

May 2019

Date : May 2019

Project : East Malling Trust Sites B & C, Ditton

Project Ref : 182600

Report Title : Technical Note – Response to KCC Comments

Report Ref : 182600-17

## DOCUMENT CONTROL

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	Draft Issue	PR	ATB	DRAFT	03/05/19
-	Final Client Issue	PR	AH <i>AH</i>	ATB <i>ATB</i>	09/05/19

## 1.0 INTRODUCTION

1.1 This Technical Note has been produced by Ardent Consulting Engineers (ACE) acting on behalf of the East Malling Trust (EMT), in relation to two current planning applications for residential development a Ditton Edge (Site B) and Parkside (Site C) located along Kiln Barn Road and Chapel Lane in Ditton and East Malling, respectively. The current outline applications are for up to 300 residential dwellings at Ditton Edge (TMBC ref: TM/18/02966/OA) and up to 106 dwellings at Parkside (TMBC ref: TM/18/03008/OA). Both applications were supported by detailed Transport Assessments, which followed ongoing pre-application discussions with Kent County Council (KCC) acting as the local highway authority.

1.2 Since the applications were submitted, KCC has provided comments on both schemes, in the form of initial formal consultation responses to TMBC and then ongoing email correspondence, telephone calls and a meeting with TMBC on 22 February 2019. Relevant correspondence to date is included at Appendix A for reference.

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1.3 Further to the productive discussions with KCC to date, the purpose of this Technical Note is to provide a final coordinated response to the various comments that have been raised on both applications to date. Given the overlapping nature of the two schemes, this report addresses comments on both sites in tandem rather than separately.

1.4 Section 2.0 below deals with the outstanding matters raised by KCC, covering the following key topics:

- Site access and on-site layout
- Pedestrian access and Public Rights of Way
- Traffic generation and distribution
- Off-site impact

## 2.0 RESPONSE TO OUTSTANDING KCC COMMENTS

### Access and Site Layout

#### *Ditton Edge*

2.1 KCC have noted a preference for horizontal traffic calming measures within the future site layouts to maintain 20mph design speeds, rather than vertical traffic calming measures. Nevertheless, KCC have noted that this can be dealt with at the reserved matters stage as only outline planning permission is being sought at this stage.

2.2 Notwithstanding the above, KCC have also noted during recent discussions that they would be keen to see the future layout designed to ensure that it could accommodate bus services, if necessary, in the future. KCC have noted that there is currently no need to divert any bus routes into the site based on the location of existing bus stops nearby, however they are keen to ensure the layout is designed such that buses could enter in the future if required. KCC are currently in the process of drafting new guidance on designing for bus access, and whilst this document has not been made available at the time of writing this report, KCC have advised that it suggests a carriageway width of between 6.25m and 6.75m to accommodate buses, depending on the

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- layout and road alignment. As such, Drawing Number 182600-003D has been subsequently produced and shows the revised site access at Kiln Barn Road showing an increased carriageway width of 6.5m at the junction.
- 2.3 Drawing Number 182600-14 includes the swept path manoeuvres of a typical single decker bus using the access, confirming that it could successfully enter/depart the junction. The drawing also includes tracking for a large refuse vehicle as requested by KCC, which confirms that these manoeuvres could also be accommodated (noting that Manual for Streets indicates occasional service vehicles can utilise the full width of the carriageway).
- 2.4 With respect to emergency access to the Ditton Edge site, the Transport Assessment confirmed that, if required, emergency access could be facilities either from Kiln Barn Road or from the south from the existing field accesses within **EMT's wider land** ownership. During subsequent discussions KCC have expressed a preference for emergency access direct from Kiln Barn Road, and so Drawing Number 182600-003D shows how the existing field access at the southern end of the site frontage can be utilised for this purpose, via a bollarded footpath/cyclepath entrance to the site.
- 2.5 In their initial comments KCC also requested that details of visibility splays for pedestrians using the proposed dropped kerb crossings on Kiln Barn Road should be shown. Drawing Number 182600-003D therefore includes visibility splays at each crossing, measured from the back of the footway to ensure adequate visibility for pushchair/wheelchair users. The splays for the crossing at the bend to the north are based on the signposted speed limit (30mph), whilst the splays for the crossing just north of the access are based on recorded speeds at this location. The drawing confirms that these splays can be provided without crossing any third-party land.
- 2.6 With respect to the potential extension of the 30mph speed limit further south on Kiln Barn Road (as shown in Drawing Number 182600-003D), KCC have confirmed that this can be secured by a suitably worded condition. This would **be a 'best endeavours' condition** requiring the Traffic Regulation Order, rather than the speed limit change itself, noting that the success of the TRO cannot

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be guaranteed. Nevertheless, if the TRO is unsuccessful then KCC have confirmed the proposed access would still be acceptable based on current recorded speeds, and noting the proposed red carriageway surfacing at the access.

- 2.7 Whilst KCC have previously confirmed that a combined Stage 1&2 Road Safety Audit could be completed for the Parkside site following outline planning consent (i.e. at detailed design stage), they have confirmed that a Stage 1 RSA is required for the Ditton Edge access prior to outline consent being granted. At the time of writing this note it has not been possible to obtain audit results for the latest drawing, however the results will be provided as **soon as they are available, along with the associated Designer's Response.**

*Parkside*

- 2.8 Since the planning application was submitted, the proposed access to Parkside from New Road has been updated to address conservation officer comments in respect of minimising the impact on the listed wall. As a result, Drawing Number 182600-009B shows the revised access arrangement, noting that the alternations do not affect the general highway layout already agreed in-principle by KCC. **In addition, following KCC's request,** Drawing Number 182600-015 shows swept paths of a large refuse vehicle entering and departing the site, confirming that the access would be suitable to accommodate occasional service vehicles (noting that Manual for Streets indicates occasional service vehicles can utilise the full width of the carriageway).
- 2.9 As set out above and also in the Parkside Transport Assessment, KCC have confirmed that there is no requirement for a Stage 1 Road Safety Audit of the proposed access at this stage.
- 2.10 With respect to the future site layout (and proposed access design), KCC have confirmed that there would be no need to design this site to accommodate any bus services in the future.

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### Pedestrian Access and Public Rights of Way

#### *Requirement for footway/footpath on Kiln Barn Road to south of Ditton Edge*

- 2.11 Within initial comments on Ditton Edge, KCC suggested that a pedestrian link towards to the south linking the site with Cyril West Lane and Franklin Kidd Lane is required to accommodate potential trips via these routes. However, following a detailed review, it is considered that there is no such justification for any pedestrian links in this direction, based on anticipated demand and the availability of alternative routes on more direct desire lines. A detailed Technical Note was issued to KCC on 21 February 2019 to address this point, and a copy is included at Appendix B of this report.

#### *Potential upgrades to Public Rights of Way*

- 2.12 KCC have also suggested that it may be beneficial to upgrade the status of the existing public footpaths (MR100 and MR102) extending from Ditton Edge towards East Malling Railway Station, to provide a convenient cycle route for potential rail passengers associated with both new developments.
- 2.13 **It is noted that KCC's PROW team have not raised this as a requirement in their comments (see Appendix A).** In practice, it would not be possible to provide a continuous cyclepath of adequate width link to the station, as the sections of footpaths MR100 and MR102 south of Chapel Street fall outside of **land under EMT's control. Nevertheless, the majority of the existing PROW route between the two sites and the station would be of adequate width to accommodate cyclists on an informal basis, noting that the route between Ditton Edge and Chapel Street comprises a surfaced track in excess of 3 wide.** To the south of Chapel Street cyclists may have to dismount for a short section in the vicinity of the church, however on the whole the existing infrastructure should help to facilitate linked cycle/rail trips via East Malling Station.

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- 2.14 In terms of other comments from KCC's PROW team, they have noted that the future detailed masterplan should keep the public footpath separate from the main access road, or at least provide a suitable buffer between the carriageway and PROW. These detailed design requirements can be addressed at the reserved matters stage as necessary.

### Traffic Generation and Distribution

#### *Clarification on Census data used for distribution models*

- 2.15 KCC have requested clarification on the specific 2011 Census Middle Super Output Areas used for the modal split and traffic distribution calculations for each site. To clarify this point, areas 005 and 014 are shown in Plates 1 and 2 below – Ditton Edge is in MSOA 005 and Parkside is in MSOA 014 (shown by red site location markers). Given the significant overlaps between the assessments for the two sites, and to ensure a consistent approach we have used average values across the two sites for modal splits and growth.



Plate 1: **MSOA 'Tonbridge and Malling 005' that includes Ditton Edge**

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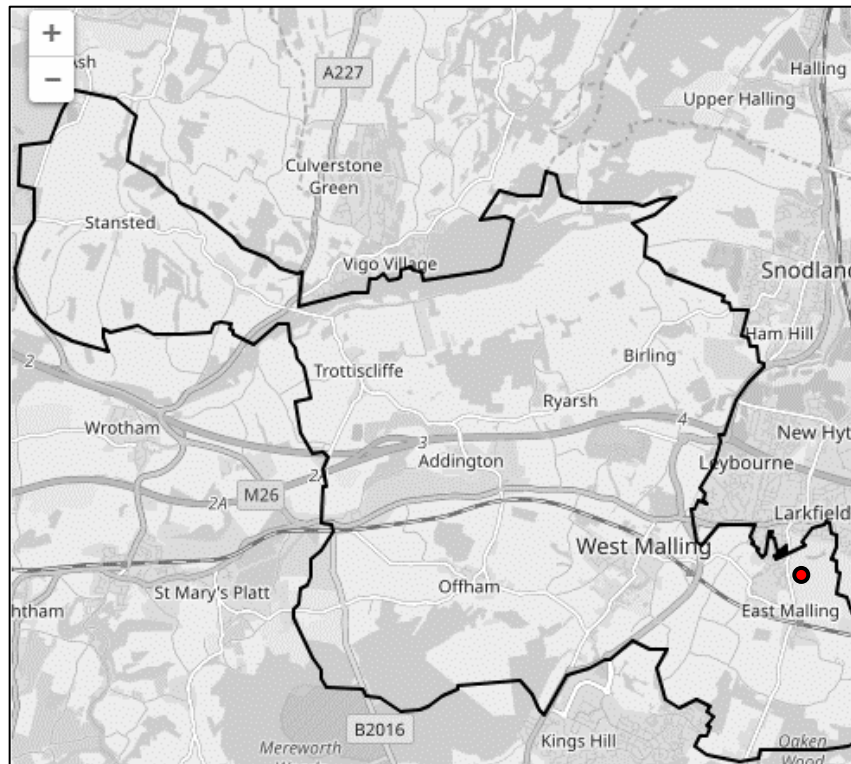


Plate 2: **MSOA 'Tonbridge and Malling 014' that includes Parkside**

*Revised Ditton Edge distribution model*

- 2.16 The original distribution model for Ditton Edge assumed a relatively high proportion of traffic travelling to and from the site might utilise St Peter's Road/Bradbourne Lane as a cut through for journeys via the A20 west of the site. However, KCC raised concerns over this assumption, and have requested that the distribution should reflect the balance of flows based on **survey data from the New Road/Kiln Barn Road/St Peter's Road T-junction**. The details below therefore summarise the revised traffic distribution assumptions for this part of the network.
- 2.17 The 2-hour AM and PM turning counts at the New Road/Kiln Barn Road/St **Peter's Road T-junction** have been reviewed to estimate the potential percentage splits of arrivals and departures from the Ditton Edge site, these are summarised in Plate 3 below. The white boxes are morning peak hour, while the shaded boxes represent evening peak hour flows.

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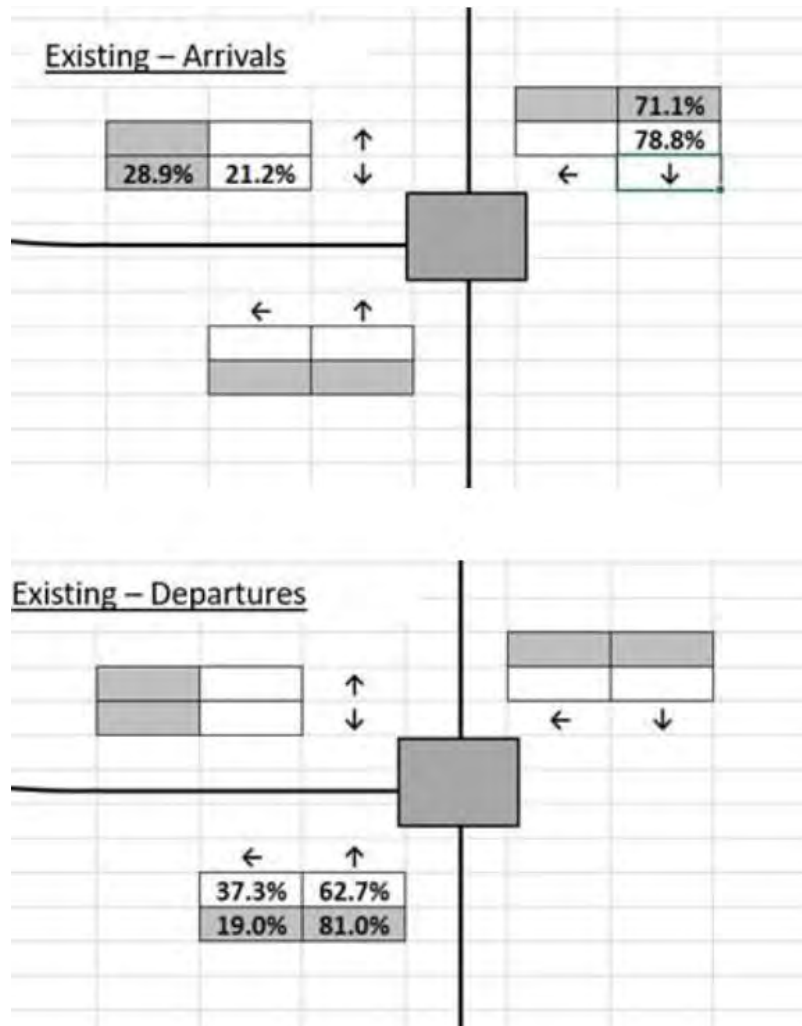


Plate 3: Observed Turning Proportions to/from Kiln Barn Road (South) at the New Road/Kiln Barn Road/St Peter's Road T-junction

2.18 The results above demonstrate that the existing junction has a split of roughly 70%-80% travelling along New Road and 20%-30% travelling along Bradbourne Lane. The only exception to this is the morning peak hour departures, which has a split of 37%-63%. When considering the other turning percentage splits, it is considered that this is outlier and therefore can be dismissed. It should also be noted that in reality a proportion of vehicles turning at this junction will not reach the A20 and therefore a lower percentage will travel along Bradbourne Lane. Accordingly, an approximate 80% (New Road) – 20% (Bradbourne Lane) split should be adopted to account for this.



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- 2.19 In light of the above, the distribution pattern for Ditton Edge has been amended to align with these percentages. The revised distribution pattern demonstrates that 7.8% of Ditton Edge traffic will travel along Bradbourne Lane, with 77.6% travelling along New Road. This equates to a percentage split of 19% of the traffic associated with the junction travelling along Bradbourne Lane and 81% traffic travelling along New Road, compared with the former 38% - 62% split.
- 2.20 The revised model shows a significantly lower proportion of traffic utilising the **Bradbourne Lane/St Peter' Road route, which reflects KCC's** feedback over use of this route, and also acknowledges the potential improvements to be implemented at the A20/Station Road/New Road junction that forms part of the other route (see below for further details). As such, no further assessment of impacts at the A20/Bradbourne Lane junction are deemed necessary at this stage.

*Distribution assumptions for traffic at Bradbourne Lane*

- 2.21 No traffic count data could be obtained for the A20/Bradbourne Lane T-junction at the time of writing the Transport Assessments, and so the reports included assumptions with respect to potential levels of turning traffic at this junction, based on 30% of observed turning movements at the A20/Station Road/New Road junction. KCC have queried this assumption. However, on the basis the revised traffic assignment for Ditton Edge results in minimal traffic from the development turning at this junction (no more than 17 in the peak hours), it is considered that no further assessment should be required in terms of turning movements/impacts here.

Off-Site Highway Impacts

*Ditton Edge impact on Kiln Barn Road and adjoining local roads*

- 2.22 **KCC's initial comments with respect to the Ditton Edge scheme requested clarification on the peak hour traffic increases summarised for the local roads between the site and the A20 (i.e. Kiln Barn Road, New Road, and St Peter's**

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Road/Bradbourne Lane). It appears that the use of both peak-hour counts and 24-hour ATC data may have resulted in some conflicting data. Hence, the increases are presented in Table 1 below, which confirms 2018 baseline flows (taken from Kiln Barn Road ATC counts and New Road/St Peter's Road junction turning count), and proposed development increases.

		Kiln Barn Road (south of site)*	Kiln Barn Road (north of site)**	New Road**	St Road/Bradbourne Lane**	<b>Peter's</b>
AM Peak	2018 baseline	92	280	435		341
	Proposed Development	32	186	169		17
PM Peak	2018 baseline	238	393	476		271
	Proposed Development	24	151	137		14

\* taken from ATC count

\*\* taken from New Road/Kiln Barn Road/St **Peter's Road** T-junction peak hour turning count

Table 1: Proposed Ditton Edge Two-Way Peak Hour Traffic Increases on Local Roads close to the site

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- 2.23 With respect to the impact to the south on Kiln Barn Road and the adjoining roads, the above table shows a maximum of just over 30 two-way peak hour movements on this route, noting that the former GOTA starting points for identifying where impacts could occur was 30 movements. It is acknowledged that this route is currently lightly trafficked, particularly in the morning peak (92 movements). However, the increases would only equate to one vehicle every two minutes on average, and whilst this route is rural in its nature with some narrowed sections there is no evidence of any current safety issues on this route. Given the relatively minor traffic increases on this route, and noting the limited availability of highway land for possible improvements, it is considered that no mitigating improvements are required on Kiln Barn Road to the south of the site.
- 2.24 **The above table also confirms that the increases on St Peter's Road/Bradbourne Lane would be insignificant based on the revised distribution pattern, with existing traffic flows increased by no more than 5%. It is therefore still considered that no mitigating improvements are necessary on these roads in light of the proposed development.**
- 2.25 As for the increases on Kiln Barn Road (north of the site) and New Road, the Transport Assessment concluded that there should be no requirement for any specific improvements on these routes, noting that they already accommodate up to 476 peak hour movements with no evidence of any current highway safety issues.

