

Response to Main Issues for Examination from West Parley Parish Council

We wish to attend the examination to respond orally to the issues listed below. James Stacey, BA (Hons) DipTP MRTPI, Director at Tetlow King Planning will represent the Parish Council at examination. Cllr. Richard Heaslip CB (WPPC) will also participate in the debate where appropriate.

Inspector's Questions

- 3 FWP6: East of New Road, West Parley - Is a convenience foodstore of the size proposed supported by robust and up to date evidence?

Does the policy provide a clear strategy for development?

- 4 FWP7 West of New Road, West Parley - Does the allocation address the need to sustain and enhance the significance of the heritage asset at Dudsbury Hill Fort?

Does the policy provide a clear strategy for development?

This written statement considers part 2 of both questions 3 and 4 (Does the policy provide a clear strategy for development?) together at the end of the statement. WPPC is concerned that the Core Strategy policies as written suggest a strategy for each allocation, rather than considering the allocations at West Parley as one development strategy. Given that the delivery of the improvements to Parley Cross is dependent on the contemporaneous delivery of both housing allocations WPPC consider that one strategy is necessary to ensure the delivery of the whole development and have therefore answered the questions together.

Summary

	3	4
Test of Soundness	Not effective	Not justified by evidence.
Suggested Modification	N/A	Enable the Parish Council to take a more active role in planning for the future conservation of the hillfort, particularly to assist in producing an access strategy.

Matter 5: Strategic Allocations – East Dorset

Question 3: FWP6: East of New Road, West Parley - Is a convenience foodstore of the size proposed supported by robust and up to date evidence?

- 1.1 The Parish Council expressed concern with the proposed 3000m² convenience store identified in the Pre-Submission Draft Core Strategy in 2012. This was not justified by the three retail studies: ED38, ED40 and ED41 and so WPPC objected to this policy during the public consultation due to the impact a store this size would have on existing retail provision in West Parley. However, whilst it appears that a reduced floor area is justified in the 2012 NLP report (ED41 - which identifies capacity for an 800-900m² store in West Parley) the Parish Council remains concerned. One of these concerns relates to the successful convenience store sited on the other side of Parley Cross, which already meets the village's needs. Other concerns relate to the quantity of development planned on the FWP6 site and whether the proposed road improvements are sufficient to support the level of development planned, including the convenience supermarket. These concerns are dealt with under the Inspector's further question below, but with specific regard to the foodstore we note that a high level of existing 'pass-by' traffic has been assumed in the analyses undertaken by WSP. Should a lower level of pass-by (existing) traffic use the foodstore, with a higher level of 'new' trips on the surrounding roads, then the traffic impact could be significantly higher.

Question 4: FWP7 West of New Road, West Parley - Does the allocation address the need to sustain and enhance the significance of the heritage asset at Dudsbury Hill Fort?

- 1.2 WPPC is concerned that there has not been significant consideration given to the impact of the strategic allocation FWP7 on the nationally recognised Scheduled Ancient Monument, and supports the position of English Heritage as set out in their letter dated 20 December 2012. English Heritage considered that the plan was not sound because the Councils had not undertaken an assessment to identify land where development would be inappropriate because of its historic significance. In their representations, English Heritage drew attention to the need for a Historic Environment Assessment to be conducted as part of the evidence base for the plan.
- 1.3 English Heritage published guidance in 2012 to outline to Local Authorities how to apply the NPPF guidance to local plans to ensure they were found sound at examination. This document gives very specific advice on how to write policy to protect the historic environment and identifies several key stages for a Plan to go through to ensure its soundness. Firstly, gathering a robust evidence base on the historic assets within the district, their state, current accessibility and their contribution to the character of the area. Secondly, a Local Plan should include a clear strategy for the conservation and enjoyment of the historic environment. English Heritage (EH) is clear that this should be achieved by researching issues and responding to these issues within the Plan. Thirdly,

the Plan should consider how the historic environment can contribute to other objectives such as protecting Green Belt land and conserving and enhancing the natural environment.

- 1.4 National policy is clear that Local Authorities should consider local historic assets in their Local Plan. Paragraph 126 of the NPPF states:

“Local Planning Authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:

- *the desirability of new development making a positive contribution to local character and distinctiveness*
- *opportunities to draw on the contribution made by the historic environment to the character of a place”*

- 1.5 East Dorset District Council (EDDC) finally distributed a Historic Landscape Assessment for the strategic housing allocation (FWP7) at West Parley on the 16th August 2013. English Heritage’s guidance is clear that such evidence-gathering should have taken place at the beginning of the plan process to inform strategic allocations. EDDC prepared this evidence after the Core Strategy was submitted for examination, at the very end of the plan-making process. The document does not perform the role suggested by EH in assessing an appropriate level of development for the site to the West of New Road.

- 1.6 In its preparation there has been no contact of any kind between the District Council and/or its consultants with the local council or community. This is not only contrary to the requirements of NPPF 155 and the District Council’s own Community Involvement Policy, but it has also failed to take advantage of the Parish Council’s own ongoing local heritage project and its more intimate knowledge of the Dudsbury Hill Fort site. Local contact would have been valuable, as paragraph 2.3(4) reveals that the evidence is based on a rapid desk based assessment.

- 1.7 Paragraph 3.40 of the Historic Landscape Assessment fails to grasp the enhanced public interest in the hill fort engendered by the Parish Council’s ongoing heritage programme over the last few years, which has featured; public displays, an almost completed programme of signage for local heritage sites and an ongoing dialogue over the hill fort between WPPC, English Heritage and the County Council’s Archaeological Officer.

- 1.8 The Historic Landscape Assessment describes the 24 hour noise and light impact of a busy major road (the newly planned Link Road for FWP7) in paragraph 3.54. The report states that despite being only 100 metres away from the scheduled monument impacts

can be mitigated by a bund and tree planting. No evidence of any kind is produced in support. The Assessment's conclusion that there should be no disturbance to the Scheduled Ancient Monument is based on inadequate evidence and a lack of community consultation.

- 1.9 WPPC commissioned FIRA to conduct a Landscape and Visual Assessment of the West Parley area. FIRA identified several major landscape impacts from the development on Dudsbury Hillfort. The mature woodland surrounding the hillfort makes a positive contribution to the landscape setting in West Parley. The western housing allocation will be visible along the ridgeline blocking local views of the Hillfort area from the East and the Stour Valley Way footpath. The impacts of the SANGs are unknown. However, a large area of newly landscaped land will affect the setting of the Dudsbury Rings. Further consideration of the landscape impacts of the proposed housing allocations can be found in 2/359553.
- 1.10 The Heritage Landscape Assessment should have been produced prior to the allocation of housing to ensure the site could be developed without causing damage to the Scheduled Ancient Monument. Policy FWP7 is not sound as the quantum of development proximate to Dudsbury Hill Fort has not been justified by an evidence based assessment. In this sense the plan has not been **positively prepared** and should be declared to be unsound as it has not objectively assessed the development and infrastructure requirements.

Suggested Modification

- 1.11 The Parish Council would like to take a more active role in planning for the future conservation of the Dudsbury Rings. As mentioned previously above the Parish Council has already considered various works to conserve the monument and widen local understanding of its historical significance. The Parish Council would like to work with Dorset County Council archaeology and East Dorset District Council to produce a conservation management plan or heritage access statement. Such a document should outline a schedule of works to conserve the rings such as; clearing some of the invasive trees, restoring the fort's river view and preparing interpretative signs. WPPC are concerned that the Council's current work does not provide a positive strategy for the conservation of Dudsbury Rings in the future. The Parish Council would, however, assist in producing policy which not only conserves the hillfort but also harnesses public interest in the site.

Question 3 & 4: Does the policy provide a clear strategy for development?

- 1.12 The proposed site allocations at West Parley are dealt with in two policies FWP6 and FWP7, however, the road improvements at Parley Cross (including the Link Roads) are dependent on the delivery of both sites either side of New Road. East Dorset District Council has used the improvement of Parley Cross as the main justification for the higher quantum of housing now proposed on sites FWP6 and FWP7 in page 37 of SD15.8. Given that the residential development and road improvements are

interdependent, the Core Strategy needs to provide a clear strategy to ensure all elements of the scheme are delivered in an appropriate time scale. WPPC are concerned that the Core Strategy and associated evidence base does not provide a robust framework for the delivery of the necessary infrastructure and as such the policies are unsound.

- 1.13 WPPC commissioned highway consultants Hydrock to undertake a review of the transport evidence which underpins the development of FWP6 and FWP7. ED67 supports the development of link distributor roads in the new residential areas in order to relieve traffic congestion at Parley Cross. WPPC and their consultants consider that ED67 does not provide justification that the proposed new road layout will reduce existing congestion as well as enable a greater number of traffic movements from the proposed residential development (see appendix 1).
- 1.14 Hydrock are concerned that the modelling techniques used to justify the link roads do not mirror the interaction between existing and new junctions which would be in close proximity. LINSIG, the model used by WSP, should be able to effectively model an entire system of junctions. However the WSP study has modelled each junction within the Parley Cross area separately, rather than taking the whole network as a whole. Thus, there are flaws within their network model, which raise significant questions in relation to its reliability:
- WSP assume that there would be no traffic flows between the two proposed developments, which is unlikely given the proposed food store.
 - One lane within the WSP model has been modelled as unsignalised and with infinite capacity, whereas this should be shown as a signalised lane with a defined capacity in line with the usual practice.
 - Opposing traffic movements are missing from the WSP model in places.
 - The modelled highway layout does not match that referred to in WSP's report in places.
 - The geometry of parts of the modelled junctions is incorrect in the WSP model – e.g. some turns are modelled with an infinite radius.
- 1.15 Hydrock has constructed LINSIG traffic models based on those prepared by WSP for EDDC. Critically, Hydrock's models link the operation of Parley Cross and the proposed link road junctions. Outputs from this modelling can be found at Appendix 2 and network performance is summarised below:
- In 2020, without improvement, baseline + committed development traffic would lead to Parley Cross operating well over capacity, with delays of nearly 5 minutes per vehicle for certain movements.

- The 2020 base + development model, including the proposed link roads and improvements to Parley Cross, indicates that:
 - The local network would operate with a 97.9% degree of saturation in the AM peak and 94.3% in the PM – for signalised networks, a figure of 90% is considered to represent a network operating at or close to capacity.
 - The southernmost (A347) and easternmost (B3073) junctions would be over-capacity in peak periods. This would not be acceptable and the associated queues could interact with other junctions within the network – e.g. blocking of traffic exiting Parley Cross eastbound in the AM and blocking of existing side roads.
 - The improved Parley Cross junction is close to capacity in 2020, particularly in the AM peak. Should improvements be required to the design of the link road junctions referred to above, it is likely that this would release further traffic that would overload Parley Cross itself.
 - The restricted turning movements available at the proposed Parley Cross junction lead to the overloading of the link roads – there could be around 100m of queuing back into the eastern development as a result.
 - There could be around 300m of queuing on the northbound approach to the southernmost A347 junction in peak hours. Around 110m of queuing back into the western development area is predicted.

1.16 Hydrock has also tested the impact of up to 50% of the residential development coming forward in the absence of the link roads (see appendix 3) – two scenarios were tested, with the developments connecting either to the B3073 or the A347 respectively:

- In the AM peak, Parley Cross would be over-capacity by up to 36% (assuming development connects with the B3073 – or by 30% if development connects via the A347), with up to 593m of queuing possible on some approaches. All but one link within the junction would be over-capacity.
- Parley Cross would be over-capacity by 21% in the PM peak (whether development connects to the north or the south). Again, only one link within the junction would be within capacity.

