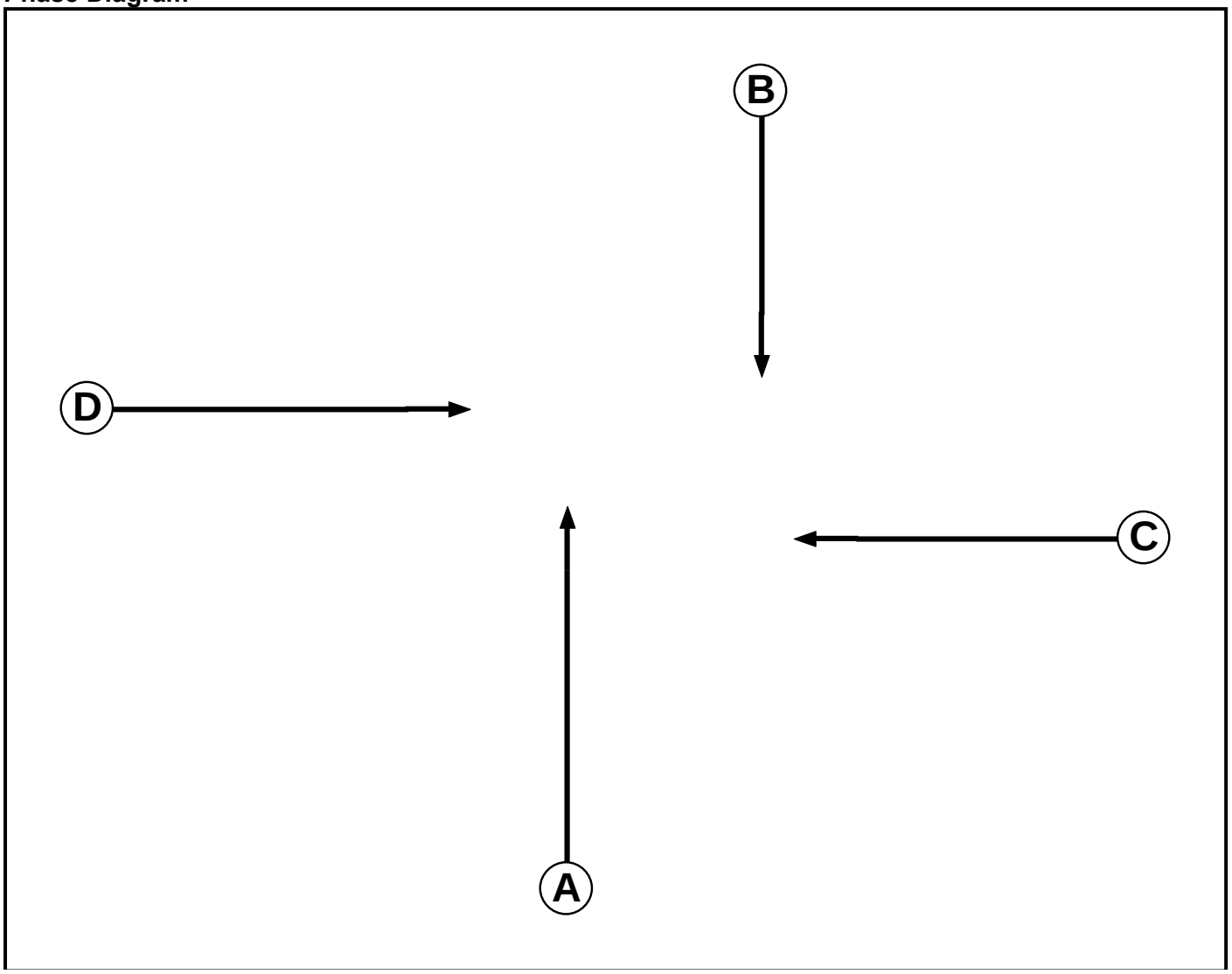
Project:	
Title:	
Location:	
Additional detail:	
File name:	Stein Road Level Crossing - 600 & 1050 scenarios.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



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

Full Input Data And Results

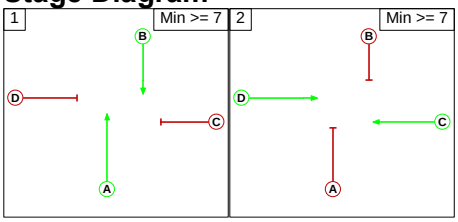
Phase Intergreens Matrix

Terminating Phase	Starting Phase				
		A	B	C	D
	A		-	10	10
	B	-		10	10
	C	10	10		-
	D	10	10	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		10
	2	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Stein Road Level Crossing
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Stein Road Level Crossing												
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	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
2/1	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
3/1	U	C	2	3	60.0	User	1800	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
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	D	2	3	60.0	User	1800	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base AM'	08:00	09:00	01:00	
2: 'Base PM'	17:00	18:00	01:00	
3: 'Forecast AM'	08:00	09:00	01:00	
4: 'Forecast PM'	17:00	18:00	01:00	
5: 'Forecast + Proposed Development (250dw) AM'	08:00	09:00	01:00	
6: 'Forecast + Proposed Development (250dw) PM'	17:00	18:00	01:00	
7: 'Forecast + Proposed Development (500dw) AM'	08:00	09:00	01:00	
8: 'Forecast + Proposed Development (500dw) PM'	17:00	18:00	01:00	
9: 'Forecast + Proposed Development (600dw) AM'	08:00	09:00	01:00	
10: 'Forecast + Proposed Development (600dw) PM'	17:00	18:00	01:00	
11: 'Forecast + Proposed Development (600dw With Travel Plan) AM'	08:00	09:00	01:00	
12: 'Forecast + Proposed Development (600dw With Travel Plan) PM'	17:00	18:00	01:00	
13: 'Forecast + Proposed Development (600dw With Internalisation) AM'	08:00	09:00	01:00	
14: 'Forecast + Proposed Development (600dw With Internalisation) PM'	17:00	18:00	01:00	
15: 'Forecast + Proposed Development (600dw With Mode Shift) AM'	08:00	09:00	01:00	
16: 'Forecast + Proposed Development (600dw With Mode Shift) PM'	17:00	18:00	01:00	
17: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) AM'	08:00	09:00	01:00	
18: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) PM'	17:00	18:00	01:00	
19: 'Forecast + Proposed Development (1050dw) AM'	08:00	09:00	01:00	
20: 'Forecast + Proposed Development (1050dw) PM'	17:00	18:00	01:00	
21: 'Forecast + Proposed Development (1050dw With Travel Plan) AM'	08:00	09:00	01:00	
22: 'Forecast + Proposed Development (1050dw With Travel Plan) PM'	17:00	18:00	01:00	
23: 'Forecast + Proposed Development (1050dw With Internalisation) AM'	08:00	09:00	01:00	
24: 'Forecast + Proposed Development (1050dw With Internalisation) PM'	17:00	18:00	01:00	
25: 'Forecast + Proposed Development (1050dw With Mode Shift) AM'	08:00	09:00	01:00	
26: 'Forecast + Proposed Development (1050dw With Mode Shift) PM'	17:00	18:00	01:00	
27: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM'	08:00	09:00	01:00	
28: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM'	17:00	18:00	01:00	

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

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	307	0	0	307
	B	200	0	0	0	200
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	200	307	0	0	507

Traffic Lane Flows

Lane	Scenario 1: Base AM
Junction: Stein Road Level Crossing	
1/1	307
2/1	200
3/1	0
4/1	0
5/1	200
6/1	307
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

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

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	185	0	0	185
	B	202	0	0	0	202
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	202	185	0	0	387

Traffic Lane Flows

Lane	Scenario 2: Base PM
Junction: Stein Road Level Crossing	
1/1	185
2/1	202
3/1	0
4/1	0
5/1	202
6/1	185
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

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

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	339	0	0	339
	B	221	0	0	0	221
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	221	339	0	0	560

Traffic Lane Flows

Lane	Scenario 3: Forecast AM
Junction: Stein Road Level Crossing	
1/1	339
2/1	221
3/1	0
4/1	0
5/1	221
6/1	339
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

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

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	204	0	0	204
	B	223	0	0	0	223
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	223	204	0	0	427

Traffic Lane Flows

Lane	Scenario 4: Forecast PM
Junction: Stein Road Level Crossing	
1/1	204
2/1	223
3/1	0
4/1	0
5/1	223
6/1	204
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 5: 'Forecast + Proposed Development (250dw) AM' (FG5: 'Forecast + Proposed Development (250dw) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	432	0	0	432
	B	258	0	0	0	258
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	258	432	0	0	690

Traffic Lane Flows

Lane	Scenario 5: Forecast + Proposed Development (250dw) AM
Junction: Stein Road Level Crossing	
1/1	432
2/1	258
3/1	0
4/1	0
5/1	258
6/1	432
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 6: 'Forecast + Proposed Development (250dw) PM' (FG6: 'Forecast + Proposed Development (250dw) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	244	0	0	244
	B	308	0	0	0	308
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	308	244	0	0	552

Traffic Lane Flows

Lane	Scenario 6: Forecast + Proposed Development (250dw) PM
Junction: Stein Road Level Crossing	
1/1	244
2/1	308
3/1	0
4/1	0
5/1	308
6/1	244
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 7: 'Forecast + Proposed Development (500dw) AM' (FG7: 'Forecast + Proposed Development (500dw) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	526	0	0	526
	B	296	0	0	0	296
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	296	526	0	0	822

Traffic Lane Flows

Lane	Scenario 7: Forecast + Proposed Development (500dw) AM
Junction: Stein Road Level Crossing	
1/1	526
2/1	296
3/1	0
4/1	0
5/1	296
6/1	526
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 8: 'Forecast + Proposed Development (500dw) PM' (FG8: 'Forecast + Proposed Development (500dw) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	284	0	0	284
	B	393	0	0	0	393
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	393	284	0	0	677

Traffic Lane Flows

Lane	Scenario 8: Forecast + Proposed Development (500dw) PM
Junction: Stein Road Level Crossing	
1/1	284
2/1	393
3/1	0
4/1	0
5/1	393
6/1	284
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 9: 'Forecast + Proposed Development (600dw) AM' (FG9: 'Forecast + Proposed Development (600dw) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	564	0	0	564
	B	311	0	0	0	311
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	311	564	0	0	875

Traffic Lane Flows

Lane	Scenario 9: Forecast + Proposed Development (600dw) AM
Junction: Stein Road Level Crossing	
1/1	564
2/1	311
3/1	0
4/1	0
5/1	311
6/1	564
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 10: 'Forecast + Proposed Development (600dw) PM' (FG10: 'Forecast + Proposed Development (600dw) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	300	0	0	300
	B	427	0	0	0	427
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	427	300	0	0	727

Traffic Lane Flows

Lane	Scenario 10: Forecast + Proposed Development (600dw) PM
Junction: Stein Road Level Crossing	
1/1	300
2/1	427
3/1	0
4/1	0
5/1	427
6/1	300
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 11: 'Forecast + Proposed Development (600dw With Travel Plan) AM' (FG11: 'Forecast + Proposed Development (600dw With Travel Plan) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	541	0	0	541
	B	302	0	0	0	302
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	302	541	0	0	843

Traffic Lane Flows

Lane	Scenario 11: Forecast + Proposed Development (600dw With Travel Plan) AM
Junction: Stein Road Level Crossing	
1/1	541
2/1	302
3/1	0
4/1	0
5/1	302
6/1	541
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 12: 'Forecast + Proposed Development (600dw With Travel Plan) PM' (FG12: 'Forecast + Proposed Development (600dw With Travel Plan) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	290	0	0	290
	B	407	0	0	0	407
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	407	290	0	0	697

Traffic Lane Flows

Lane	Scenario 12: Forecast + Proposed Development (600dw With Travel Plan) PM
Junction: Stein Road Level Crossing	
1/1	290
2/1	407
3/1	0
4/1	0
5/1	407
6/1	290
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 13: 'Forecast + Proposed Development (600dw With Internalisation) AM' (FG13: 'Forecast + Proposed Development (600dw With Internalisation) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	507	0	0	507
	B	288	0	0	0	288
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	288	507	0	0	795

Traffic Lane Flows

Lane	Scenario 13: Forecast + Proposed Development (600dw With Internalisation) AM
Junction: Stein Road Level Crossing	
1/1	507
2/1	288
3/1	0
4/1	0
5/1	288
6/1	507
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 14: 'Forecast + Proposed Development (600dw With Internalisation) PM' (FG14: 'Forecast + Proposed Development (600dw With Internalisation) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	276	0	0	276
	B	376	0	0	0	376
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	376	276	0	0	652

Traffic Lane Flows

Lane	Scenario 14: Forecast + Proposed Development (600dw With Internalisation) PM
Junction: Stein Road Level Crossing	
1/1	276
2/1	376
3/1	0
4/1	0
5/1	376
6/1	276
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 15: 'Forecast + Proposed Development (600dw With Mode Shift) AM' (FG15: 'Forecast + Proposed Development (600dw With Mode Shift) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	474	0	0	474
	B	275	0	0	0	275
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	275	474	0	0	749

Traffic Lane Flows

Lane	Scenario 15: Forecast + Proposed Development (600dw With Mode Shift) AM
Junction: Stein Road Level Crossing	
1/1	474
2/1	275
3/1	0
4/1	0
5/1	275
6/1	474
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 16: 'Forecast + Proposed Development (600dw With Mode Shift PM' (FG16: 'Forecast + Proposed Development (600dw With Mode Shift) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	261	0	0	261
	B	346	0	0	0	346
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	346	261	0	0	607

Traffic Lane Flows

Lane	Scenario 16: Forecast + Proposed Development (600dw With Mode Shift PM
Junction: Stein Road Level Crossing	
1/1	261
2/1	346
3/1	0
4/1	0
5/1	346
6/1	261
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 17: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) AM' (FG17: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	470	0	0	470
	B	259	0	0	0	259
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	259	470	0	0	729

Traffic Lane Flows

Lane	Scenario 17: Forecast + Proposed Development (600dw With 20% Overall Deduction) AM
Junction: Stein Road Level Crossing	
1/1	470
2/1	259
3/1	0
4/1	0
5/1	259
6/1	470
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 18: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) PM' (FG18: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) PM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	250	0	0	250
	B	356	0	0	0	356
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	356	250	0	0	606

Traffic Lane Flows

Lane	Scenario 18: Forecast + Proposed Development (600dw With 20% Overall Deduction) PM
Junction: Stein Road Level Crossing	
1/1	250
2/1	356
3/1	0
4/1	0
5/1	356
6/1	250
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 19: 'Forecast + Proposed Development (1050dw) AM' (FG19: 'Forecast + Proposed Development (1050dw) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	732	0	0	732
	B	378	0	0	0	378
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	378	732	0	0	1110

Traffic Lane Flows

Lane	Scenario 19: Forecast + Proposed Development (1050dw) AM
Junction: Stein Road Level Crossing	
1/1	732
2/1	378
3/1	0
4/1	0
5/1	378
6/1	732
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 20: 'Forecast + Proposed Development (1050dw) PM' (FG20: 'Forecast + Proposed Development (1050dw) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	372	0	0	372
	B	580	0	0	0	580
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	580	372	0	0	952

Traffic Lane Flows

Lane	Scenario 20: Forecast + Proposed Development (1050dw) PM
Junction: Stein Road Level Crossing	
1/1	372
2/1	580
3/1	0
4/1	0
5/1	580
6/1	372
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 21: 'Forecast + Proposed Development (1050dw With Travel Plan) AM' (FG21: 'Forecast + Proposed Development (1050dw With Travel Plan) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	693	0	0	693
	B	363	0	0	0	363
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	363	693	0	0	1056

Traffic Lane Flows

Lane	Scenario 21: Forecast + Proposed Development (1050dw With Travel Plan) AM
Junction: Stein Road Level Crossing	
1/1	693
2/1	363
3/1	0
4/1	0
5/1	363
6/1	693
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 22: 'Forecast + Proposed Development (1050dw With Travel Plan) PM' (FG22: 'Forecast + Proposed Development (1050dw With Travel Plan) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	355	0	0	355
	B	545	0	0	0	545
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	545	355	0	0	900

Traffic Lane Flows

Lane	Scenario 22: Forecast + Proposed Development (1050dw With Travel Plan) PM
Junction: Stein Road Level Crossing	
1/1	355
2/1	545
3/1	0
4/1	0
5/1	545
6/1	355
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 23: 'Forecast + Proposed Development (1050dw With Internalisation) AM' (FG23: 'Forecast + Proposed Development (1050dw With Internalisation) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	634	0	0	634
	B	339	0	0	0	339
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	339	634	0	0	973

Traffic Lane Flows

Lane	Scenario 23: Forecast + Proposed Development (1050dw With Internalisation) AM
Junction: Stein Road Level Crossing	
1/1	634
2/1	339
3/1	0
4/1	0
5/1	339
6/1	634
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 24: 'Forecast + Proposed Development (1050dw With Internalisation) PM' (FG24: 'Forecast + Proposed Development (1050dw With Internalisation) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	330	0	0	330
	B	491	0	0	0	491
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	491	330	0	0	821

Traffic Lane Flows

Lane	Scenario 24: Forecast + Proposed Development (1050dw With Internalisation) PM
Junction: Stein Road Level Crossing	
1/1	330
2/1	491
3/1	0
4/1	0
5/1	491
6/1	330
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 25: 'Forecast + Proposed Development (1050dw With Mode Shift) AM' (FG25: 'Forecast + Proposed Development (1050dw With Mode Shift) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	575	0	0	575
	B	315	0	0	0	315
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	315	575	0	0	890

Traffic Lane Flows

Lane	Scenario 25: Forecast + Proposed Development (1050dw With Mode Shift) AM
Junction: Stein Road Level Crossing	
1/1	575
2/1	315
3/1	0
4/1	0
5/1	315
6/1	575
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 26: 'Forecast + Proposed Development (1050dw With Mode Shift PM' (FG26: 'Forecast + Proposed Development (1050dw With Mode Shift) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	305	0	0	305
	B	437	0	0	0	437
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	437	305	0	0	742

Traffic Lane Flows

Lane	Scenario 26: Forecast + Proposed Development (1050dw With Mode Shift PM
Junction: Stein Road Level Crossing	
1/1	305
2/1	437
3/1	0
4/1	0
5/1	437
6/1	305
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 27: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM' (FG27: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	611	0	0	611
	B	316	0	0	0	316
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	316	611	0	0	927

Traffic Lane Flows

Lane	Scenario 27: Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM
Junction: Stein Road Level Crossing	
1/1	611
2/1	316
3/1	0
4/1	0
5/1	316
6/1	611
7/1	0
8/1	0

Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 28: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM' (FG28: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	310	0	0	310
	B	484	0	0	0	484
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	484	310	0	0	794

Traffic Lane Flows

Lane	Scenario 28: Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM
Junction: Stein Road Level Crossing	
1/1	310
2/1	484
3/1	0
4/1	0
5/1	484
6/1	310
7/1	0
8/1	0

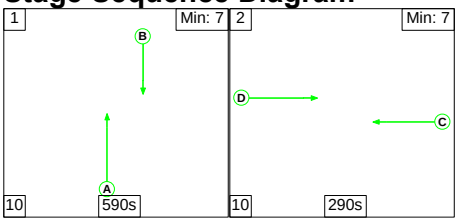
Full Input Data And Results

Lane Saturation Flows

Junction: Stein Road Level Crossing								
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	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/1	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
3/1	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	This lane uses a directly entered Saturation Flow						1800	1800

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

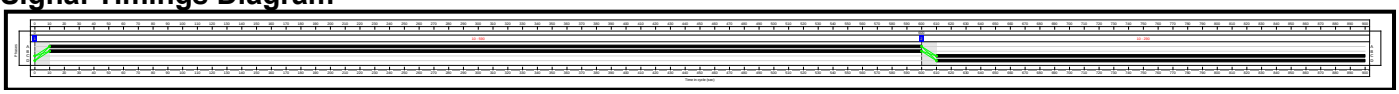
Stage Sequence Diagram



Stage Timings

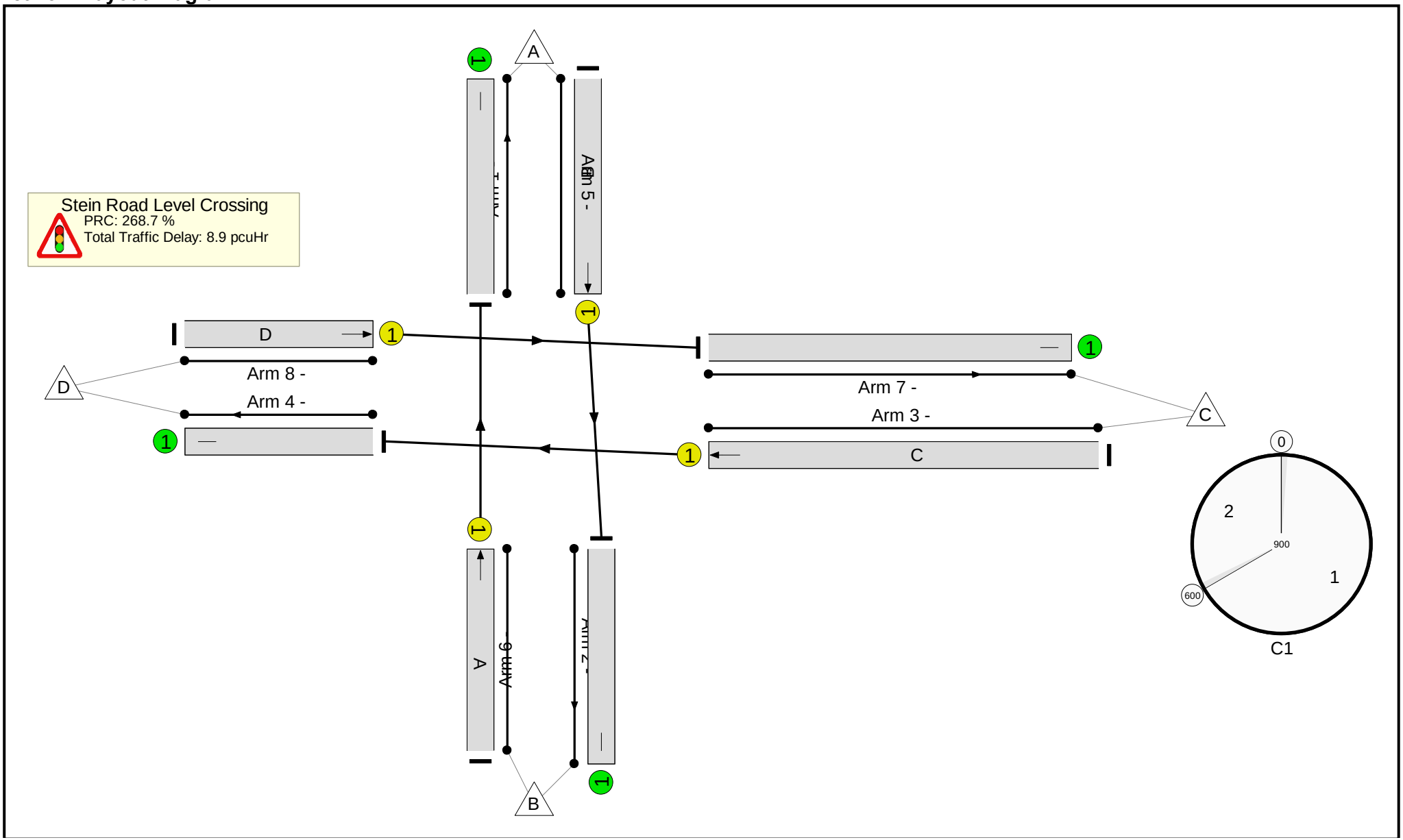
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**24.4%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**24.4%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	307	1915	1258	24.4%
2/1	Ahead	U	N/A	N/A	A		1	590	-	200	1915	1258	15.9%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	200	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	307	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**8.7**	**0.3**	**0.0**	**8.9**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**8.7**	**0.3**	**0.0**	**8.9**	**-**	**-**	**-**	**-**
1/1	307	307	-	-	-	5.4	0.2	-	5.5	65.1	31.3	0.2	31.5
2/1	200	200	-	-	-	3.3	0.1	-	3.4	60.9	19.2	0.1	19.3
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	200	200	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