*Use of Revised VISUM model traffic data*

- 2.26 At the time the planning applications were submitted in December 2018, the VISUM model traffic flow data supporting the emerging TMBC Local Plan did not include either the Ditton Edge or Parkside site. As such, KCC agreed that specific traffic generation calculations for these sites could be added to the VISUM flows for assessment of the proposed development impacts, and so this approach was adopted in the Transport Assessments (noting that at the time there was no scope for the VISUM model to be re-run with these sites included).

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- 2.27 However, since the applications were submitted, the VISUM model has been updated to reflect revised strategic transport interventions and alternative Local Plan draft allocations, including the Ditton Edge and Parkside sites. Whilst these two sites are now included in the model, they are based on alternative assumptions in terms of the scale of development at each site compared with the outline applications. For Ditton Edge the model assumes a smaller development (216 dwellings compared with 300), whilst at Parkside the model assumes a larger development (205 dwellings compared with 106).
- 2.28 Following discussions with KCC, it has been agreed that rather than update **the VISUM model, a 'first principles' approach should be adopted to amend** the baseline flows to reflect the alternative quantum of development for each site. Consequently, the following details confirm the approach that has been taken.
- The latest distribution models used for the outline application proposals are used to estimate traffic assignment for the Local Plan assumptions (e.g. 216 units at Ditton Edge and 205 units at Parkside).
  - The resulting traffic assignment for the draft Local Plan allocations was **then deducted from the overall VISUM 'do something' flows.**
  - The proposed traffic assignment for the outline applications for the two sites (300 units and 106 units) was then added back onto the altered **VISUM 'do something' flows, in order to assess the impact of the proposals.**
- 2.29 The resulting traffic flow scenarios for the proposed development are shown in Figures 1 – 26 appended to this report. The net assignment figures confirm that the development sizes subject to the current outline applications would result in slightly higher traffic increases overall at the A20/Station Road/New Road junction, but with a reduced level of movements at the A20/New Road/Hotel junction (summarised in Figure 13B) when compared with the current Local Plan assumptions in respect of the number of dwellings at each site. Further afield the difference would be negligible, on the basis that the combined level of development in both scenarios is very similar (406 total units as proposed vs. 421 in VISUM model).

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*Proposed Section 278 Off-Site Improvements/Section 106 contributions*

- 2.30 At the post-submission meeting on 22 February 2019, KCC suggested a potential approach for suitable off-site highway mitigation on the A20 corridor. It was suggested that Ditton Edge should offer suitable Section 278 improvements at the A20/Station Road/New Road signal junction, whilst Parkside should offer S278 works at the A20/New Road/Hotel junction. beyond these junctions it was suggested that suitable proportionate Section 106 contributions could be calculated by KCC to help fund Local Plan improvements elsewhere along this highway corridor.
- 2.31 Further to the above, these two junctions have therefore been re-modelled based on the revised traffic flow figures. The full results of these two LinSig assessments are shown in Tables 2 and 3 below.

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Scenario	AM Peak	PM Peak
<b>Existing Layout</b>		
2031 'Do Minimum' Background	-40.3%	-44.2%
2031 'Do Minimum' Background + Site B	-46.4%	-51.4%
2031 'Do Minimum' Background + Site C	-46.9%	-45.4%
2031 'Do Minimum' Background + Site B and C	-51.9%	-51.4%
2031 'Do Something' Background (- Site B Local Plan Flows)	-84.1%	-71.2%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-84.4%	-71.6%
2031 'Do Something' Background (- Site C Local Plan Flows)	-72.2%	-65.4%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-77.4%	-68.7%
2031 'Do Something' Background (- Site B/C Local Plan Flows)	-69.0%	-65.4%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-77.4%	-69.2%
<b>KCC Improvements</b>		
2031 'Do Minimum' Background + Site B	16.0%	11.8%
2031 'Do Minimum' Background + Site C	19.85	13.0%
2031 'Do Minimum' Background + Site B and C	15.0%	11.1%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-3.7%	1.2%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-0.9%	3.6%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-2.0%	3.3%
<b>Ardent Improvements</b>		
2031 'Do Minimum' Background + Site B	-39.3%	-46.8%
2031 'Do Minimum' Background + Site C	-34.6%	-44.2%
2031 'Do Minimum' Background + Site B and C	-39.3%	-50.0%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-73.3%	-64.5%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-69.2%	-63.4%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-73.3%	64.5%

Table 2: A20/New Road/Hotel Access LinSig Results

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Scenario	AM Peak	PM Peak
<b>Existing Layout</b>		
2031 'Do Minimum' Background	-90.5%	-79.4%
2031 'Do Minimum' Background + Site B	-94.6%	-82.9%
2031 'Do Minimum' Background + Site C	-92.5%	-81.4%
2031 'Do Minimum' Background + Site B and C	-95.5%	-83.5%
2031 'Do Something' Background (- Site B Local Plan Flows)	-62.1%	-40.9%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-63.6%	-42.2%
2031 'Do Something' Background (- Site C Local Plan Flows)	-59.9%	-38.9%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-59.7%	-40.1%
2031 'Do Something' Background (- Site B/C Local Plan Flows)	-56.7%	-38.8%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-66.3%	-40.2%
<b>KCC Improvements</b>		
2031 'Do Minimum' Background + Site B	-68.6%	-37.0%
2031 'Do Minimum' Background + Site C	-48.7%	-28.0%
2031 'Do Minimum' Background + Site B and C	-69.4%	-37.0%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-40.4%	-41.7%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-32.4%	-37.7%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-38.8%	-40.2%
<b>Ardent Improvements</b>		
2031 'Do Minimum' Background + Site B	-44.5%	-68.3%
2031 'Do Minimum' Background + Site C	-38.5%	-63.7%
2031 'Do Minimum' Background + Site B and C	-44.5%	-69.6%
2031 'Do Something' Background (- Site B Local Plan Flows) + Site B	-63.0%	-19.1%
2031 'Do Something' Background (- Site C Local Plan Flows) + Site C	-58.3%	-16.3%
2031 'Do Something' Background (- Site B/C Local Plan Flows) + Site B and C	-63.0%	-18.0%

Table 3: A20/Station Road/New Road LinSig Results

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- 2.32 The above tables include results for the existing junction layouts based on **both the 'do minimum' and 'do something' VISUM scenarios, and with the addition of Ditton Edge and Parkside traffic both together and separately (referred to as Sites B and C in the results). When modelling the 'do something' scenarios, the baseline includes the removal of traffic for the relevant scheme, such that the full impact of each development can then be assessed.** Full LinSig output results for all of these scenarios are included at Appendix C.
- 2.33 Given that both applications are being determined, the results for the addition of both Ditton Edge and Parkside traffic in combination has been reviewed in detail when considering potential impacts, however the results for each site separately are also provided for information.
- 2.34 The above tables also include results for two potential improvements schemes **at each junction. The 'KCC improvements' reflect the potential improvements shown in Drawing Number 182600-016 for the A20/New Road/Hotel junction and Drawing Number 182600-017 for the A20/Station Road/New Road junction.** These comprise significant improvement designs that are consistent with improvements being highlighted by KCC as part of their proposed infrastructure to support the Local Plan. **The 'Ardent improvements' results reflect improvement proposals for these junctions that were previously offered within the Transport Assessments submitted with the planning applications, as shown in Drawing Numbers 182600-007 and 182600-008.**
- 2.35 The results for the existing layouts confirm that the developments would have **a slight detrimental impact at both junctions in both the 'do minimum' and 'do something' scenarios. If the KCC improvements are implemented, the impacts of both sites' development traffic would be mitigated, and the overall performance of the junctions would significantly improve over and above these development-specific impacts.** For example, at the Station Road junction these improvements would result in a Practical Reserve Capacity of -2% at the 2031 Do Something scenario in the AM peak hour, compared with -69% without the improvements and excluding Ditton Edge and Parkside



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traffic. It is therefore clear that these potential S278 improvements would significantly help to address existing capacity issues and wider Local Plan traffic impacts, rather than just offsetting the impacts of the two development sites.

- 2.36 Given the above, the alternative approach of offering smaller-scale improvements as per those presented in the original Transport Assessments **has also been reviewed. The results for these 'Ardent improvements' show that in the 'do minimum' scenario, the improvements at both junctions would more than offset the impacts of Ditton Edge and Parkside. They would also offset the impacts of these two sites in the 'do something' scenario as well. For the 'do something' scenario that includes other Local Plan allocation traffic (and other highway improvements), the Ardent proposals would partly offset the impacts of Ditton Edge and Parkside, such that the impacts are not considered to be severe in the context of the overall performance of the junctions without these developments in place.**
- 2.37 Notwithstanding the above, based on discussions with the highway authority, it is understood that KCC are keen to avoid iterative improvements at junctions on the A20, as this would cause issues in terms of practicality, particularly in terms of securing time and space for the required roadworks. As such, KCC have requested that the more significant improvements listed **as 'KCC improvements' listed above are proposed as S278 mitigation for the proposed development.**

#### Proposed Section 278 Mitigation Works

- 2.38 In light of the above, it is considered that if the more significant works at these junctions are to be offered (at the Station Road junction for Ditton Edge and at the New Road junction for Parkside), then this should offset any requirement for further S106 contributions for works elsewhere along the A20 corridor. This is on the basis that the S278 proposals far exceed what is required just to mitigate the impacts of these two sites, and instead help to mitigate wider Local Plan impacts and background traffic growth, which would occur irrespective of the proposed development.

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2.39 The applicant therefore looks to agree with KCC that if it makes a commitment to undertake at its expense the full improvements at the New Road/A20 London Road/Hotel Access and the Station Road/New Road/A20 London Road junctions, which from the offset would make sense in terms of practicality, that this should result in no contributions towards any other works. This is because the improvement works provide mitigation over and above that required for the proposed development at Ditton Edge and Parkside, to the benefit of other schemes proposed to come forward in the emerging Local Plan.

2.40 Further, this would allow Ditton Edge and Parkside to come forward with no additional S106 highways contributions, allowing the scheme to come forward to the next available planning committee.

### 3.0 SUMMARY AND CONCLUSIONS

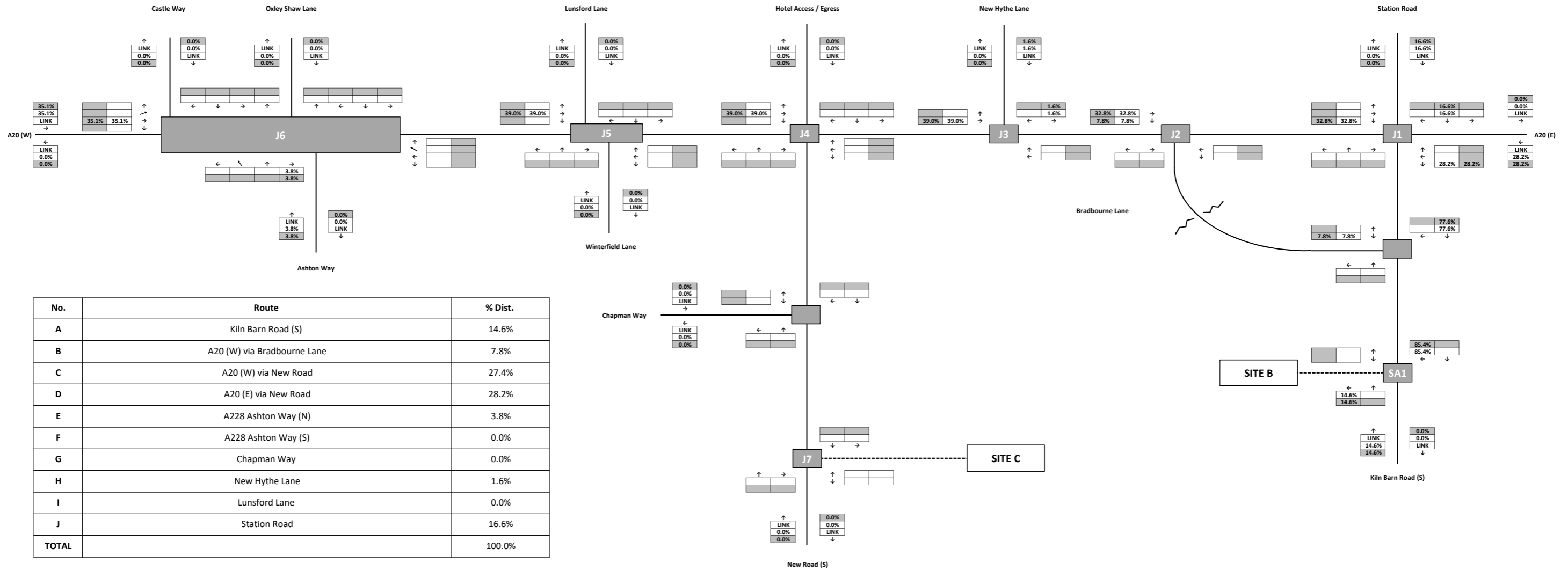
3.1 The purpose of this Technical Note has been to address outstanding highways and transportation comments raised by KCC in respect of the two current outline planning applications at Ditton Edge and Parkside. Based on the details set out in this report, it is considered that the remaining comments raised by KCC have been satisfactorily addressed. As such, it is anticipated that KCC should now be able to confirm there are no objections to either application, subject to confirmation of required S278 off-site improvements and no S106 contributions (to reflect the significant extent of S278 works being proposed).

Figures

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



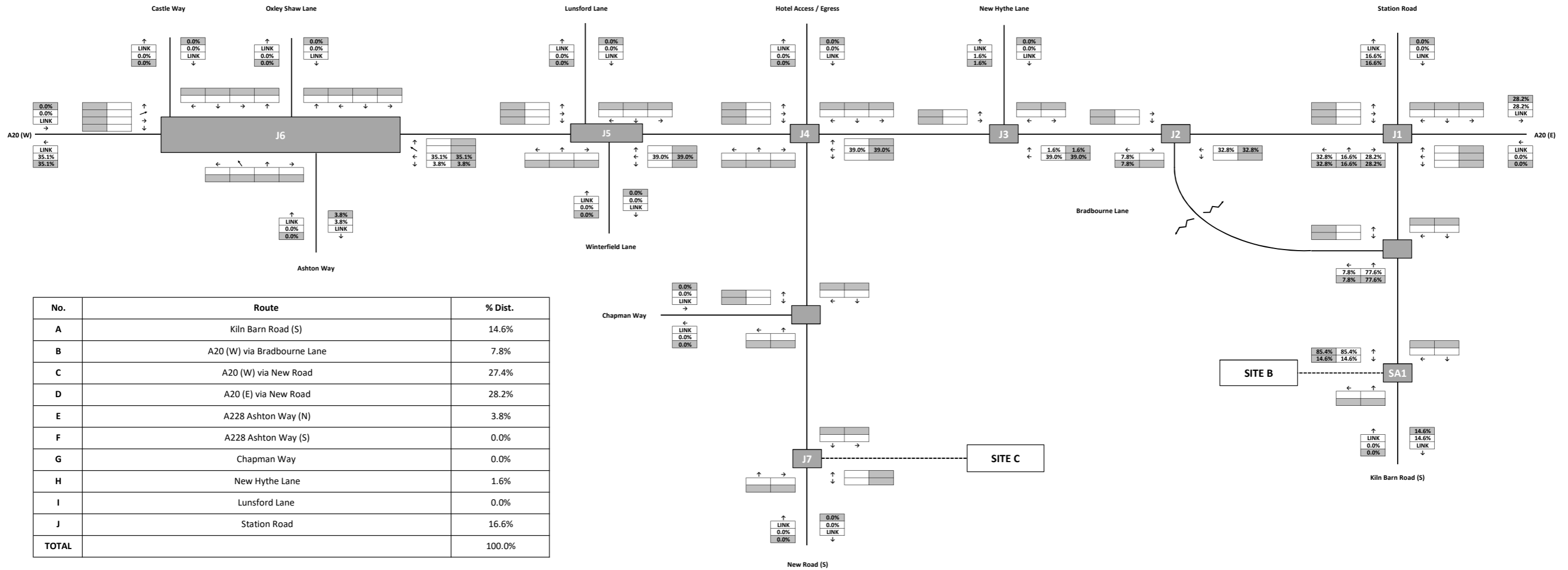
No.	Route	% Dist.
A	Kiln Barn Road (S)	14.6%
B	A20 (W) via Bradbourne Lane	7.8%
C	A20 (W) via New Road	27.4%
D	A20 (E) via New Road	28.2%
E	A228 Ashton Way (N)	3.8%
F	A228 Ashton Way (S)	0.0%
G	Chapman Way	0.0%
H	New Hythe Lane	1.6%
I	Lunsford Lane	0.0%
J	Station Road	16.6%
<b>TOTAL</b>		<b>100.0%</b>

SCALE: <b>NTS @ A3</b>	CLIENT: <b>EAST MALLING TRUST</b>	PROJECT: <b>LAND OFF KILN BARN ROAD, DITTON (SITE B) &amp; LAND OFF NEW ROAD, EAST MALLING (SITE C)</b>	<b>ARDENT</b> CONSULTING ENGINEERS
DATE: <b>AUGUST 2018</b>	TITLE: <b>PROPOSED DEVELOPMENT (SITE B) PERCENTAGE TRAFFIC DISTRIBUTION - ARRIVALS</b>	FIGURE: <b>1</b>	
JOB NUMBER: <b>182600</b>			
DRAWN BY: <b>PR</b>			