1.17 With the foodstore in place, junction operation would be significantly worse again, with Parley Cross predicted to be up to 44% over-capacity in the AM peak and 30% over-capacity in the PM peak. If the link roads were to be built and then found operationally wanting, this would affect a far wider area than the village of West Parley. The A347 through West Parley, which includes Parley Cross and the two planned Link Road junctions, is one of the only two approaches to the Bournemouth conurbation from the N and the E. The other is the A338 from Bournemouth to Ringwood. When one of the two roads has a problem it is usual for the other to be brought to a standstill.

- 1.18 Another key concern for WPPC is that if the link roads are not workable, either operationally or because they are unviable (a concern raised in matter 1/359553) developers will not deliver the full network of road infrastructure required. Policies FWP6 and FWP7 both require that the link road is completed prior to occupation of 50% of the new homes. This provides the opportunity for a developer to provide less than half the housing and not provide the link road.
- 1.19 WPPC are concerned that if market conditions are unfavourable a large number of houses can still be provided without any traffic mitigation measures. The provision of a link road is stipulated in each policy individually, allowing for the possibility that one developer could deliver a link road and the other not. Without the provision of **both** link roads the junction improvements will not achieve the reductions in congestion and deliver the planning benefit associated with these traffic mitigation measures.
- 1.20 Furthermore, there is great uncertainty that the link roads will be provided in a co-ordinated manner, as witnessed by the differing development timescales in the risk assessment (FD5). The Councils have not provided any evidence that Parley Cross can cope with this level of additional traffic movements and analyses undertaken by Hydrock on behalf of WPPC demonstrate that the junctions would not operate in a satisfactory manner.
- 1.21 WPPC are therefore concerned that the Core Strategy does not include a clear strategy for the delivery of all the development around Parley Cross, the community facilities, housing and junction improvements. Without such a strategy WPPC consider both policies FWP6 and FWP7 to be unsound as they are undeliverable.
- 1.22 The preparation of the plan is unsound because it has not been **positively prepared** in accordance with paragraph 182 of the NPPF, which requires that:

“the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements”

(our emphasis)

Given that there is no certainty over the delivery of the links and junction improvements, and there is evidence that these infrastructure elements would not operate in an acceptable manner, there can be no certainty of whole or partial development at sites FWP6 and FWP 7 in achieving a sustainable development. Hence the plan must be found to be unsound.

Suggested Modification

- 1.23 WPPC are unable to suggest a modification to the plan to make it sound as it has no basis for assessing the suitability of the proposed allocations in achieving the stated aims. WPPC request that the plan either be withdrawn or found unsound.

APPENDICES

**APPENDIX 1: HYDROCK TECHNICAL NOTE
SITE BACKGROUND**

**APPENDIX 2: HYDROCK PARLEY CROSS
NETWORK BASIC RESULTS**

**APPENDIX 3: HYDROCK PARLEY CROSS
EXISTING LAYOUT BASIC
RESULTS**

APPENDIX 1

HYDROCK TECHNICAL NOTE SITE BACKGROUND

Technical Note

Project: **West Parley** Ref: **C13196**

Subject: **Transportation Technical Review**

Prepared: **Eliot King** Date: **18 April 2013**

Approved: **James McKechnie** Date: **30 April 2013**

Revision: **A** Date: **30 April 2013**

1.0 Overview

1.1.1 This Technical note provides a summary of Hydrock's review of a number of key background and policy documents relating to Parley Cross, as identified within Tetlow King's Highway Brief document.

2.0 Issues

2.1.1 West Parley Parish Council highlight the following issues with the current planning documents:

- FWP6 and FWP7 do not take account of Airport expansion or Airport Business Park expansion;
- Additional traffic through Parley Cross junction not taken account of in East Dorset District Council (EDDC) plans / background studies include:
 - traffic associated with the Bournemouth Sewage Works application
 - traffic associated with potential new mineral sites to be decided in 2013/2014
 - possible new waste plans proposed in Core Strategy
 - expansion plans for ECO sustainable solutions waste plant on Chapel Lane outside West Parley.

3.0 Local Policy

3.1 East Dorset Housing Options Masterplan Report – Transport Chapter

3.1.1 Notwithstanding its reference to Planning Policy Guidance / Statement (PPG and PPS) documents which have subsequently been withdrawn as a consequence of the National Planning Policy Framework (NPPF), the above document identifies that the LTP suggests that the B3073/A347 Parley Cross junction may be affected as a result of additional development in the vicinity (pp.130).

3.1.2 It goes on to state that a number of other junctions along the A347/A3060 corridor to the south east of West Parley may also be affected.

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- 3.1.3 The evidence base supporting the document is, in places, now out-of-date. For example, reliance is made upon 2001 Census Travel to Work data, in order to inform the likely number and distribution of peak hour vehicle trips – this is now superseded by 2011 Census data.
- 3.1.4 Funding streams for Bournemouth Airport Access and Parley to Cooper Deane route improvements are identified (pp.130) as being “unclear at present”.
- 3.1.5 A gyratory scheme is identified for Parley Cross which it is stated is being prepared by consultants PBA on behalf of Manchester Airport Group and due to report shortly after the time of publication however it states that the design was not fully tested. The document goes on to state that DCC favours a transport solution for the junction that is, “integrated with and to some degree led by the development proposals on this location,” and must increase capacity and improve opportunities for pedestrian and cycle movements (pp.132).
- 3.1.6 Parley Cross is identified to be operating at capacity at the time of the report’s preparation with modelling carried out for the Sub-Regional Study indicating that this will worsen by 2016 (pp.152).
- 3.1.7 It is noted that South East Dorset Multi Modal Transport Study (SEDMMTS) modelling was not complete or available to inform the master planning (pp.160).
- 3.1.8 The document states that development in the vicinity of Ferndown and West Parley will be subject to the findings of SEDMMTS and the potential to address the existing capacity issues in this area (pp.162). However, it is unclear whether or how this further iteration of work has been undertaken.

3.2 Parley Cross Potential Improvements Summary (WSP, July 2012)

- 3.2.1 The document states that the draft Core Strategy has been subject to public consultation although the adoption of policies FWP5, FWP6 and FWP7 are yet to be resolved.
- 3.2.2 WSP identifies issues of provision for pedestrians and cyclists, and also of potential community severance, as problems with either implementing a gyratory arrangement or maintaining the status quo. WSP seek to address these issues in its report / proposed design.
- 3.2.3 A June 2011 corridor study of the B3073 was conducted by consultants Buro Happold, to assess the potential traffic impacts of future Bournemouth Airport Aviation Business Park on Parley Cross. The report concluded that the anticipated traffic generated by a residential development to the south east of Parley Cross could be accommodated in the 2020 AM and PM peak periods based upon the provision of a link road through the site. It is noted that the age of this report, and its consequent 2020 ‘future year’ do not align well with the wider Development Plan – in short, a later ‘future year’ scenario needs to be assessed for consistency.
- 3.2.4 However, the WSP study used the Linsig model established by Buro Happold for the B3073 Corridor Study as the basis of their modelling work. This included trip generation of the east and west residential

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development sites and the assumed layouts of the Parley Cross junction and those on Christchurch Road and New Road at each end of the eastern link road.

- 3.2.5 The Buro Happold baseline data was amended to account for the traffic generation of 42,000m² of employment development at the airport. Trip generation of the proposed 3,000m² food store on the east site was included within the analysis using TRICS data and assuming 30% pass-by trips from the existing network, which is towards the upper limit of usual assumptions in this regard and could lead to the under-estimation of supermarket traffic.
- 3.2.6 The Buro Happold Linsig model was amended to account for an error in the junction operation and amendments to the saturation ('sat') flows were made in consultation with Dorset County Council to use the Department for Transport guidance document RR67 as a point of reference. We note that authorities in the region commonly argue that RR67 sat flows should not be used in traffic models, as they may over-estimate capacity due to local driver behaviour – whether that is the case here would need to be established through traffic surveys.
- 3.2.7 Paragraph 1.2.9 of WSP's report states that the Parley Cross junction was modelled separately in order to avoid concerns about the routeing of vehicles associated with the network model. It is possible within Linsig to model a network and specify route assignment and routes not to be used rendering this exercise unnecessary. It is possible that the need to 'force' traffic to take certain routes within the model is indicative either of a wider modelling issue, or indeed a junction layout which does not encourage the use of the most appropriate routes.
- 3.2.8 Table 2 setting out the revised junction layout resulting from the modelling exercise only includes an ahead movement on New Road (S), this does not consider traffic generated by the residential dwellings served from New Road being able to turn left or right at the Parley Cross junction. The modelling needs to be interrogated to see whether any allowance has been made for this movement. If not, it would necessitate residents making a lengthy diversion to travel east or west on the B3037.
- 3.2.9 Paragraph 1.2.20 of the WSP report states that the combined network model does not contain the same layout for the Parley Cross junction as that contained within the preferred Scenario 5 layout that was tested independently. This also reflects our comment at 3.2.8 above.
- 3.2.10 Paragraph 1.2.21 states that the interaction of traffic flows and the potential impacts of platooning traffic are considered to be low given the distance of the auxiliary junction from Parley Cross. Hydrock considers that, at an approximate separation of 220 metres, there is potential for interaction between Parley Cross and the New Road junction serving the development to the east. A Linsig model including the full network of junctions would enable a full assessment of the effects of any platooning to be understood. To separate-out the junctions in such a localised area is likely to give a false picture of their actual operation – it may be the case that more sophisticated modelling techniques are required, if WSP's models are not suitable for the task (e.g. Paramics / VISSIM micro-simulation models, although these tend to be costly).

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- 3.2.11 The results set out for the auxiliary junctions indicate negative PRC values for the junction to the east of Parley Cross and the junction south of Parley Cross. In short, these junctions do not operate within capacity in the modelled future year. WSP state that they considered that the small changes required to achieve positive PRC values could be achieved through detailed design and modelling for each site – this is not an appropriate approach, as we believe that the fundamental correctness of the designs should be established at an early stage. It is not appropriate to attempt to ‘design out’ such matters once approvals in principle have been given to the designs, and this is a key risk as a result.
- 3.2.12 WSP also state that the installation of MOVA reduces delays by an average of 13%. Whilst they accept that this is an average figure, it may of course be the case that far lower levels of improvement are actually achievable at this location.
- 3.2.13 WSP’s conclusion states that, “it is considered likely that the network as a whole would operate within reasonable performance criteria,” (pp.7). Hydrock does not believe that there is sufficient evidence available to support this conclusion.
- 3.2.14 As previously noted, the modelling undertaken by WSP for the purposes of the report is based upon base data for 2020 derived from the Buro Happold Corridor Study; however, the report of this study does not appear to be readily available.

3.3 EDDC 2012 SHLAA

- 3.3.1 The EDDC 2012 SHLAA states in relation to Core Strategy Policy FWP6 – Land East of New Road proposed for 320 dwellings (SHLAA ref: 3/24/0104) that a planning application is likely following adoption of the Core Strategy and that SANG negotiations are complete.
- 3.3.2 In relation to Core Strategy Policy FWP7 – Land West of New Road proposed for 200 dwellings (SHLAA ref: 3/24/0103, 3/24/0325, 3/24/0328) the SHLAA does not provide a timescale.
- 3.3.3 The SHLAA states that master planning work on the possible new neighbourhoods began in 2010 and was undertaken by Broadway Malyan.
- 3.3.4 The 2008 EDDC SHLAA provides further details regarding the sites; however, with the exception of references to access constraints, no Highway Authority comments are provided.

4.0 Summary

- 4.1.1 DCC favours a transport solution for the junction that is integrated with development proposals in the location.
- 4.1.2 In addition to the WSP report, a previous corridor study of the B3073 has been undertaken by Buro Happold in the context of the airport business park expansion on behalf of DCC. The data from Buro Happold report and the Linsig model have formed the basis of the WSP report however, the Buro Happold report does not appear to be readily available.