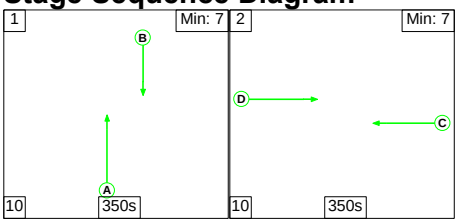
C1 PRC for Signalled Lanes (%): 268.7 Total Delay for Signalled Lanes (pcuHr): 8.93 Cycle Time (s): 900
PRC Over All Lanes (%): 268.7 Total Delay Over All Lanes(pcuHr): 8.93

Full Input Data And Results

Full Input Data And Results

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

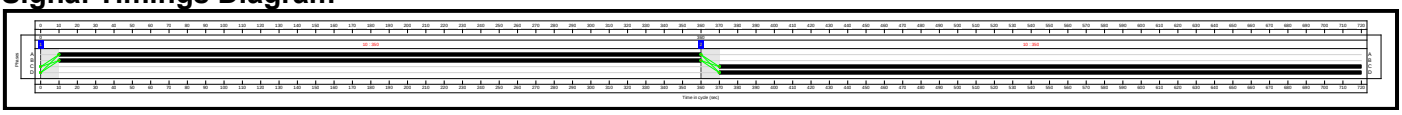
Stage Sequence Diagram



Stage Timings

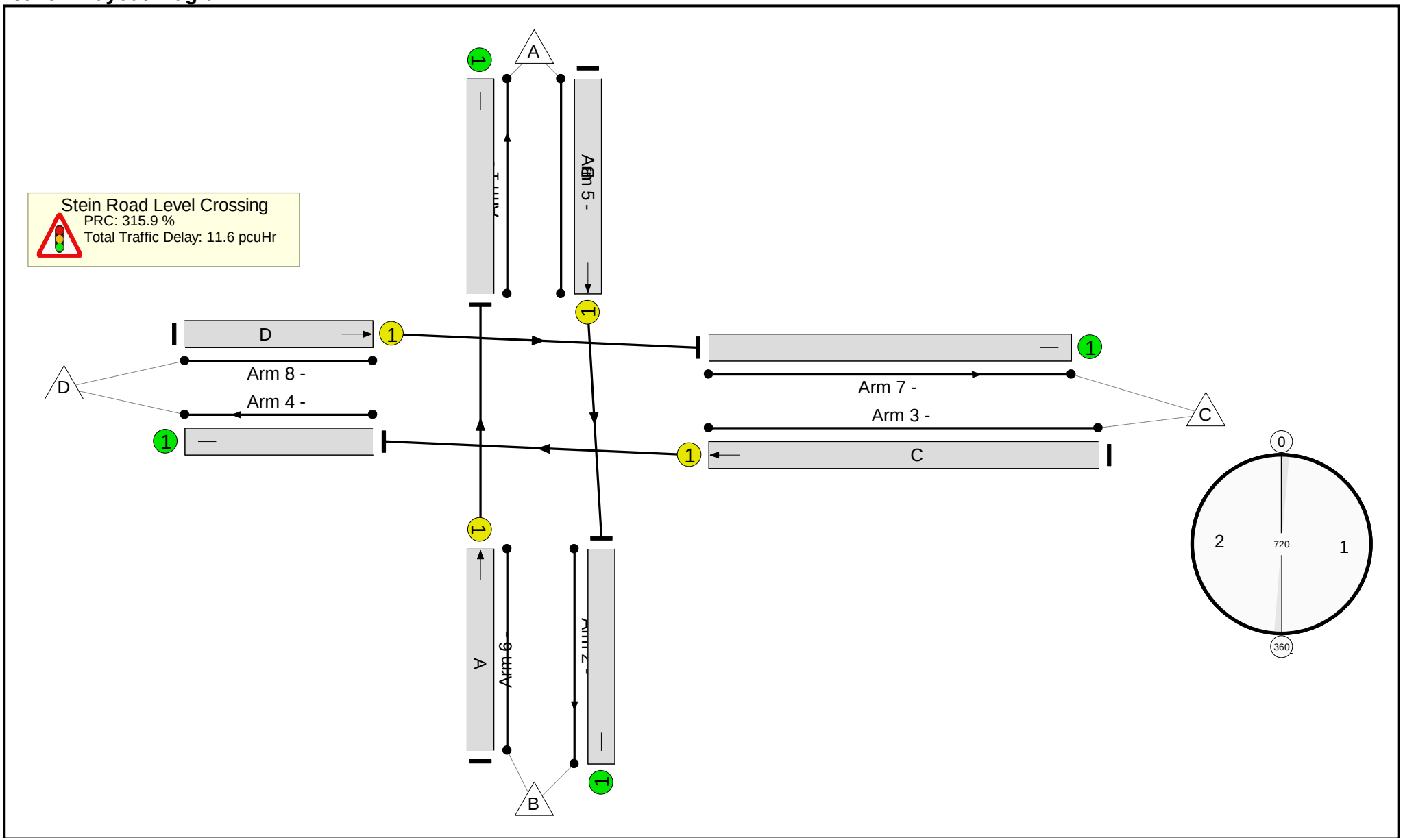
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**21.6%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**21.6%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	185	1915	934	19.8%
2/1	Ahead	U	N/A	N/A	A		1	350	-	202	1915	934	21.6%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**11.3**	**0.3**	**0.0**	**11.6**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**11.3**	**0.3**	**0.0**	**11.6**	**-**	**-**	**-**	**-**
1/1	185	185	-	-	-	5.4	0.1	-	5.5	107.1	21.0	0.1	21.1
2/1	202	202	-	-	-	5.9	0.1	-	6.1	108.2	23.1	0.1	23.3
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

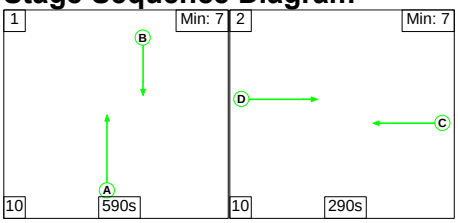
C1 PRC for Signalled Lanes (%): 315.9 Total Delay for Signalled Lanes (pcuHr): 11.57 Cycle Time (s): 720
PRC Over All Lanes (%): 315.9 Total Delay Over All Lanes(pcuHr): 11.57

Full Input Data And Results

Full Input Data And Results

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

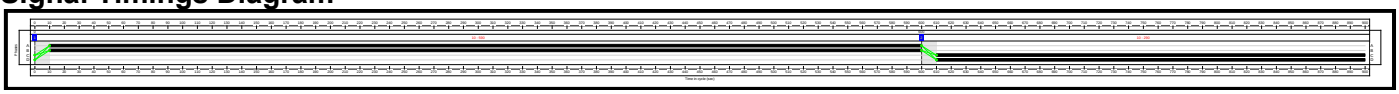
Stage Sequence Diagram



Stage Timings

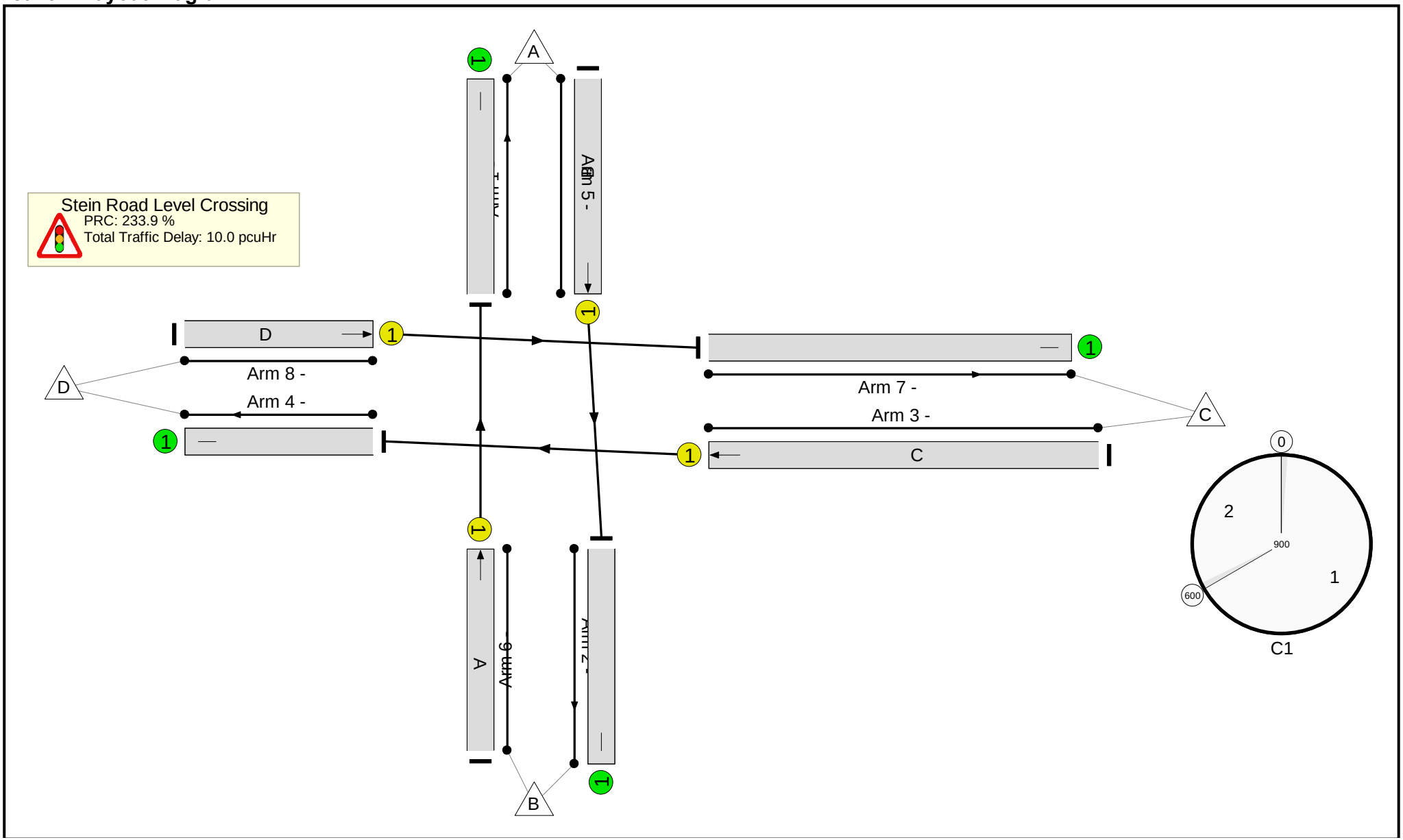
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**27.0%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**27.0%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	339	1915	1258	27.0%
2/1	Ahead	U	N/A	N/A	A		1	590	-	221	1915	1258	17.6%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	221	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.8**	**0.3**	**0.0**	**10.0**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**9.8**	**0.3**	**0.0**	**10.0**	**-**	**-**	**-**	**-**
1/1	339	339	-	-	-	6.1	0.2	-	6.3	66.4	35.3	0.2	35.5
2/1	221	221	-	-	-	3.7	0.1	-	3.8	61.7	21.4	0.1	21.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	221	221	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

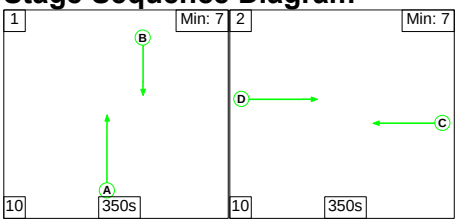
C1 PRC for Signalled Lanes (%): 233.9 Total Delay for Signalled Lanes (pcuHr): 10.04 Cycle Time (s): 900
PRC Over All Lanes (%): 233.9 Total Delay Over All Lanes(pcuHr): 10.04

Full Input Data And Results

Full Input Data And Results

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

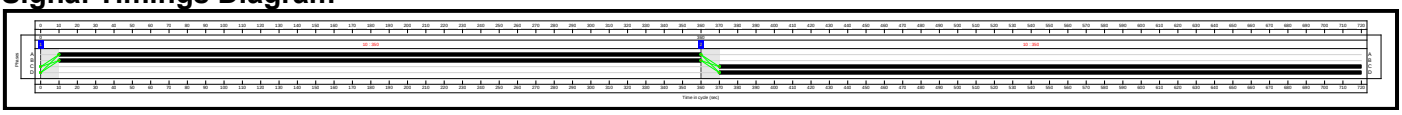
Stage Sequence Diagram



Stage Timings

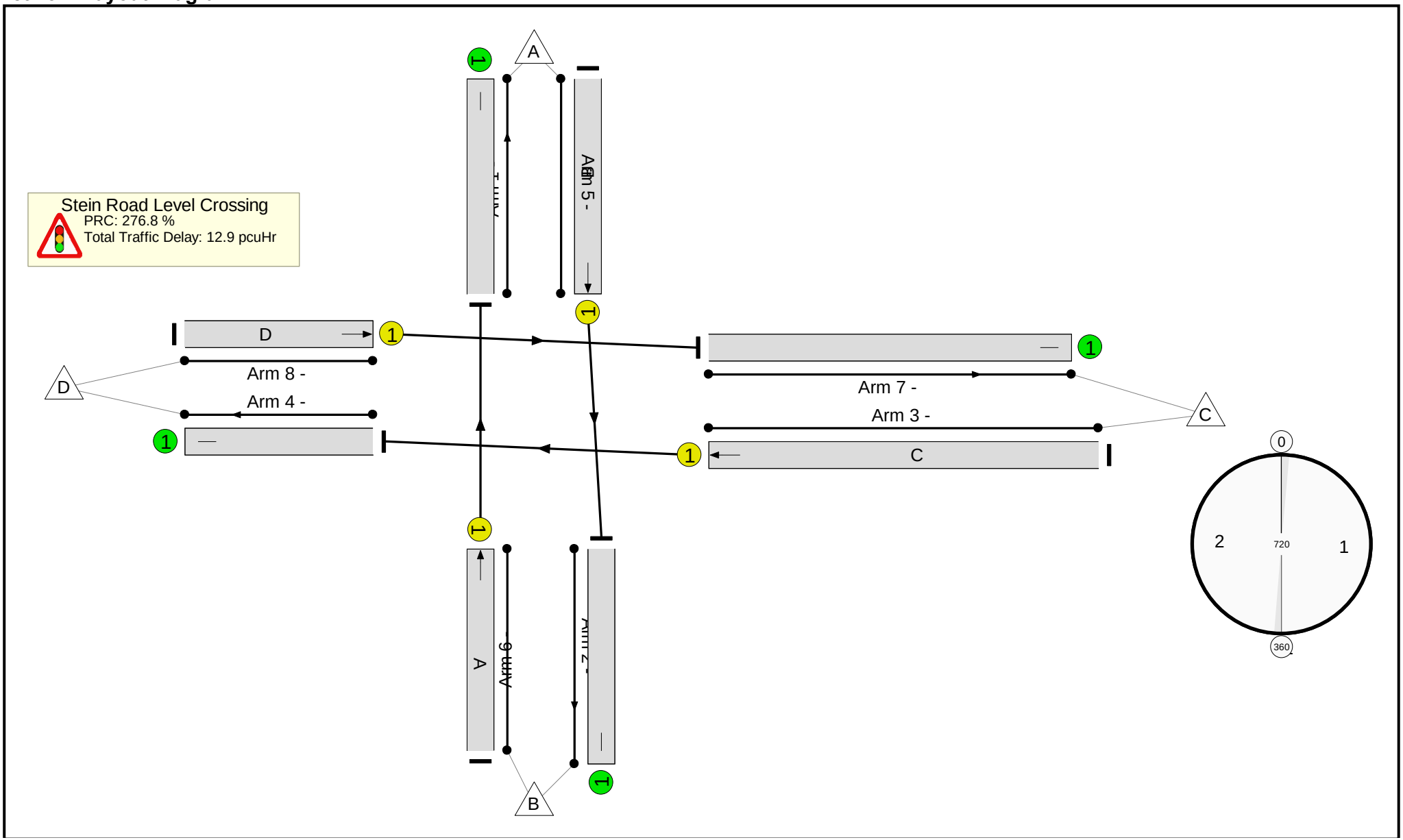
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**23.9%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**23.9%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	204	1915	934	21.9%
2/1	Ahead	U	N/A	N/A	A		1	350	-	223	1915	934	23.9%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.6**	**0.3**	**0.0**	**12.9**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**12.6**	**0.3**	**0.0**	**12.9**	**-**	**-**	**-**	**-**
1/1	204	204	-	-	-	6.0	0.1	-	6.1	108.3	23.3	0.1	23.5
2/1	223	223	-	-	-	6.6	0.2	-	6.8	109.6	25.8	0.2	26.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

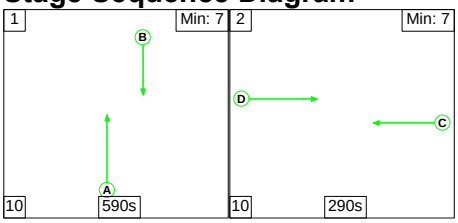
C1 PRC for Signalled Lanes (%): 276.8 Total Delay for Signalled Lanes (pcuHr): 12.92 Cycle Time (s): 720
PRC Over All Lanes (%): 276.8 Total Delay Over All Lanes(pcuHr): 12.92

Full Input Data And Results

Full Input Data And Results

Scenario 5: 'Forecast + Proposed Development (250dw) AM' (FG5: 'Forecast + Proposed Development (250dw) AM', Plan 1: 'Network Control Plan 1')

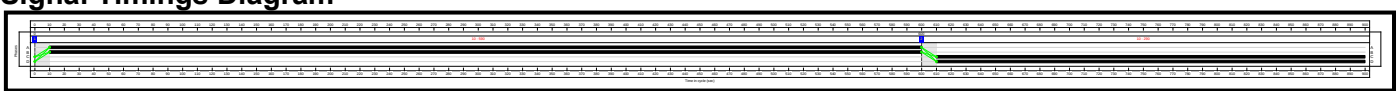
Stage Sequence Diagram



Stage Timings

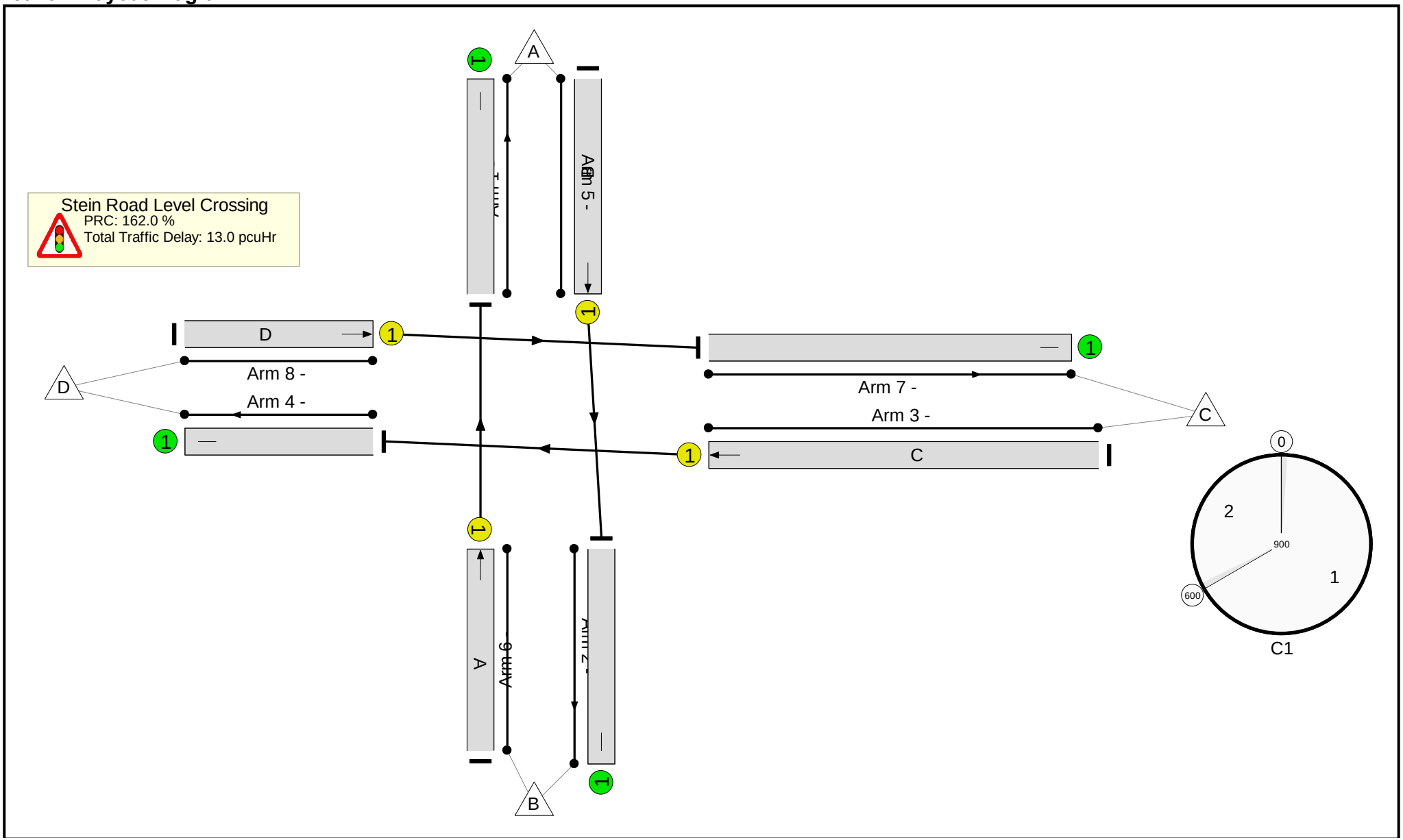
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**34.4%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**34.4%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	432	1915	1258	34.4%
2/1	Ahead	U	N/A	N/A	A		1	590	-	258	1915	1258	20.5%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.6**	**0.4**	**0.0**	**13.0**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**12.6**	**0.4**	**0.0**	**13.0**	**-**	**-**	**-**	**-**
1/1	432	432	-	-	-	8.2	0.3	-	8.5	70.7	47.9	0.3	48.1
2/1	258	258	-	-	-	4.4	0.1	-	4.5	63.1	25.6	0.1	25.7
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