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

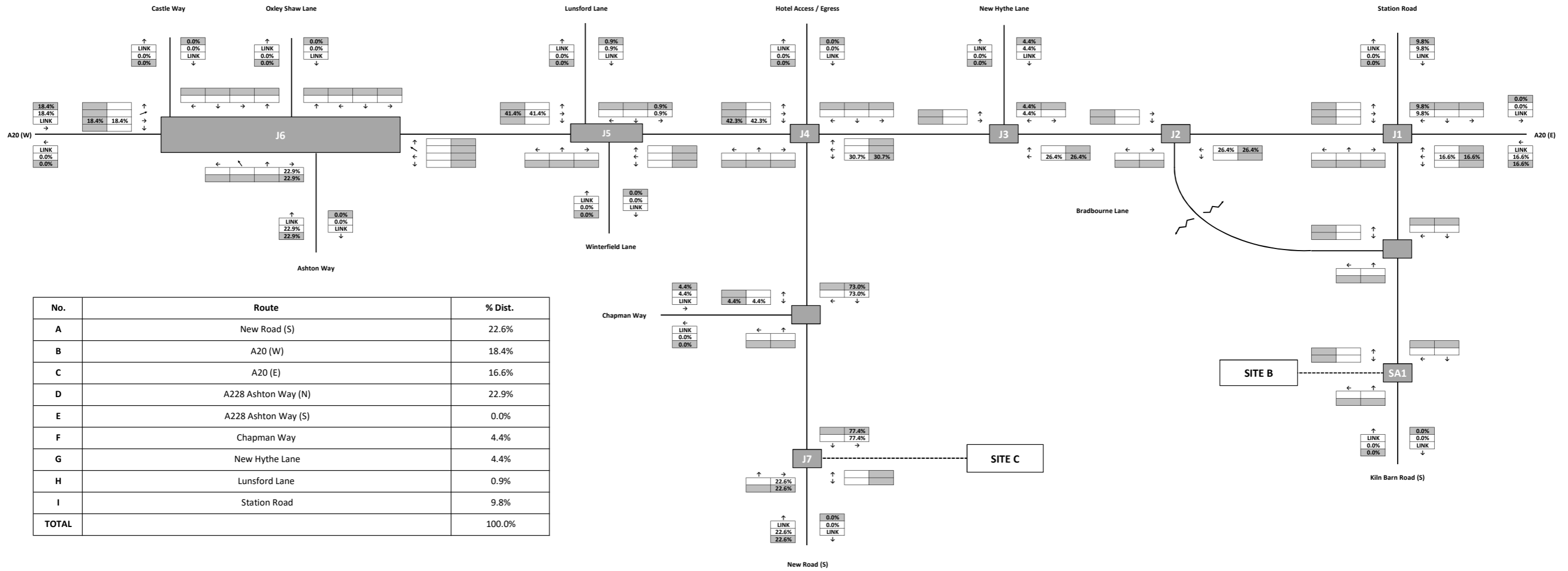


SCALE:	<b>NTS @ A3</b>	CLIENT:	<b>EAST MALLING TRUST</b>	PROJECT:	<b>LAND OFF KILN BARN ROAD, DITTON (SITE B) &amp; LAND OFF NEW ROAD, EAST MALLING (SITE C)</b>		
DATE:	<b>AUGUST 2018</b>	TITLE:	<b>PROPOSED DEVELOPMENT (SITE B) PERCENTAGE TRAFFIC DISTRIBUTION - DEPARTURES</b>	FIGURE:	<b>2</b>		REV:
JOB NUMBER:	<b>182600</b>						
DRAWN BY:	<b>PR</b>						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



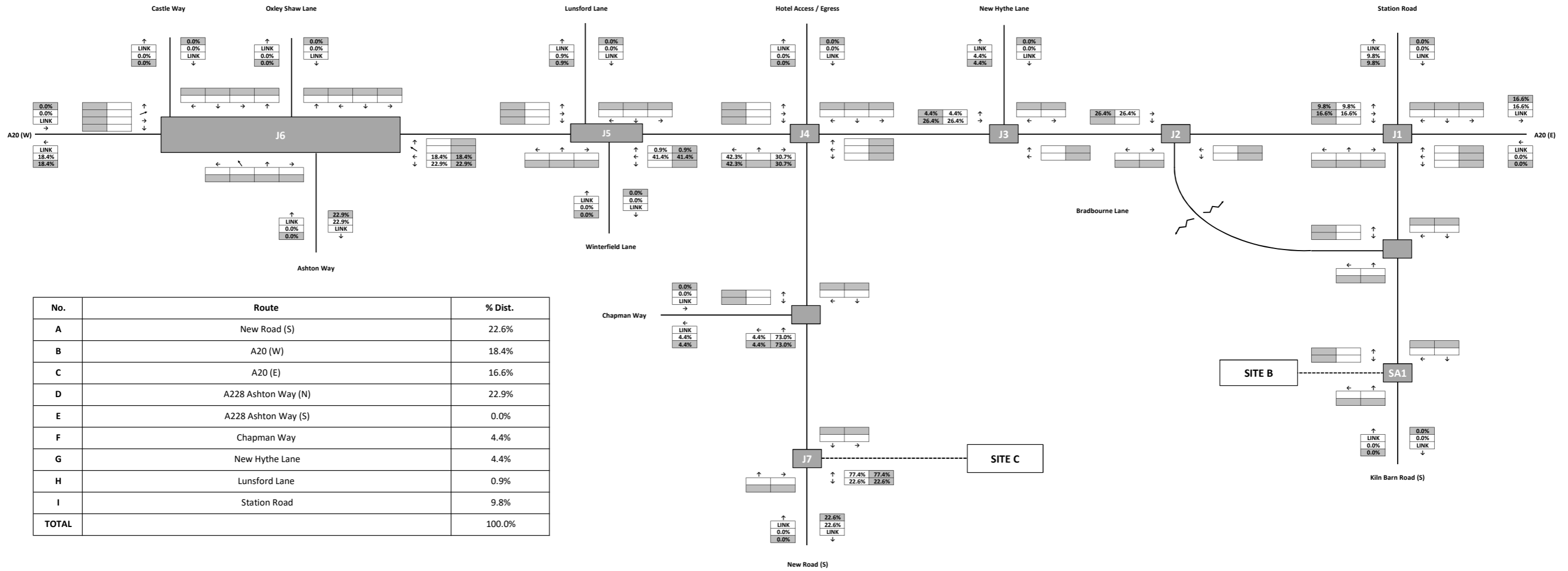
No.	Route	% Dist.
A	New Road (S)	22.6%
B	A20 (W)	18.4%
C	A20 (E)	16.6%
D	A228 Ashton Way (N)	22.9%
E	A228 Ashton Way (S)	0.0%
F	Chapman Way	4.4%
G	New Hythe Lane	4.4%
H	Lunsford Lane	0.9%
I	Station Road	9.8%
<b>TOTAL</b>		<b>100.0%</b>

SCALE: <b>NTS @ A3</b>	CLIENT: <b>EAST MALLING TRUST</b>	PROJECT: <b>LAND OFF KILN BARN ROAD, DITTON (SITE B) &amp; LAND OFF NEW ROAD, EAST MALLING (SITE C)</b>	<b>ARDENT</b> CONSULTING ENGINEERS
DATE: <b>AUGUST 2018</b>	TITLE: <b>PROPOSED DEVELOPMENT (SITE C) PERCENTAGE TRAFFIC DISTRIBUTION - ARRIVALS</b>	FIGURE: <b>3</b>	
JOB NUMBER: <b>182600</b>			
DRAWN BY: <b>PR</b>			

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



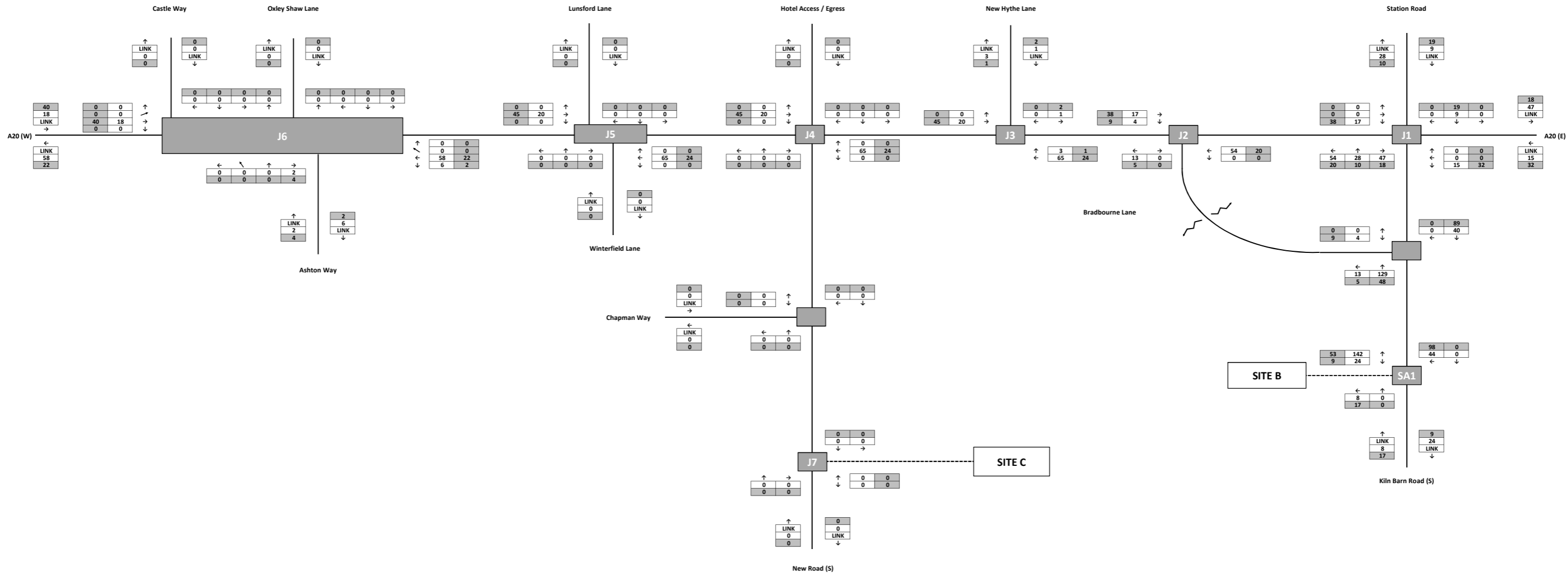
No.	Route	% Dist.
A	New Road (S)	22.6%
B	A20 (W)	18.4%
C	A20 (E)	16.6%
D	A228 Ashton Way (N)	22.9%
E	A228 Ashton Way (S)	0.0%
F	Chapman Way	4.4%
G	New Hythe Lane	4.4%
H	Lunsford Lane	0.9%
I	Station Road	9.8%
<b>TOTAL</b>		<b>100.0%</b>

SCALE: <b>NTS @ A3</b>	CLIENT: <b>EAST MALLING TRUST</b>	PROJECT: <b>LAND OFF KILN BARN ROAD, DITTON (SITE B) &amp; LAND OFF NEW ROAD, EAST MALLING (SITE C)</b>	<b>ARDENT</b> CONSULTING ENGINEERS
DATE: <b>AUGUST 2018</b>	TITLE: <b>PROPOSED DEVELOPMENT (SITE C) PERCENTAGE TRAFFIC DISTRIBUTION - DEPARTURES</b>	FIGURE: <b>4</b>	
JOB NUMBER: <b>182600</b>			
DRAWN BY: <b>PR</b>			

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



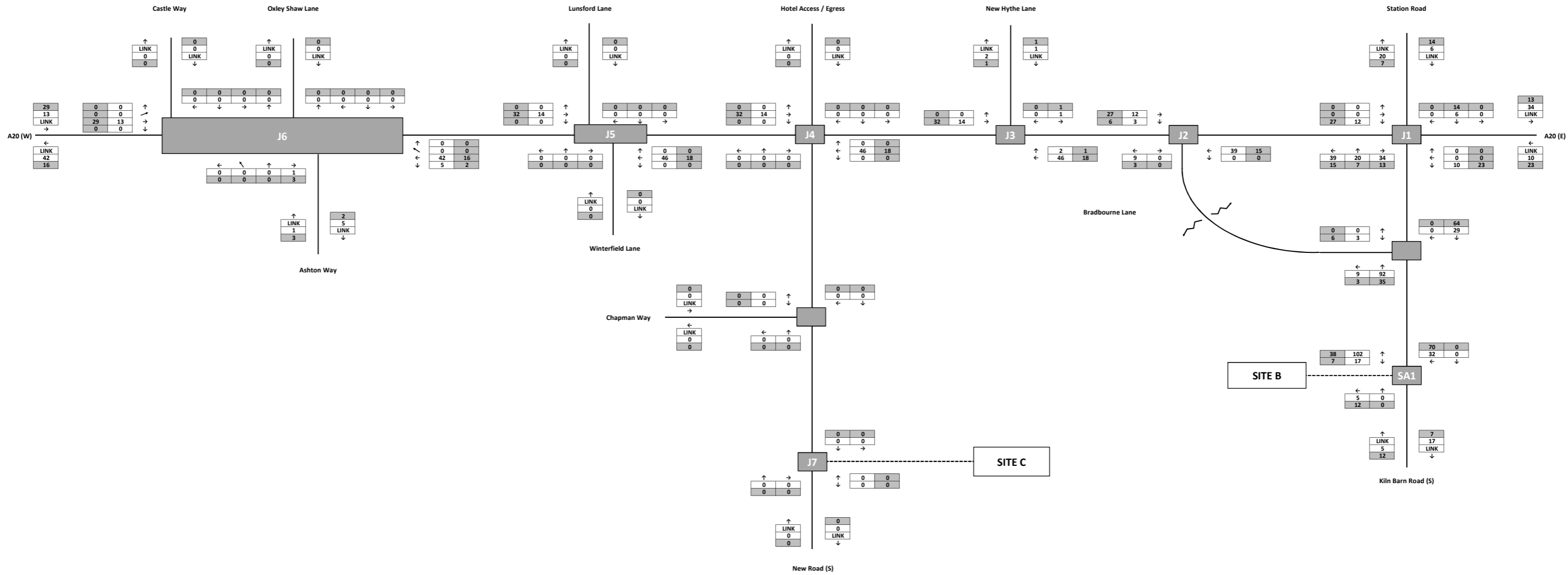
SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	AUGUST 2018	TITLE:	PROPOSED DEVELOPMENT (SITE B) ASSIGNED TRAFFIC FLOWS		FIGURE:	5	REV:	
JOB NUMBER:	182600							
DRAWN BY:	PR							



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

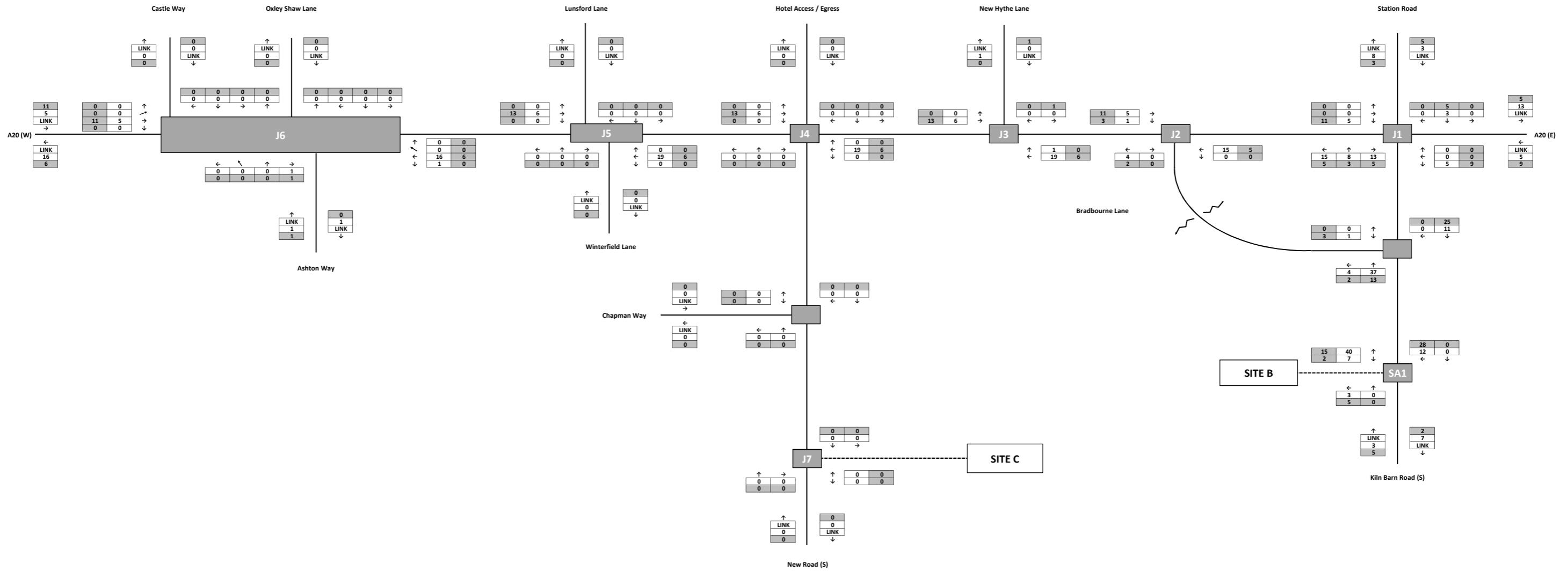


SCALE:	NTS @ A3	CLIENT:	PROJECT:		
DATE:	APRIL 2019	EAST MALLING TRUST	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
JOB NUMBER:	182600	TITLE:	SITE B ASSIGNED TRAFFIC FLOWS - LOCAL PLAN ASSUMPTIONS (216 DWELLS)		
DRAWN BY:	AH				
			FIGURE:	REV:	
			6	-	