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- 4.1.3 Having reviewed the documents referred to above, it is our view that the work suffers as a consequence of its age / its basis on earlier work. This leads to the use of 'future years' for assessment which are not now consistent with the wider Development Plan.
- 4.1.4 Furthermore, we have identified in-principle concerns with the modelling work undertaken by WSP and would recommend that the models (or at least the available technical outputs from those models) are examined in-depth in order to identify precisely what the detail problems within them are likely to be.

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APPENDIX 2

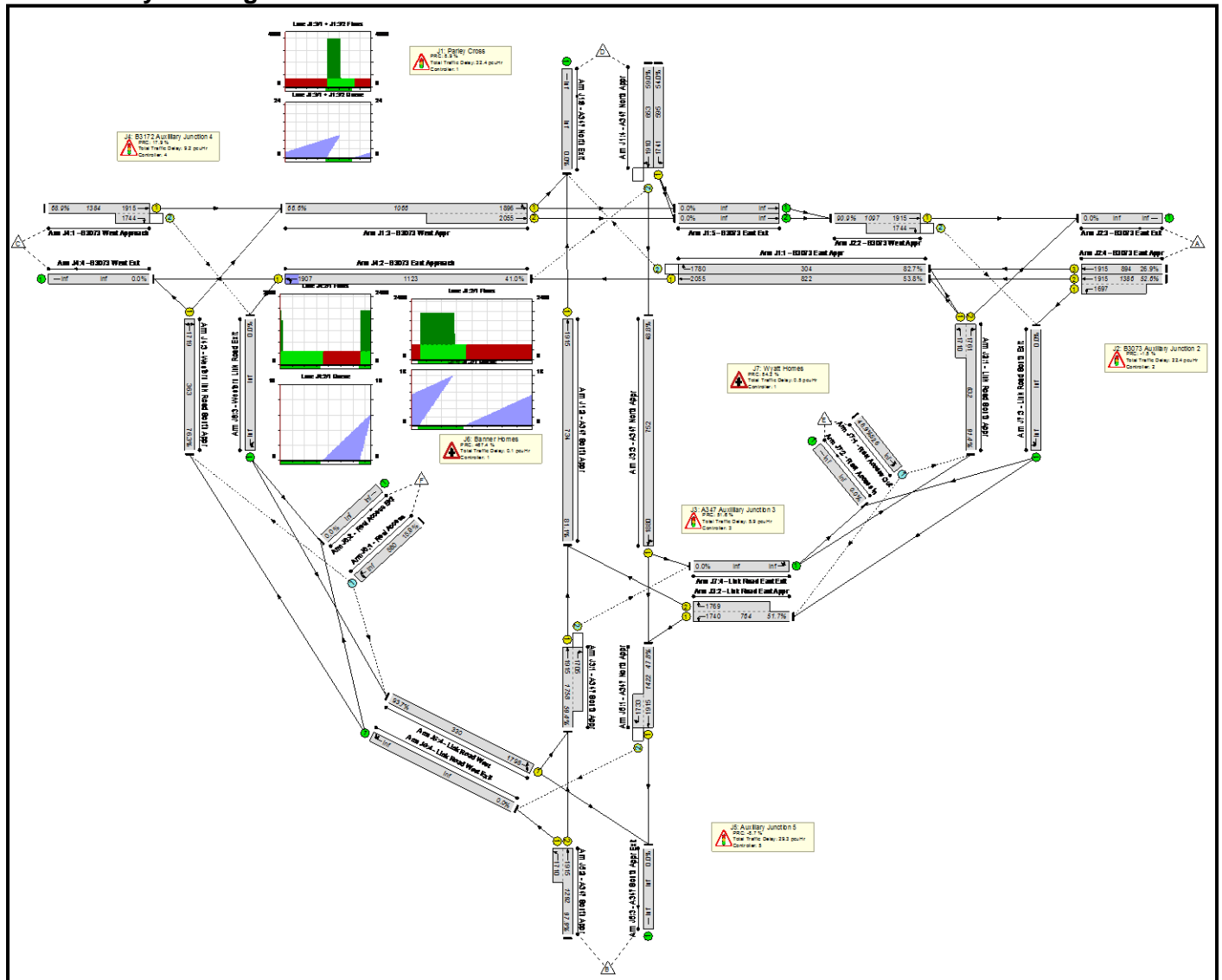
HYDROCK PARLEY CROSS NETWORK BASIC RESULTS

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	13-08-14 Parley Cross Network Linsig.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 1: '2020 AM' (FG1: '2020 AM Peak Base + Development', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	97.9%	992	429	26	99.8	-	-
J1: Parley Cross	-	-	-		-	-	-	-	-	-	82.7%	128	133	7	32.4	-	-
1/1	B3073 East Appr Ahead	U	C1:A		1	47	-	442	2055	822	53.8%	-	-	-	4.0	32.2	11.8
1/2	B3073 East Appr Right	O	C1:A	C1:H	1	47	6	251	1780	304	82.7%	110	133	7	5.5	78.8	10.2
2/1	A347 South Appr Ahead	U	C1:B		1	45	-	595	1915	734	81.1%	-	-	-	7.5	45.7	19.8
3/1+3/2	B3073 West Appr Ahead Left	U	C1:C		1	37	-	710	1896:2055	1066	66.6%	-	-	-	7.7	39.2	11.1
4/1	A347 North Appr Left	U	C1:D		1	40	-	321	1741	595	54.0%	-	-	-	3.4	38.4	9.1
4/2	A347 North Appr Ahead Right	O	C1:D		1	40	-	385	1910	653	59.0%	18	0	0	4.3	40.0	11.2
J2: B3073 Auxillary Junction 2	-	-	-		-	-	-	-	-	-	91.4%	36	4	1	22.4	-	-
1/2+1/1	Link Road South Appr Left Right	U	C2:C		1	30	-	577	1761:1710	632	91.4%	-	-	-	8.1	50.4	17.5
2/1+2/2	B3073 West Appr Ahead Right	U+O	C2:A	C2:D	1	50	4	997	1915:1744	1097	90.9%	36	4	1	9.4	33.8	26.4
4/2+4/1	B3073 East Appr Ahead Left	U	C2:B	C2:G	1	41	0	729	1915:1697	1386	52.6%	-	-	-	3.8	18.8	7.2
4/3	B3073 East Appr Ahead	U	C2:B		1	41	-	240	1915	894	26.9%	-	-	-	1.2	17.4	3.8
J3: A347 Auxillary Junction 3	-	-	-		-	-	-	-	-	-	59.4%	214	269	11	5.9	-	-

Basic Results Summary

1/1+1/2	A347 South Appr Ahead Right	U+O	C3:A	C3:E	1	70	19	1044	1915:1705	1758	59.4%	214	269	11	2.2	7.7	6.4
2/1+2/2	Link Road East Appr Right Left	U	C3:D C3:C		2:1	33:9	-	395	1740:1769	764	51.7%	-	-	-	2.0	18.1	5.6
3/1	A347 North Appr Ahead Left	U	C3:B		2	34	-	367	1880	752	48.8%	-	-	-	1.6	16.1	5.1
J4: B3172 Auxilliary Junction 4	-	-	-		-	-	-	-	-	-	76.3%	264	23	7	9.2	-	-
1/1+1/2	B3073 West Approach Ahead Right	U+O	C4:A	C4:D	1	61	4	953	1915:1744	1384	68.9%	264	23	7	3.4	12.9	11.3
2/1	B3073 East Approach Ahead Left	U	C4:B		1	52	-	460	1907	1123	41.0%	-	-	-	1.6	12.7	6.5
3/1	Western link Road South Appr Right Left	U	C4:C		1	18	-	277	1719	363	76.3%	-	-	-	4.1	53.6	8.0
J5: Auxiliary Junction 5	-	-	-		-	-	-	-	-	-	97.9%	1	0	0	29.3	-	-
1/1+1/2	A347 North Appr Ahead Right	U+O	C5:A	C5:D	1	88	4	680	1915:1733	1422	47.8%	1	0	0	1.6	8.7	9.5
2/2+2/1	A347 South Appr Ahead Left	U	C5:B		1	79	-	1264	1915:1710	1292	97.9%	-	-	-	18.5	52.7	51.1
4/1	Link Road West Left Right	U	C5:C		1	21	-	309	1798	330	93.7%	-	-	-	9.2	107.0	15.2
J6: Banner Homes	-	-	-		-	-	-	-	-	-	15.9%	92	0	0	0.1	-	-
1/1	Resi Access Right Left	O	-		-	-	-	92	Inf	580	15.9%	92	0	0	0.1	3.7	0.1
J7: Wyatt Homes	-	-	-		-	-	-	-	-	-	48.9%	257	0	0	0.5	-	-
1/1	Resi Access Out U-Turn Right	O	-		-	-	-	257	Inf	526	48.9%	257	0	0	0.5	6.7	0.5

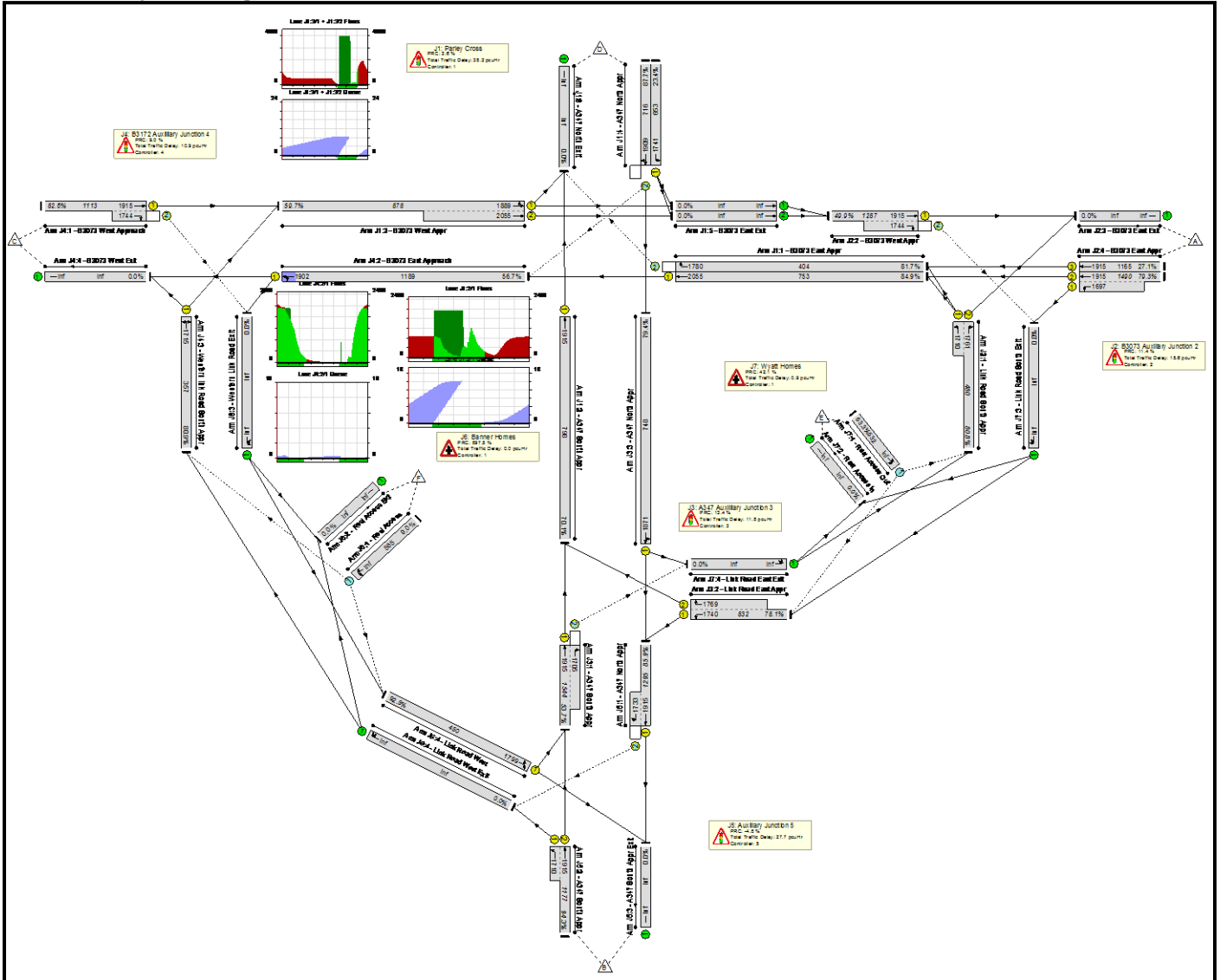
Basic Results Summary

C1	PRC for Signalled Lanes (%):	8.9	Total Delay for Signalled Lanes (pcuHr):	32.44	Cycle Time (s):	120
C2	PRC for Signalled Lanes (%):	-1.5	Total Delay for Signalled Lanes (pcuHr):	22.41	Cycle Time (s):	90
C3	PRC for Signalled Lanes (%):	51.6	Total Delay for Signalled Lanes (pcuHr):	5.86	Cycle Time (s):	90
C4	PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	9.16	Cycle Time (s):	90
C5	PRC for Signalled Lanes (%):	-8.7	Total Delay for Signalled Lanes (pcuHr):	29.32	Cycle Time (s):	120
	PRC Over All Lanes (%):	-8.7	Total Delay Over All Lanes(pcuHr):	99.76		