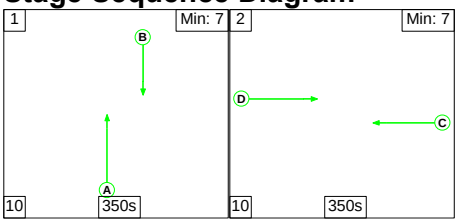
C1 PRC for Signalled Lanes (%): 162.0 Total Delay for Signalled Lanes (pcuHr): 13.00 Cycle Time (s): 900
PRC Over All Lanes (%): 162.0 Total Delay Over All Lanes(pcuHr): 13.00

Full Input Data And Results

Full Input Data And Results

Scenario 6: 'Forecast + Proposed Development (250dw) PM' (FG6: 'Forecast + Proposed Development (250dw) PM', Plan 1: 'Network Control Plan 1')

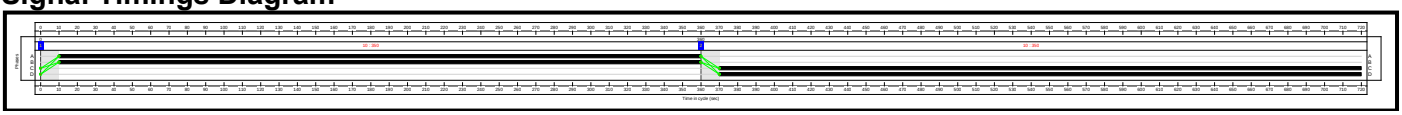
Stage Sequence Diagram



Stage Timings

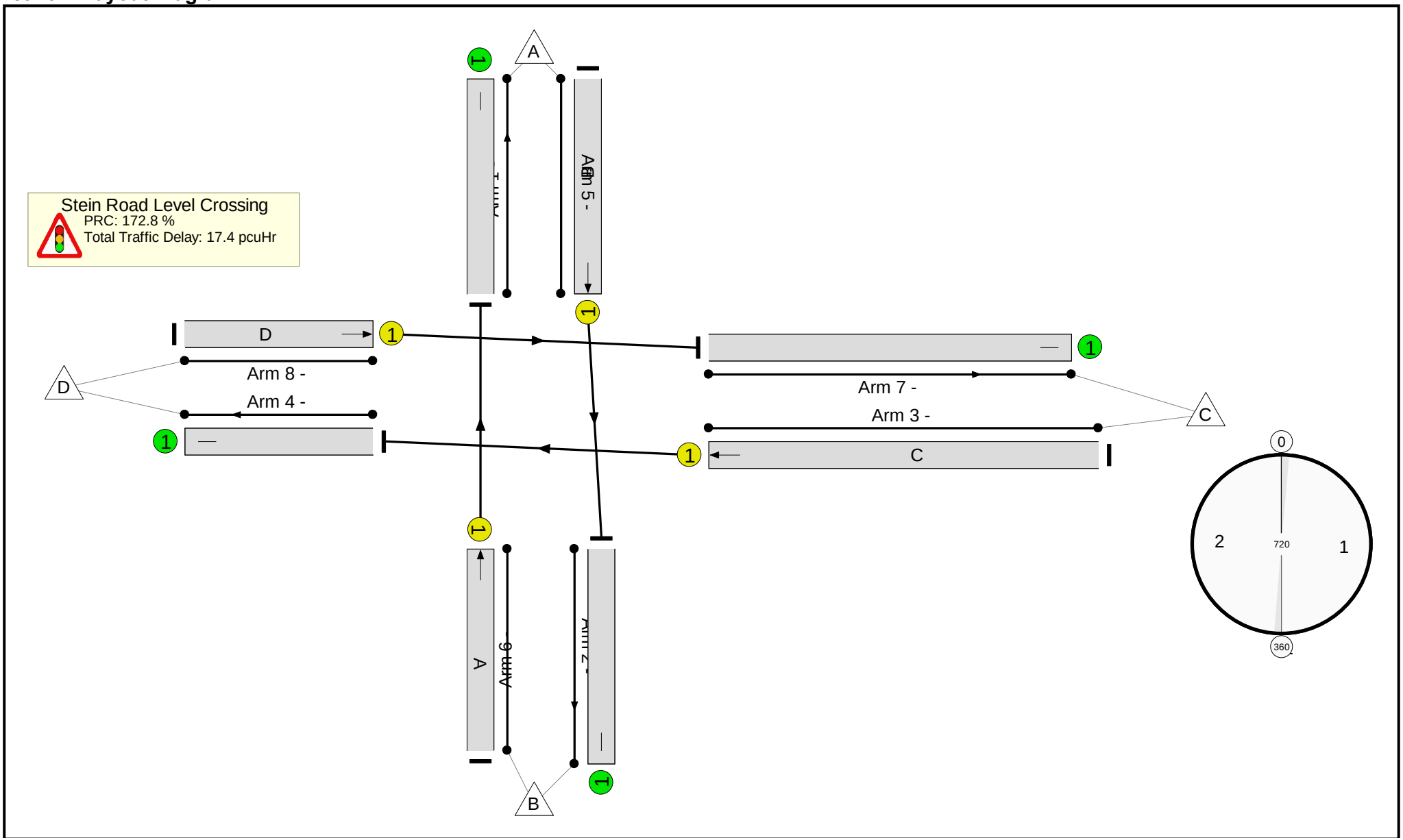
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**33.0%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**33.0%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	244	1915	934	26.1%
2/1	Ahead	U	N/A	N/A	A		1	350	-	308	1915	934	33.0%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	244	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.0**	**0.4**	**0.0**	**17.4**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**17.0**	**0.4**	**0.0**	**17.4**	**-**	**-**	**-**	**-**
1/1	244	244	-	-	-	7.3	0.2	-	7.5	111.0	28.6	0.2	28.8
2/1	308	308	-	-	-	9.6	0.2	-	9.9	115.6	37.6	0.2	37.8
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

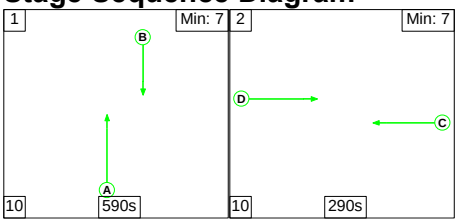
C1 PRC for Signalled Lanes (%): 172.8 Total Delay for Signalled Lanes (pcuHr): 17.41 Cycle Time (s): 720
PRC Over All Lanes (%): 172.8 Total Delay Over All Lanes(pcuHr): 17.41

Full Input Data And Results

Full Input Data And Results

Scenario 7: 'Forecast + Proposed Development (500dw) AM' (FG7: 'Forecast + Proposed Development (500dw) AM', Plan 1: 'Network Control Plan 1')

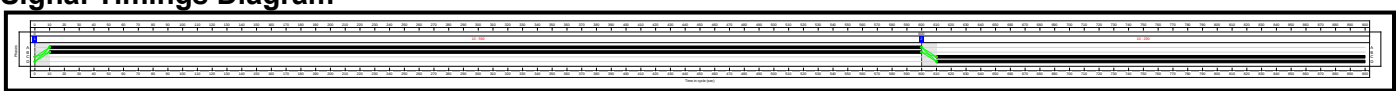
Stage Sequence Diagram



Stage Timings

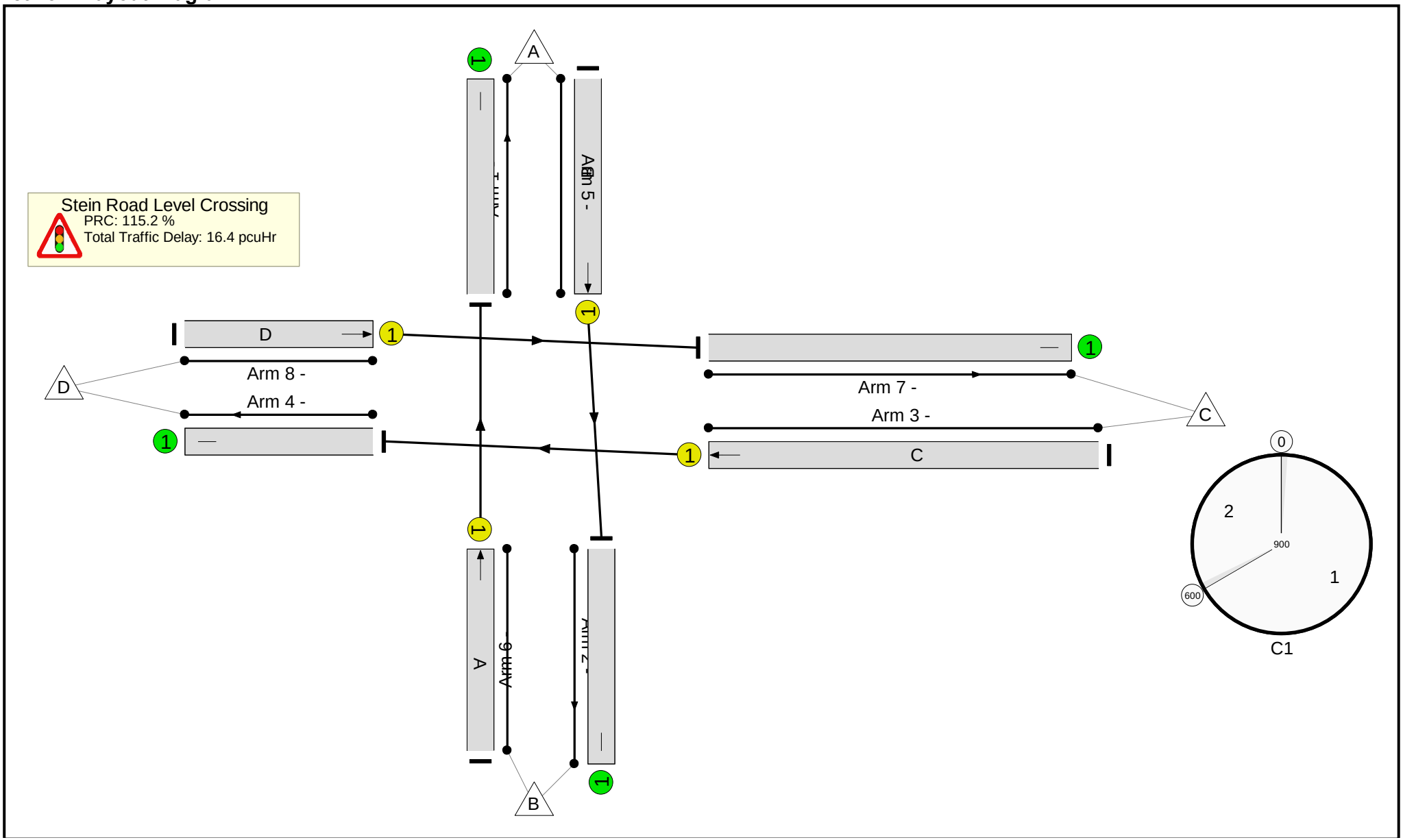
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.8%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.8%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	526	1915	1258	41.8%
2/1	Ahead	U	N/A	N/A	A		1	590	-	296	1915	1258	23.5%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**15.8**	**0.5**	**0.0**	**16.4**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**15.8**	**0.5**	**0.0**	**16.4**	-	-	-	-
1/1	526	526	-	-	-	10.7	0.4	-	11.0	75.6	62.2	0.4	62.6
2/1	296	296	-	-	-	5.2	0.2	-	5.3	64.6	30.0	0.2	30.2
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

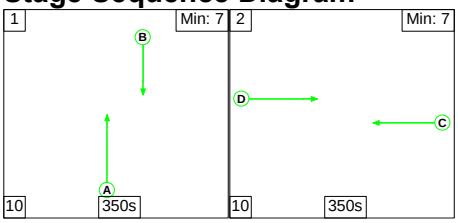
C1 PRC for Signalled Lanes (%): 115.2 Total Delay for Signalled Lanes (pcuHr): 16.36 Cycle Time (s): 900
PRC Over All Lanes (%): 115.2 Total Delay Over All Lanes(pcuHr): 16.36

Full Input Data And Results

Full Input Data And Results

Scenario 8: 'Forecast + Proposed Development (500dw) PM' (FG8: 'Forecast + Proposed Development (500dw) PM', Plan 1: 'Network Control Plan 1')

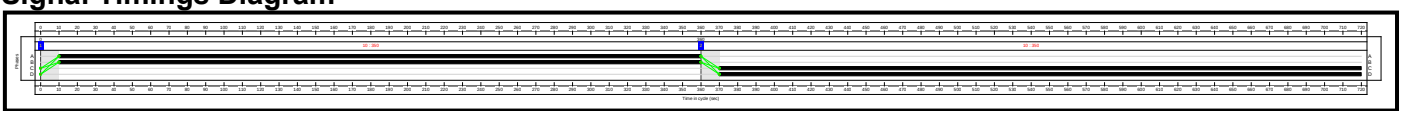
Stage Sequence Diagram



Stage Timings

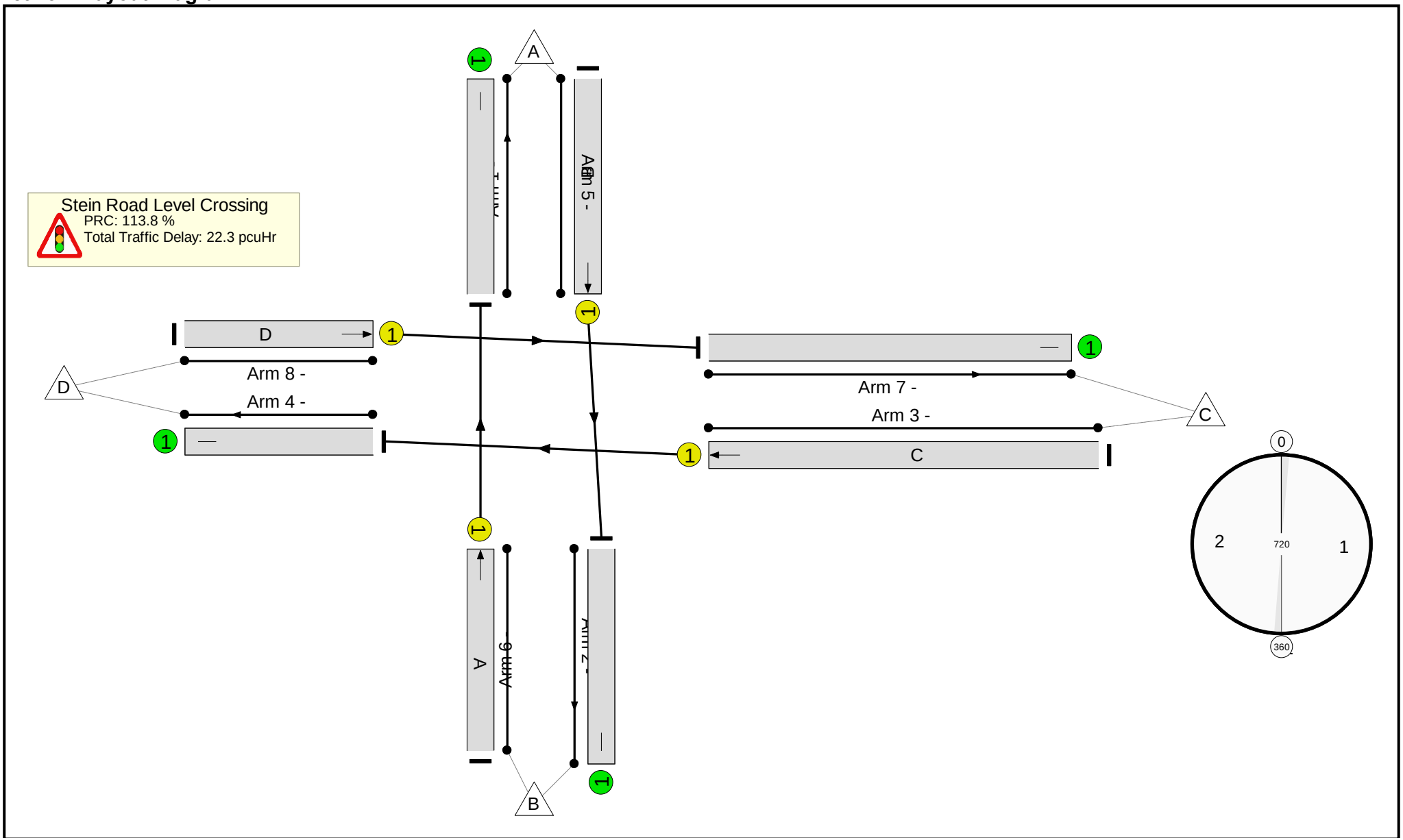
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**42.1%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**42.1%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	284	1915	934	30.4%
2/1	Ahead	U	N/A	N/A	A		1	350	-	393	1915	934	42.1%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	284	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.7**	**0.6**	**0.0**	**22.3**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**21.7**	**0.6**	**0.0**	**22.3**	**-**	**-**	**-**	**-**
1/1	284	284	-	-	-	8.8	0.2	-	9.0	113.8	34.2	0.2	34.4
2/1	393	393	-	-	-	13.0	0.4	-	13.4	122.3	50.7	0.4	51.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

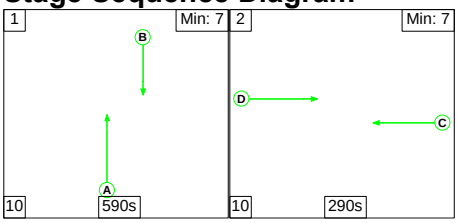
C1 PRC for Signalled Lanes (%): 113.8 Total Delay for Signalled Lanes (pcuHr): 22.33 Cycle Time (s): 720
PRC Over All Lanes (%): 113.8 Total Delay Over All Lanes(pcuHr): 22.33

Full Input Data And Results

Full Input Data And Results

Scenario 9: 'Forecast + Proposed Development (600dw) AM' (FG9: 'Forecast + Proposed Development (600dw) AM', Plan 1: 'Network Control Plan 1')

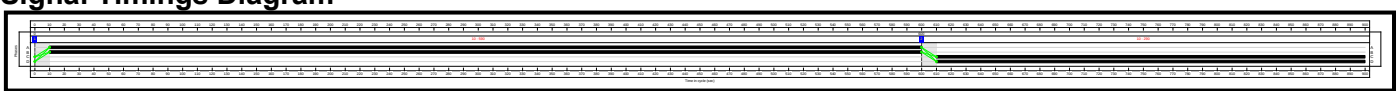
Stage Sequence Diagram



Stage Timings

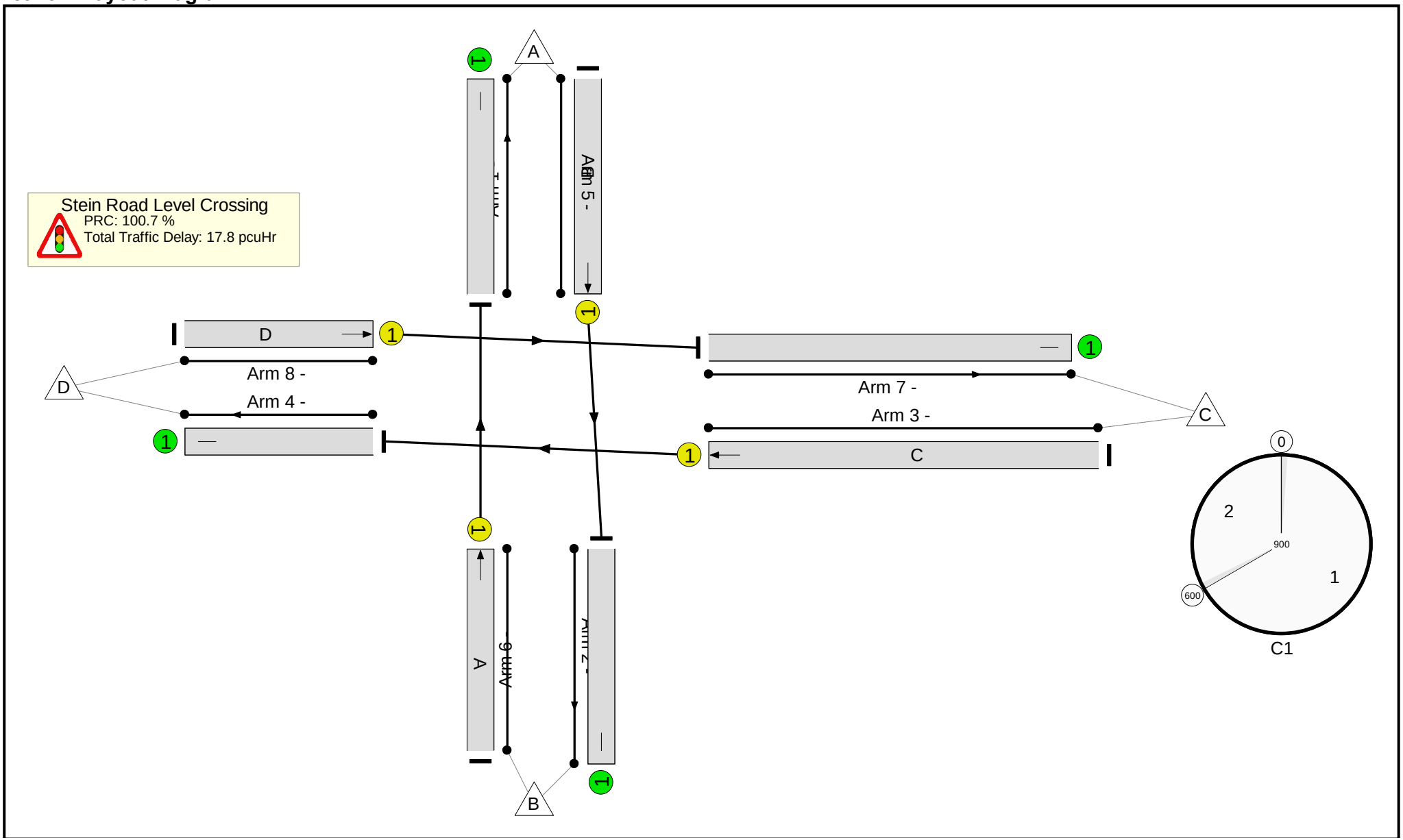
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.9%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.9%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	564	1915	1258	44.9%
2/1	Ahead	U	N/A	N/A	A		1	590	-	311	1915	1258	24.7%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	311	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**17.3**	**0.6**	**0.0**	**17.8**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**17.3**	**0.6**	**0.0**	**17.8**	-	-	-	-
1/1	564	564	-	-	-	11.8	0.4	-	12.2	77.8	68.5	0.4	68.9
2/1	311	311	-	-	-	5.5	0.2	-	5.6	65.2	31.8	0.2	32.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