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



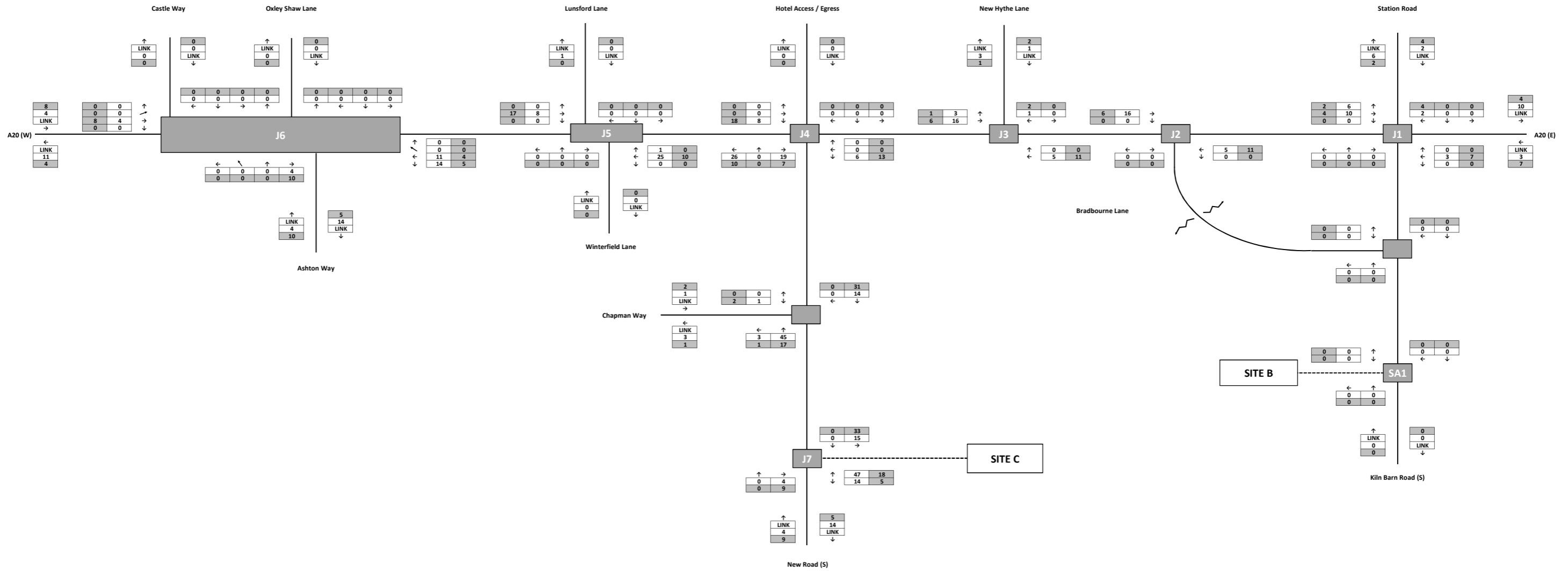
SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)	
DATE:	APRIL 2019	TITLE:	NET TRAFFIC FLOWS (PROPOSED DEVELOPMENT MINUS LOCAL PLAN ASSUMPTIONS) - SITE B				
JOB NUMBER:	182600	FIGURE:	7		REV:	-	
DRAWN BY:	AH						



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

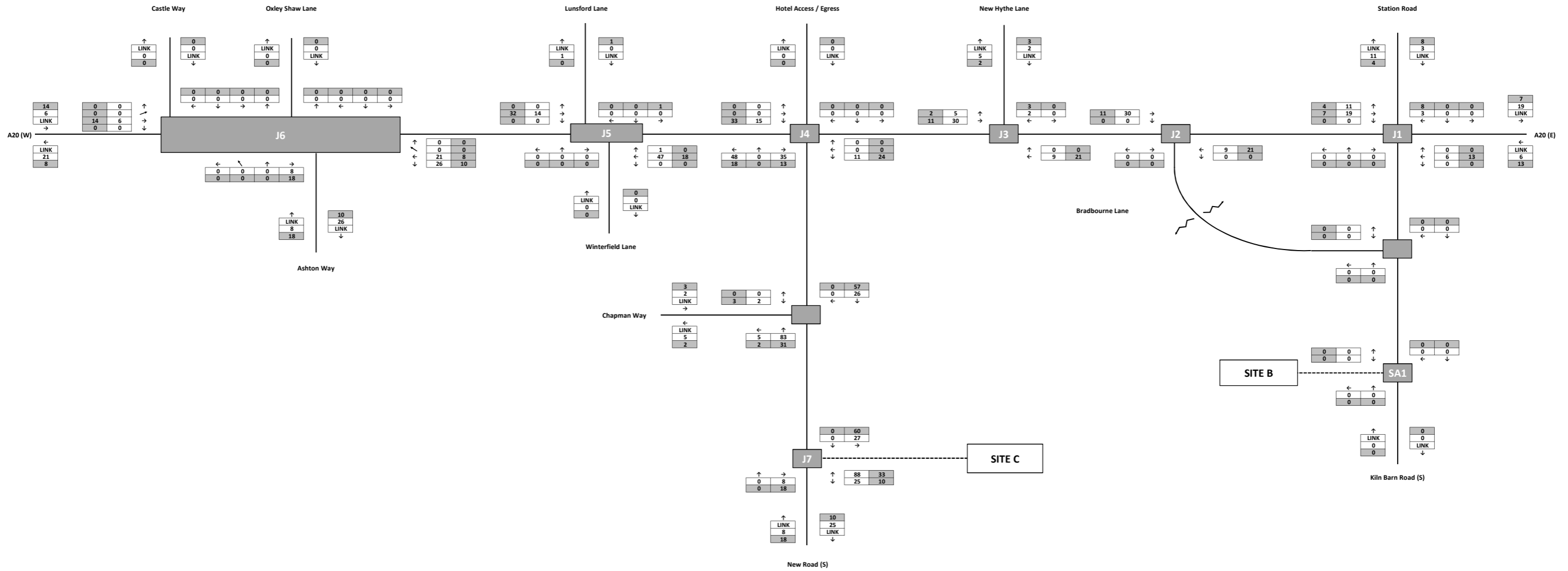


SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	AUGUST 2018	TITLE:	PROPOSED DEVELOPMENT (SITE C) ASSIGNED TRAFFIC FLOWS	FIGURE:	8		REV:
JOB NUMBER:	182600						
DRAWN BY:	PR						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

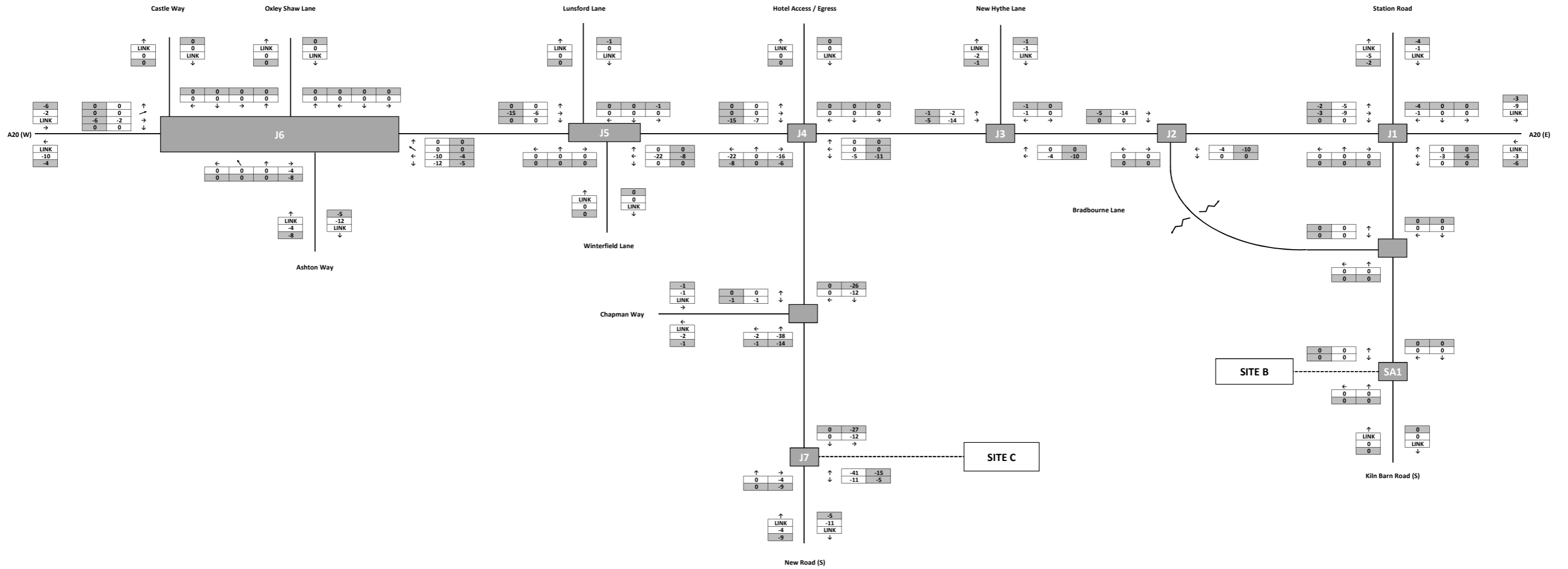


SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	APRIL 2019	TITLE:	SITE C ASSIGNED TRAFFIC FLOWS - LOCAL PLAN ASSUMPTIONS (205 DWELLS)	FIGURE:	9		REV:
JOB NUMBER:	182600						
DRAWN BY:	AH						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

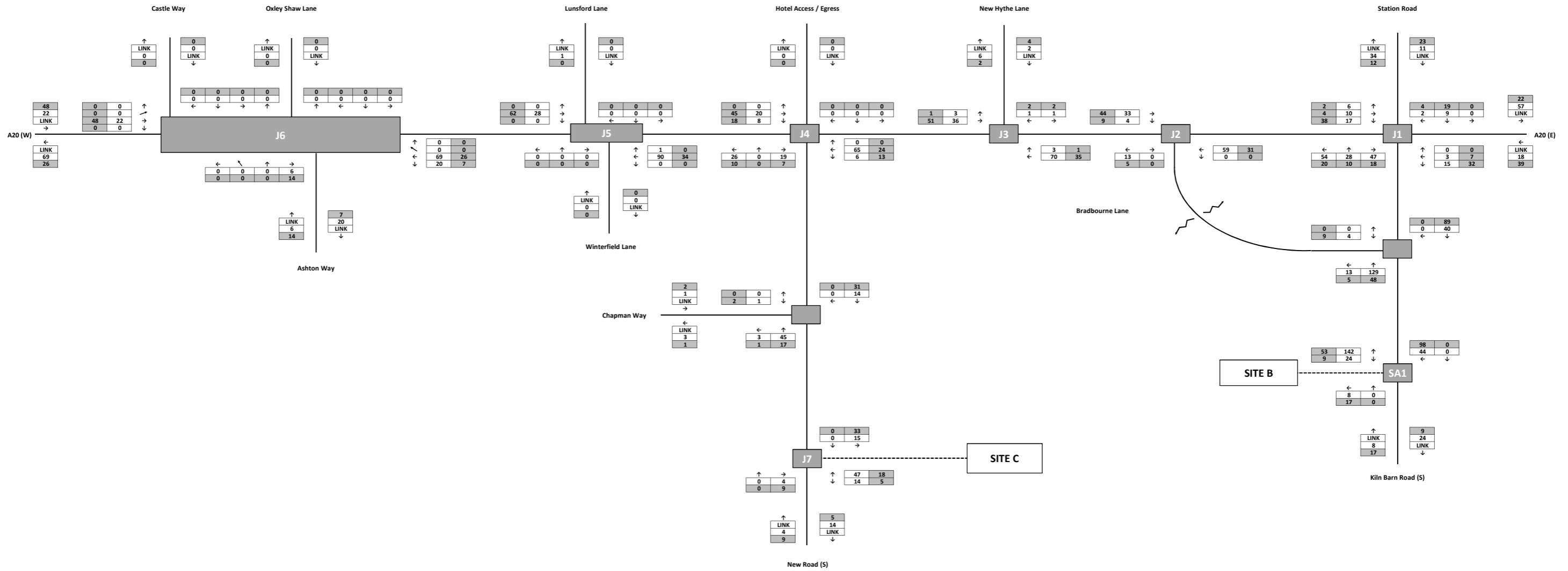


SCALE:	NTS @ A3	CLIENT:	PROJECT:		
DATE:	APRIL 2019	EAST MALLING TRUST	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
JOB NUMBER:	182600	TITLE:	NET TRAFFIC FLOWS (PROPOSED DEVELOPMENT MINUS LOCAL PLAN ASSUMPTIONS) - SITE C		
DRAWN BY:	AH				
			FIGURE:	REV:	
			10	-	

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



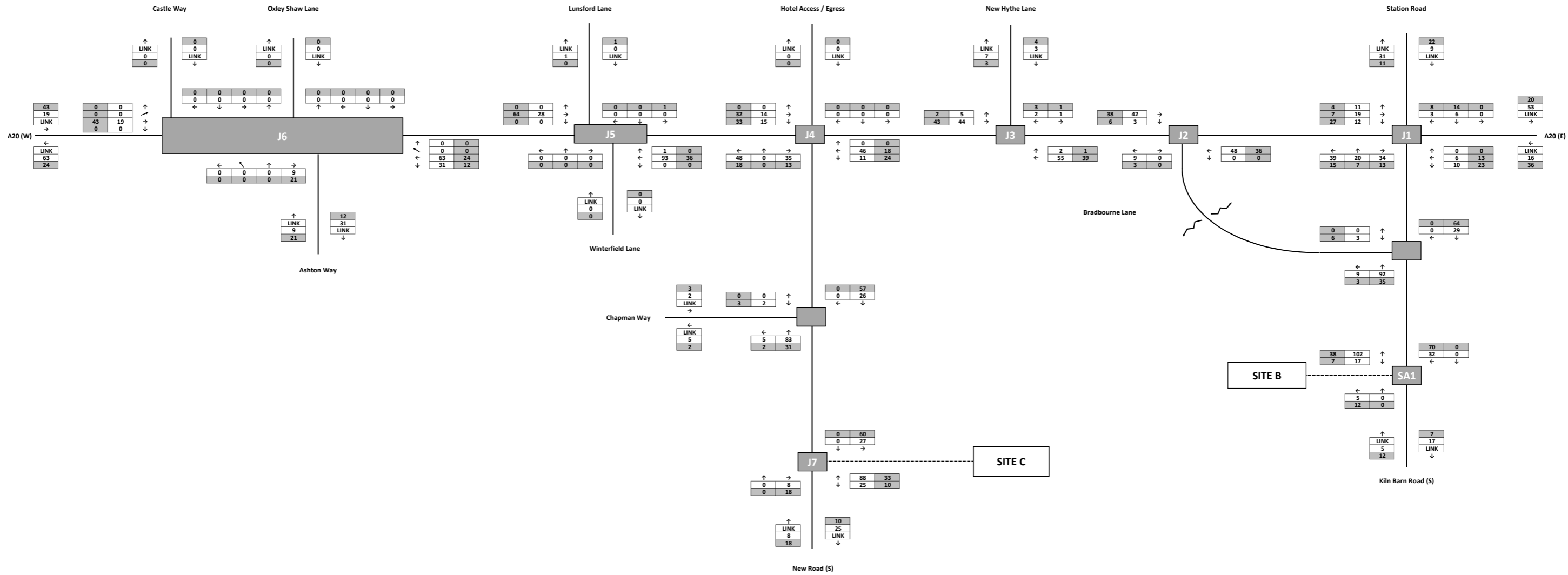
SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)	
DATE:	AUGUST 2018	TITLE:	PROPOSED DEVELOPMENT (SITE B + SITE C) ASSIGNED TRAFFIC FLOWS				
JOB NUMBER:	182600	FIGURE:	11		REV:	B	
DRAWN BY:	PR						



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

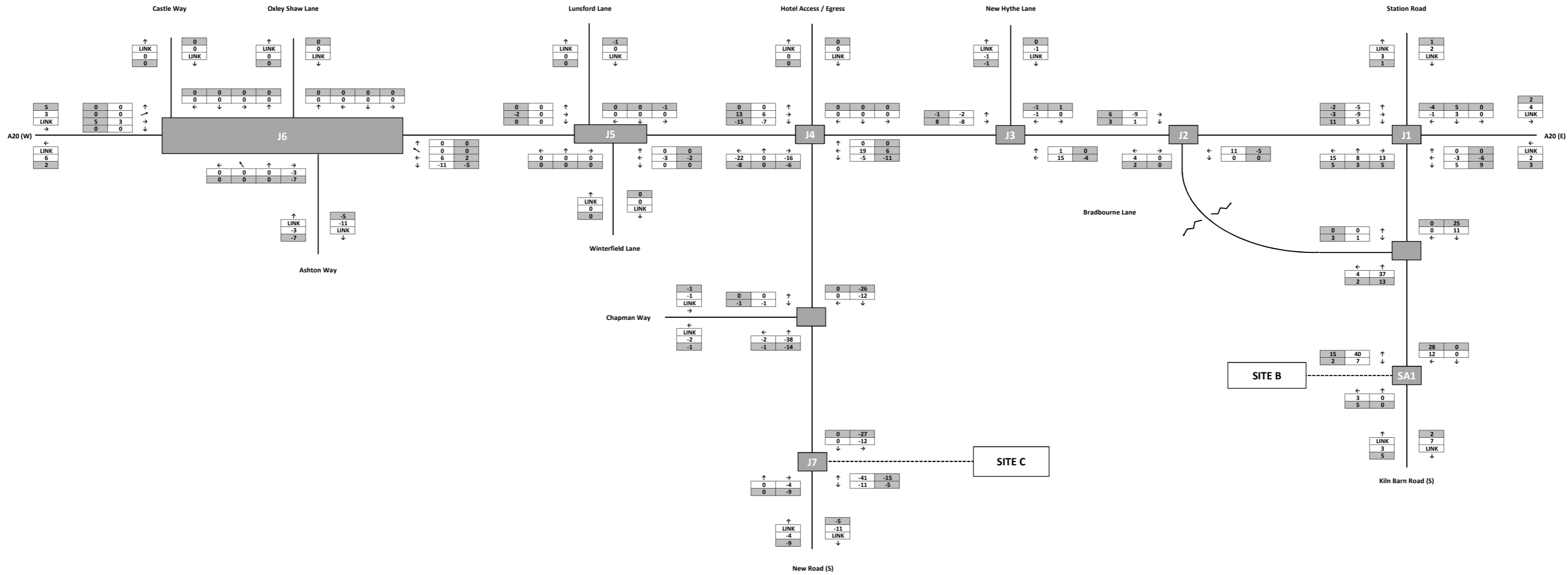


SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	APRIL 2019	TITLE:	COMBINED SITE B + SITE C ASSIGNED TRAFFIC FLOWS (LOCAL PLAN ASSUMPTIONS)	FIGURE:	12		REV:
JOB NUMBER:	182600						
DRAWN BY:	AH						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