Basic Results Summary

Scenario 2: '2020 PM' (FG2: '2020 PM Peak Base + Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	94.3%	892	678	20	105.1	-	-
J1: Parley Cross	-	-	-		-	-	-	-	-	-	87.7%	140	218	5	38.2	-	-
1/1	B3073 East Appr Ahead	U	C1:A		1	43	-	640	2055	753	84.9%	-	-	-	6.7	37.7	15.3
1/2	B3073 East Appr Right	O	C1:A	C1:H	1	43	13	330	1780	404	81.7%	106	218	5	5.2	57.0	12.5
2/1	A347 South Appr Ahead	U	C1:B		1	49	-	559	1915	798	70.1%	-	-	-	5.6	36.1	16.3
3/1+3/2	B3073 West Appr Ahead Left	U	C1:C		1	26	-	524	1889:2055	878	59.7%	-	-	-	9.9	67.9	9.2
4/1	A347 North Appr Left	U	C1:D		1	44	-	153	1741	653	23.4%	-	-	-	1.2	29.3	3.6
4/2	A347 North Appr Ahead Right	O	C1:D		1	44	-	628	1909	716	87.7%	34	0	0	9.5	54.4	22.7
J2: B3073 Auxillary Junction 2	-	-	-		-	-	-	-	-	-	80.8%	0	86	0	15.6	-	-
1/2+1/1	Link Road South Appr Left Right	U	C2:C		1	29	-	388	1761:1710	480	80.8%	-	-	-	5.5	50.8	11.9
2/1+2/2	B3073 West Appr Ahead Right	U+O	C2:A	C2:D	1	81	4	642	1915:1744	1287	49.9%	0	86	0	2.6	14.5	23.5
4/2+4/1	B3073 East Appr Ahead Left	U	C2:B	C2:G	1	72	0	1182	1915:1697	1490	79.3%	-	-	-	6.4	19.5	14.2
4/3	B3073 East Appr Ahead	U	C2:B		1	72	-	316	1915	1165	27.1%	-	-	-	1.2	13.1	5.1
J3: A347 Auxillary Junction 3	-	-	-		-	-	-	-	-	-	79.4%	41	279	8	11.8	-	-

Basic Results Summary

1/1+1/2	A347 South Appr Ahead Right	U+O	C3:A	C3:E	1	92	29	830	1915:1705	1544	53.7%	41	279	8	1.4	6.1	2.8
2/1+2/2	Link Road East Appr Right Left	U	C3:D C3:C		2:1	51:17	-	650	1740:1769	832	78.1%	-	-	-	7.3	40.7	18.1
3/1	A347 North Appr Ahead Left	U	C3:B		2	46	-	594	1871	748	79.4%	-	-	-	3.0	18.2	7.4
J4: B3172 Auxilliary Junction 4	-	-	-		-	-	-	-	-	-	82.6%	322	94	7	10.9	-	-
1/1+1/2	B3073 West Approach Ahead Right	U+O	C4:A	C4:D	1	85	6	919	1915:1744	1113	82.6%	322	94	7	5.4	21.2	10.6
2/1	B3073 East Approach Ahead Left	U	C4:B		1	74	-	674	1902	1189	56.7%	-	-	-	0.8	4.0	1.0
3/1	Western link Road South Appr Right Left	U	C4:C		1	24	-	289	1715	357	80.9%	-	-	-	4.7	59.0	11.1
J5: Auxiliary Junction 5	-	-	-		-	-	-	-	-	-	94.3%	2	0	0	27.7	-	-
1/1+1/2	A347 North Appr Ahead Right	U+O	C5:A	C5:D	1	80	4	1112	1915:1733	1295	85.9%	2	0	0	5.0	16.3	16.3
2/2+2/1	A347 South Appr Ahead Left	U	C5:B		1	71	-	1110	1915:1710	1177	94.3%	-	-	-	13.2	42.8	38.8
4/1	Link Road West Left Right	U	C5:C		1	29	-	416	1799	450	92.5%	-	-	-	9.5	82.2	18.4
J6: Banner Homes	-	-	-		-	-	-	-	-	-	9.0%	51	0	0	0.0	-	-
1/1	Resi Access Right Left	O	-		-	-	-	51	Inf	565	9.0%	51	0	0	0.0	3.5	0.0
J7: Wyatt Homes	-	-	-		-	-	-	-	-	-	63.3%	337	0	0	0.9	-	-
1/1	Resi Access Out U-Turn Right	O	-		-	-	-	337	Inf	532	63.3%	337	0	0	0.9	9.1	0.9

Basic Results Summary

C1	PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	38.17	Cycle Time (s):	120
C2	PRC for Signalled Lanes (%):	11.4	Total Delay for Signalled Lanes (pcuHr):	15.63	Cycle Time (s):	120
C3	PRC for Signalled Lanes (%):	13.4	Total Delay for Signalled Lanes (pcuHr):	11.76	Cycle Time (s):	120
C4	PRC for Signalled Lanes (%):	9.0	Total Delay for Signalled Lanes (pcuHr):	10.89	Cycle Time (s):	120
C5	PRC for Signalled Lanes (%):	-4.8	Total Delay for Signalled Lanes (pcuHr):	27.73	Cycle Time (s):	120
	PRC Over All Lanes (%):	-4.8	Total Delay Over All Lanes(pcuHr):	105.09		

APPENDIX 3

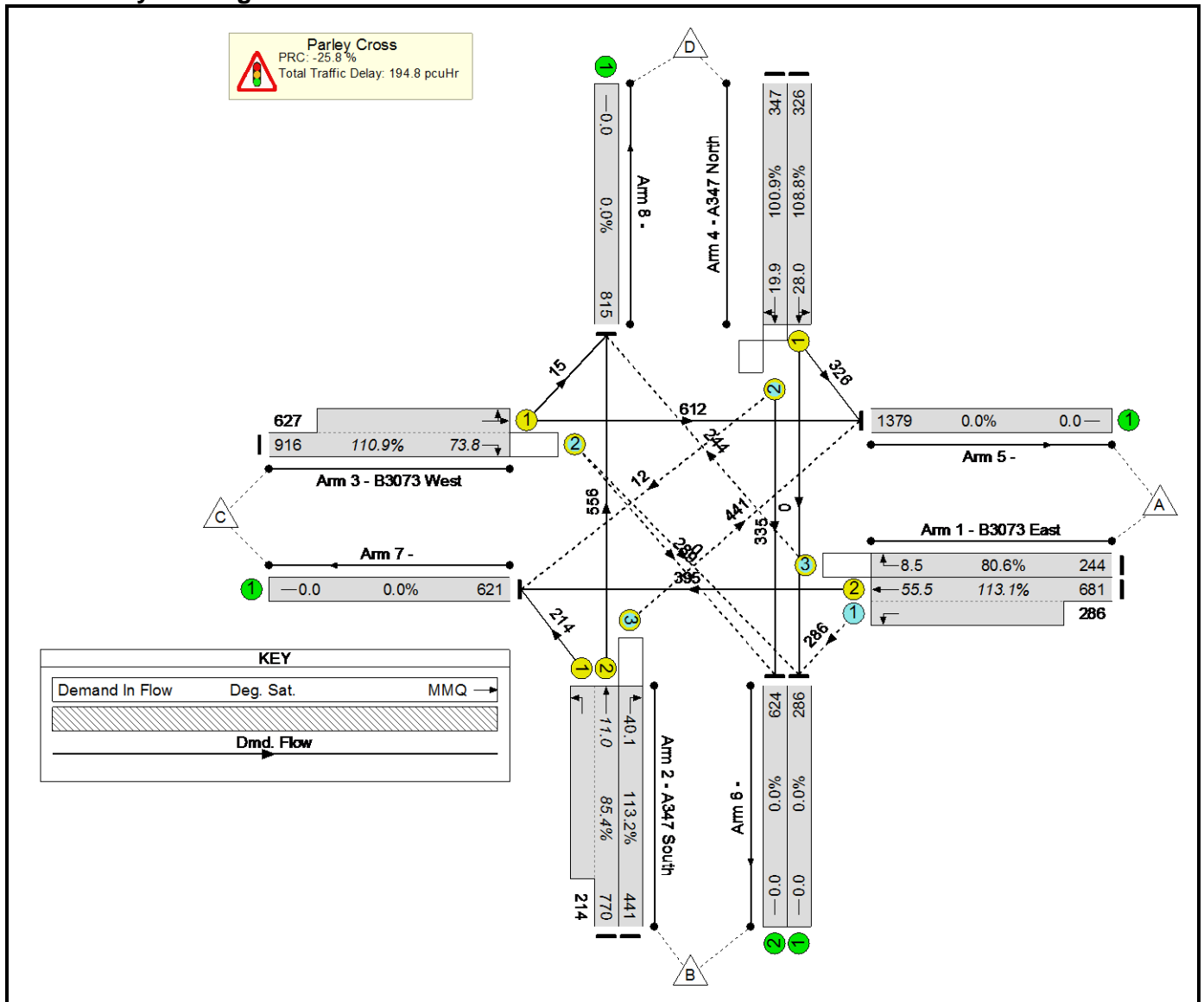
HYDROCK PARLEY CROSS EXISTING LAYOUT BASIC RESULTS

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	West Parley
Title:	Parley Cross Junction
Location:	West Parley, Dorset
File name:	13-08-15 Parley Cross Linsig Existing Layout.lsg3x
Author:	Eliot King
Company:	Hydrock Consultants
Address:	Over Court Barns, Over Lane, Almondsbury, BS32 4DF
Notes:	

Scenario 1: '2020 Base AM' (FG1: '2020 AM Peak Base', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