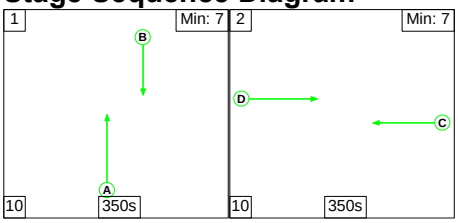
C1 PRC for Signalled Lanes (%): 100.7 Total Delay for Signalled Lanes (pcuHr): 17.82 Cycle Time (s): 900
PRC Over All Lanes (%): 100.7 Total Delay Over All Lanes(pcuHr): 17.82

Full Input Data And Results

Full Input Data And Results

Scenario 10: 'Forecast + Proposed Development (600dw) PM' (FG10: 'Forecast + Proposed Development (600dw) PM', Plan 1: 'Network Control Plan 1')

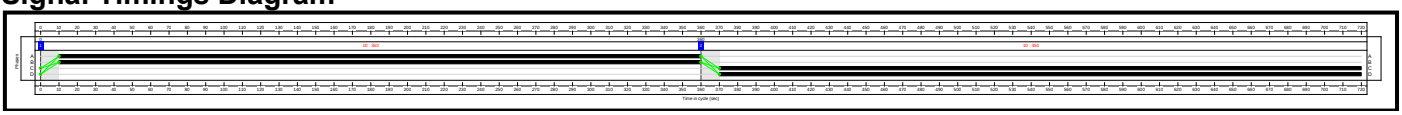
Stage Sequence Diagram



Stage Timings

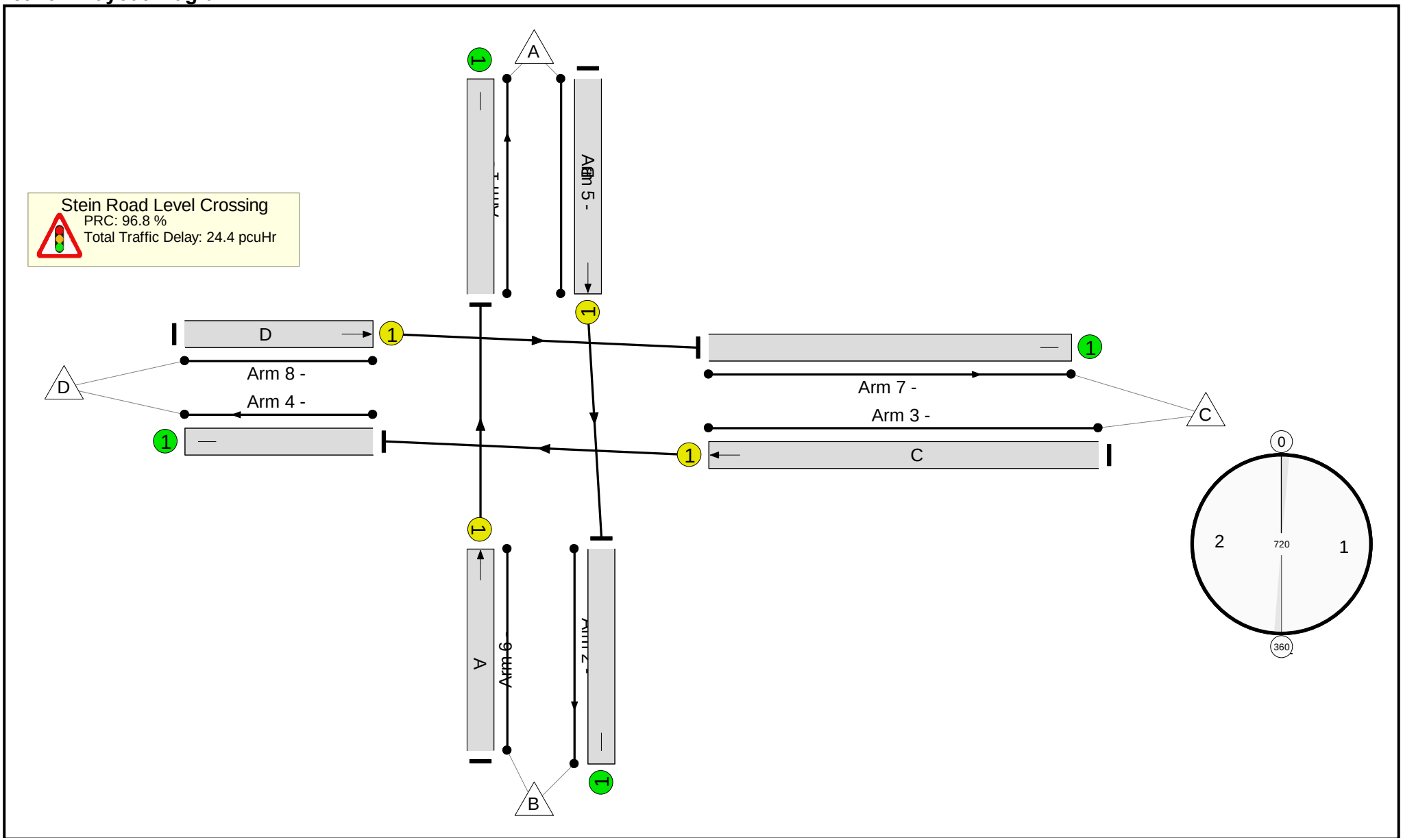
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.7%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.7%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	300	1915	934	32.1%
2/1	Ahead	U	N/A	N/A	A		1	350	-	427	1915	934	45.7%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	300	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.8**	**0.7**	**0.0**	**24.4**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**23.8**	**0.7**	**0.0**	**24.4**	**-**	**-**	**-**	**-**
1/1	300	300	-	-	-	9.3	0.2	-	9.6	115.0	36.4	0.2	36.7
2/1	427	427	-	-	-	14.4	0.4	-	14.9	125.2	56.2	0.4	56.6
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	300	300	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

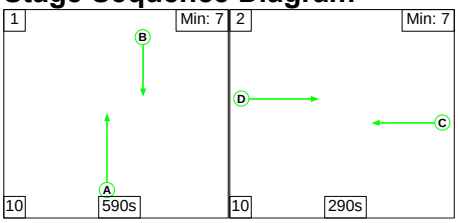
C1 PRC for Signalled Lanes (%): 96.8 Total Delay for Signalled Lanes (pcuHr): 24.43 Cycle Time (s): 720
PRC Over All Lanes (%): 96.8 Total Delay Over All Lanes(pcuHr): 24.43

Full Input Data And Results

Full Input Data And Results

Scenario 11: 'Forecast + Proposed Development (600dw With Travel Plan) AM' (FG11: 'Forecast + Proposed Development (600dw With Travel Plan) AM', Plan 1: 'Network Control Plan 1')

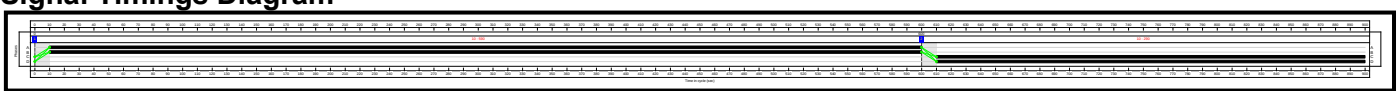
Stage Sequence Diagram



Stage Timings

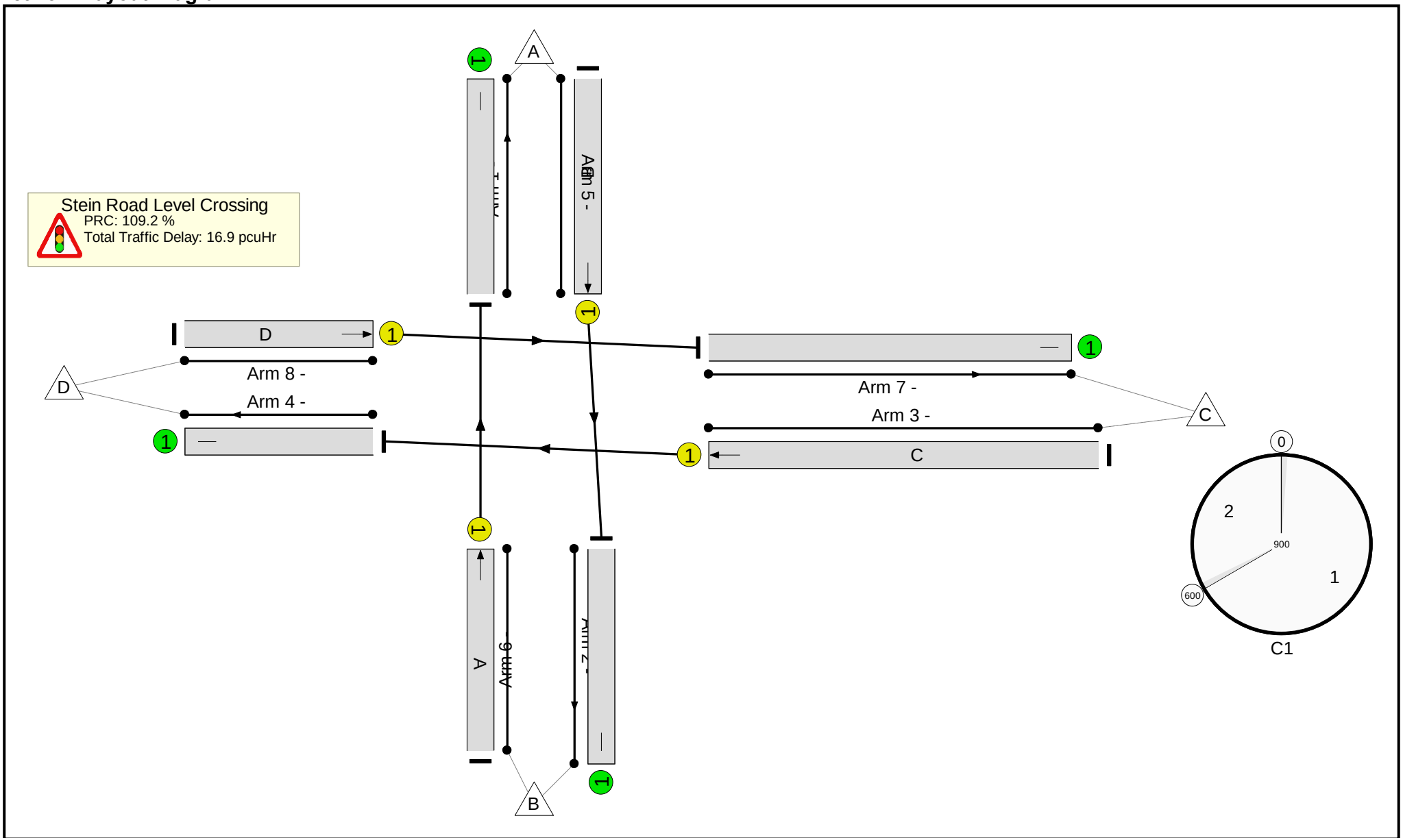
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.0%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.0%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	541	1915	1258	43.0%
2/1	Ahead	U	N/A	N/A	A		1	590	-	302	1915	1258	24.0%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**16.4**	**0.5**	**0.0**	**16.9**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**16.4**	**0.5**	**0.0**	**16.9**	-	-	-	-
1/1	541	541	-	-	-	11.1	0.4	-	11.5	76.4	64.6	0.4	65.0
2/1	302	302	-	-	-	5.3	0.2	-	5.4	64.9	30.7	0.2	30.9
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

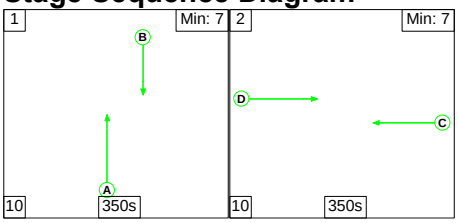
C1 PRC for Signalled Lanes (%): 109.2 Total Delay for Signalled Lanes (pcuHr): 16.93 Cycle Time (s): 900
PRC Over All Lanes (%): 109.2 Total Delay Over All Lanes(pcuHr): 16.93

Full Input Data And Results

Full Input Data And Results

Scenario 12: 'Forecast + Proposed Development (600dw With Travel Plan) PM' (FG12: 'Forecast + Proposed Development (600dw With Travel Plan) PM', Plan 1: 'Network Control Plan 1')

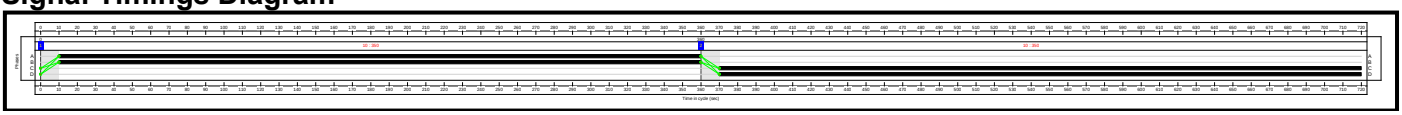
Stage Sequence Diagram



Stage Timings

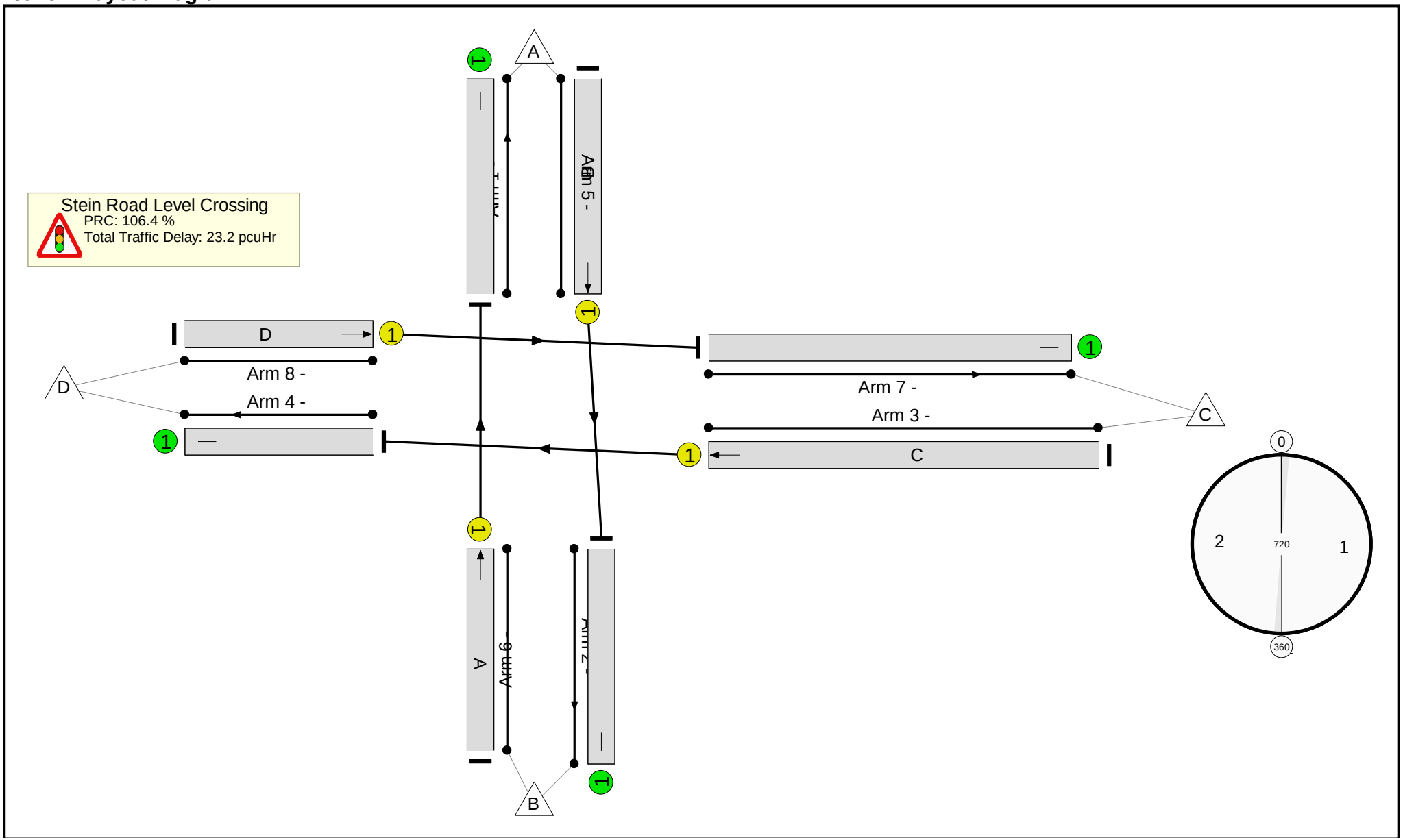
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**43.6%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**43.6%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	290	1915	934	31.1%
2/1	Ahead	U	N/A	N/A	A		1	350	-	407	1915	934	43.6%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	407	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	290	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.6**	**0.6**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**22.6**	**0.6**	**0.0**	**23.2**	**-**	**-**	**-**	**-**
1/1	290	290	-	-	-	9.0	0.2	-	9.2	114.2	35.0	0.2	35.2
2/1	407	407	-	-	-	13.6	0.4	-	14.0	123.5	52.9	0.4	53.3
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	290	290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

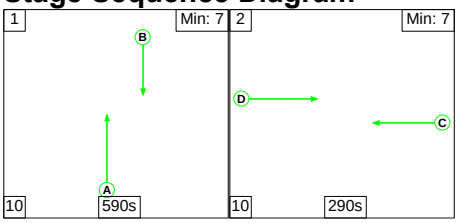
C1 PRC for Signalled Lanes (%): 106.4 Total Delay for Signalled Lanes (pcuHr): 23.16 Cycle Time (s): 720
PRC Over All Lanes (%): 106.4 Total Delay Over All Lanes(pcuHr): 23.16

Full Input Data And Results

Full Input Data And Results

Scenario 13: 'Forecast + Proposed Development (600dw With Internalisation) AM' (FG13: 'Forecast + Proposed Development (600dw With Internalisation) AM', Plan 1: 'Network Control Plan 1')