SCALE:	NTS @ A3
DATE:	APRIL 2019
JOB NUMBER:	182600
DRAWN BY:	AH

CLIENT:	EAST MALLING TRUST
TITLE:	COMBINED SITE B + C NET TRAFFIC FLOWS (PROPOSED DEVELOPMENT MINUS LOCAL PLAN ASSUMPTIONS)

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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**ARDENT**  
CONSULTING ENGINEERS

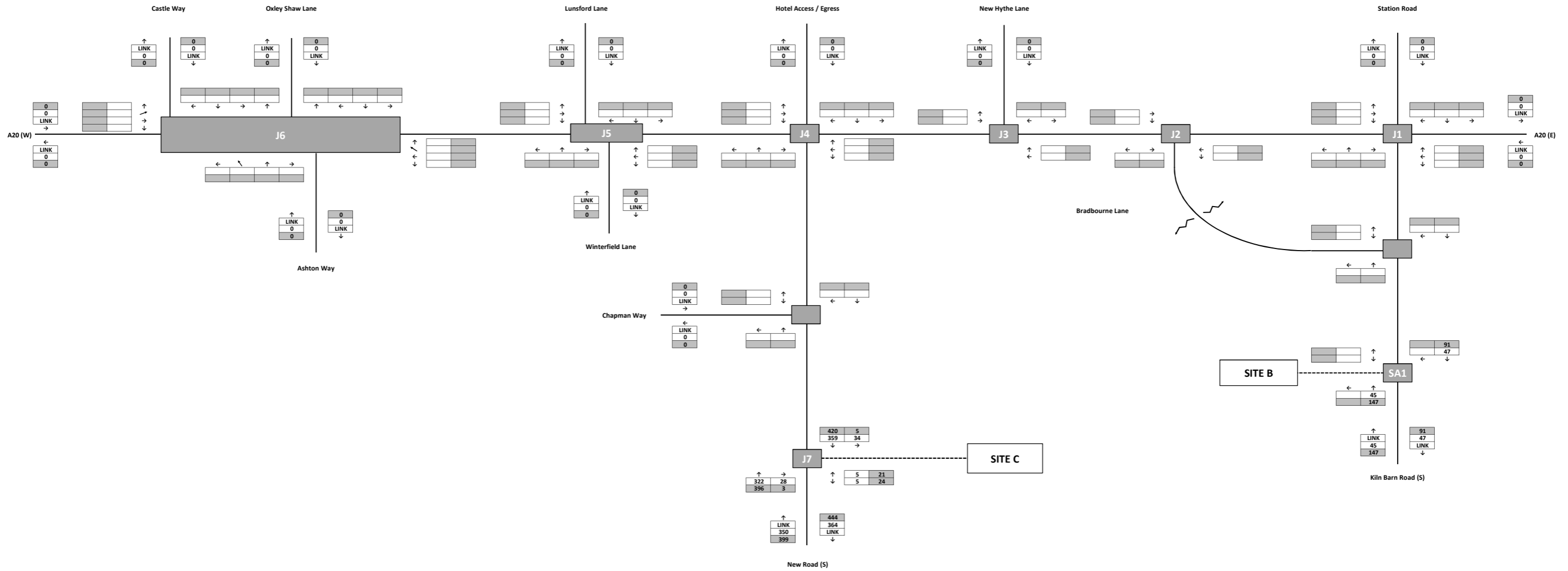
FIGURE:	REV:
13	B



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Kiln Barn Road flows taken from ATC undertaken on xxx  
 2. New Road / Chapel Street flows taken from Manual Classified Count undertaken on Tuesday 17th July 2018



SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)	
DATE:	AUGUST 2018	TITLE:	2018 OBSERVED TRAFFIC FLOWS		FIGURE:	14	REV:
JOB NUMBER:	182600						B
DRAWN BY:	PR						



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

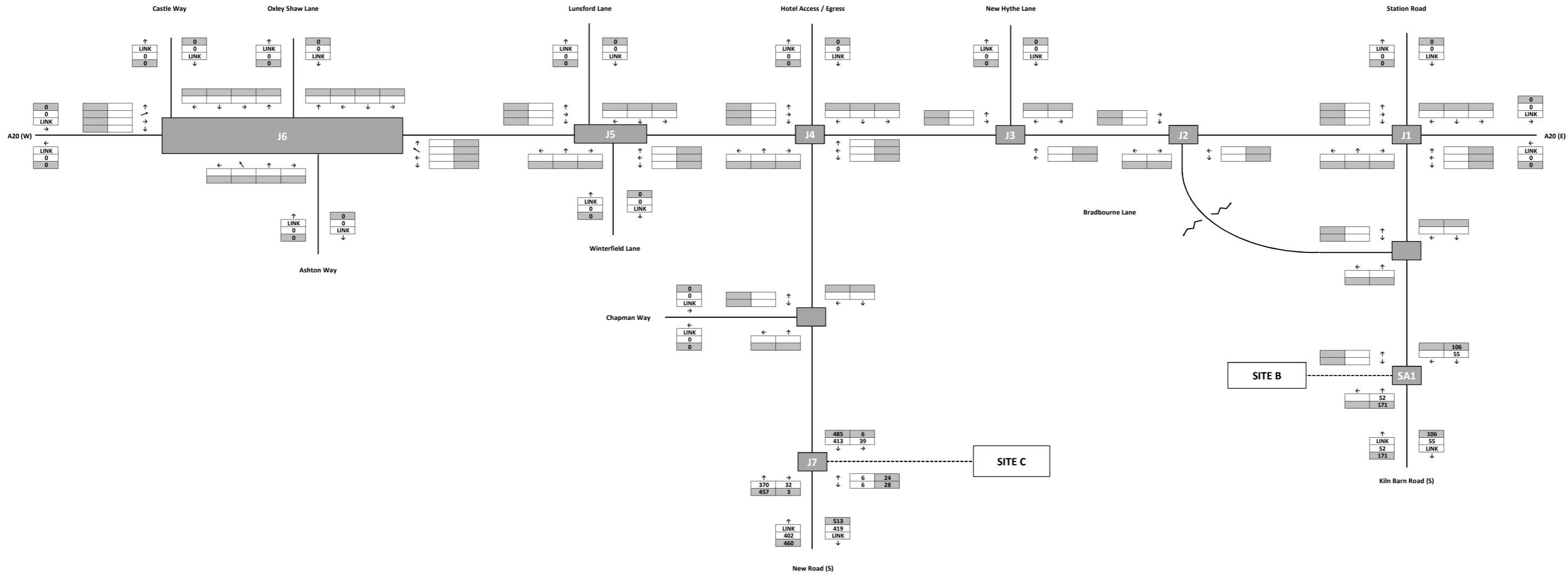
**Notes:**  
 1. Growth Factors not applied to turning movements to/from Chapel Street as road is private and therefore no growth would be expected

**Site B Growth Factors**

AM	-	1.1604
PM	-	1.1651

**Site C Growth Factors**

AM	-	1.1498
PM	-	1.1551

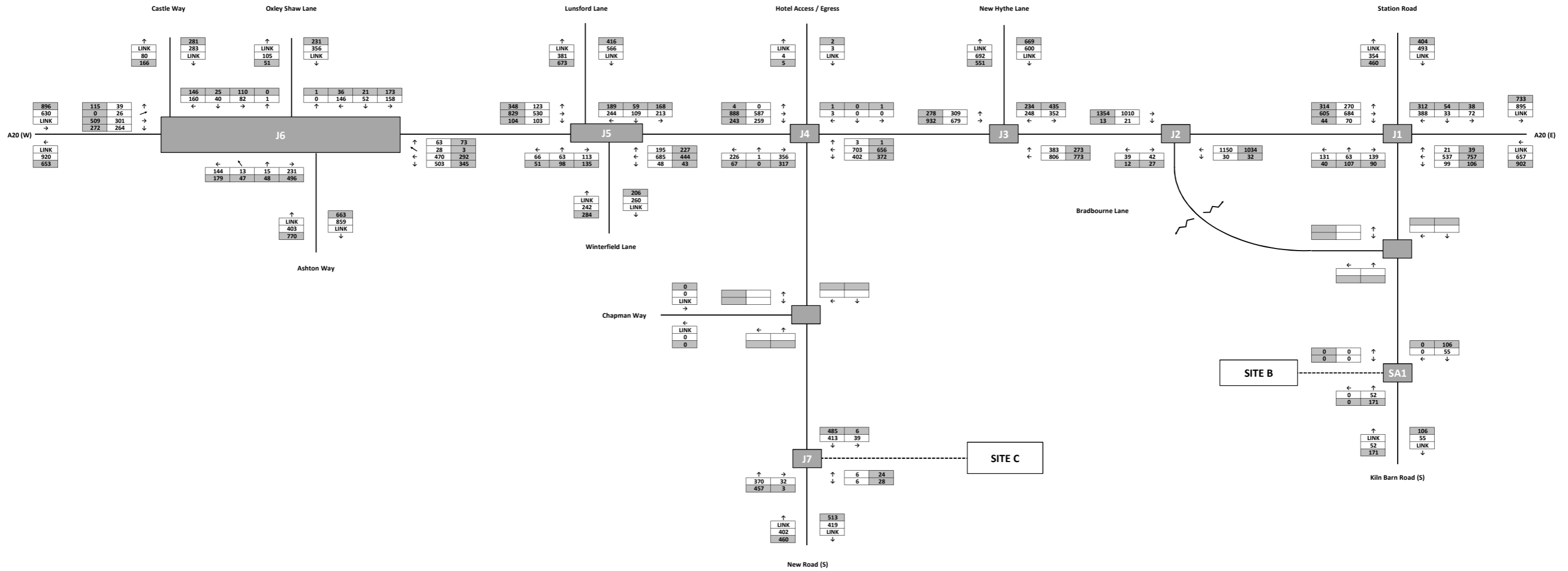


SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	AUGUST 2018	TITLE:	2031 FUTURE YEAR TRAFFIC FLOWS	FIGURE:	15		REV:
JOB NUMBER:	182600						
DRAWN BY:	PR						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3
DATE:	AUGUST 2018
JOB NUMBER:	182600
DRAWN BY:	PR

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO MINIMUM' BACKGROUND TRAFFIC FLOWS

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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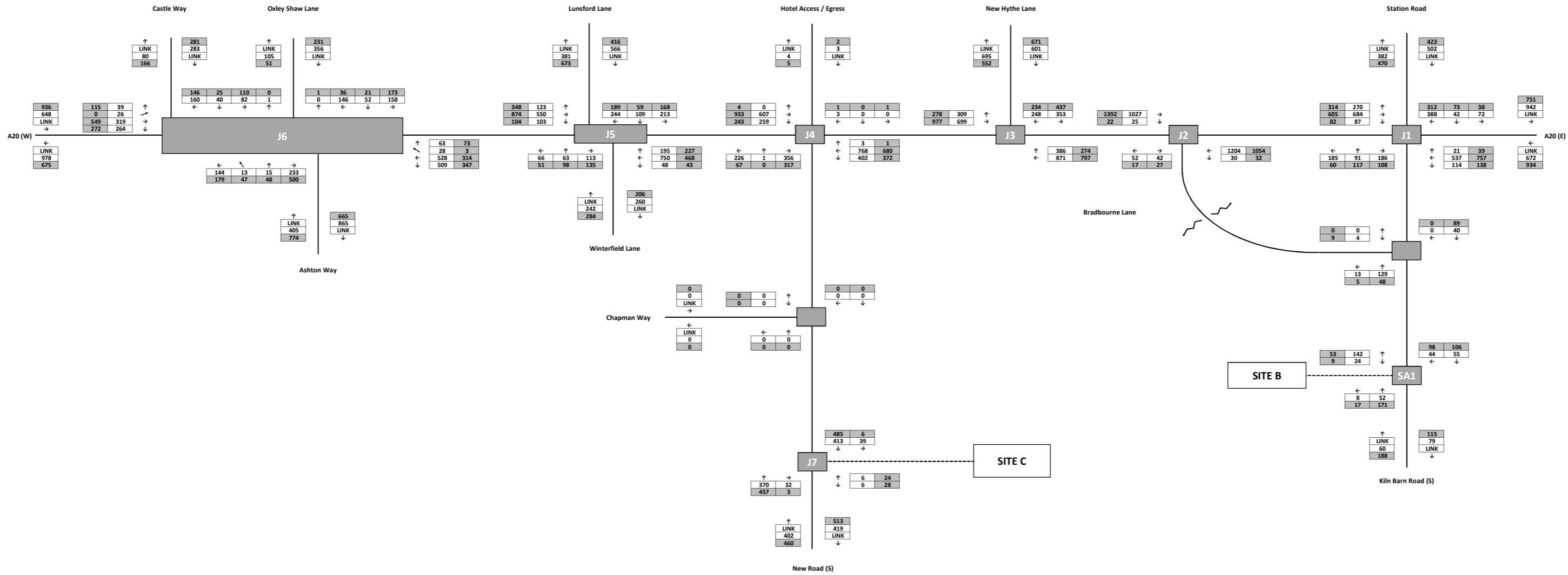
**ARDENT**  
 CONSULTING ENGINEERS

FIGURE:	REV:
16	A

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



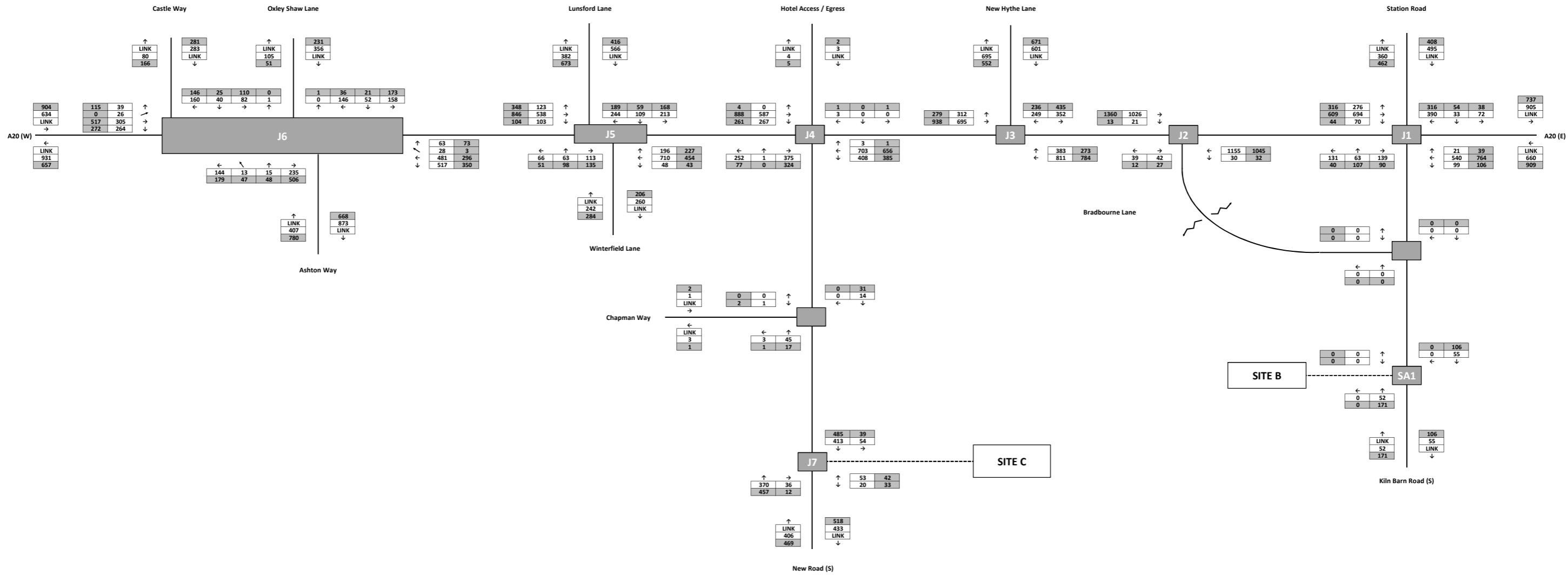
SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)	
DATE:	AUGUST 2018	TITLE:	2031 'DO MINIMUM' BACKGROUND + SITE B (PROPOSED DEVELOPMENT) TRAFFIC FLOWS				
JOB NUMBER:	182600	FIGURE:	17	REV:	A		
DRAWN BY:	PR						