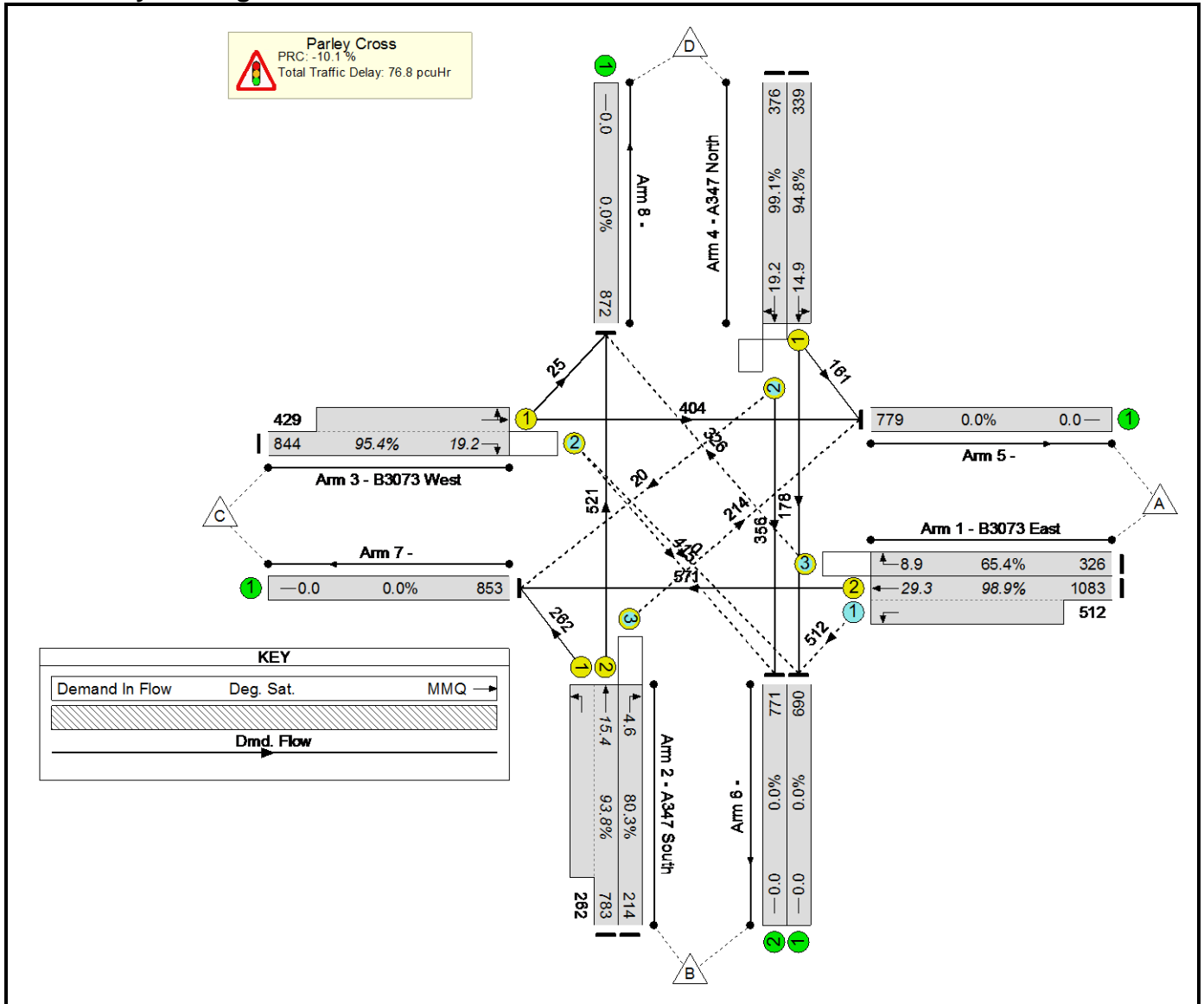
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	113.2%	148	875	169	194.8	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	113.2%	148	875	169	194.8	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	16	-	681	2055:1824	602	113.1%	137	149	0	49.5	261.5	55.5	
1/3	B3073 East Right	O	A	E	1	16	16	244	1780	303	80.6%	0	237	7	4.7	68.7	8.5	
2/2+2/1	A347 South Left Ahead	U	B	G	2	32:71	39	770	1915:1730	902	85.4%	-	-	-	5.5	25.7	11.0	
2/3	A347 South Right	O	B	F	2	32	32	441	1760	390	113.2%	0	229	161	35.4	289.3	40.1	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	29	29	916	1787:1909	826	110.9%	0	261	0	62.4	245.3	73.8	
4/1	A347 North Left Ahead	U	D		1	17	-	326	1665	300	108.8%	-	-	-	23.0	253.6	28.0	
4/2	A347 North Ahead Right	O	D		1	17	-	347	1910	344	100.9%	11	0	1	14.3	148.5	19.9	
C1					PRC for Signalled Lanes (%):		-25.8		Total Delay for Signalled Lanes (pcuHr):			194.76		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-25.8		Total Delay Over All Lanes(pcuHr):			194.76						

Basic Results Summary

Scenario 2: '2020 Base PM' (FG2: '2020 PM Peak Base', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

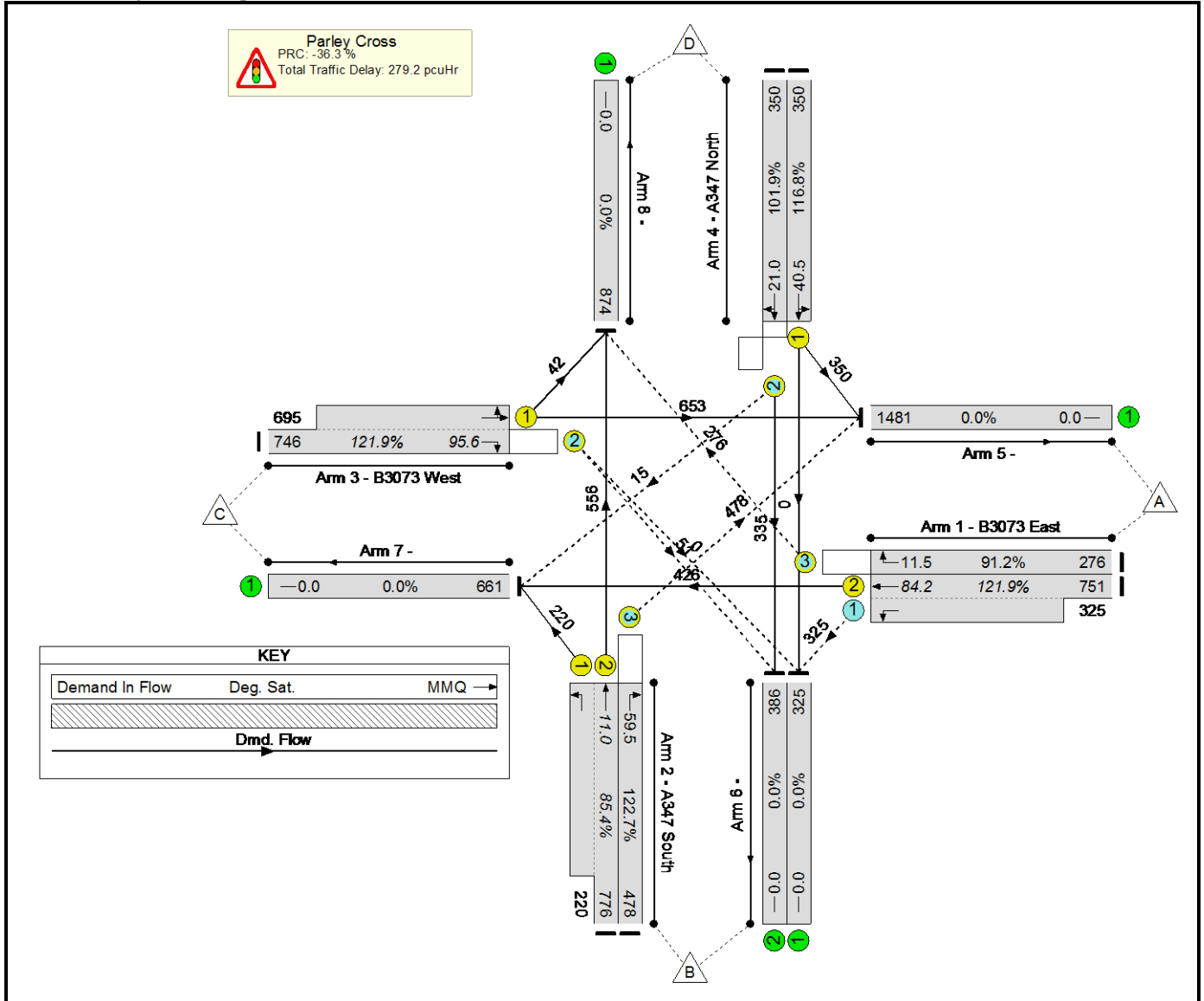
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	99.1%	138	1183	165	76.8	-	-
Parley Cross	-	-	-		-	-	-	-	-	-	99.1%	138	1183	165	76.8	-	-
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	27	-	1083	2055:1824	1095	98.9%	120	392	0	20.7	68.9	29.3
1/3	B3073 East Right	O	A	E	1	27	27	326	1780	498	65.4%	0	316	10	3.8	42.1	8.9
2/2+2/1	A347 South Left Ahead	U	B	G	2	27:60	33	783	1915:1730	835	93.8%	-	-	-	9.9	45.6	15.4
2/3	A347 South Right	O	B	F	2	27	27	214	1760	266	80.3%	0	100	114	3.5	59.5	4.6
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	23	23	844	1787:1901	885	95.4%	0	375	40	16.3	69.5	19.2
4/1	A347 North Left Ahead	U	D		1	19	-	339	1788	358	94.8%	-	-	-	9.4	99.6	14.9
4/2	A347 North Ahead Right	O	D		1	19	-	376	1908	380	99.1%	19	0	1	13.1	125.2	19.2
C1				PRC for Signalled Lanes (%):		-10.1		Total Delay for Signalled Lanes (pcuHr):				76.76		Cycle Time (s): 100			
				PRC Over All Lanes (%):		-10.1		Total Delay Over All Lanes(pcuHr):				76.76					

Basic Results Summary

Scenario 3: '2020 AM Peak Base + 50% Dev North' (FG3: '2020 AM Peak Base + 50% Dev Exiting North', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