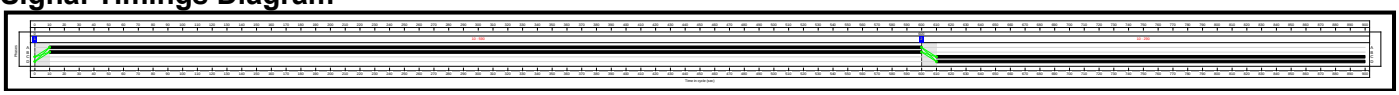
Stage Sequence Diagram



Stage Timings

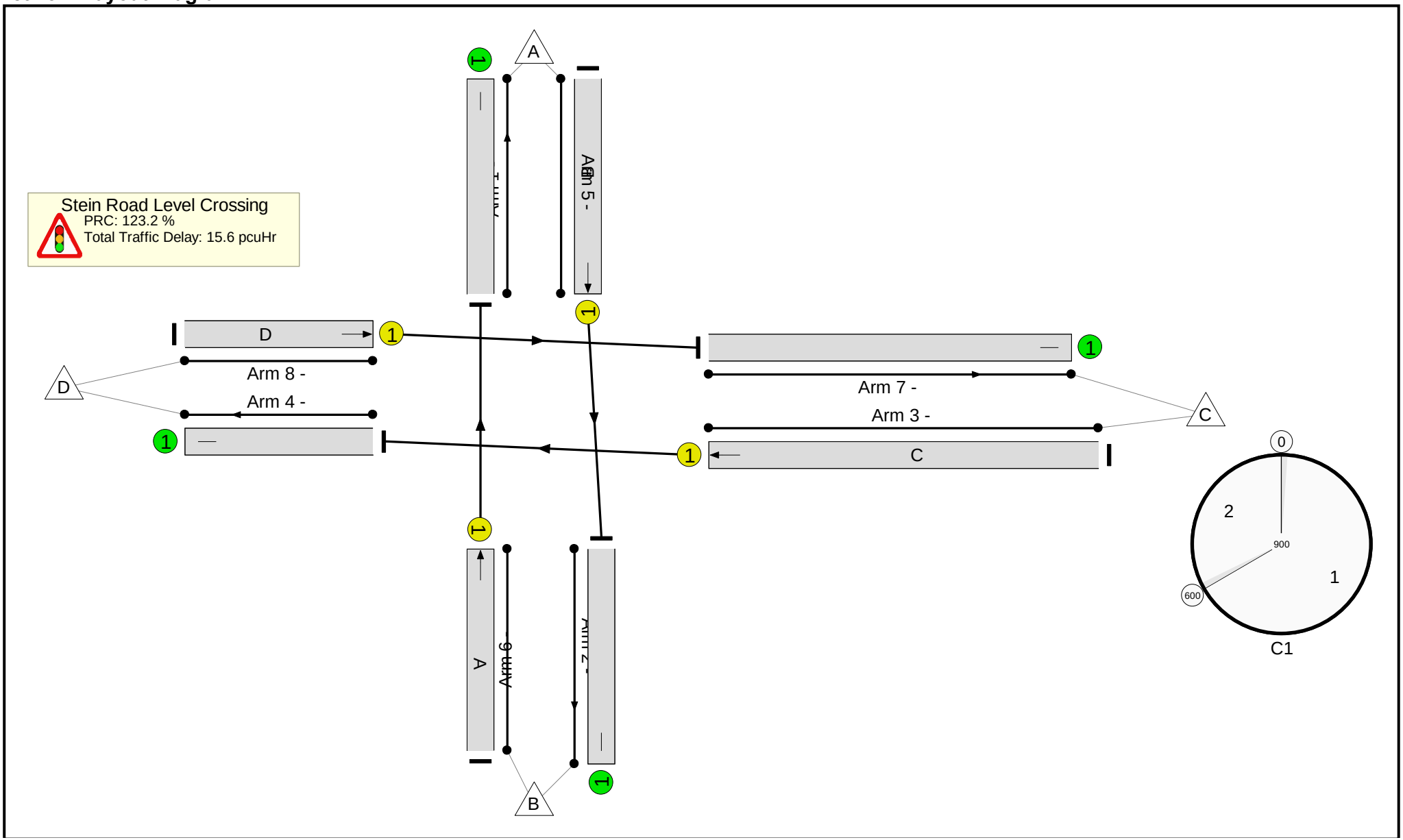
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**40.3%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**40.3%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	507	1915	1258	40.3%
2/1	Ahead	U	N/A	N/A	A		1	590	-	288	1915	1258	22.9%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.2**	**0.5**	**0.0**	**15.6**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**15.2**	**0.5**	**0.0**	**15.6**	**-**	**-**	**-**	**-**
1/1	507	507	-	-	-	10.2	0.3	-	10.5	74.5	59.1	0.3	59.5
2/1	288	288	-	-	-	5.0	0.1	-	5.1	64.3	29.0	0.1	29.2
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

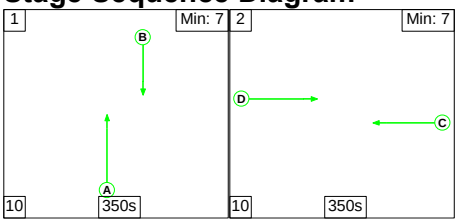
C1 PRC for Signalled Lanes (%): 123.2 Total Delay for Signalled Lanes (pcuHr): 15.64 Cycle Time (s): 900
PRC Over All Lanes (%): 123.2 Total Delay Over All Lanes(pcuHr): 15.64

Full Input Data And Results

Full Input Data And Results

Scenario 14: 'Forecast + Proposed Development (600dw With Internalisation) PM' (FG14: 'Forecast + Proposed Development (600dw With Internalisation) PM', Plan 1: 'Network Control Plan 1')

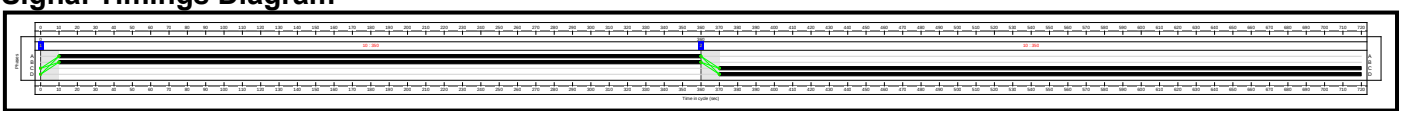
Stage Sequence Diagram



Stage Timings

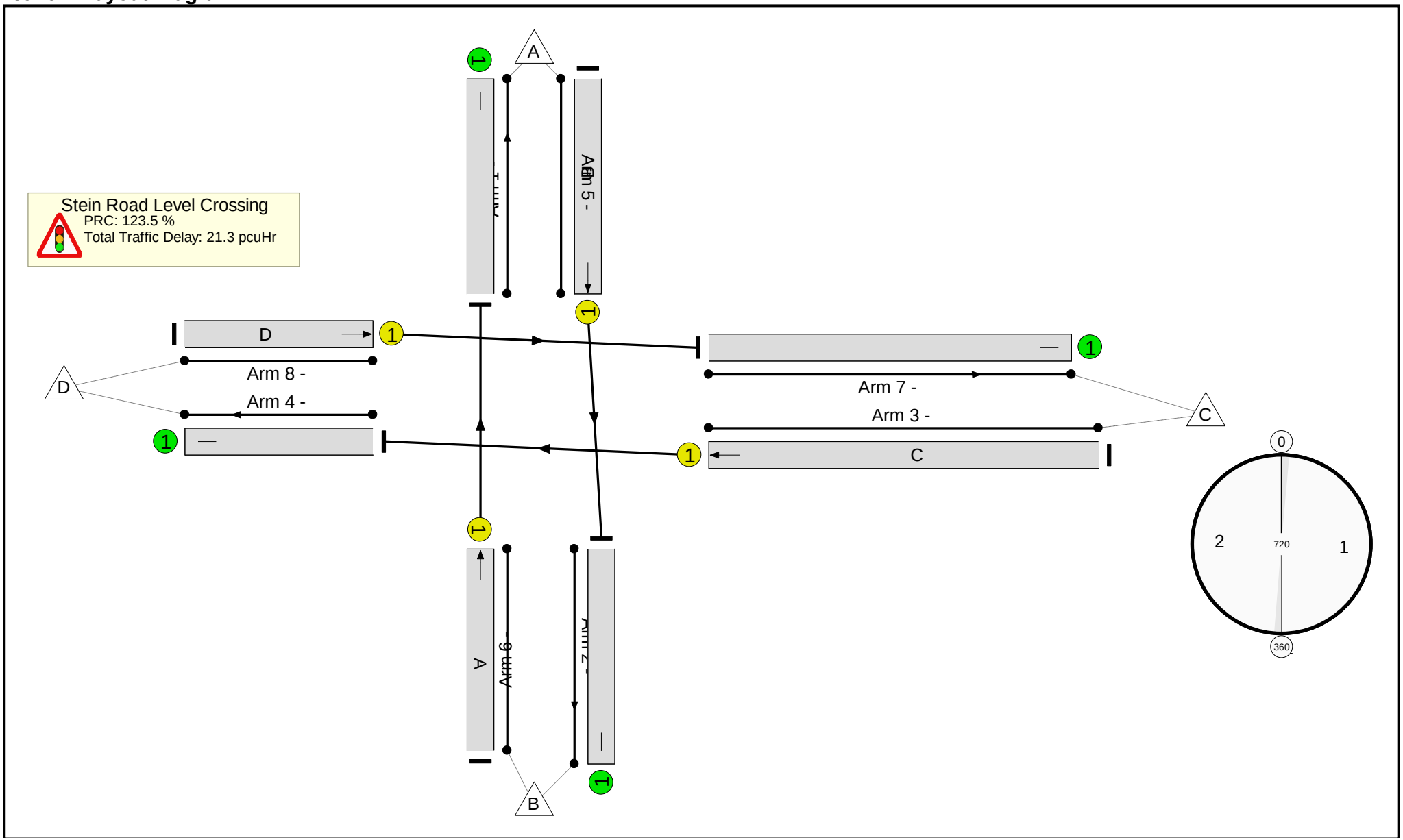
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**40.3%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**40.3%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	276	1915	934	29.6%
2/1	Ahead	U	N/A	N/A	A		1	350	-	376	1915	934	40.3%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.8**	**0.5**	**0.0**	**21.3**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**20.8**	**0.5**	**0.0**	**21.3**	**-**	**-**	**-**	**-**
1/1	276	276	-	-	-	8.5	0.2	-	8.7	113.2	33.0	0.2	33.3
2/1	376	376	-	-	-	12.3	0.3	-	12.6	120.9	47.9	0.3	48.3
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

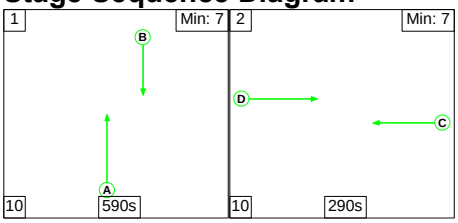
C1 PRC for Signalled Lanes (%): 123.5 Total Delay for Signalled Lanes (pcuHr): 21.31 Cycle Time (s): 720
PRC Over All Lanes (%): 123.5 Total Delay Over All Lanes(pcuHr): 21.31

Full Input Data And Results

Full Input Data And Results

Scenario 15: 'Forecast + Proposed Development (600dw With Mode Shift) AM' (FG15: 'Forecast + Proposed Development (600dw With Mode Shift) AM', Plan 1: 'Network Control Plan 1')

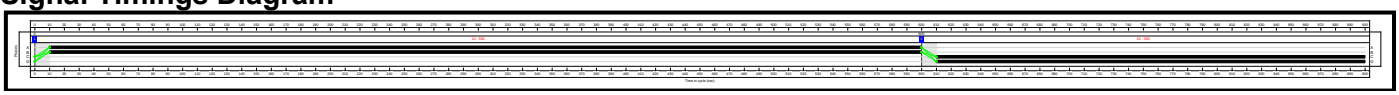
Stage Sequence Diagram



Stage Timings

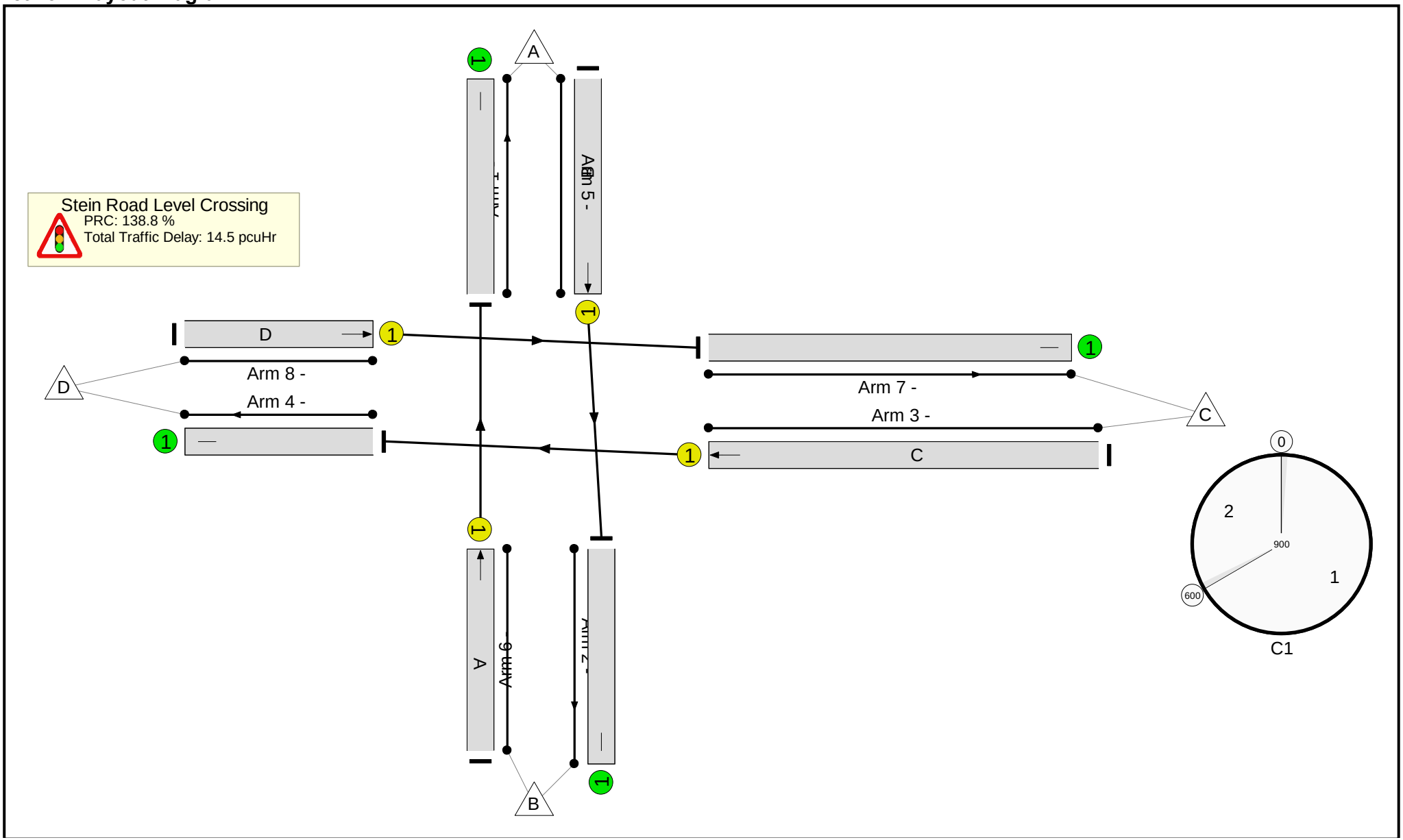
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.7%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.7%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	474	1915	1258	37.7%
2/1	Ahead	U	N/A	N/A	A		1	590	-	275	1915	1258	21.9%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	275	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.0**	**0.4**	**0.0**	**14.5**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**14.0**	**0.4**	**0.0**	**14.5**	**-**	**-**	**-**	**-**
1/1	474	474	-	-	-	9.3	0.3	-	9.6	72.8	54.0	0.3	54.3
2/1	275	275	-	-	-	4.7	0.1	-	4.9	63.8	27.5	0.1	27.6
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	275	275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

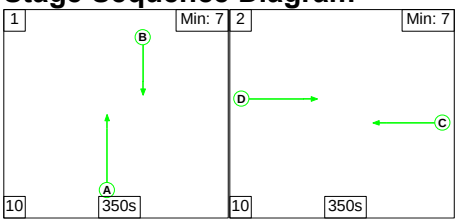
C1 PRC for Signalled Lanes (%): 138.8 Total Delay for Signalled Lanes (pcuHr): 14.46 Cycle Time (s): 900
PRC Over All Lanes (%): 138.8 Total Delay Over All Lanes(pcuHr): 14.46

Full Input Data And Results

Full Input Data And Results

Scenario 16: 'Forecast + Proposed Development (600dw With Mode Shift PM' (FG16: 'Forecast + Proposed Development (600dw With Mode Shift) PM', Plan 1: 'Network Control Plan 1')

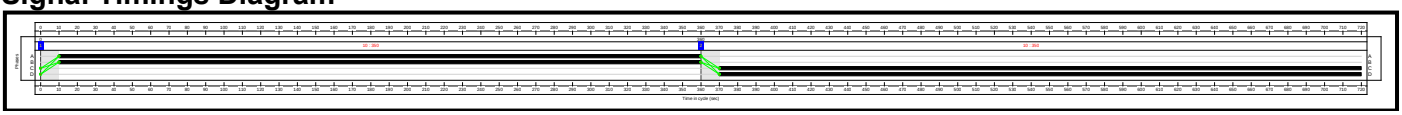
Stage Sequence Diagram



Stage Timings

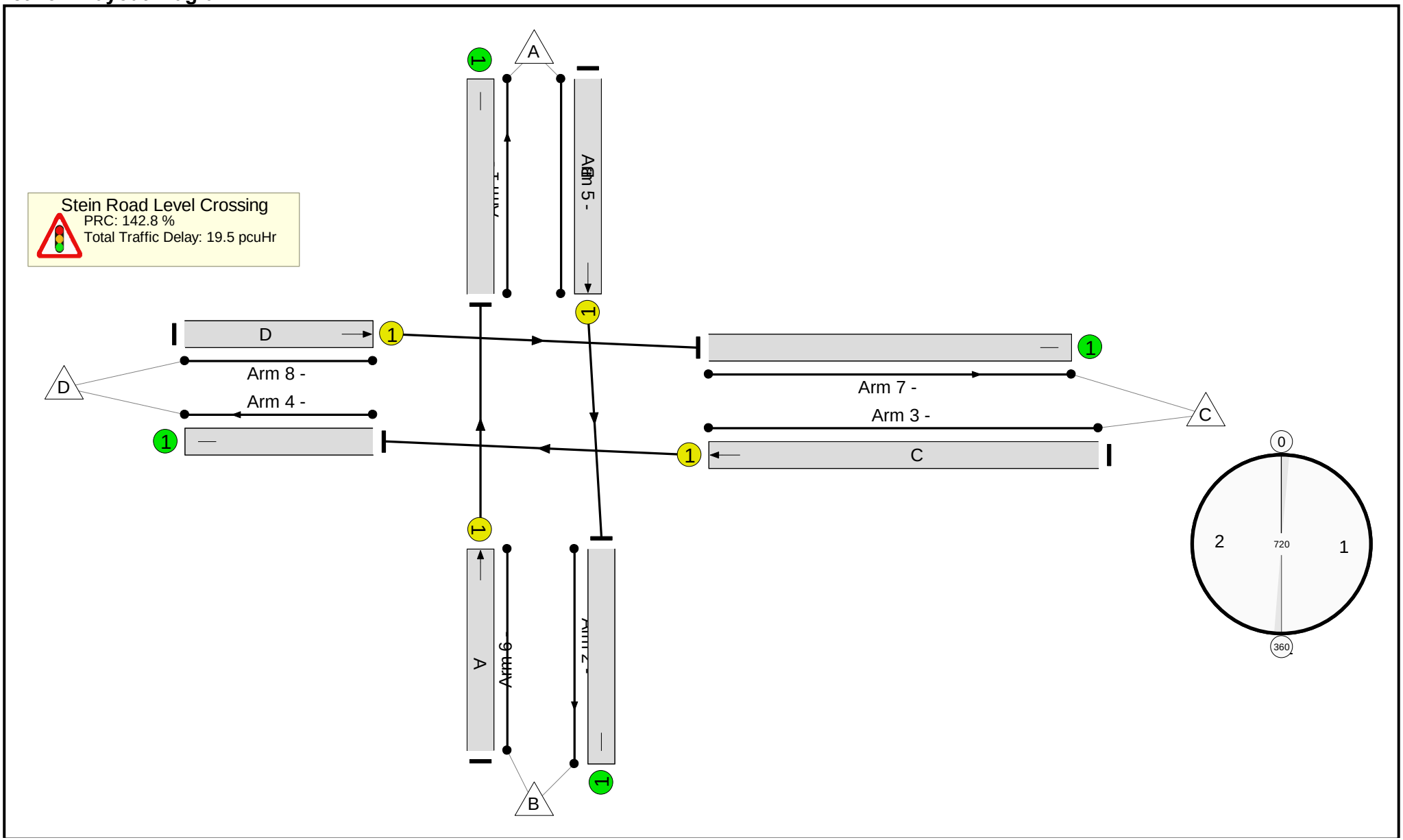
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.1%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.1%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	261	1915	934	28.0%
2/1	Ahead	U	N/A	N/A	A		1	350	-	346	1915	934	37.1%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.0**	**0.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**19.0**	**0.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
1/1	261	261	-	-	-	7.9	0.2	-	8.1	112.2	31.0	0.2	31.2
2/1	346	346	-	-	-	11.1	0.3	-	11.4	118.5	43.2	0.3	43.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

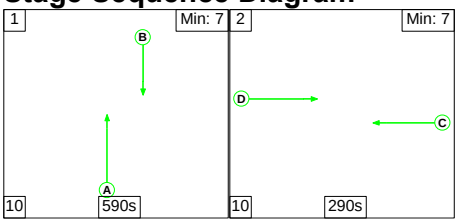
C1 PRC for Signalled Lanes (%): 142.8 Total Delay for Signalled Lanes (pcuHr): 19.52 Cycle Time (s): 720
PRC Over All Lanes (%): 142.8 Total Delay Over All Lanes(pcuHr): 19.52

Full Input Data And Results

Full Input Data And Results

Scenario 17: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) AM' (FG17: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) AM', Plan 1: 'Network Control Plan 1')