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**



SCALE:	NTS @ A3
DATE:	AUGUST 2018
JOB NUMBER:	182600
DRAWN BY:	PR

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO MINIMUM' BACKGROUND + SITE C (PROPOSED DEVELOPMENT) TRAFFIC FLOWS

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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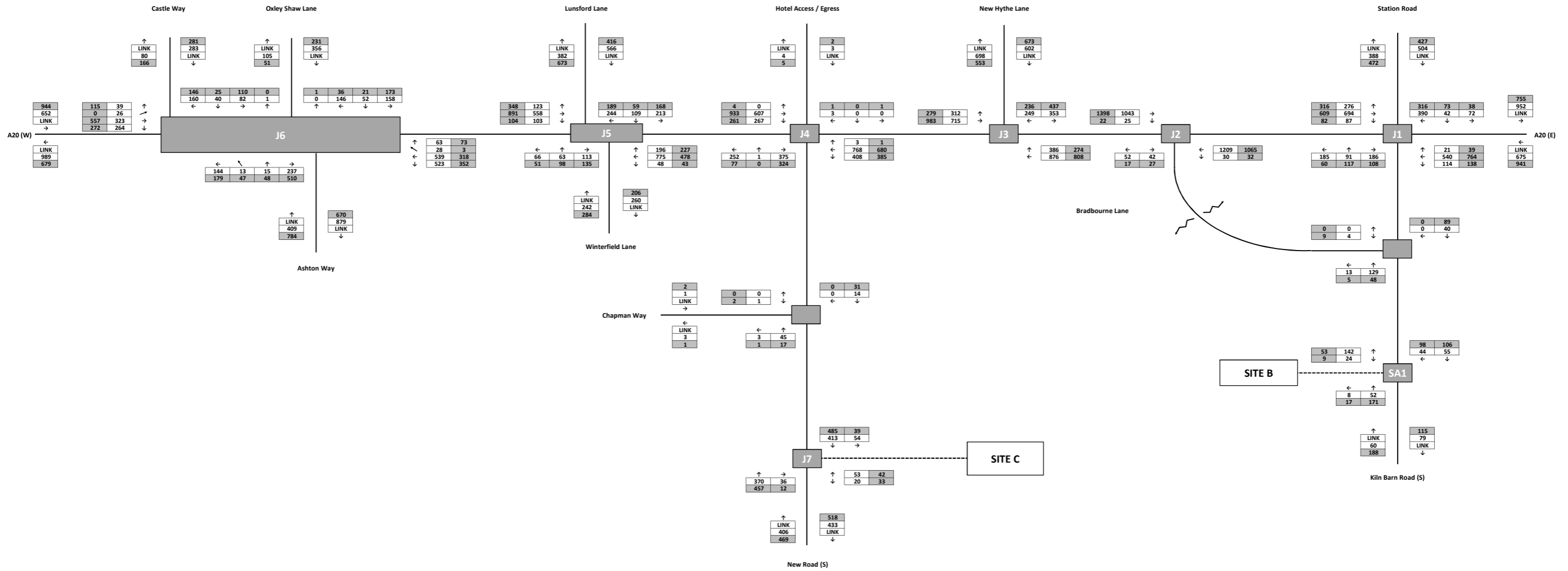
**ARDENT**  
CONSULTING ENGINEERS

FIGURE:	REV:
18	A

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**

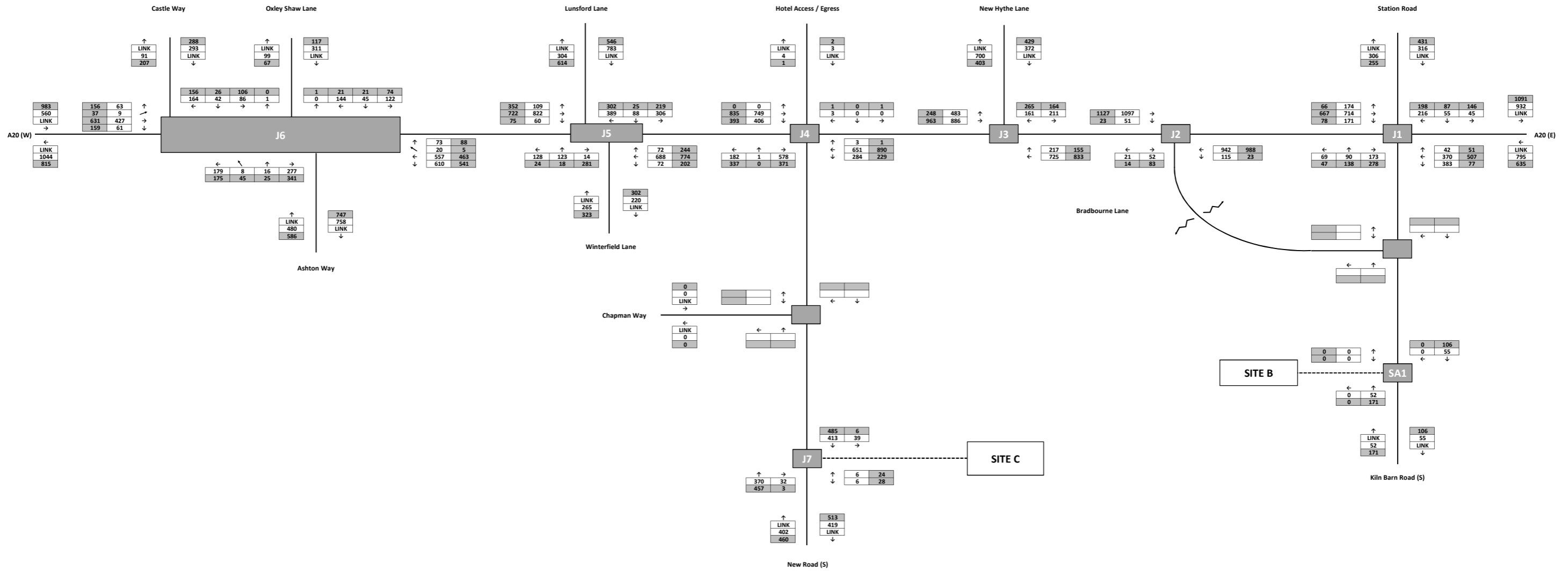



SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	AUGUST 2018	TITLE:	2031 'DO MINIMUM' BACKGROUND + SITE B + SITE C (PROPOSED DEVELOPMENT) TRAFFIC FLOWS	FIGURE:	19		REV:
JOB NUMBER:	182600						
DRAWN BY:	PR						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.

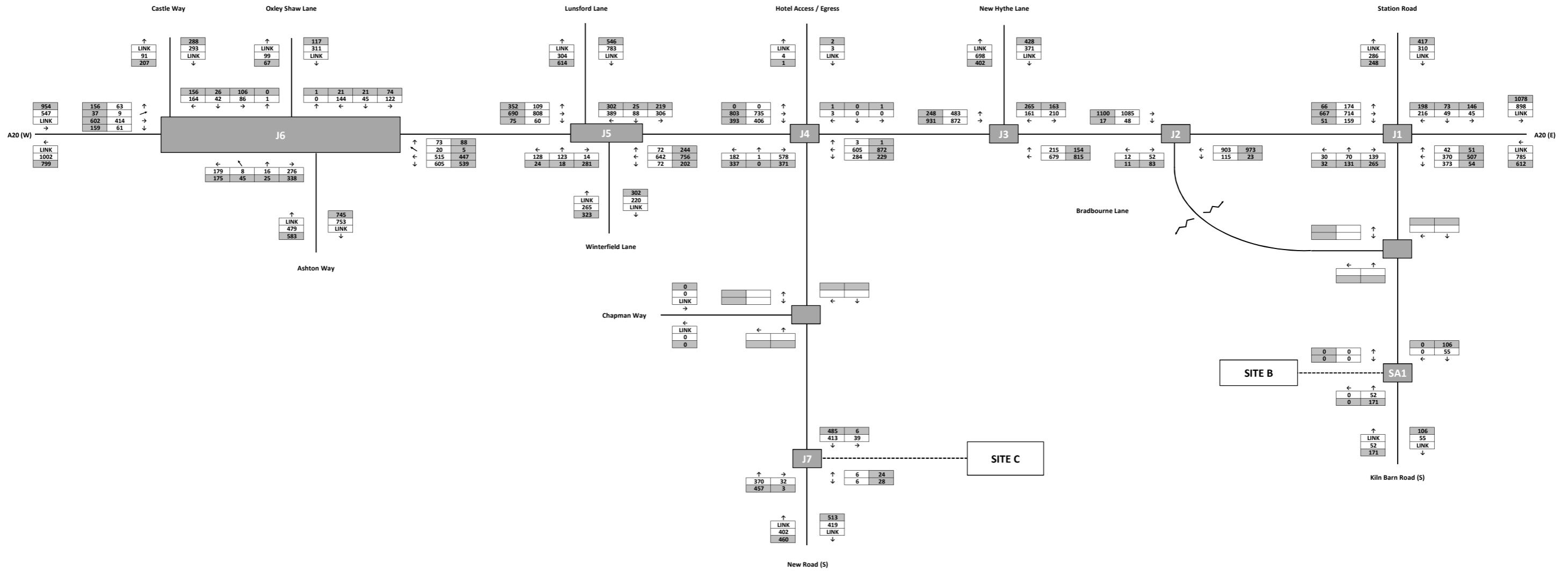


SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST		PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)	
DATE:	AUGUST 2018	TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS				
JOB NUMBER:	182600	FIGURE:	20	REV:	B		
DRAWN BY:	PR						

**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



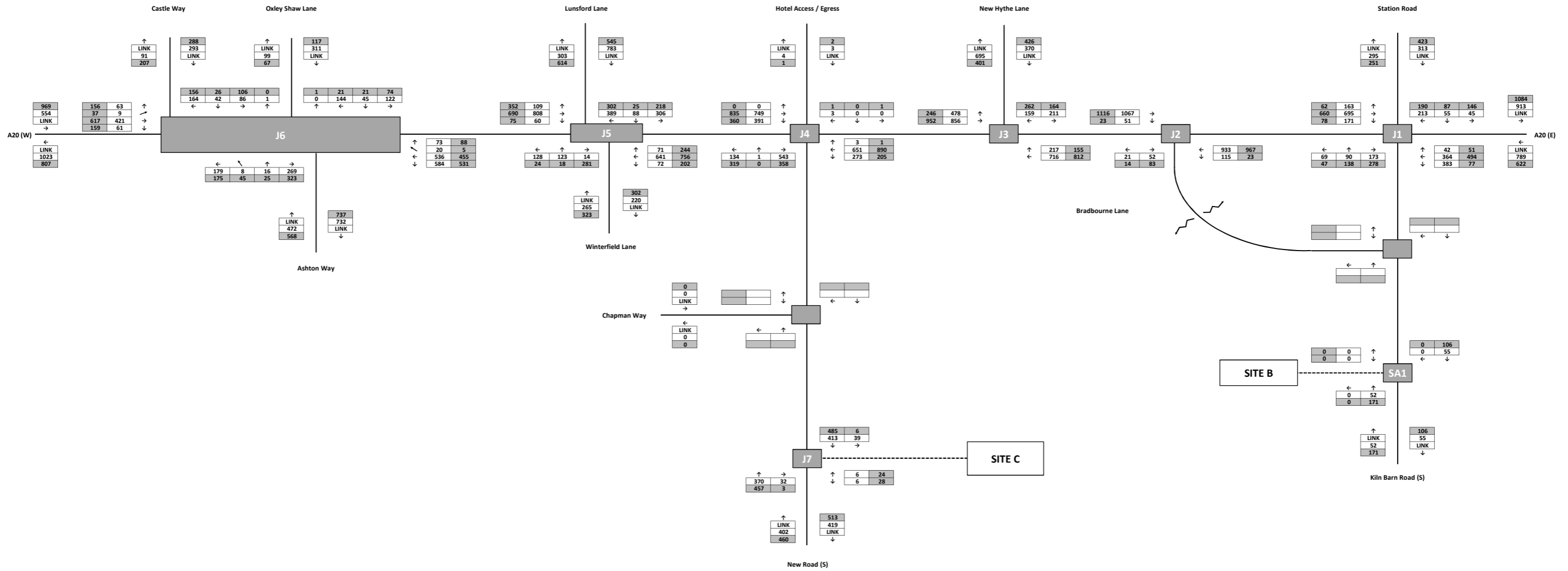
SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	APRIL 2019	TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE B)	FIGURE:	21		REV:
JOB NUMBER:	182600						
DRAWN BY:	AH						



**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3
DATE:	APRIL 2019
JOB NUMBER:	182600
DRAWN BY:	AH

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE C)

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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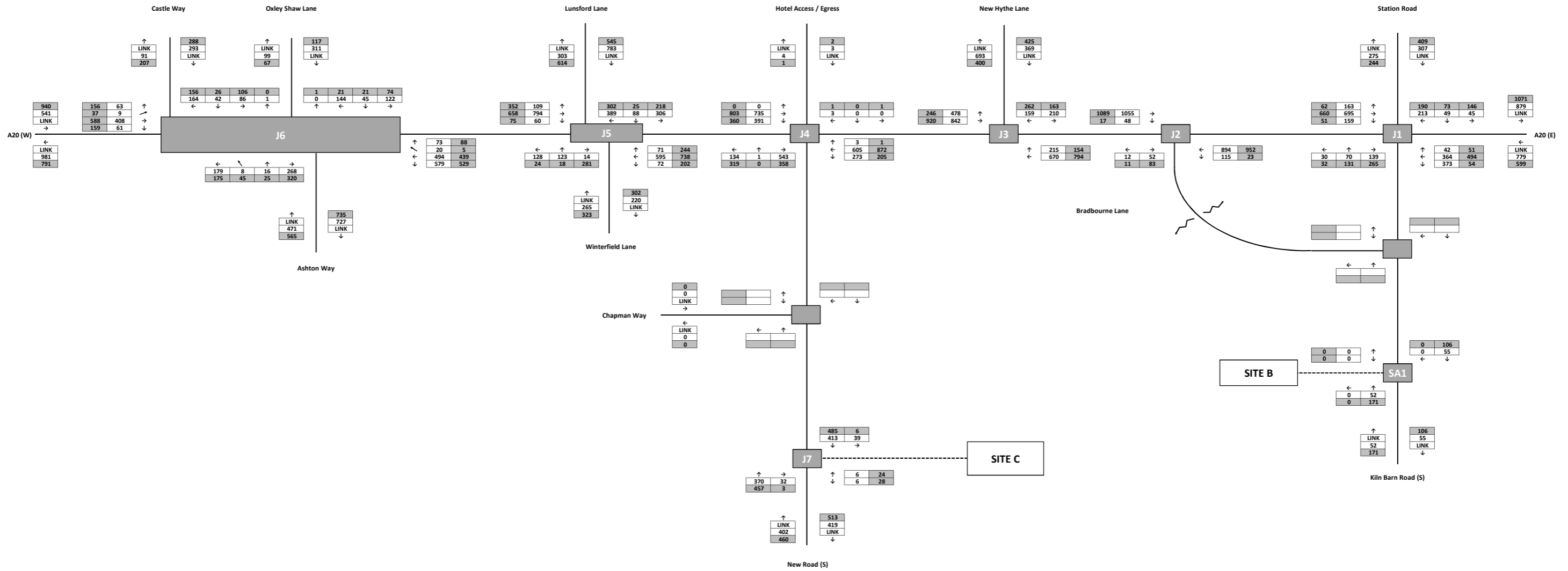
**ARDENT**  
 CONSULTING ENGINEERS

FIGURE:	22	REV:	-
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**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3
DATE:	APRIL 2019
JOB NUMBER:	182600
DRAWN BY:	AH

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE B + C)

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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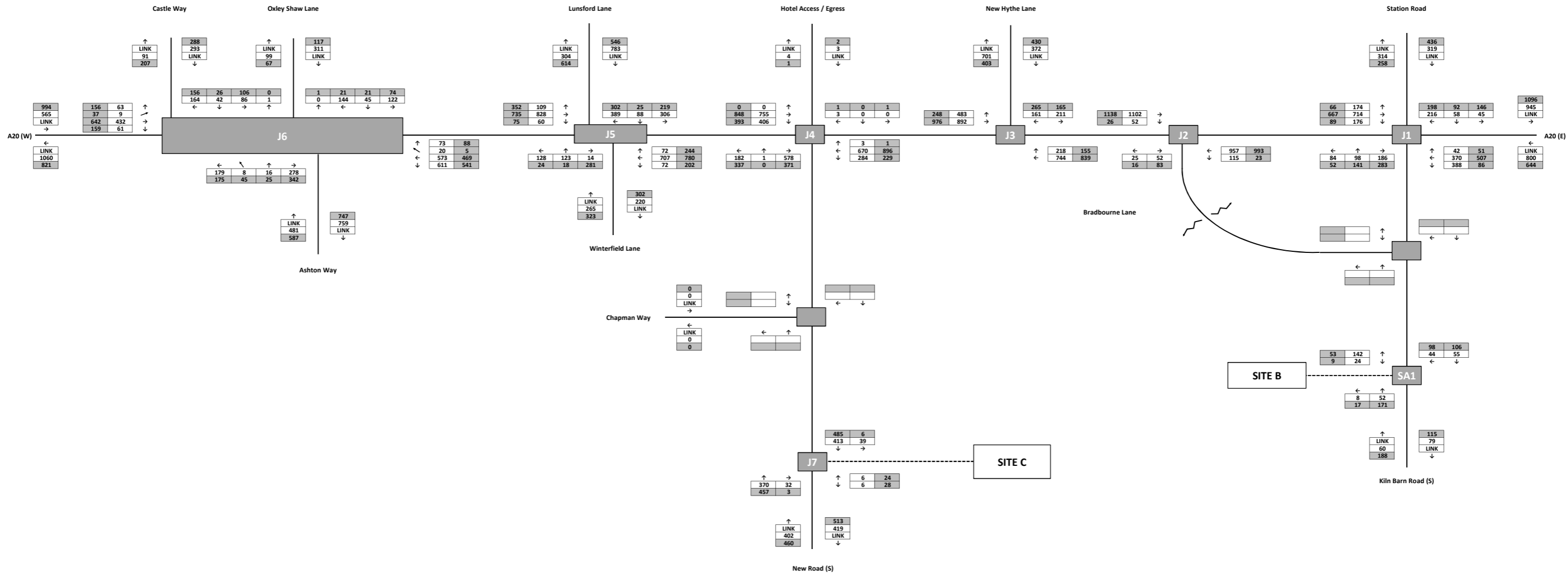
**ARDENT**  
 CONSULTING ENGINEERS

FIGURE:	23	REV:	-
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**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3
DATE:	APRIL 2019
JOB NUMBER:	182600
DRAWN BY:	AH

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE B) + DEVELOPMENT TRAFFIC (SITE B) + LOCAL PLAN ASSUMPTIONS (SITE C)