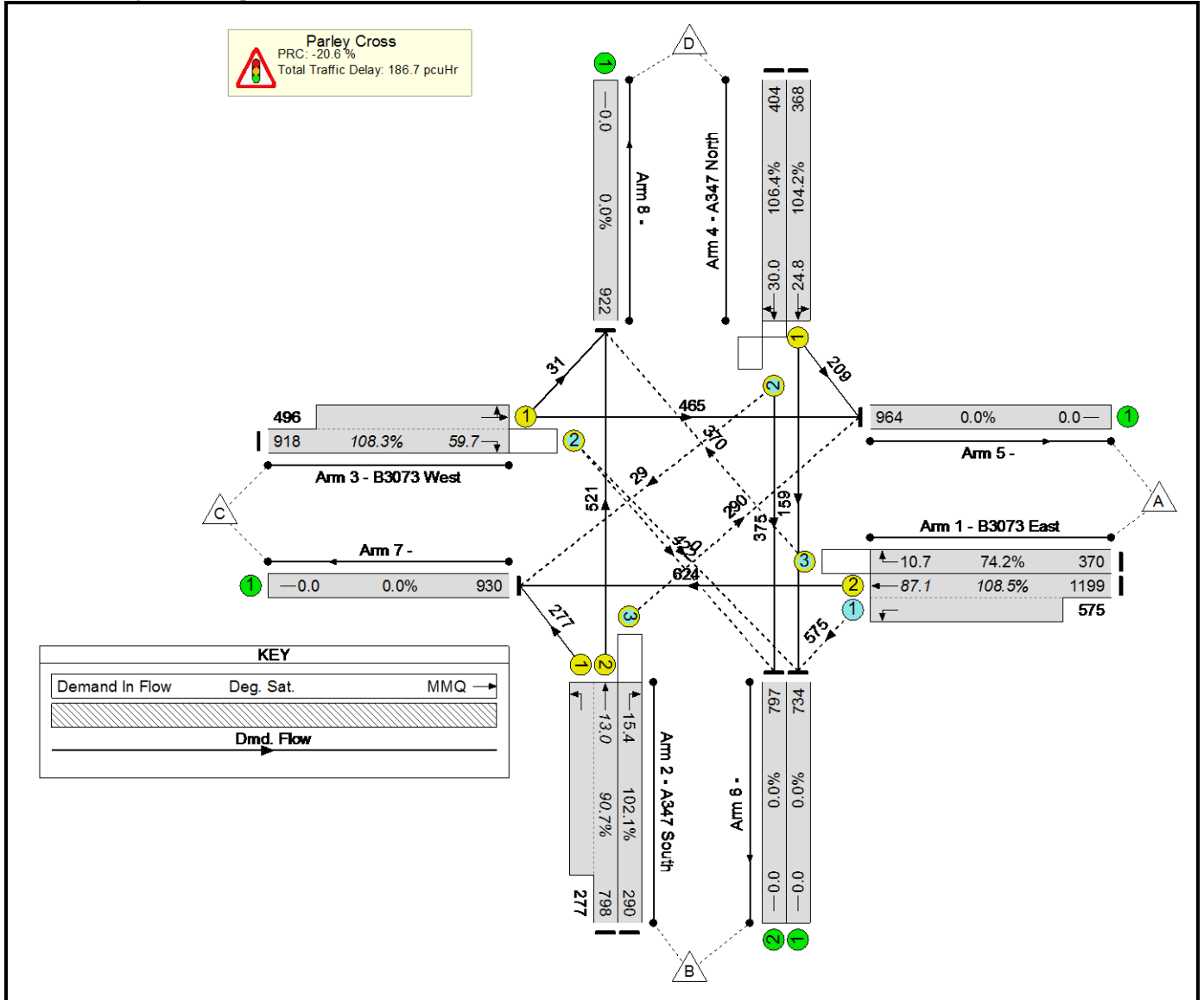
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	122.7%	168	690	189	279.2	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	122.7%	168	690	189	279.2	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	16	-	751	2055:1824	616	121.9%	154	171	0	77.9	373.4	84.2	
1/3	B3073 East Right	O	A	E	1	16	16	276	1780	303	91.2%	0	249	27	7.1	92.8	11.5	
2/2+2/1	A347 South Left Ahead	U	B	G	2	32:71	39	776	1915:1730	909	85.4%	-	-	-	5.5	25.5	11.0	
2/3	A347 South Right	O	B	F	2	32	32	478	1760	390	122.7%	0	229	161	54.7	412.2	59.5	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	29	29	746	1787:1901	612	121.9%	0	42	0	83.4	402.3	95.6	
4/1	A347 North Left Ahead	U	D		1	17	-	350	1665	300	116.8%	-	-	-	35.1	361.2	40.5	
4/2	A347 North Ahead Right	O	D		1	17	-	350	1909	344	101.9%	13	0	2	15.5	159.2	21.0	
C1					PRC for Signalled Lanes (%):		-36.3		Total Delay for Signalled Lanes (pcuHr):			279.22		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-36.3		Total Delay Over All Lanes(pcuHr):			279.22						

Basic Results Summary

Scenario 4: '2020 PM Peak Base + 50% Dev North' (FG4: '2020 PM Peak Base + 50% Dev Exiting North', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

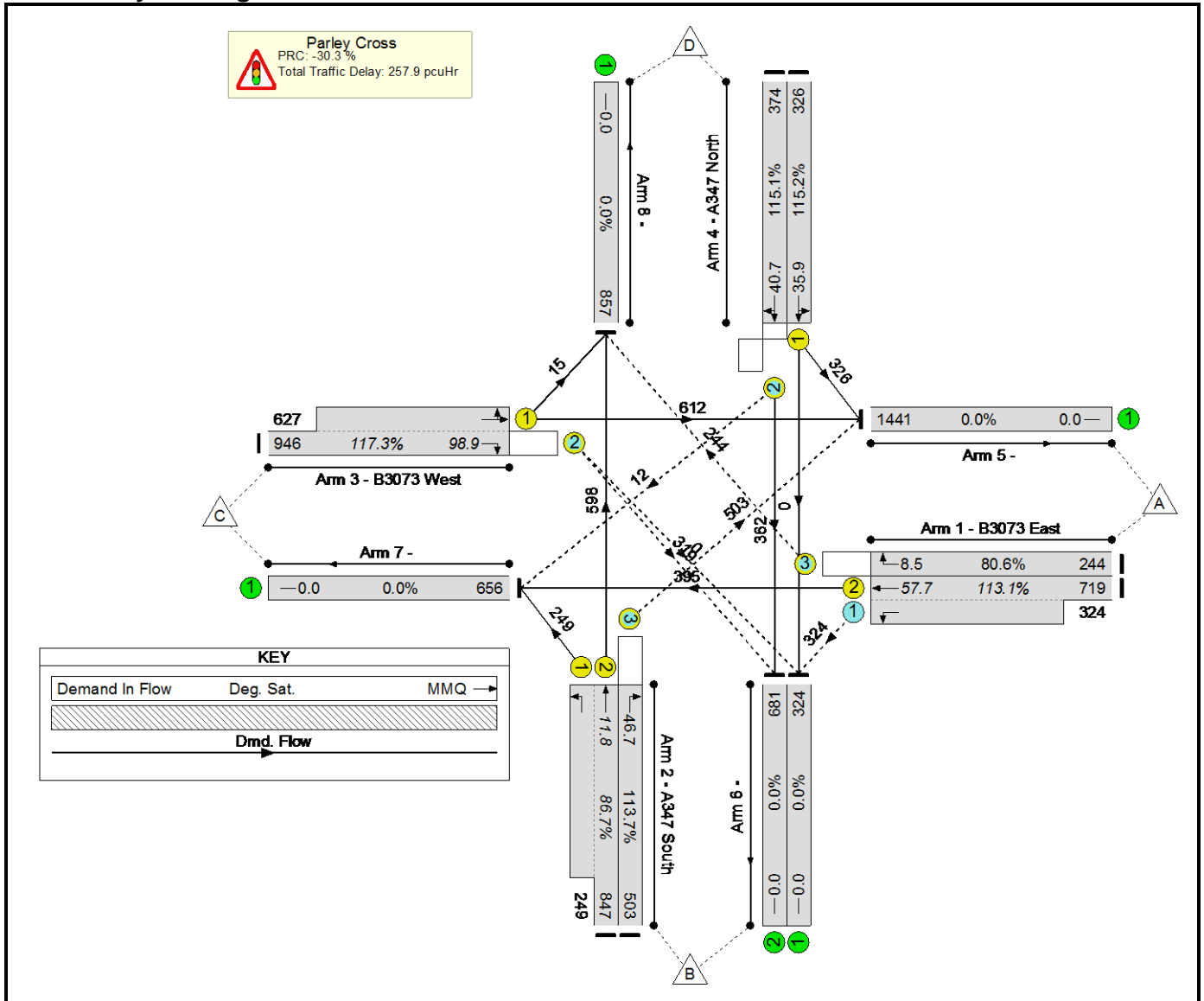
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	108.5%	147	1247	228	186.7	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	108.5%	147	1247	228	186.7	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	27	-	1199	2055:1824	1105	108.5%	122	408	0	64.4	193.2	87.1	
1/3	B3073 East Right	O	A	E	1	27	27	370	1780	498	74.2%	0	359	11	4.8	46.4	10.7	
2/2+2/1	A347 South Left Ahead	U	B	G	2	28:60	32	798	1915:1730	880	90.7%	-	-	-	7.9	35.6	13.0	
2/3	A347 South Right	O	B	F	2	28	28	290	1760	284	102.1%	0	123	161	13.0	161.7	15.4	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	22	22	918	1787:1900	848	108.3%	0	357	54	54.0	211.8	59.7	
4/1	A347 North Left Ahead	U	D		1	19	-	368	1765	353	104.2%	-	-	-	19.0	185.9	24.8	
4/2	A347 North Ahead Right	O	D		1	19	-	404	1905	380	106.4%	25	0	3	23.7	211.2	30.0	
C1					PRC for Signalled Lanes (%):		-20.6		Total Delay for Signalled Lanes (pcuHr):			186.74		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-20.6		Total Delay Over All Lanes(pcuHr):			186.74						

Basic Results Summary

Scenario 5: '2020 AM Peak Base + 50% Dev South' (FG5: '2020 AM Peak Base + 50% Dev Exiting South', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

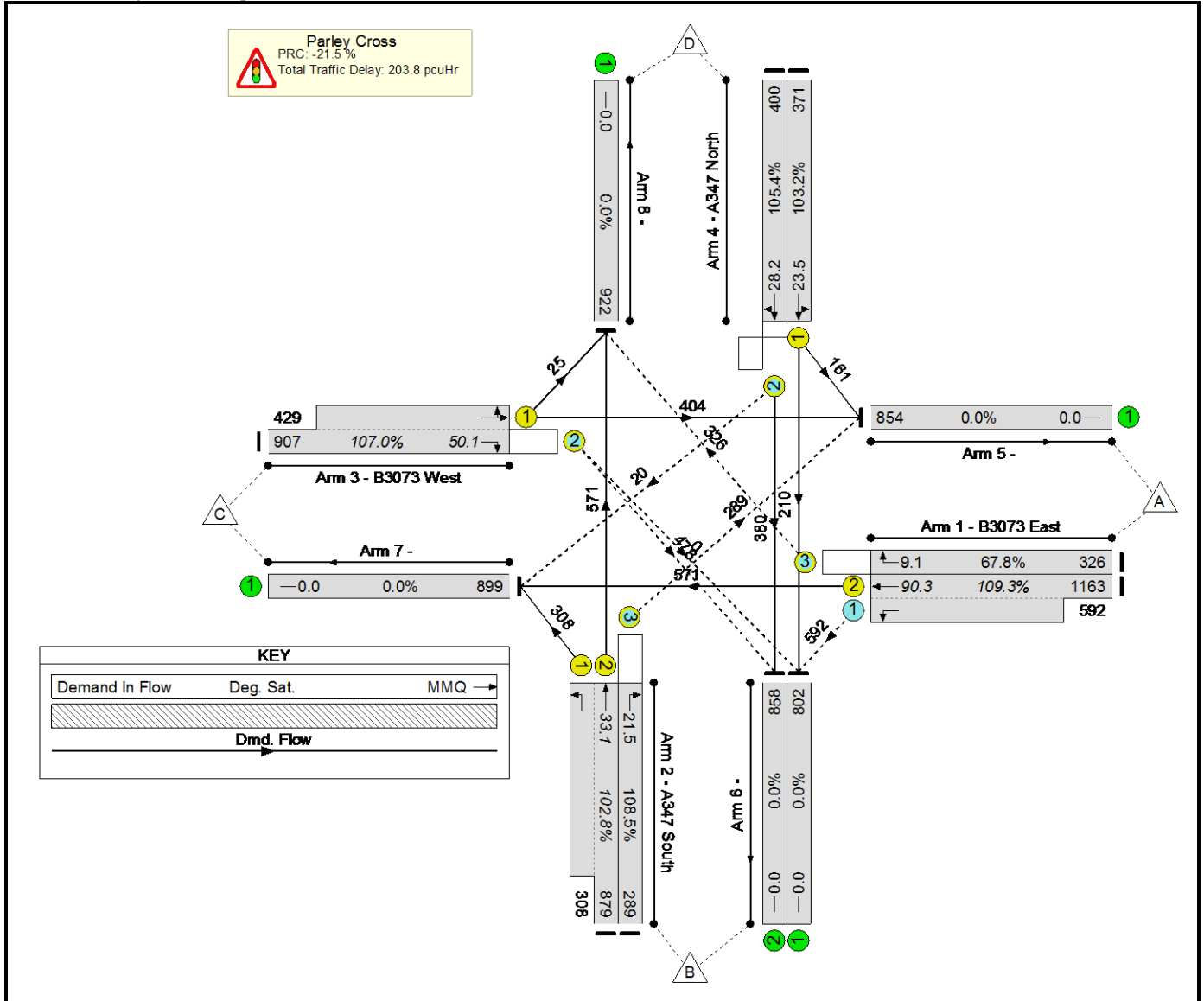
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	117.3%	153	970	169	257.9	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	117.3%	153	970	169	257.9	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	16	-	719	2055:1824	636	113.1%	144	180	0	51.7	258.8	57.7	
1/3	B3073 East Right	O	A	E	1	16	16	244	1780	303	80.6%	0	237	7	4.7	68.7	8.5	
2/2+2/1	A347 South Left Ahead	U	B	G	2	34:71	37	847	1915:1730	976	86.7%	-	-	-	6.0	25.3	11.8	
2/3	A347 South Right	O	B	F	2	34	34	503	1760	442	113.7%	0	282	161	40.9	292.8	46.7	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	27	27	946	1787:1909	806	117.3%	0	272	0	88.7	337.5	98.9	
4/1	A347 North Left Ahead	U	D		1	16	-	326	1665	283	115.2%	-	-	-	31.0	342.1	35.9	
4/2	A347 North Ahead Right	O	D		1	16	-	374	1911	325	115.1%	9	0	1	35.1	337.6	40.7	
C1					PRC for Signalled Lanes (%):		-30.3		Total Delay for Signalled Lanes (pcuHr):			257.94		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-30.3		Total Delay Over All Lanes(pcuHr):			257.94						