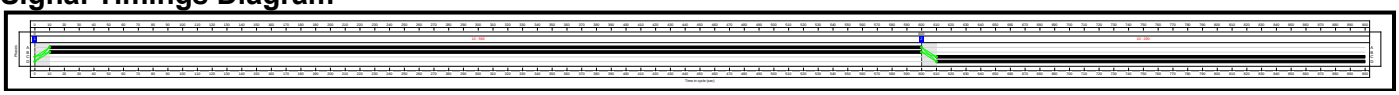
Stage Sequence Diagram



Stage Timings

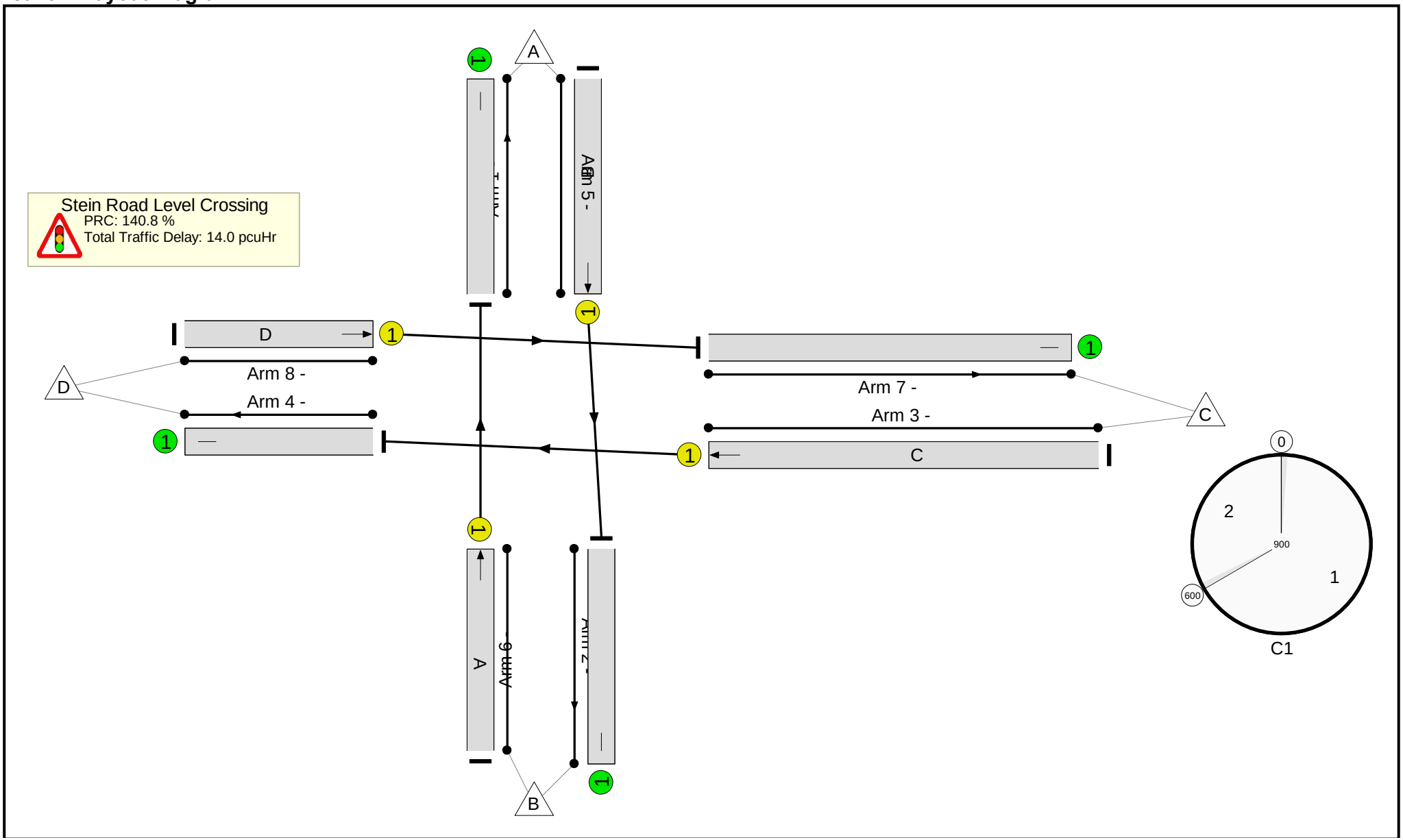
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.4%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**37.4%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	470	1915	1258	37.4%
2/1	Ahead	U	N/A	N/A	A		1	590	-	259	1915	1258	20.6%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.6**	**0.4**	**0.0**	**14.0**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**13.6**	**0.4**	**0.0**	**14.0**	**-**	**-**	**-**	**-**
1/1	470	470	-	-	-	9.2	0.3	-	9.5	72.6	53.4	0.3	53.7
2/1	259	259	-	-	-	4.4	0.1	-	4.5	63.1	25.7	0.1	25.8
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

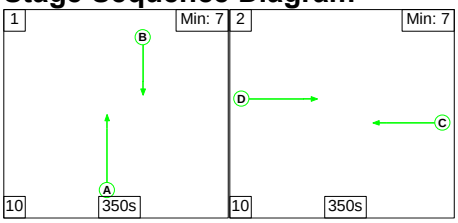
C1 PRC for Signalled Lanes (%): 140.8 Total Delay for Signalled Lanes (pcuHr): 14.02 Cycle Time (s): 900
PRC Over All Lanes (%): 140.8 Total Delay Over All Lanes(pcuHr): 14.02

Full Input Data And Results

Full Input Data And Results

Scenario 18: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) PM' (FG18: 'Forecast + Proposed Development (600dw With 20% Overall Deduction) PM ', Plan 1: 'Network Control Plan 1')

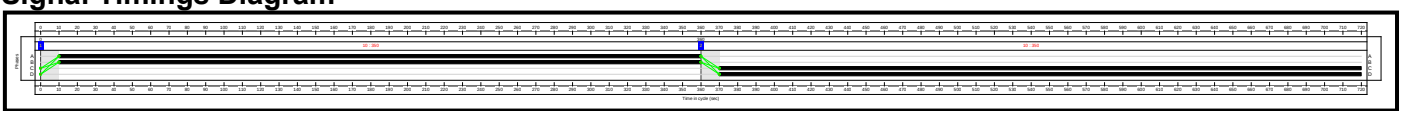
Stage Sequence Diagram



Stage Timings

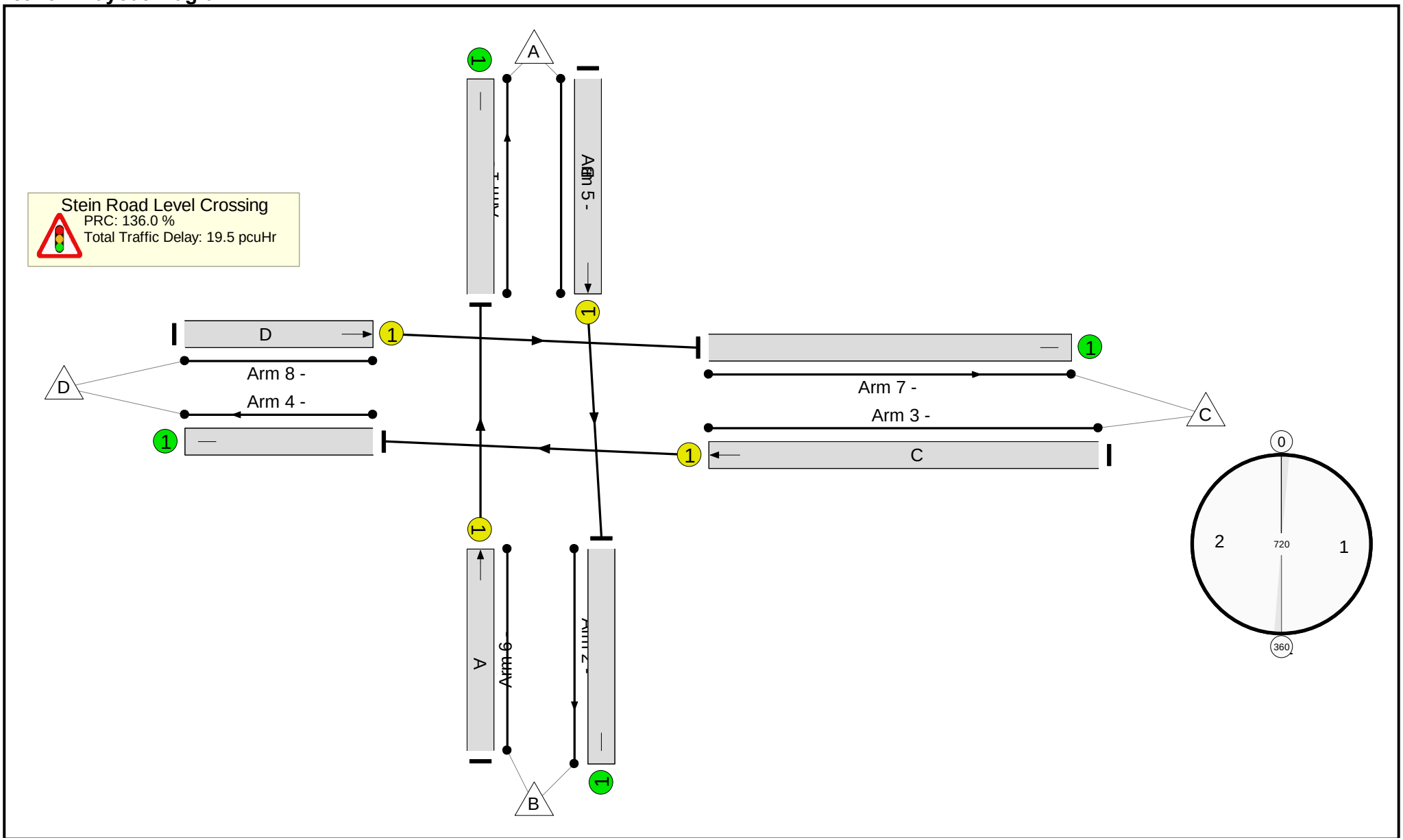
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**38.1%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**38.1%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	250	1915	934	26.8%
2/1	Ahead	U	N/A	N/A	A		1	350	-	356	1915	934	38.1%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	250	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.0**	**0.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**19.0**	**0.5**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
1/1	250	250	-	-	-	7.6	0.2	-	7.7	111.4	29.4	0.2	29.6
2/1	356	356	-	-	-	11.5	0.3	-	11.8	119.3	44.8	0.3	45.1
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

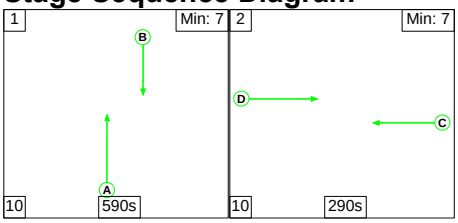
C1 PRC for Signalled Lanes (%): 136.0 Total Delay for Signalled Lanes (pcuHr): 19.53 Cycle Time (s): 720
PRC Over All Lanes (%): 136.0 Total Delay Over All Lanes(pcuHr): 19.53

Full Input Data And Results

Full Input Data And Results

Scenario 19: 'Forecast + Proposed Development (1050dw) AM' (FG19: 'Forecast + Proposed Development (1050dw) AM', Plan 1: 'Network Control Plan 1')

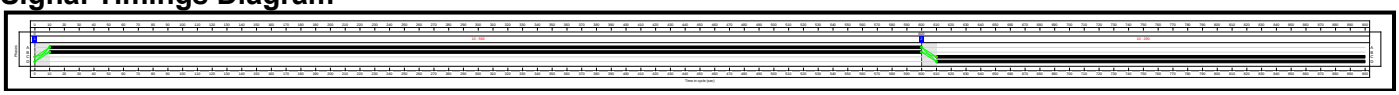
Stage Sequence Diagram



Stage Timings

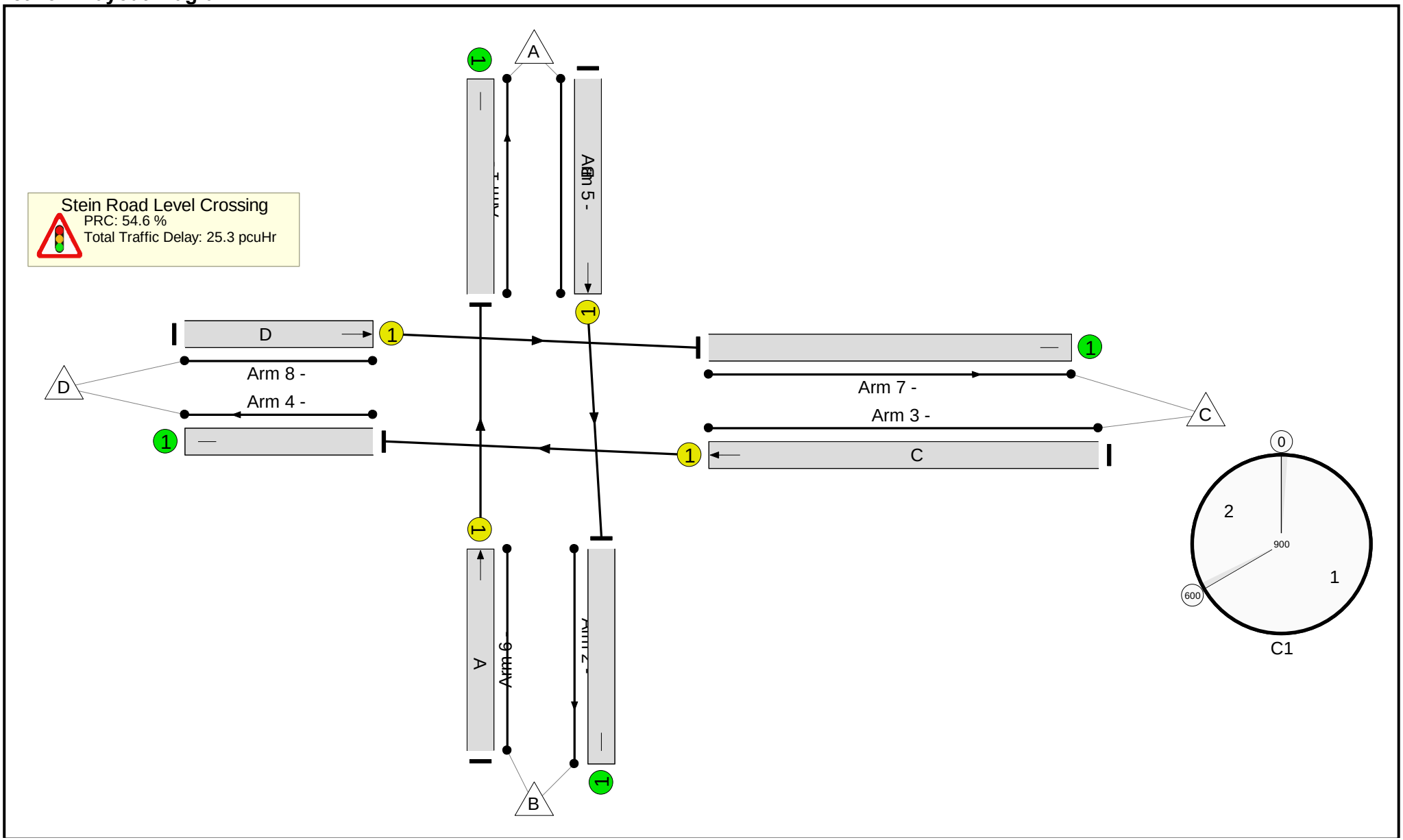
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.2%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.2%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	732	1915	1258	58.2%
2/1	Ahead	U	N/A	N/A	A		1	590	-	378	1915	1258	30.1%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	732	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**24.4**	**0.9**	**0.0**	**25.3**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**24.4**	**0.9**	**0.0**	**25.3**	-	-	-	-
1/1	732	732	-	-	-	17.5	0.7	-	18.2	89.3	101.7	0.7	102.4
2/1	378	378	-	-	-	6.9	0.2	-	7.2	68.1	40.3	0.2	40.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

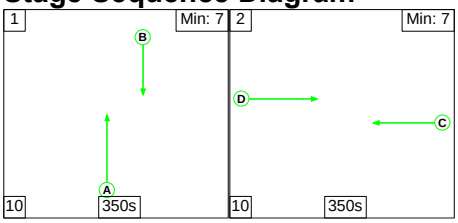
C1 PRC for Signalled Lanes (%): 54.6 Total Delay for Signalled Lanes (pcuHr): 25.31 Cycle Time (s): 900
PRC Over All Lanes (%): 54.6 Total Delay Over All Lanes(pcuHr): 25.31

Full Input Data And Results

Full Input Data And Results

Scenario 20: 'Forecast + Proposed Development (1050dw) PM' (FG20: 'Forecast + Proposed Development (1050dw) PM', Plan 1: 'Network Control Plan 1')

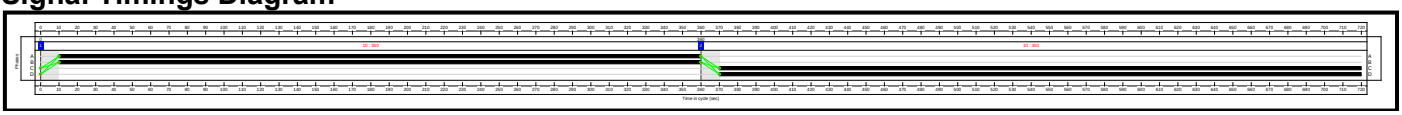
Stage Sequence Diagram



Stage Timings

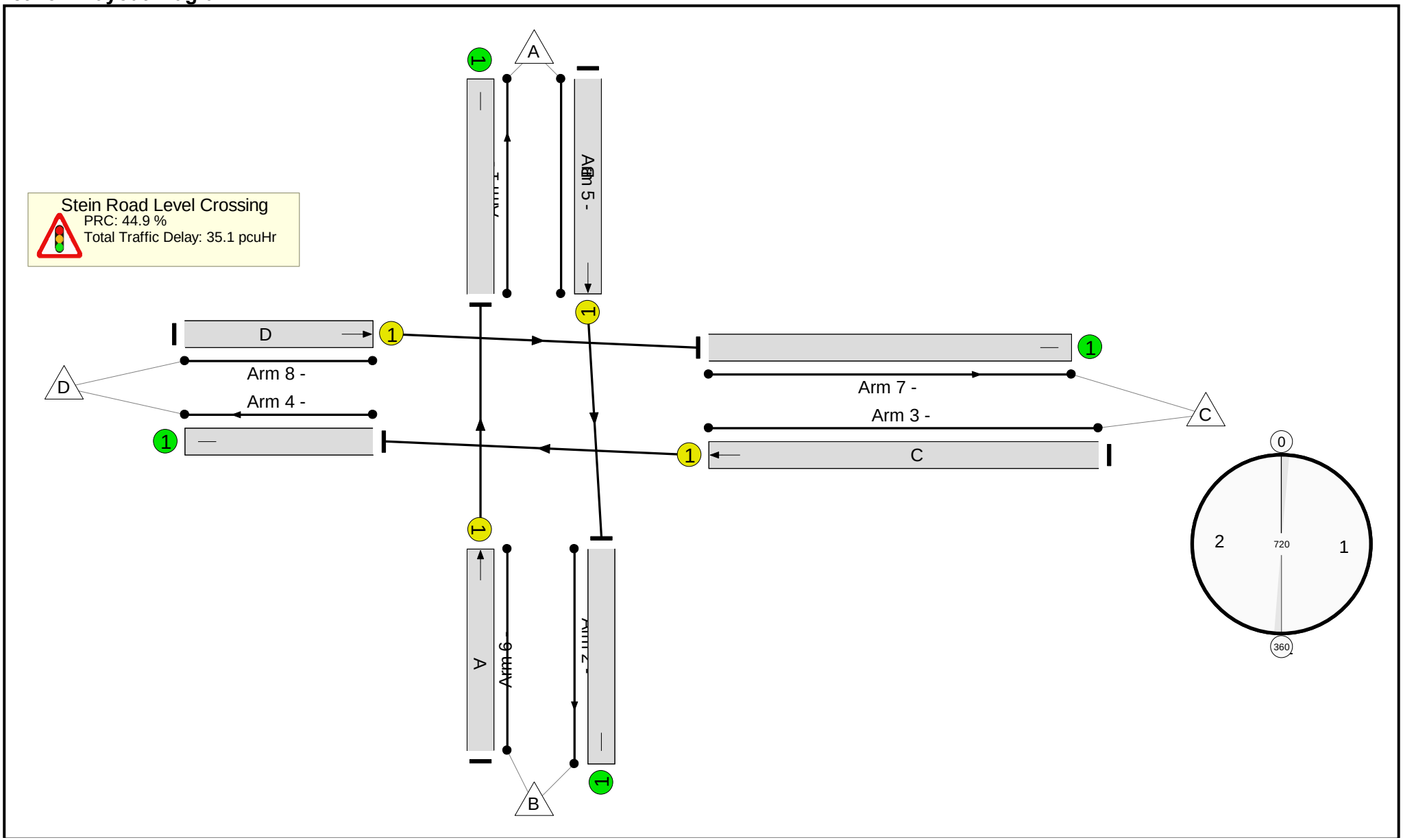
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.1%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.1%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	372	1915	934	39.8%
2/1	Ahead	U	N/A	N/A	A		1	350	-	580	1915	934	62.1%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**34.0**	**1.1**	**0.0**	**35.1**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**34.0**	**1.1**	**0.0**	**35.1**	-	-	-	-
1/1	372	372	-	-	-	12.1	0.3	-	12.5	120.6	47.2	0.3	47.6
2/1	580	580	-	-	-	21.9	0.8	-	22.7	140.7	85.2	0.8	86.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

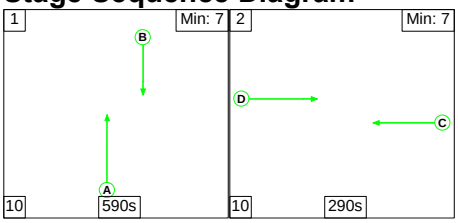
C1 PRC for Signalled Lanes (%): 44.9 Total Delay for Signalled Lanes (pcuHr): 35.13 Cycle Time (s): 720
PRC Over All Lanes (%): 44.9 Total Delay Over All Lanes(pcuHr): 35.13

Full Input Data And Results

Full Input Data And Results

Scenario 21: 'Forecast + Proposed Development (1050dw With Travel Plan) AM' (FG21: 'Forecast + Proposed Development (1050dw With Travel Plan) AM', Plan 1: 'Network Control Plan 1')