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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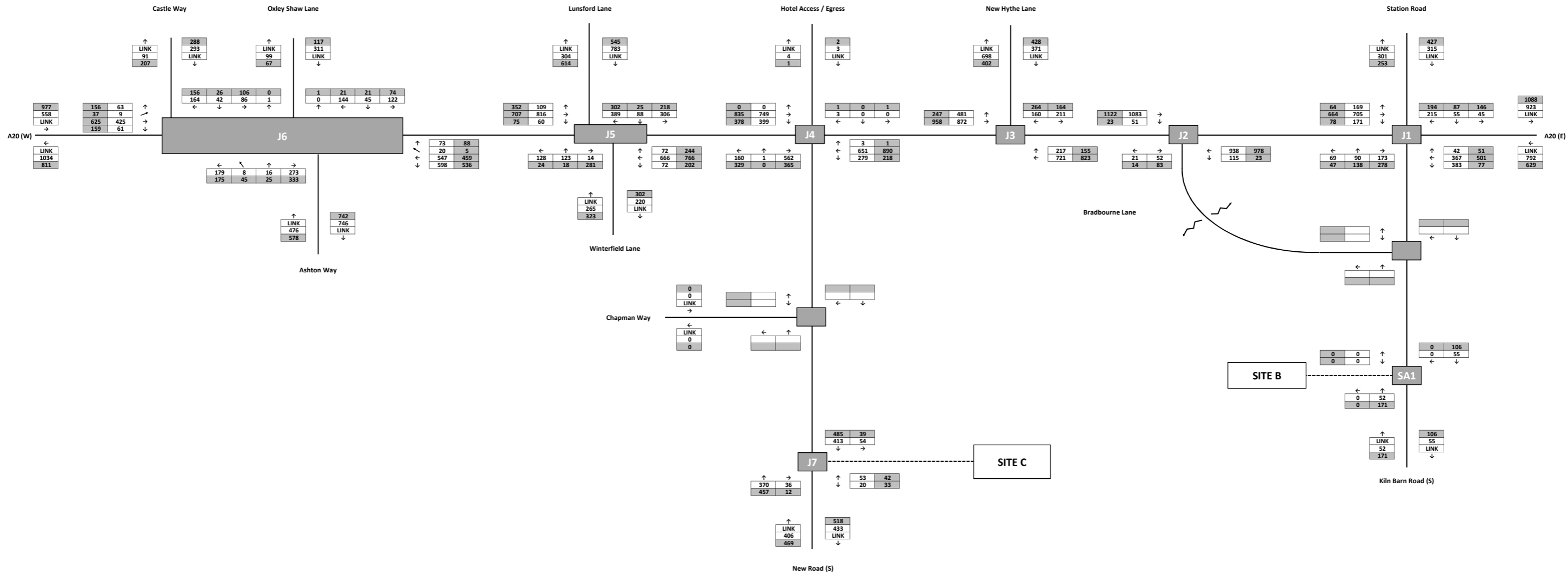
**ARDENT**  
 CONSULTING ENGINEERS

FIGURE:	24	REV:	-
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**KEY**

←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3
DATE:	APRIL 2019
JOB NUMBER:	182600
DRAWN BY:	AH

CLIENT:	EAST MALLING TRUST
TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE C) + DEVELOPMENT TRAFFIC (SITE C) + LOCAL PLAN ASSUMPTIONS (SITE B)

PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)
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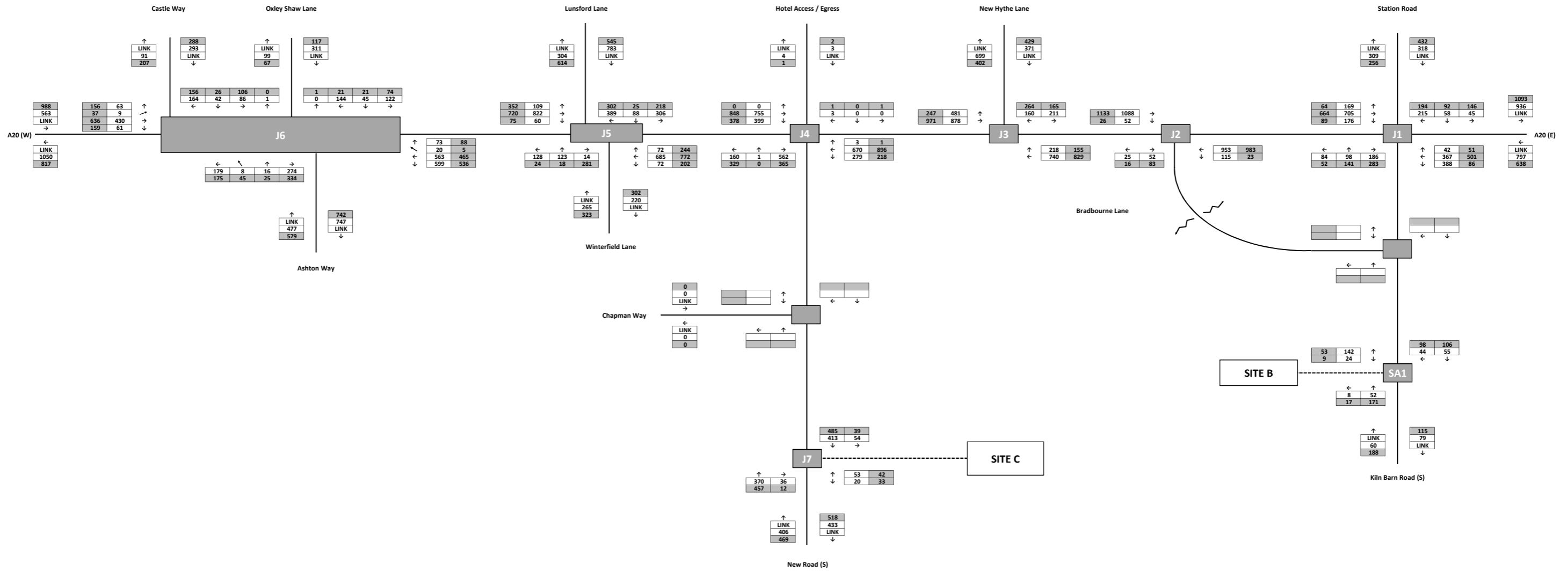
**ARDENT**  
 CONSULTING ENGINEERS

FIGURE:	REV:
25	-

**KEY**

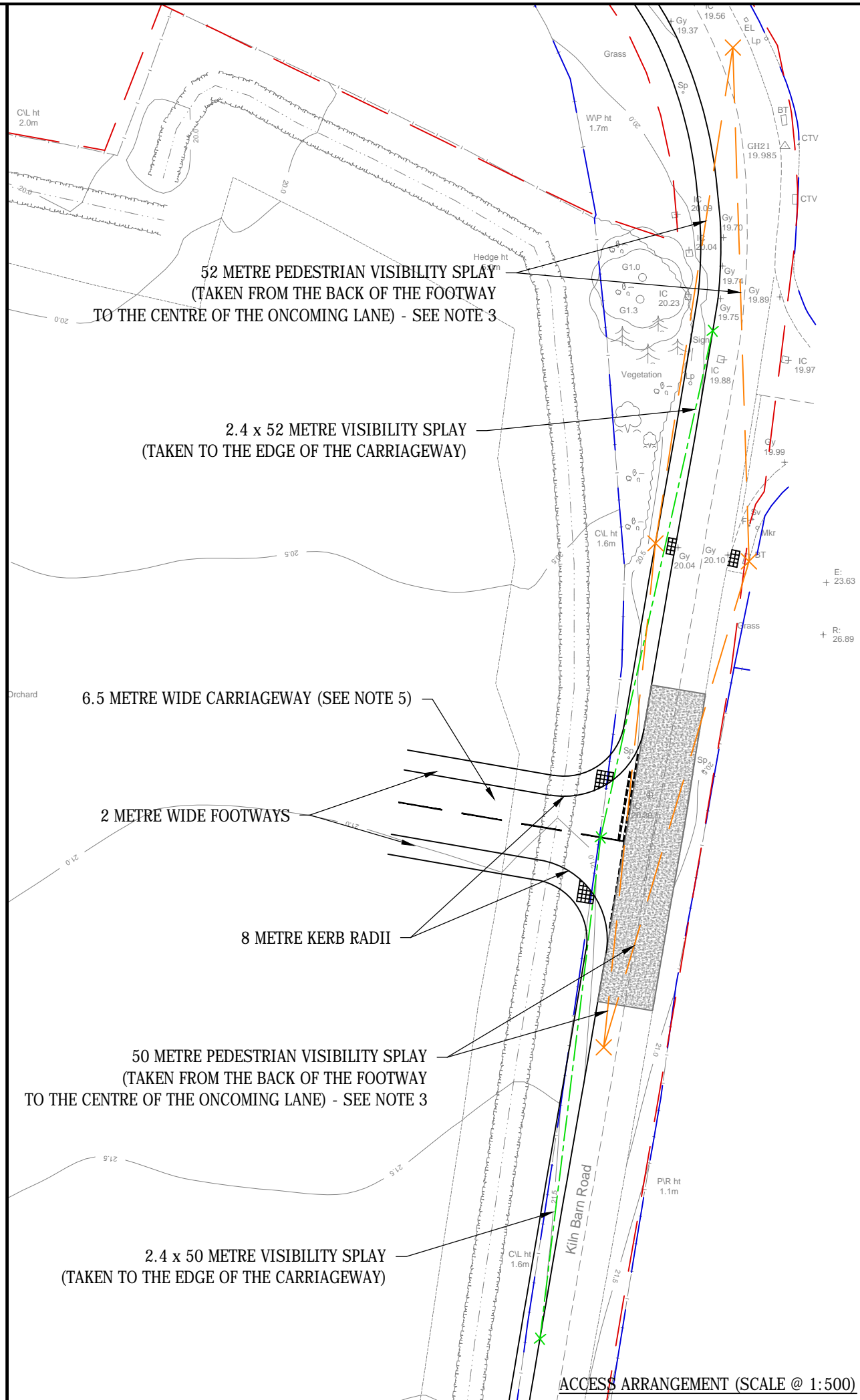
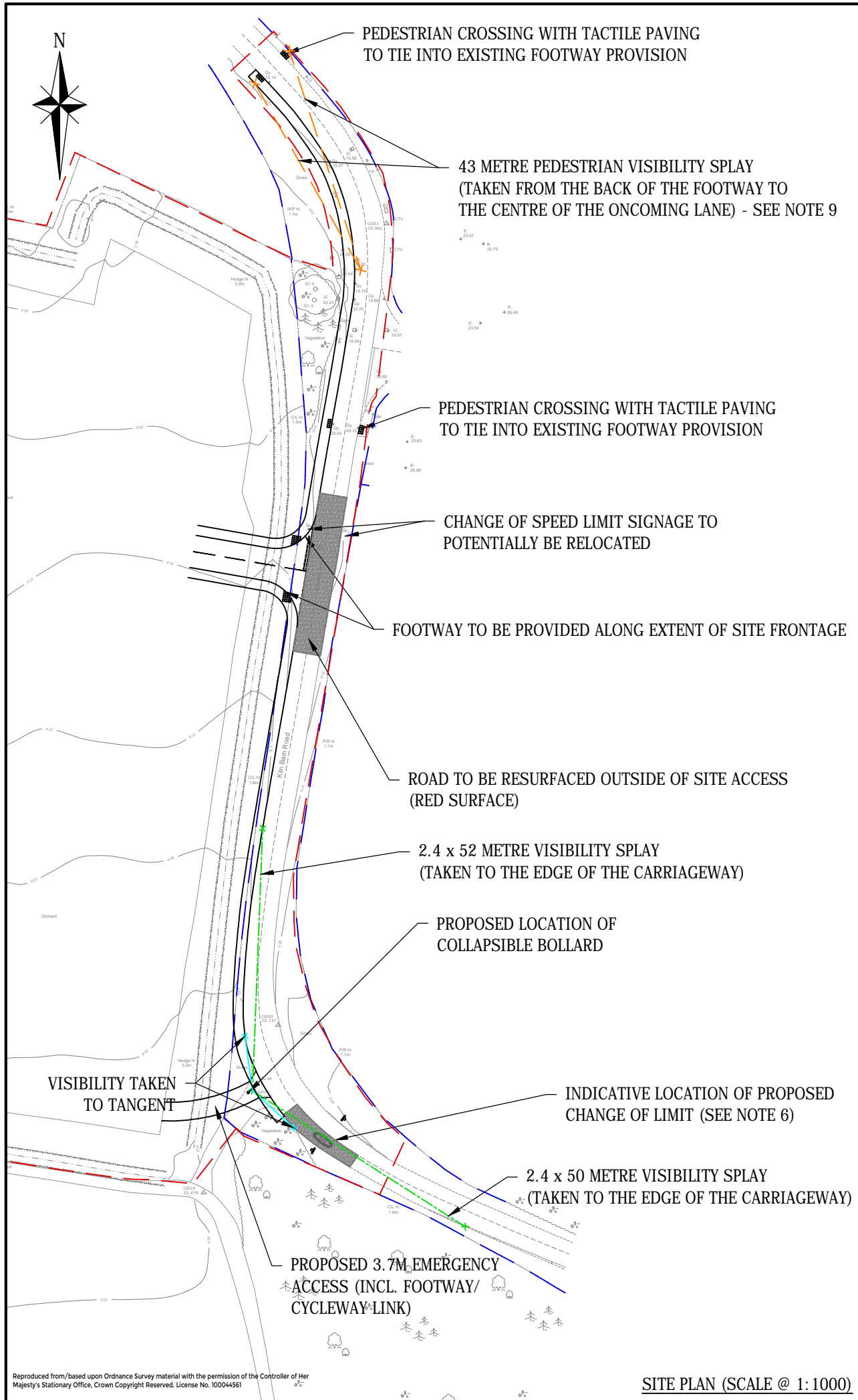
←	↑	→	=	Turning Movement (PCU)
X	X	X	=	AM Peak Hour
X	X	X	=	PM Peak Hour

**Notes:**  
 1. Assumptions have been made when deriving the traffic flow information for Junction 2. Please see corresponding Transport Assessment further details.



SCALE:	NTS @ A3	CLIENT:	EAST MALLING TRUST	PROJECT:	LAND OFF KILN BARN ROAD, DITTON (SITE B) & LAND OFF NEW ROAD, EAST MALLING (SITE C)		
DATE:	APRIL 2019	TITLE:	2031 'DO SOMETHING' BACKGROUND TRAFFIC FLOWS MINUS LOCAL PLAN ASSUMPTIONS (SITE B + C) + DEVELOPMENT TRAFFIC (SITE B + C)	FIGURE:	26		REV:
JOB NUMBER:	182600						
DRAWN BY:	AH						

Drawings



**NOTES**

1. PROPOSED JUNCTION IS SUBJECT TO SWEEP PATH ANALYSIS AND CAPACITY ASSESSMENTS.
2. IN ACCORDANCE WITH KENT DESIGN GUIDE, JUNCTION IS SPACED 30 METRES FROM THE NEAREST JUNCTION (MEASURED CENTRE LINE TO CENTRE LINE).
3. VISIBILITY SPLAYS BASED ON ATC SPEED SURVEY RESULTS AND MFS CALCULATIONS.
4. AREAS BETWEEN CARRIAGEWAY EDGE AND VISIBILITY SPLAYS TO REMAIN CLEAR OF OBSTRUCTIONS 0.6m OR HIGHER.
5. INITIAL SECTION OF ROAD TO 6.5 METRES WIDE UP UNTIL INTERNAL LOOP ROAD (SUBJECT TO INTERNAL LAYOUT), AND THEREAFTER WILL BE A MAXIMUM WIDTH OF 6.5 METRES.
6. SPEED LIMIT TO BE RELOCATED AS PER THE DRAWING TO BEST ENDEAVOURS.
7. ROAD MARKINGS TO BE PROVIDED IN ACCORDANCE WITH TRAFFIC SIGNS MANUAL CHAPTER 5.
8. AS PER THE ADVICE CONTAINED WITHIN KENT DESIGN GUIDE, THE PROPOSED SITE ACCESS HAS BEEN LOCATED FURTHER THAN THE MINIMUM 15 METRES OF THE NEAREST JUNCTION.
9. PEDESTRIAN VISIBILITY PROVIDED BASED ON MFS CALCULATIONS AND SIGNPOSTED SPEED LIMIT.