Basic Results Summary

Scenario 6: '2020 PM Peak Base + 50% Dev South' (FG6: '2020 PM Peak Base + 50% Dev Exiting South', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

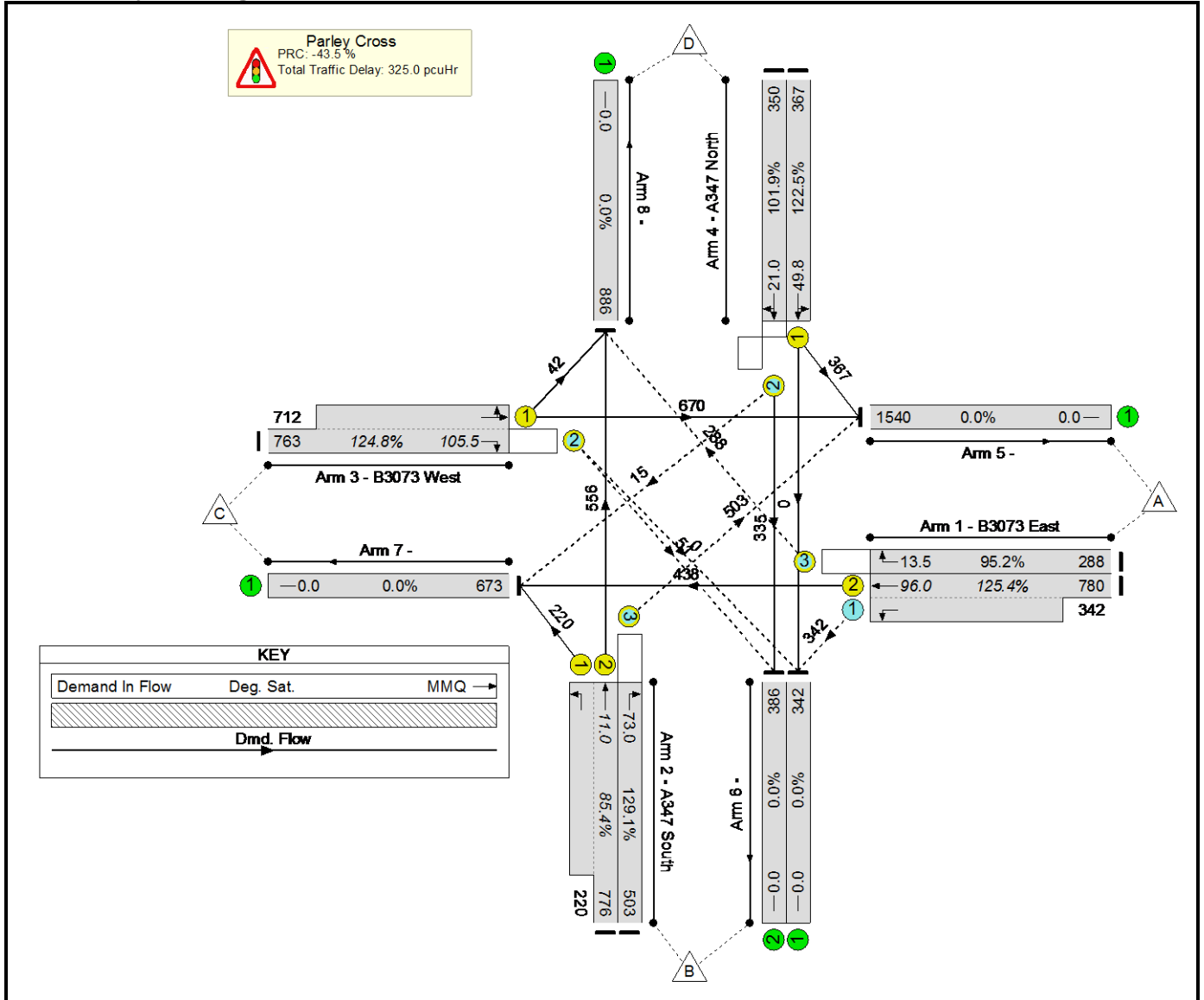
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	109.3%	133	1208	226	203.8	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	109.3%	133	1208	226	203.8	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	26	-	1163	2055:1824	1064	109.3%	115	393	0	66.8	206.8	90.3	
1/3	B3073 East Right	O	A	E	1	26	26	326	1780	481	67.8%	0	316	10	4.0	44.1	9.1	
2/2+2/1	A347 South Left Ahead	U	B	G	2	27:61	34	879	1915:1730	855	102.8%	-	-	-	27.1	110.9	33.1	
2/3	A347 South Right	O	B	F	2	27	27	289	1760	266	108.5%	0	106	161	19.5	242.3	21.5	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	24	24	907	1787:1901	848	107.0%	0	393	54	46.8	185.9	50.1	
4/1	A347 North Left Ahead	U	D		1	19	-	371	1798	360	103.2%	-	-	-	17.7	171.5	23.5	
4/2	A347 North Ahead Right	O	D		1	19	-	400	1908	380	105.4%	17	0	2	21.9	197.4	28.2	
C1					PRC for Signalled Lanes (%):		-21.5		Total Delay for Signalled Lanes (pcuHr):			203.78		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-21.5		Total Delay Over All Lanes(pcuHr):			203.78						

Basic Results Summary

Scenario 7: '2020 AM Peak Base + 50% Dev +FS North' (FG7: '2020 AM Peak + 50% Dev + Food store Exiting North', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

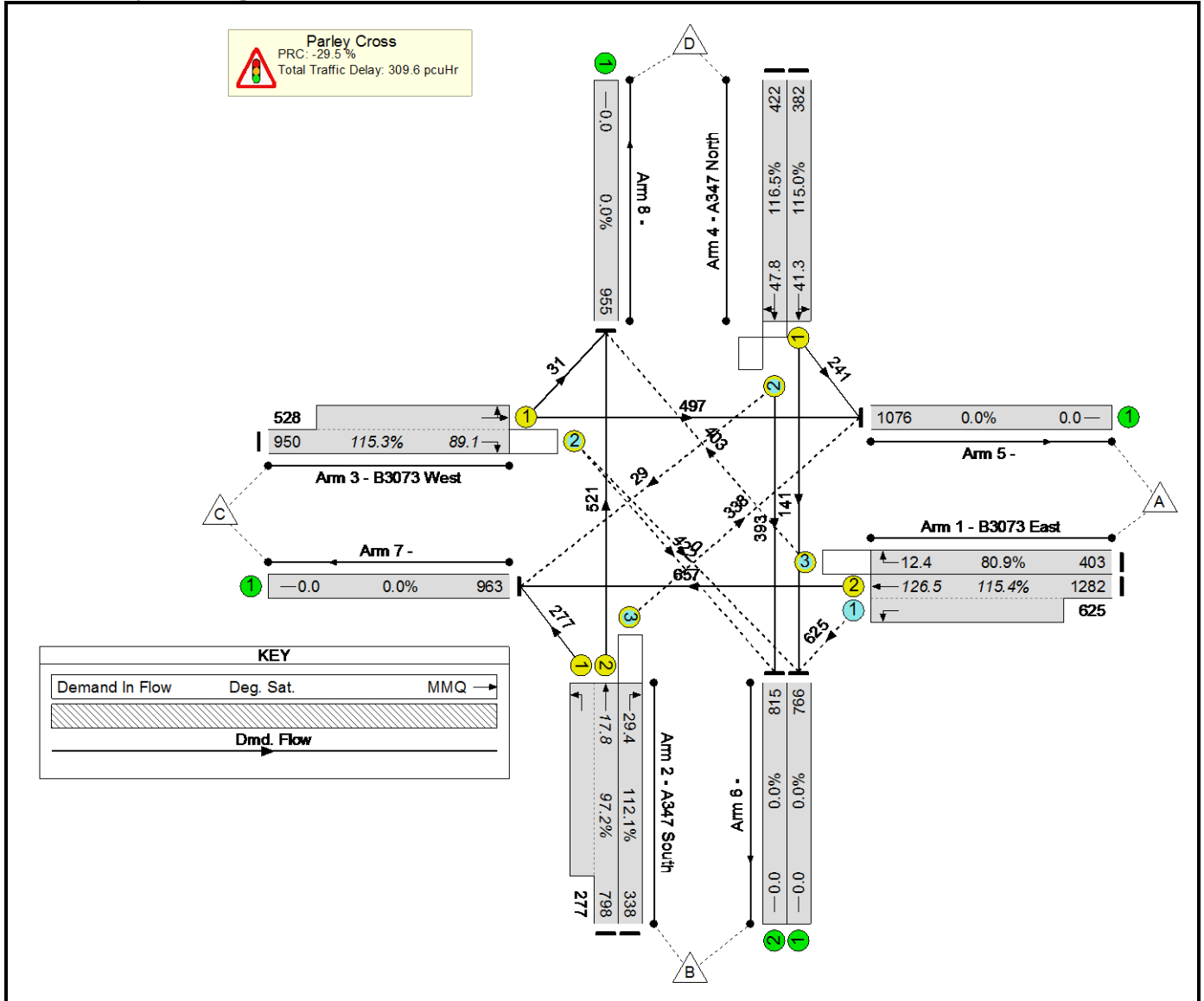
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	129.1%	173	701	201	325.0	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	129.1%	173	701	201	325.0	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	16	-	780	2055:1824	622	125.4%	160	182	0	89.6	413.4	96.0	
1/3	B3073 East Right	O	A	E	1	16	16	288	1780	303	95.2%	0	249	39	8.9	110.9	13.5	
2/2+2/1	A347 South Left Ahead	U	B	G	2	32:71	39	776	1915:1730	909	85.4%	-	-	-	5.5	25.5	11.0	
2/3	A347 South Right	O	B	F	2	32	32	503	1760	390	129.1%	0	229	161	68.2	487.8	73.0	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	29	29	763	1787:1901	611	124.8%	0	41	0	93.2	439.7	105.5	
4/1	A347 North Left Ahead	U	D		1	17	-	367	1665	300	122.5%	-	-	-	44.2	433.8	49.8	
4/2	A347 North Ahead Right	O	D		1	17	-	350	1909	344	101.9%	13	0	2	15.5	159.2	21.0	
C1					PRC for Signalled Lanes (%):		-43.5		Total Delay for Signalled Lanes (pcuHr):			324.99		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-43.5		Total Delay Over All Lanes(pcuHr):			324.99						

Basic Results Summary

Scenario 8: '2020 PM Peak Base + 50% Dev +FS North' (FG8: '2020 PM Peak + 50% Dev + Food store Exiting North', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