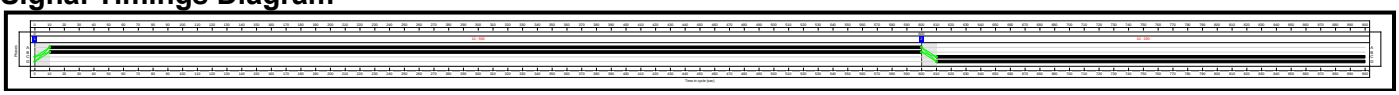
Stage Sequence Diagram



Stage Timings

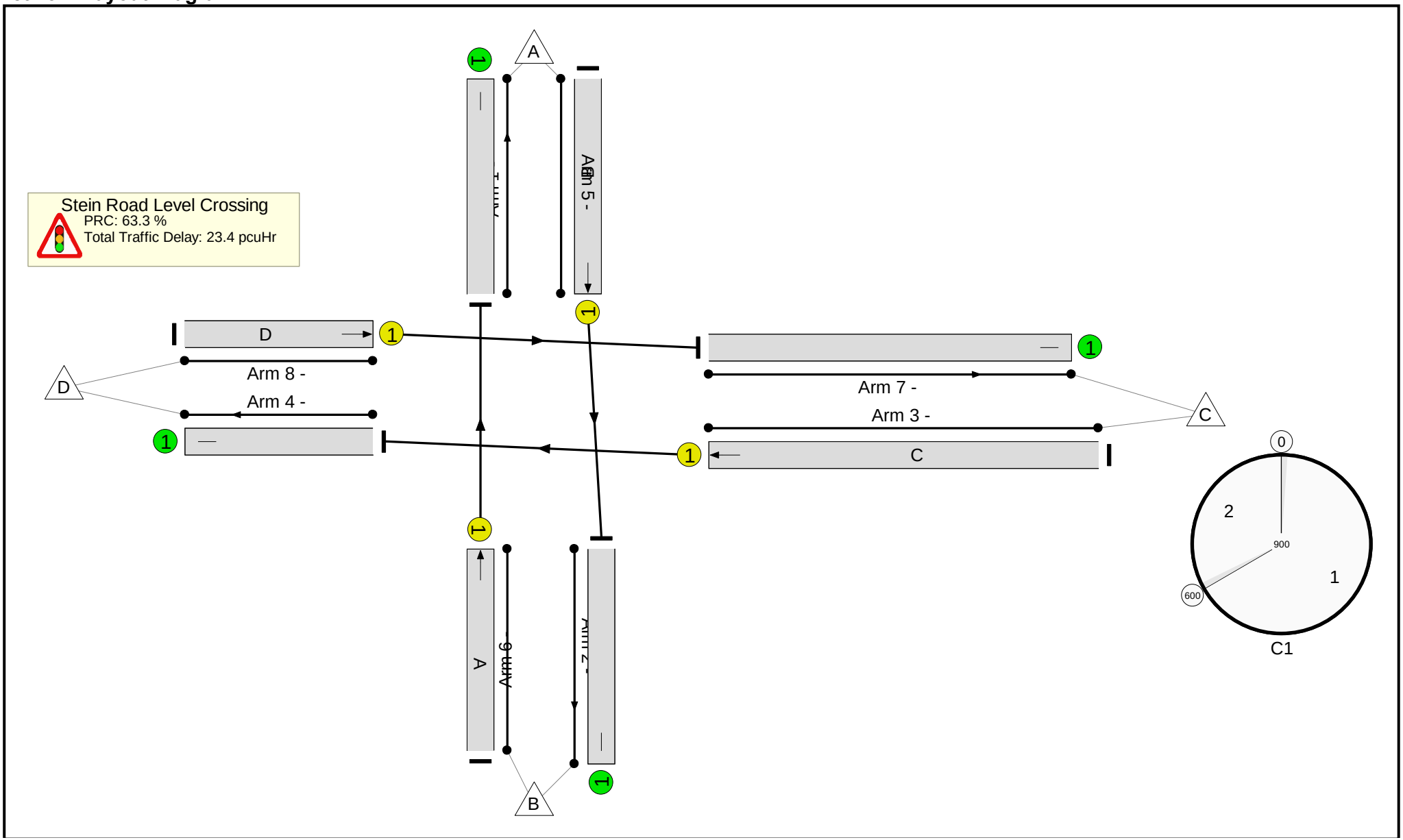
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.1%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.1%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	693	1915	1258	55.1%
2/1	Ahead	U	N/A	N/A	A		1	590	-	363	1915	1258	28.9%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	693	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**22.6**	**0.8**	**0.0**	**23.4**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**22.6**	**0.8**	**0.0**	**23.4**	-	-	-	-
1/1	693	693	-	-	-	16.0	0.6	-	16.6	86.3	93.2	0.6	93.8
2/1	363	363	-	-	-	6.6	0.2	-	6.8	67.5	38.4	0.2	38.6
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

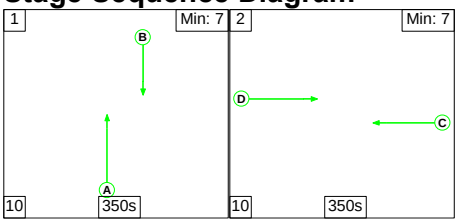
C1 PRC for Signalled Lanes (%): 63.3 Total Delay for Signalled Lanes (pcuHr): 23.42 Cycle Time (s): 900
PRC Over All Lanes (%): 63.3 Total Delay Over All Lanes(pcuHr): 23.42

Full Input Data And Results

Full Input Data And Results

Scenario 22: 'Forecast + Proposed Development (1050dw With Travel Plan) PM' (FG22: 'Forecast + Proposed Development (1050dw With Travel Plan) PM', Plan 1: 'Network Control Plan 1')

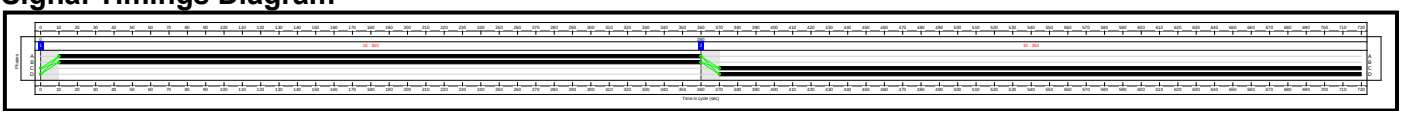
Stage Sequence Diagram



Stage Timings

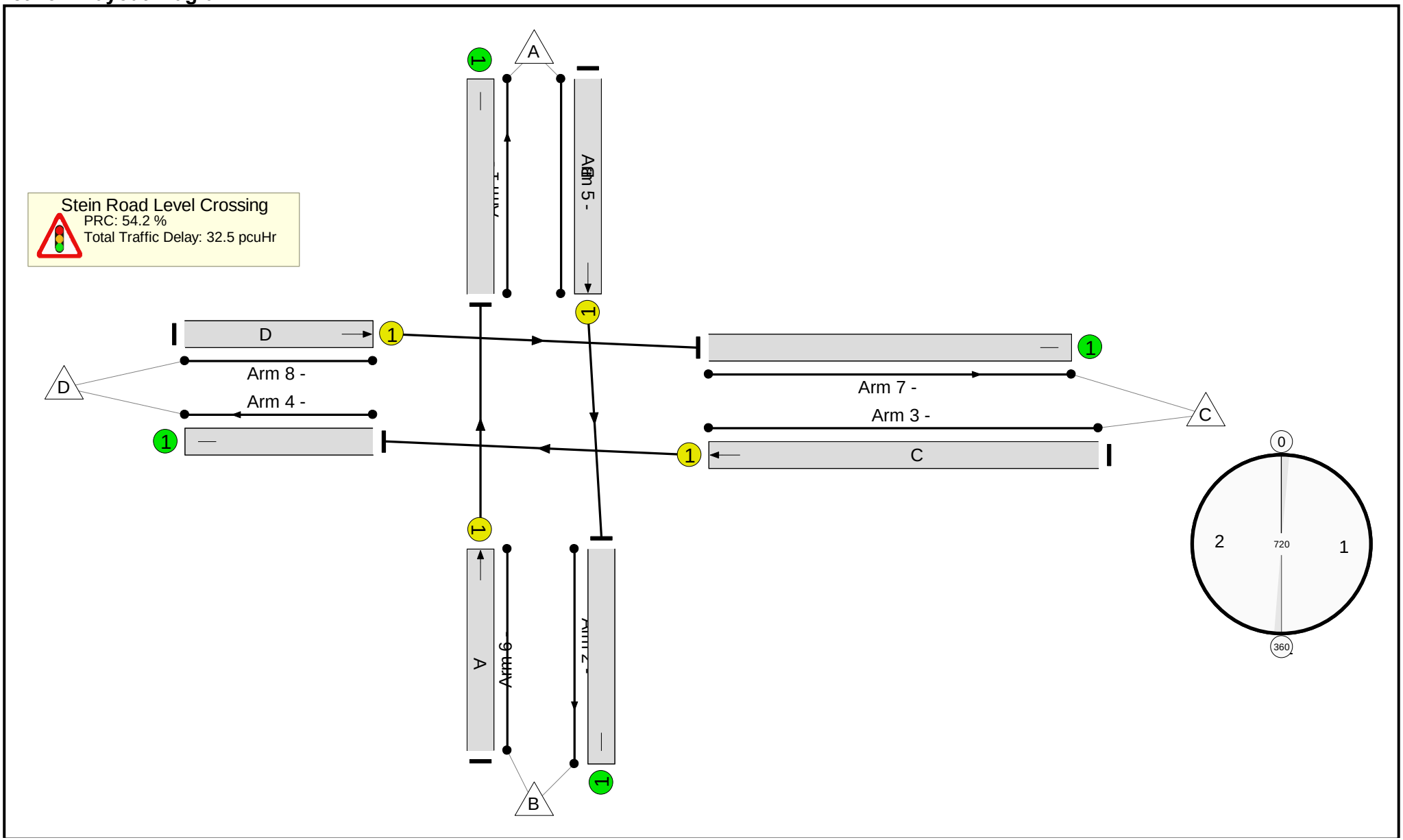
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.4%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.4%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	355	1915	934	38.0%
2/1	Ahead	U	N/A	N/A	A		1	350	-	545	1915	934	58.4%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**31.5**	**1.0**	**0.0**	**32.5**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**31.5**	**1.0**	**0.0**	**32.5**	-	-	-	-
1/1	355	355	-	-	-	11.4	0.3	-	11.8	119.2	44.6	0.3	44.9
2/1	545	545	-	-	-	20.0	0.7	-	20.7	136.8	78.0	0.7	78.7
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

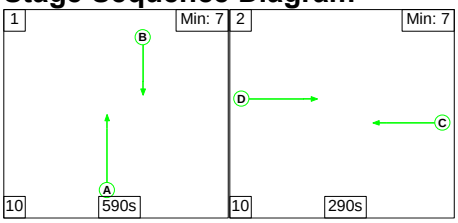
C1 PRC for Signalled Lanes (%): 54.2 Total Delay for Signalled Lanes (pcuHr): 32.46 Cycle Time (s): 720
PRC Over All Lanes (%): 54.2 Total Delay Over All Lanes(pcuHr): 32.46

Full Input Data And Results

Full Input Data And Results

Scenario 23: 'Forecast + Proposed Development (1050dw With Internalisation) AM' (FG23: 'Forecast + Proposed Development (1050dw With Internalisation) AM', Plan 1: 'Network Control Plan 1')

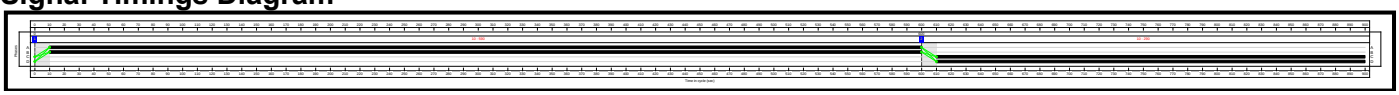
Stage Sequence Diagram



Stage Timings

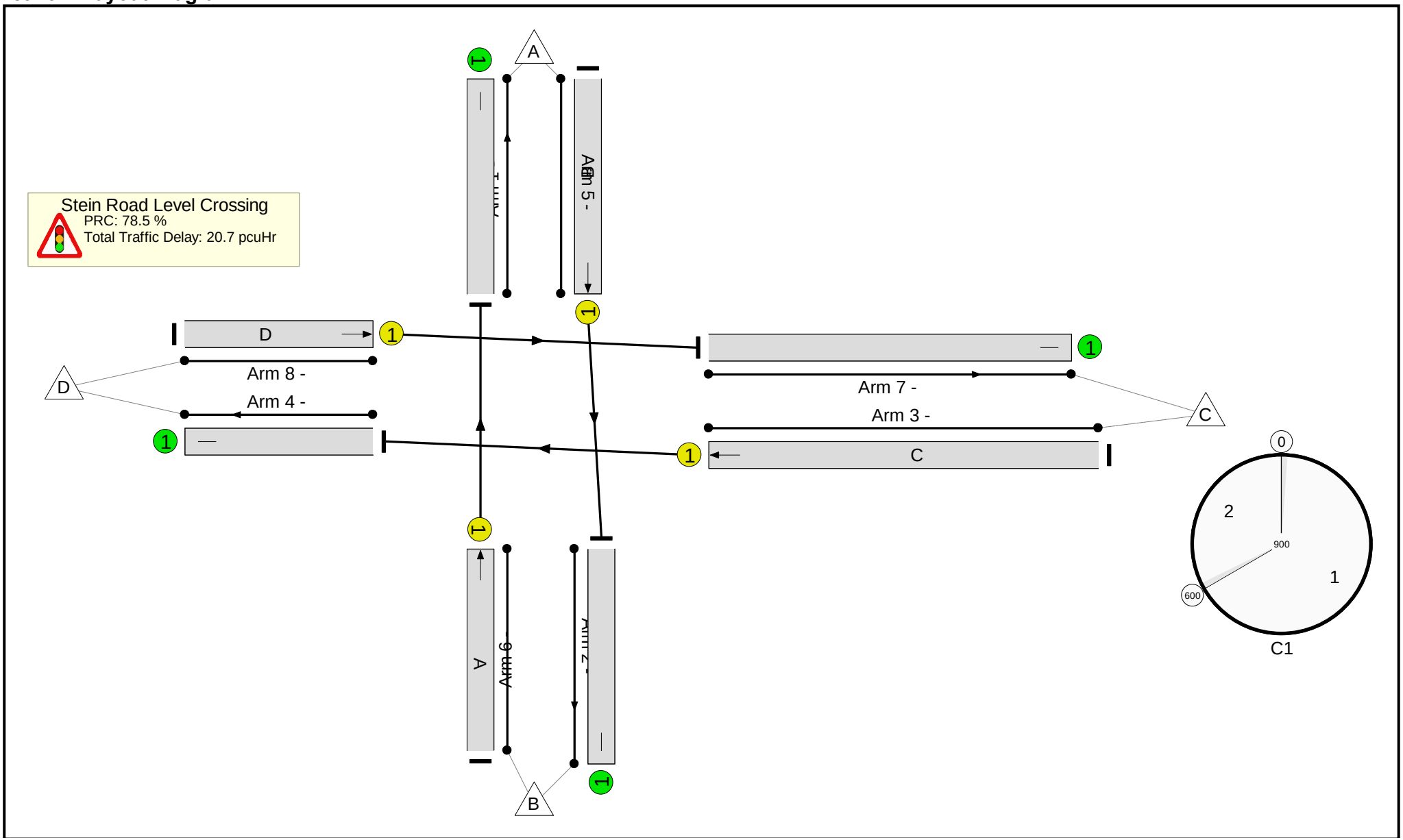
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.4%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.4%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	634	1915	1258	50.4%
2/1	Ahead	U	N/A	N/A	A		1	590	-	339	1915	1258	27.0%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.0**	**0.7**	**0.0**	**20.7**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**20.0**	**0.7**	**0.0**	**20.7**	**-**	**-**	**-**	**-**
1/1	634	634	-	-	-	14.0	0.5	-	14.5	82.2	81.2	0.5	81.7
2/1	339	339	-	-	-	6.1	0.2	-	6.3	66.4	35.3	0.2	35.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

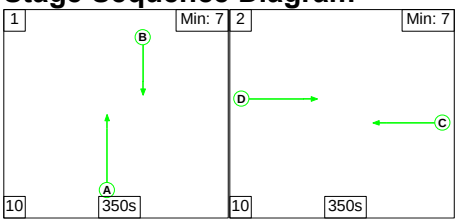
C1 PRC for Signalled Lanes (%): 78.5 Total Delay for Signalled Lanes (pcuHr): 20.73 Cycle Time (s): 900
PRC Over All Lanes (%): 78.5 Total Delay Over All Lanes(pcuHr): 20.73

Full Input Data And Results

Full Input Data And Results

Scenario 24: 'Forecast + Proposed Development (1050dw With Internalisation) PM' (FG24: 'Forecast + Proposed Development (1050dw With Internalisation) PM', Plan 1: 'Network Control Plan 1')

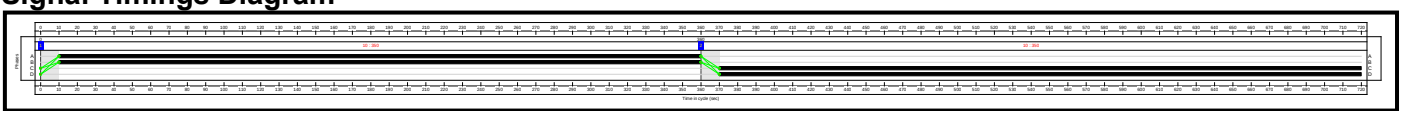
Stage Sequence Diagram



Stage Timings

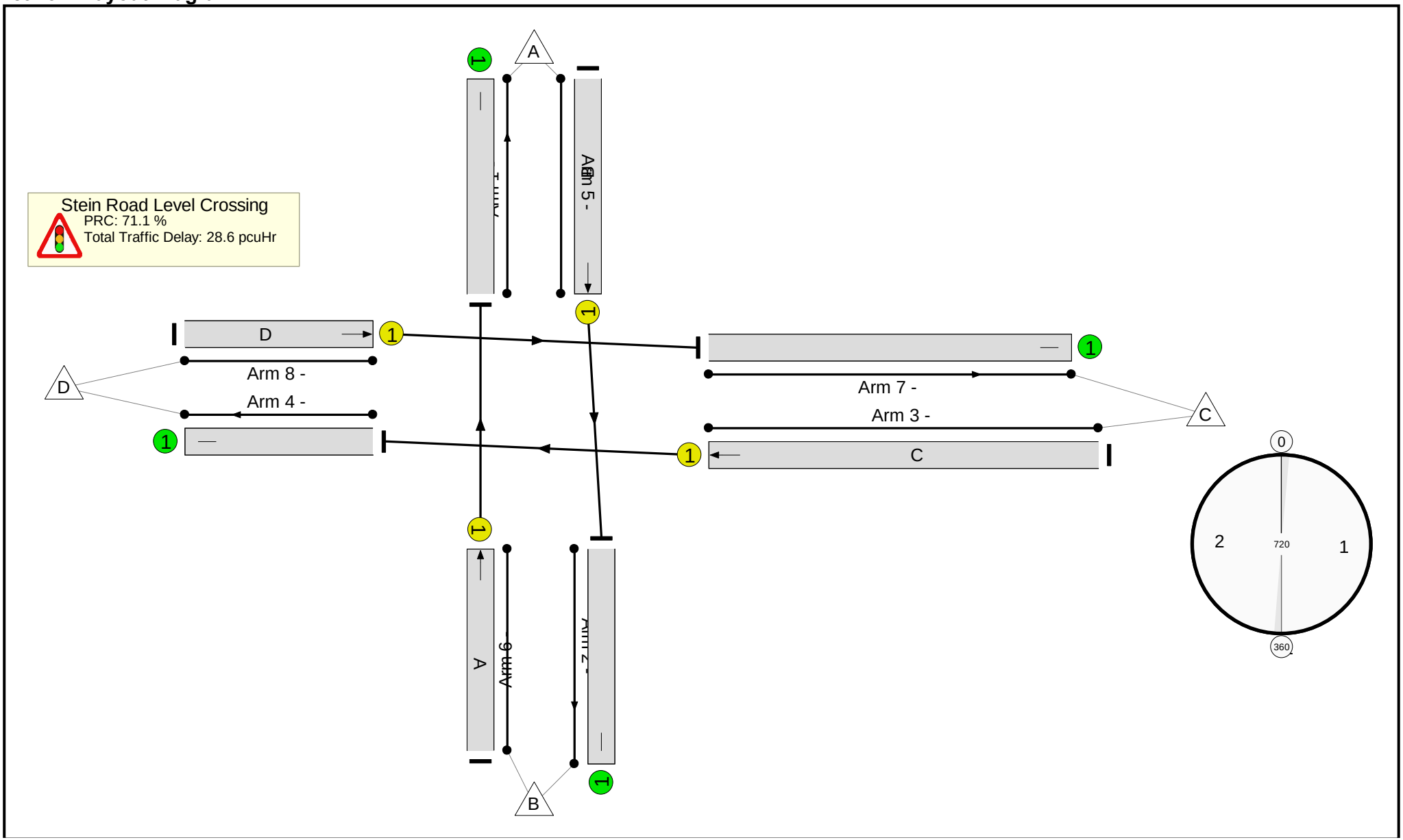
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**52.6%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**52.6%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	330	1915	934	35.3%
2/1	Ahead	U	N/A	N/A	A		1	350	-	491	1915	934	52.6%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	330	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**27.8**	**0.8**	**0.0**	**28.6**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**27.8**	**0.8**	**0.0**	**28.6**	-	-	-	-
1/1	330	330	-	-	-	10.5	0.3	-	10.7	117.2	40.8	0.3	41.1
2/1	491	491	-	-	-	17.3	0.6	-	17.9	131.2	67.6	0.6	68.2
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	330	330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

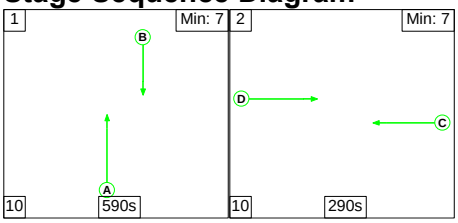
C1 PRC for Signalled Lanes (%): 71.1 Total Delay for Signalled Lanes (pcuHr): 28.64 Cycle Time (s): 720
PRC Over All Lanes (%): 71.1 Total Delay Over All Lanes(pcuHr): 28.64

Full Input Data And Results

Full Input Data And Results

Scenario 25: 'Forecast + Proposed Development (1050dw With Mode Shift) AM' (FG25: 'Forecast + Proposed Development (1050dw With Mode Shift) AM', Plan 1: 'Network Control Plan 1')

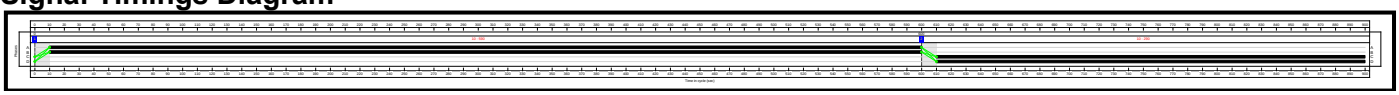
Stage Sequence Diagram



Stage Timings

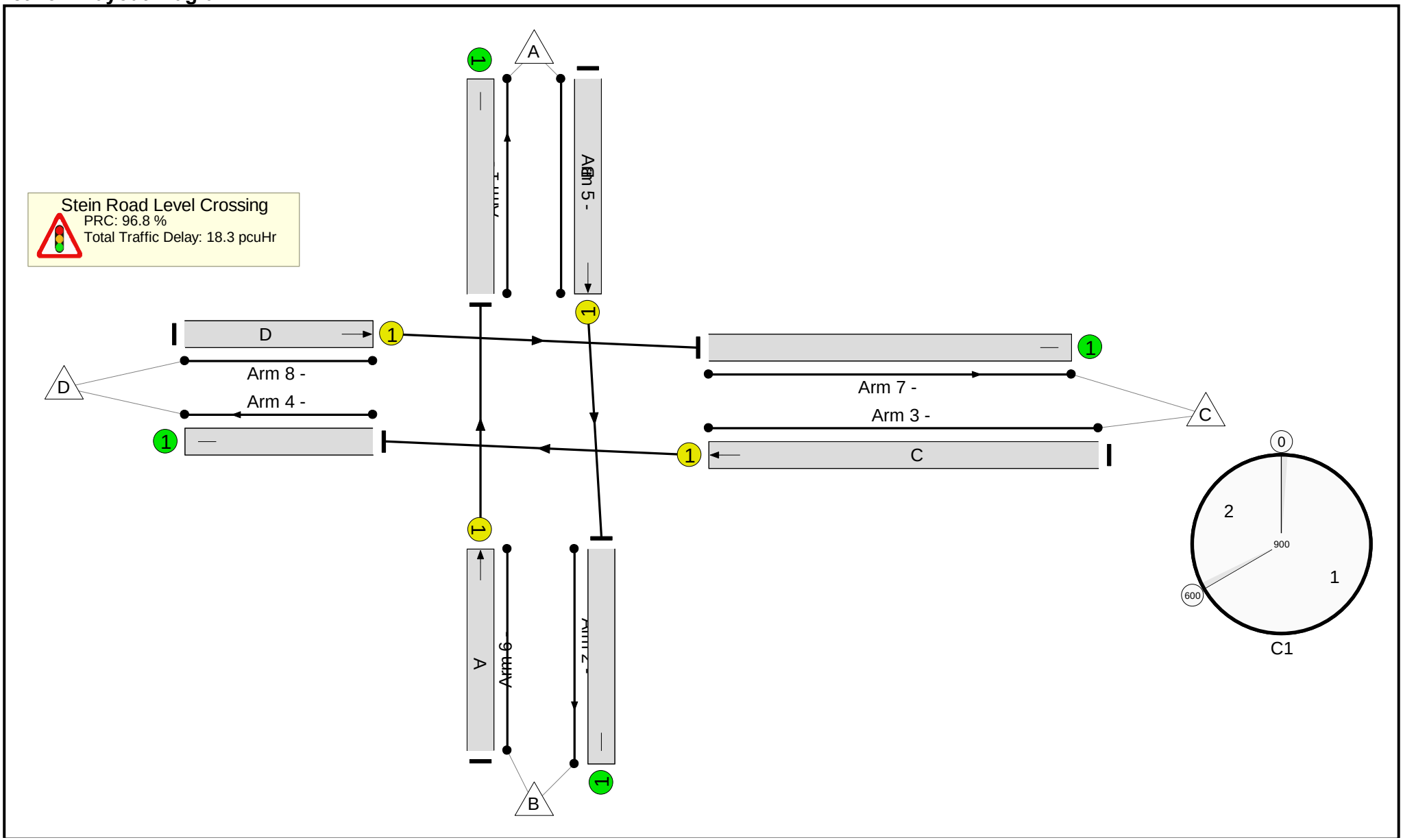
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.7%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.7%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	575	1915	1258	45.7%
2/1	Ahead	U	N/A	N/A	A		1	590	-	315	1915	1258	25.0%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**17.7**	**0.6**	**0.0**	**18.3**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**17.7**	**0.6**	**0.0**	**18.3**	-	-	-	-
1/1	575	575	-	-	-	12.1	0.4	-	12.5	78.4	70.4	0.4	70.9
2/1	315	315	-	-	-	5.6	0.2	-	5.7	65.4	32.3	0.2	32.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

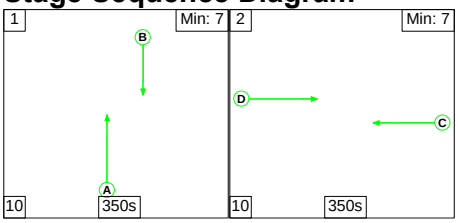
C1 PRC for Signalled Lanes (%): 96.8 Total Delay for Signalled Lanes (pcuHr): 18.25 Cycle Time (s): 900
PRC Over All Lanes (%): 96.8 Total Delay Over All Lanes(pcuHr): 18.25

Full Input Data And Results

Full Input Data And Results

Scenario 26: 'Forecast + Proposed Development (1050dw With Mode Shift PM' (FG26: 'Forecast + Proposed Development (1050dw With Mode Shift) PM', Plan 1: 'Network Control Plan 1')

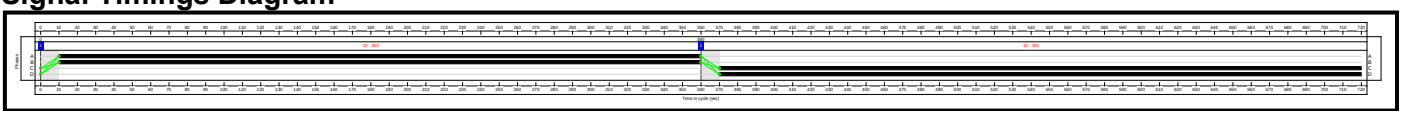
Stage Sequence Diagram



Stage Timings

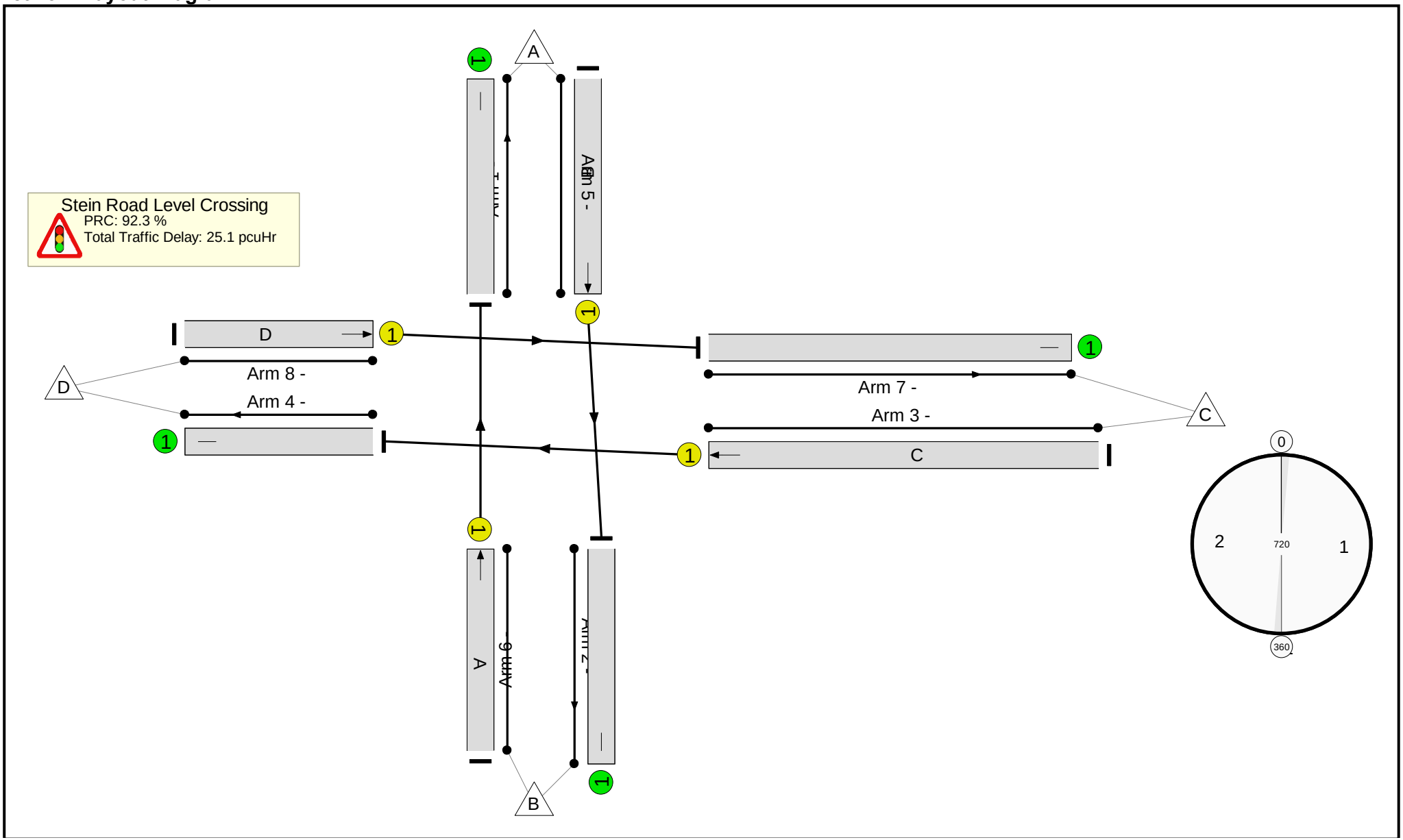
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.8%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.8%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	305	1915	934	32.7%
2/1	Ahead	U	N/A	N/A	A		1	350	-	437	1915	934	46.8%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	437	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**24.4**	**0.7**	**0.0**	**25.1**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**24.4**	**0.7**	**0.0**	**25.1**	**-**	**-**	**-**	**-**
1/1	305	305	-	-	-	9.5	0.2	-	9.8	115.3	37.1	0.2	37.4
2/1	437	437	-	-	-	14.9	0.4	-	15.3	126.1	58.0	0.4	58.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

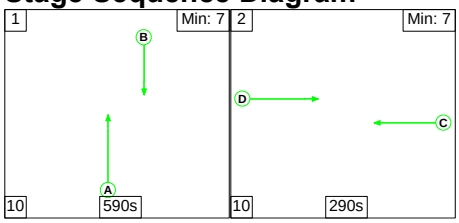
C1 PRC for Signalled Lanes (%): 92.3 Total Delay for Signalled Lanes (pcuHr): 25.08 Cycle Time (s): 720
PRC Over All Lanes (%): 92.3 Total Delay Over All Lanes(pcuHr): 25.08

Full Input Data And Results

Full Input Data And Results

Scenario 27: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM' (FG27: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) AM', Plan 1: 'Network Control Plan 1')

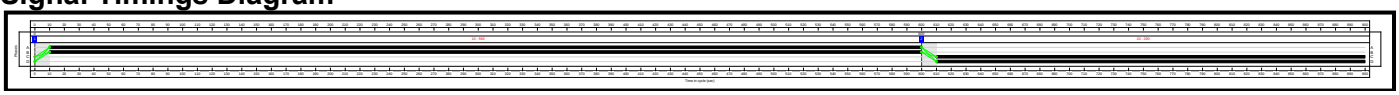
Stage Sequence Diagram



Stage Timings

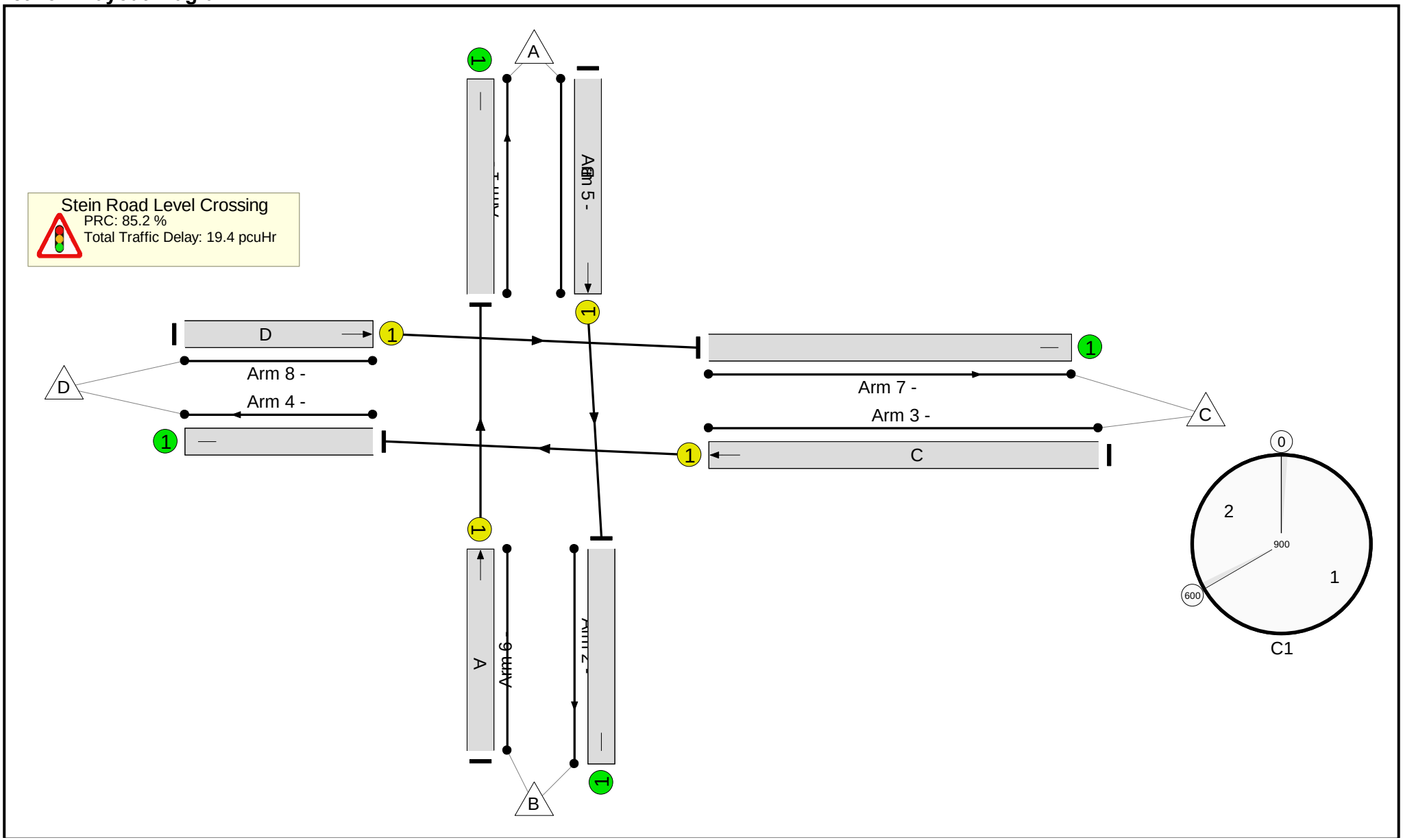
Stage	1	2
Duration	590	290
Change Point	0	600

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.6%**
Stein Road Level Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.6%**
1/1	Ahead	U	N/A	N/A	B		1	590	-	611	1915	1258	48.6%
2/1	Ahead	U	N/A	N/A	A		1	590	-	316	1915	1258	25.1%
3/1	Ahead	U	N/A	N/A	C		1	290	-	0	1800	582	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	290	-	0	1800	582	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**18.8**	**0.6**	**0.0**	**19.4**	-	-	-	-
Stein Road Level Crossing	-	-	**0**	**0**	**0**	**18.8**	**0.6**	**0.0**	**19.4**	-	-	-	-
1/1	611	611	-	-	-	13.2	0.5	-	13.7	80.7	76.9	0.5	77.4
2/1	316	316	-	-	-	5.6	0.2	-	5.7	65.4	32.5	0.2	32.6
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

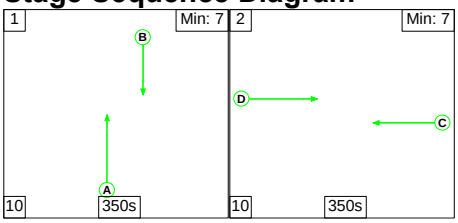
C1 PRC for Signalled Lanes (%): 85.2 Total Delay for Signalled Lanes (pcuHr): 19.44 Cycle Time (s): 900
PRC Over All Lanes (%): 85.2 Total Delay Over All Lanes(pcuHr): 19.44

Full Input Data And Results

Full Input Data And Results

Scenario 28: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM' (FG28: 'Forecast + Proposed Development (1050dw With 20% Overall Deduction) PM', Plan 1: 'Network Control Plan 1')

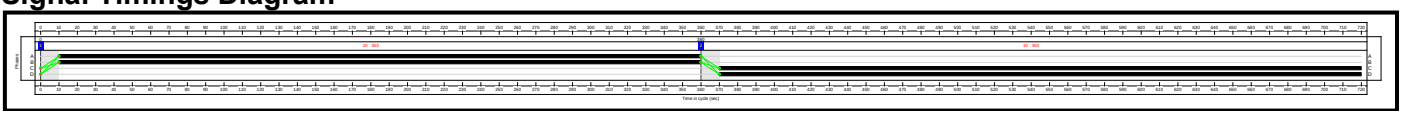
Stage Sequence Diagram



Stage Timings

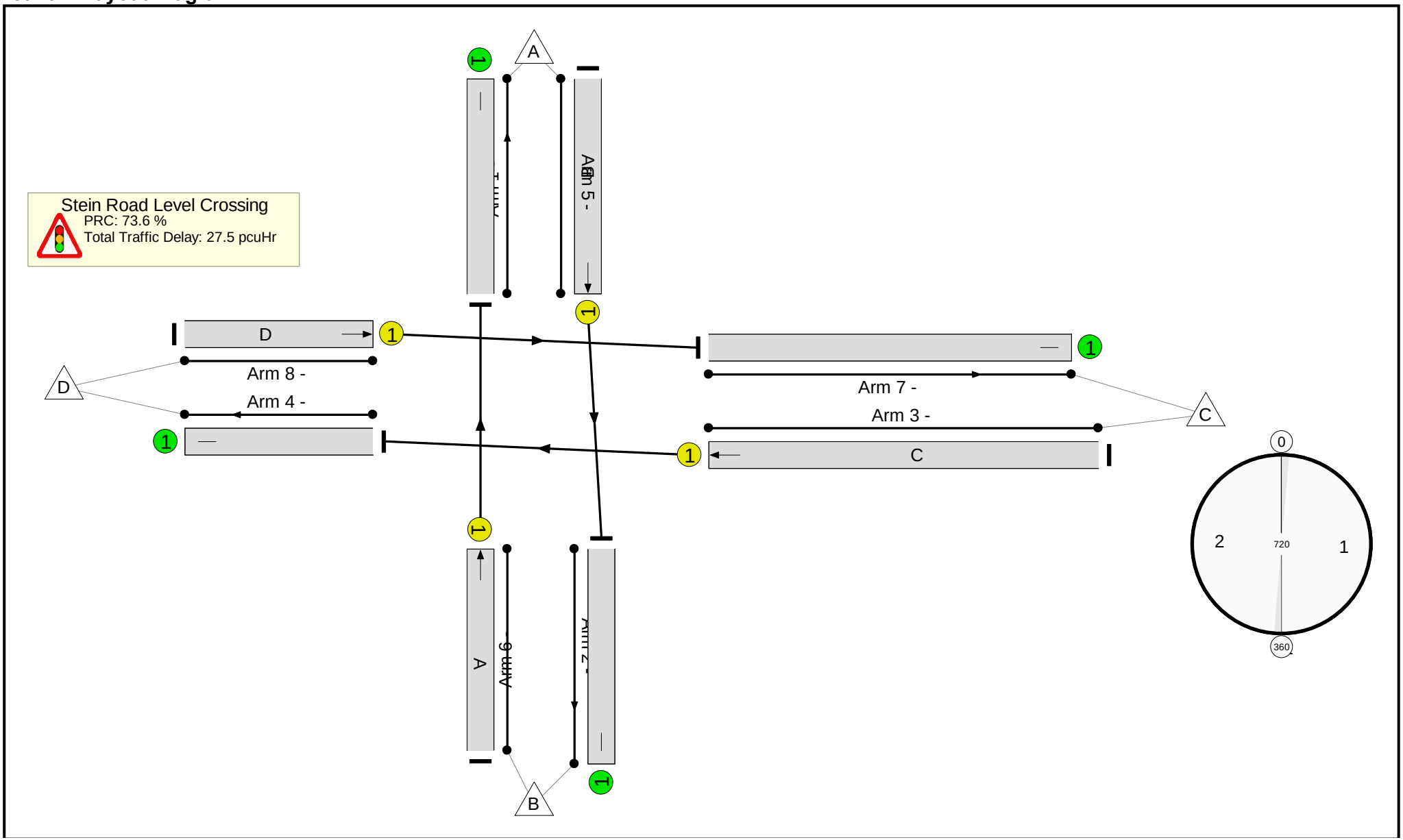
Stage	1	2
Duration	350	350
Change Point	0	360

Signal Timings Diagram



Full Input Data And Results

Network Layout 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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.8%**
Stein Road Level Crossing	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**51.8%**
1/1	Ahead	U	N/A	N/A	B		1	350	-	310	1915	934	33.2%
2/1	Ahead	U	N/A	N/A	A		1	350	-	484	1915	934	51.8%
3/1	Ahead	U	N/A	N/A	C		1	350	-	0	1800	878	0.0%
4/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	310	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	D		1	350	-	0	1800	878	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**26.7**	**0.8**	**0.0**	**27.5**	**-**	**-**	**-**	**-**
Stein Road Level Crossing	**-**	**-**	**0**	**0**	**0**	**26.7**	**0.8**	**0.0**	**27.5**	**-**	**-**	**-**	**-**
1/1	310	310	-	-	-	9.7	0.2	-	10.0	115.7	37.9	0.2	38.1
2/1	484	484	-	-	-	17.0	0.5	-	17.5	130.5	66.3	0.5	66.8
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 73.6 Total Delay for Signalled Lanes (pcuHr): 27.51 Cycle Time (s): 720
PRC Over All Lanes (%): 73.6 Total Delay Over All Lanes(pcuHr): 27.51

Full Input Data And Results