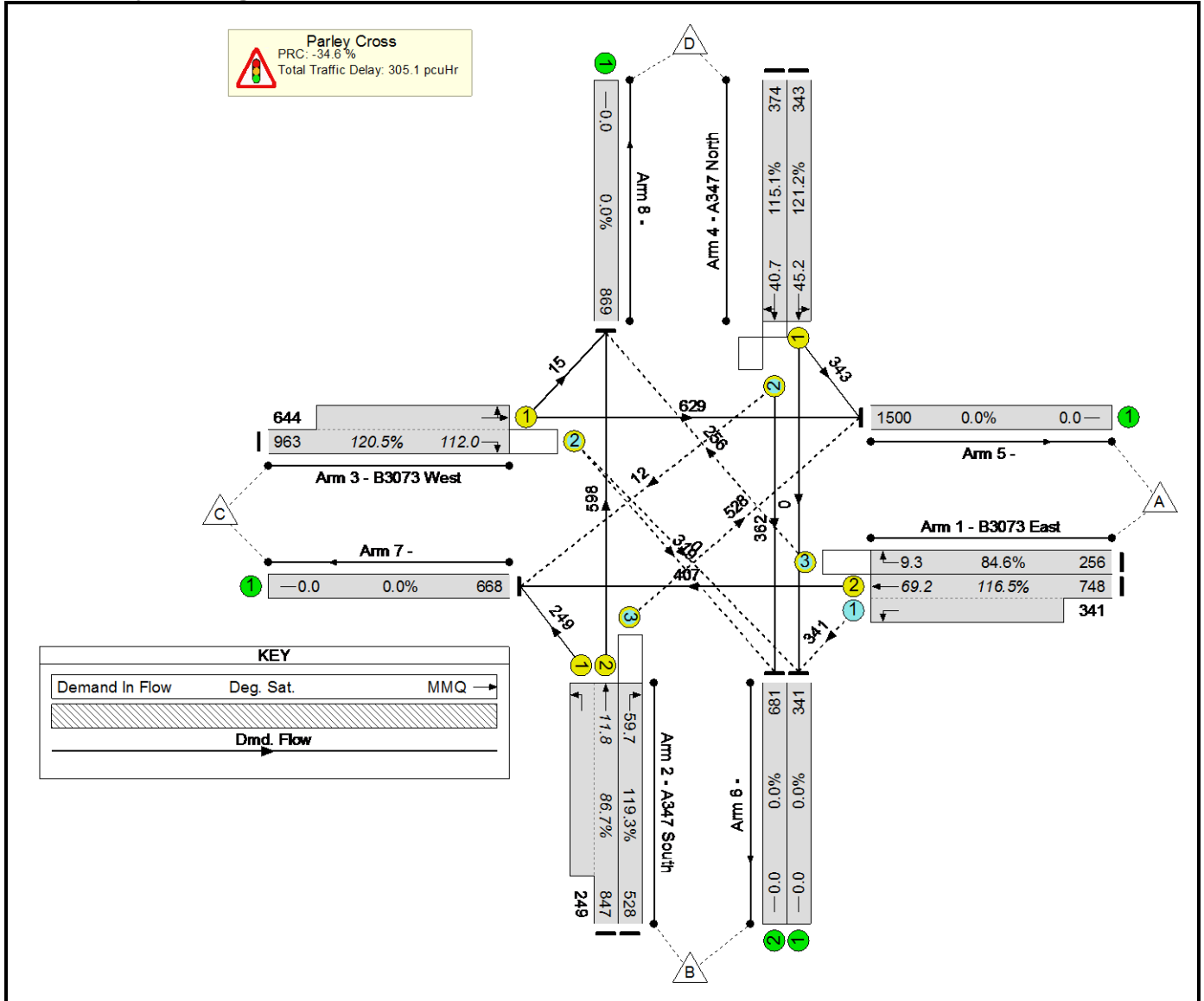
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	116.5%	145	1304	194	309.6	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	116.5%	145	1304	194	309.6	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	27	-	1282	2055:1824	1111	115.4%	120	415	0	104.5	293.4	126.5	
1/3	B3073 East Right	O	A	E	1	27	27	403	1780	498	80.9%	0	391	12	5.8	51.6	12.4	
2/2+2/1	A347 South Left Ahead	U	B	G	2	26:58	32	798	1915:1730	821	97.2%	-	-	-	13.0	58.8	17.8	
2/3	A347 South Right	O	B	F	2	26	26	338	1760	302	112.1%	0	141	161	26.8	285.5	29.4	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	22	22	950	1787:1901	824	115.3%	0	357	21	82.7	313.3	89.1	
4/1	A347 North Left Ahead	U	D		1	18	-	382	1749	332	115.0%	-	-	-	35.4	333.5	41.3	
4/2	A347 North Ahead Right	O	D		1	18	-	422	1906	362	116.5%	25	0	0	41.4	353.2	47.8	
C1					PRC for Signalled Lanes (%):		-29.5		Total Delay for Signalled Lanes (pcuHr):			309.55		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-29.5		Total Delay Over All Lanes(pcuHr):			309.55						

Basic Results Summary

Scenario 9: '2020 AM Peak Base + 50% Dev + FS South' (FG9: '2020 AM Peak + 50% Dev + Food store Exiting South', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

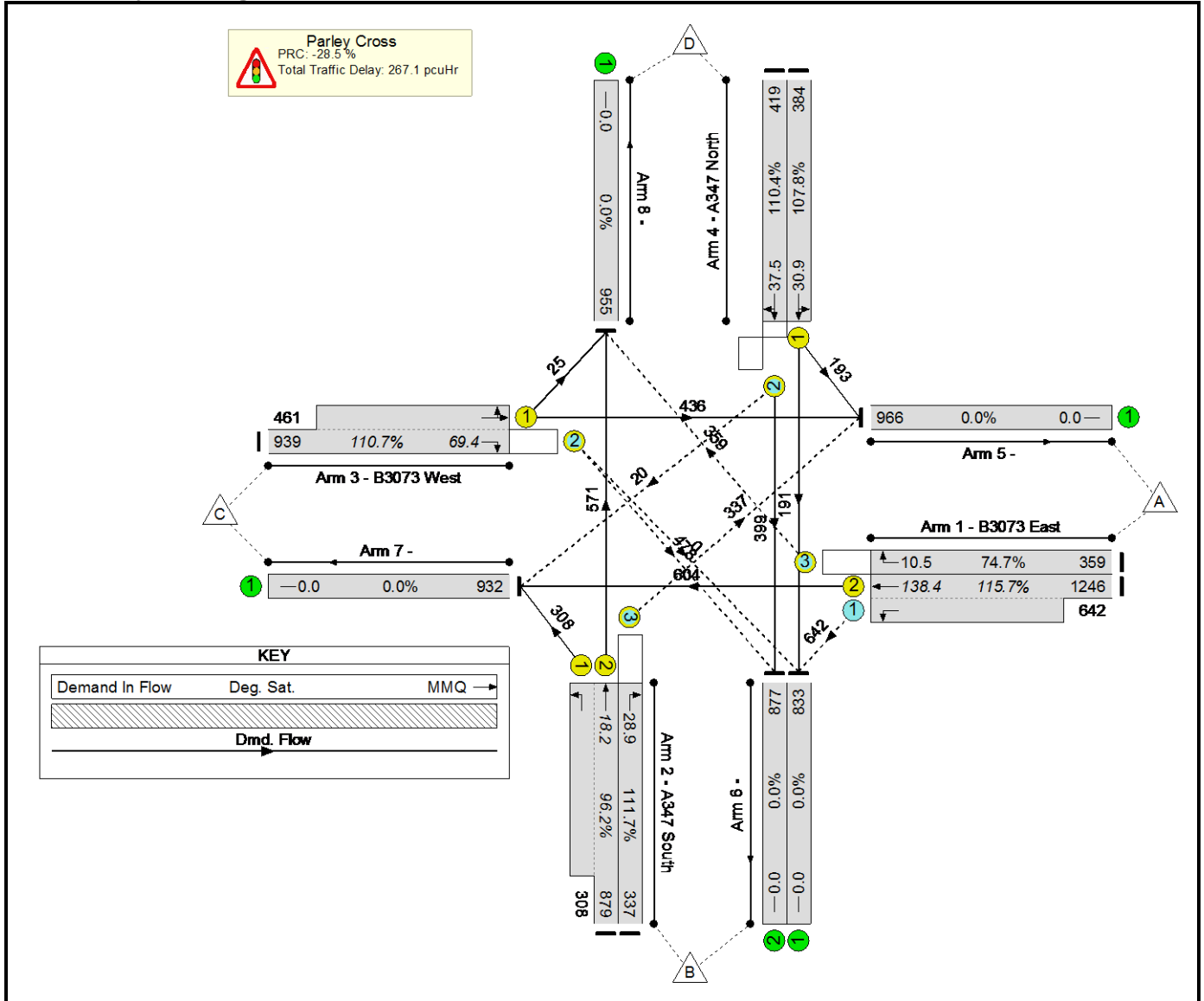
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	121.2%	158	987	170	305.1	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	121.2%	158	987	170	305.1	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	16	-	748	2055:1824	642	116.5%	149	192	0	63.1	303.5	69.2	
1/3	B3073 East Right	O	A	E	1	16	16	256	1780	303	84.6%	0	248	8	5.3	75.1	9.3	
2/2+2/1	A347 South Left Ahead	U	B	G	2	34:71	37	847	1915:1730	976	86.7%	-	-	-	6.0	25.3	11.8	
2/3	A347 South Right	O	B	F	2	34	34	528	1760	442	119.3%	0	282	161	53.9	367.8	59.7	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	27	27	963	1787:1909	799	120.5%	0	265	0	101.8	380.4	112.0	
4/1	A347 North Left Ahead	U	D		1	16	-	343	1665	283	121.2%	-	-	-	40.0	419.7	45.2	
4/2	A347 North Ahead Right	O	D		1	16	-	374	1911	325	115.1%	9	0	1	35.1	337.6	40.7	
C1					PRC for Signalled Lanes (%):		-34.6		Total Delay for Signalled Lanes (pcuHr):			305.10		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-34.6		Total Delay Over All Lanes(pcuHr):			305.10						

Basic Results Summary

Scenario 10: '2020 PM Peak Base + 50% Dev +FS South' (FG10: '2020 PM Peak + 50% Dev + Food store Exiting South', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Parley Cross Junction	-	-	-		-	-	-	-	-	-	115.7%	131	1254	227	267.1	-	-	
Parley Cross	-	-	-		-	-	-	-	-	-	115.7%	131	1254	227	267.1	-	-	
1/2+1/1	B3073 East Left Ahead	U+O	A -		1	26	-	1246	2055:1824	1077	115.7%	115	408	0	103.3	298.3	138.4	
1/3	B3073 East Right	O	A	E	1	26	26	359	1780	481	74.7%	0	348	11	4.8	47.8	10.5	
2/2+2/1	A347 South Left Ahead	U	B	G	2	29:61	32	879	1915:1730	914	96.2%	-	-	-	12.4	50.7	18.2	
2/3	A347 South Right	O	B	F	2	29	29	337	1760	302	111.7%	0	141	161	26.3	281.1	28.9	
3/2+3/1	B3073 West Ahead Right Left	O+U	C	H	1	22	22	939	1787:1902	848	110.7%	0	357	54	64.6	247.6	69.4	
4/1	A347 North Left Ahead	U	D		1	19	-	384	1781	356	107.8%	-	-	-	24.8	232.8	30.9	
4/2	A347 North Ahead Right	O	D		1	19	-	419	1908	379	110.4%	17	0	2	31.0	266.1	37.5	
C1					PRC for Signalled Lanes (%):		-28.5		Total Delay for Signalled Lanes (pcuHr):			267.13		Cycle Time (s): 100				
					PRC Over All Lanes (%):		-28.5		Total Delay Over All Lanes(pcuHr):			267.13						