**KEY**

- APPLICATION BOUNDARY
- HIGHWAY BOUNDARY (AS CONFIRMED BY KENT COUNTY COUNCIL)

PRELIMINARY

D	PROPOSED EMERGENCY ACCESS ADDED	ND	AH	ATB	30.04.19
C	PEDESTRIAN CROSSING VISIBILITY ADDED	PR	PR	ATB	15.02.19
B	ACCESS LOCATION AND RED LINE AMENDED	PR	ATB	SJH	10.12.18
A	RED LINE AMENDED AND TRAFFIC CALMING FEATURES ADDED	PR	ATB	SJH	08.11.18
Rev	Description	Drn	Chk	App	Date

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Client  
**EAST MALLING TRUST**

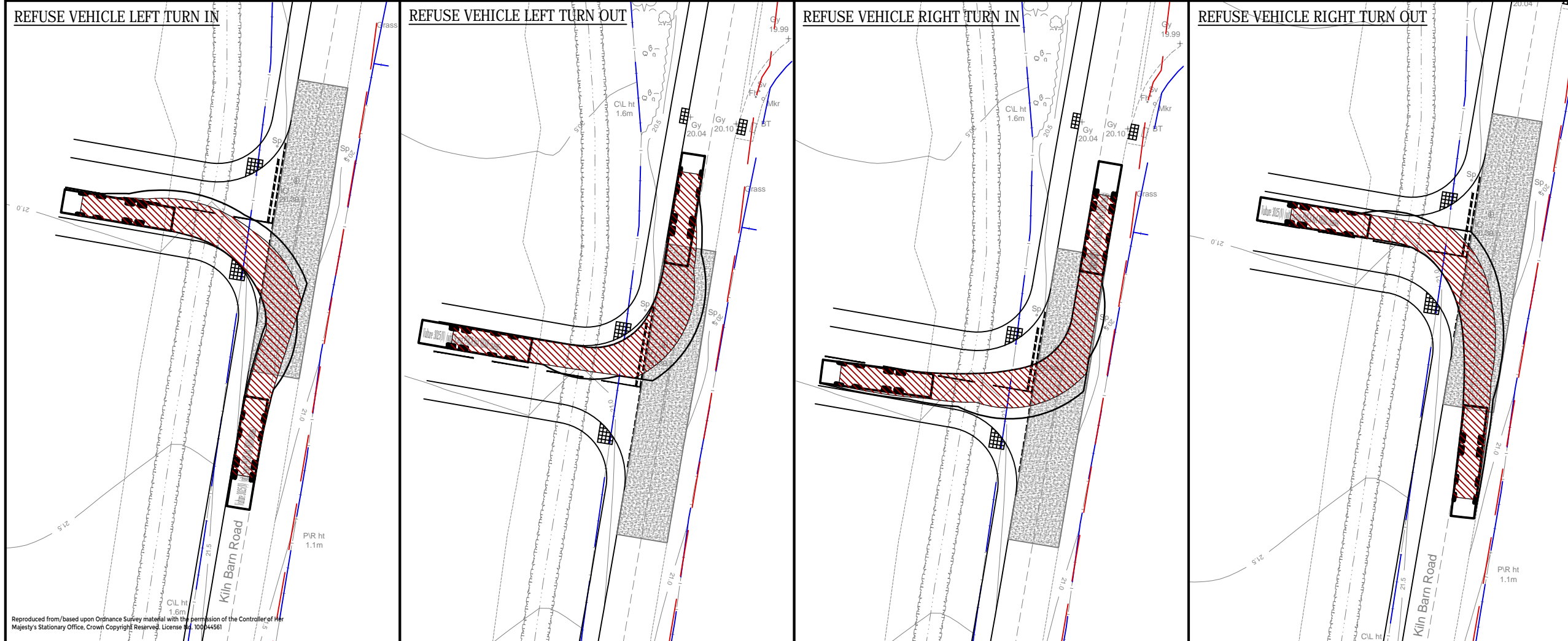
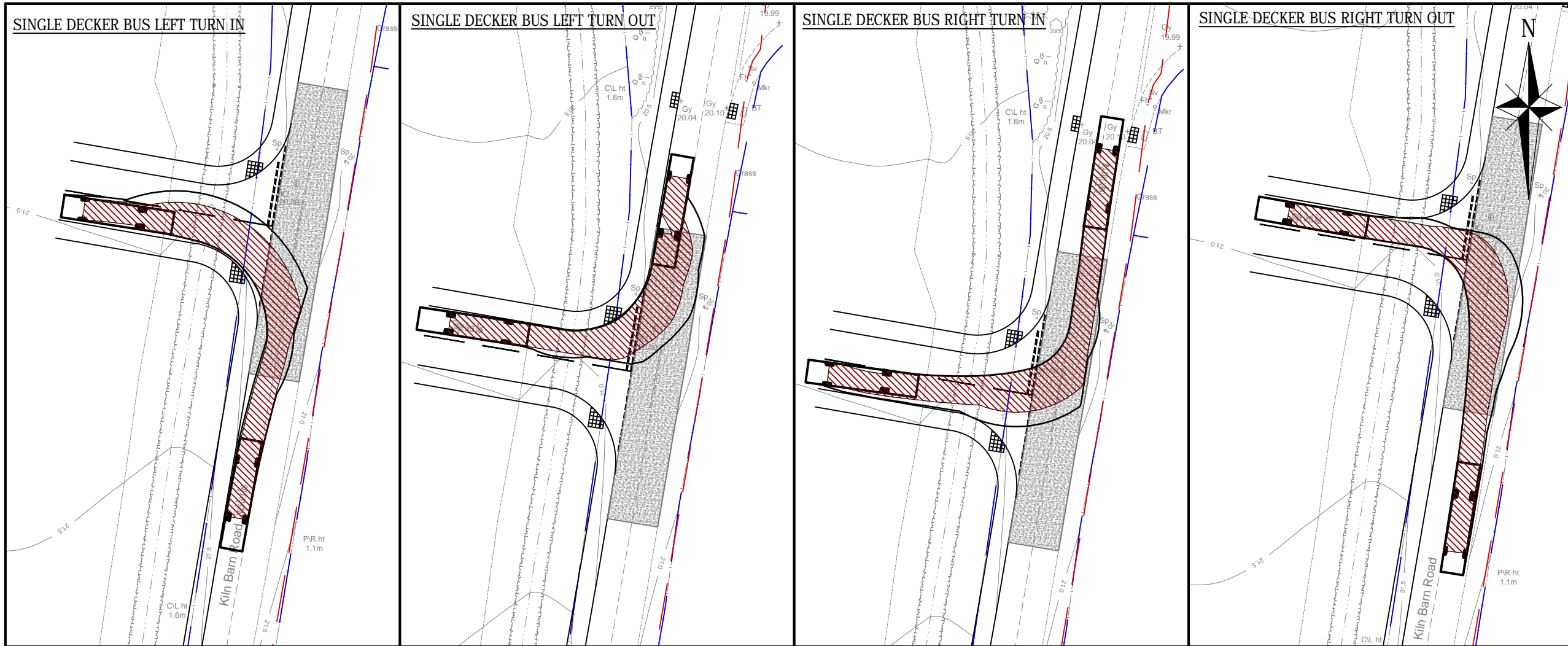
Project Title  
**DITTON EDGE (SITE B)**

Drawing Title  
**PROPOSED ACCESS ARRANGEMENT VIA KILN BARN ROAD**

A3 Scale	Date	Designed by
AS SHOWN	26.10.18	PR
Drawn by	Checked by	Approved by
PR	ATB	-
Drawing Number	Rev	
182600-003	D	

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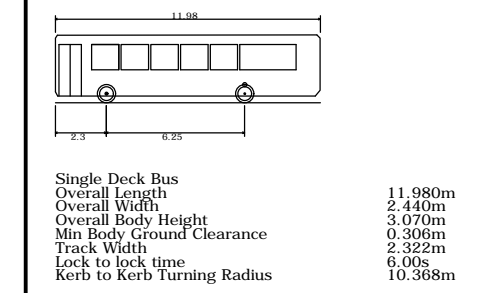
SITE PLAN (SCALE @ 1:1000)



**NOTES**

1. INITIAL SECTION OF ROAD TO 6.5 METRES WIDE UP UNTIL INTERNAL LOOP ROAD (SUBJECT TO INTERNAL LAYOUT), AND THEREAFTER WILL BE A MAXIMUM WIDTH OF 6.5 METRES.
2. ROAD MARKINGS TO BE PROVIDED IN ACCORDANCE WITH TRAFFIC SIGNS MANUAL CHAPTER 5.
3. INDICATIVE VEHICLES SHOWN ONLY. SUBJECT TO CONFIRMATION OF ANY SPECIFIC VEHICLE REQUIREMENTS.

- KEY**
- APPLICATION BOUNDARY
  - HIGHWAY BOUNDARY (AS CONFIRMED BY KENT COUNTY COUNCIL)

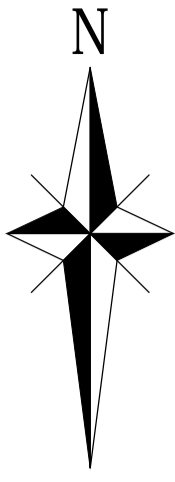


DRAFT

Rev	Description	Drm	Chk	App	Date
<b>ARDENT CONSULTING ENGINEERS</b> Third Floor The Hallmark Building 52-56 Leadenhall Street London EC3M 5JE Tel: 020 7680 4088 Web: www.ardent-ce.co.uk E-mail: enquiries@ardent-ce.co.uk					
<b>Client</b> EAST MALLING TRUST					
<b>Project Title</b> DITTON EDGE (SITE B)					
<b>Drawing Title</b> PROPOSED ACCESS VEHICLE TRACKING					
A3 Scale	Date	Designed by			
1:500	30.04.19	ND			
Drawn by	Checked by	Approved by			
ND	AH	ATB			
Drawing Number					Rev
182600-014					-

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2.4m X 103m VISIBILITY SPLAY  
(TAKEN TO EDGE OF CARRIAGEWAY)

BUS STOP MAY REQUIRE  
RELOCATION FOR VISIBILITY

CARRIAGEWAY AMENDED TO A  
MINIMUM WIDTH OF 5.5M

POINT WHERE VISIBILITY IS NO  
LONGER BLOCKED BY WALL (11.2m)

AREA OF EXISTING WALL TO BE SET  
BACK AND RECONSTRUCTED

DROPPED KERB AND TACTILE PAVING

POINT WHERE VISIBILITY IS NO  
LONGER BLOCKED BY WALL (10.6m)

2.4m X 103m VISIBILITY SPLAY  
(TAKEN TO EDGE OF CARRIAGEWAY)

PROPOSED DROP KERB,  
CROSSING WITH TACTILE PAVING

**NOTES**

1. VISIBILITY SPLAYS BASED ON ASSUMED VEHICLE SPEEDS AND MFS CALCULATIONS.
2. AREAS BETWEEN CARRIAGEWAY EDGE AND VISIBILITY SPLAYS TO REMAIN CLEAR OF OBSTRUCTIONS 0.6m OR HIGHER.
3. PROVISION OF FOOTWAY (AND ALSO RE-PROVISION OF WALL) SUBJECT TO DETAILS REGARDING THE WALLS LISTED STATUS.
4. TREE T79 (AS PER ARBORICULTURAL REPORT TO BS5837:2012 PREPARED BY DOWN TO EARTH LTD) TO BE REMOVED.
5. ACCESS TO BE LOCATED OUTSIDE OF TREE PROTECTION ZONES FOR SURROUNDING TREES BUT SUBJECT TO FURTHER DETAILED ASSESSMENT.
6. PROVISION OF ACCESS IS SUBJECT TO EARTHWORKS ASSESSMENT AND FURTHER DETAILED DESIGN.
7. ROAD MARKINGS TO BE PROVIDED IN ACCORDANCE WITH TRAFFIC SIGNS MANUAL CHAPTER 5.
8. OS MAPPING INCLUDED IS THERE AS REFERENCE FOR AREAS NOT PICKED UP ON TOPOGRAPHICAL SURVEY AND SHOULD NOT BE USED FOR ANY ACCURATE MEASUREMENTS.

**KEY**

— APPLICATION BOUNDARY

PRELIMINARY

B	DRAWING AMENDED TO REFLECT WALL POSITION	GHB	ATB	SJH	27.03.19
A	TACTILE PAVING CROSSING ADDED	PR	PR	ATB	15.02.19
Rev	Description	Drn	Chk	App	Date

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**worksafe** consultant  
www.smasid.com

**SSIP** SAFETY INSTITUTE  
MEMBER OF THE INSTITUTE OF PROFESSIONAL SURVEYORS

**BUREAU VERITAS** CERTIFIED

Client: **EAST MALLING TRUST**

Project Title: **PARKSIDE (SITE C)**

Drawing Title: **ACCESS VIA NEW ROAD**

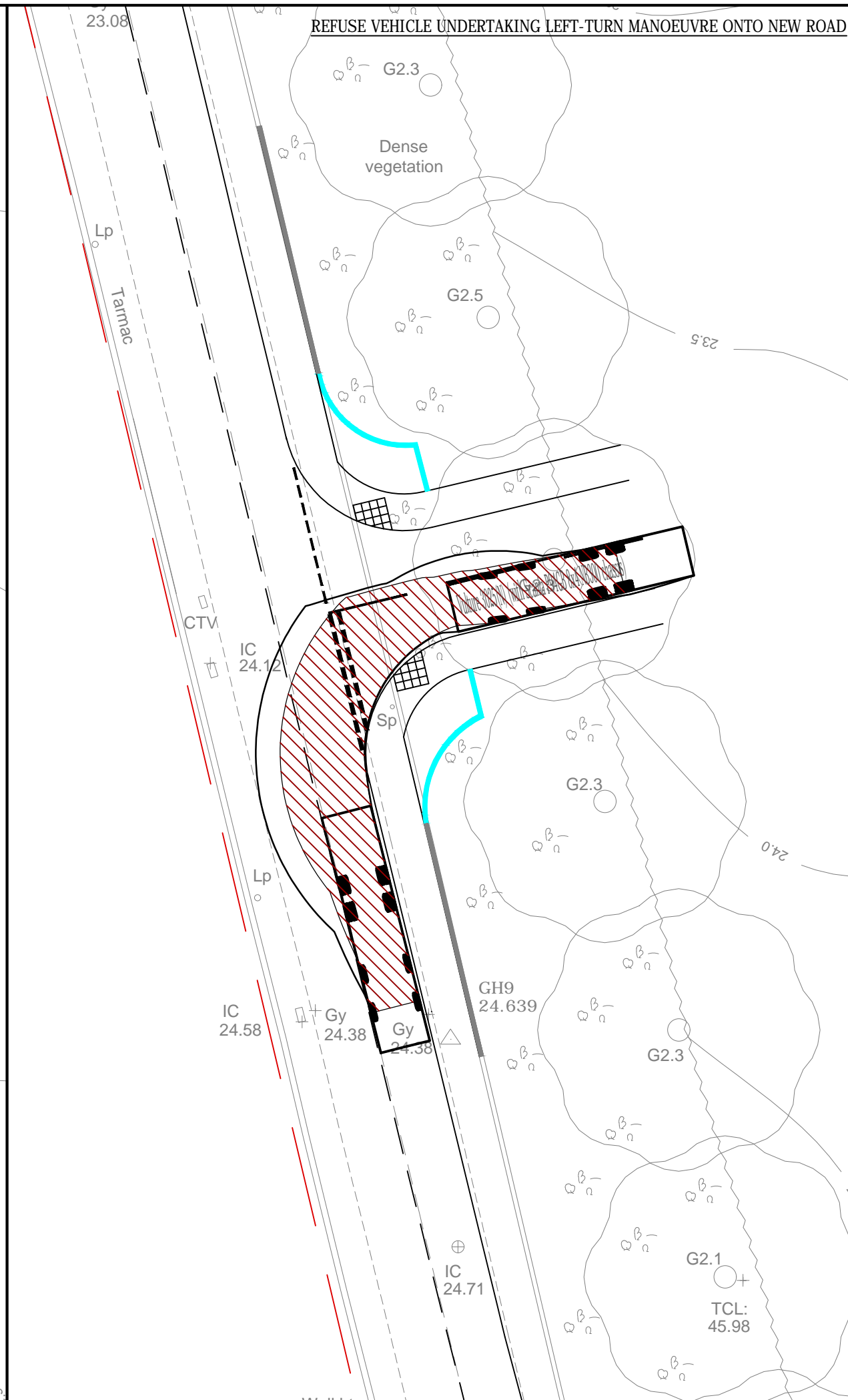
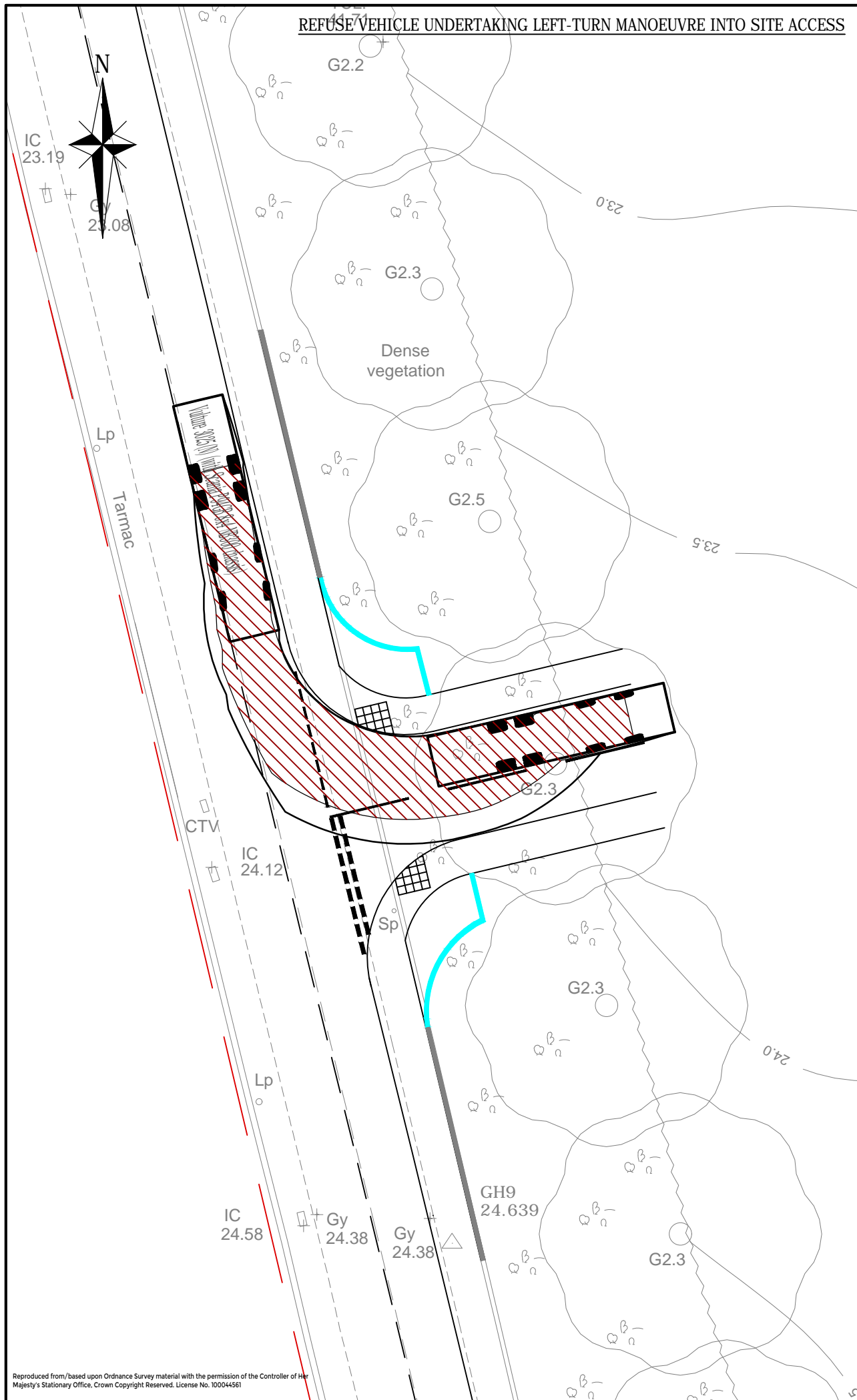
A2 Scale	Date	Designed by
1:500	06.12.18	ND
Drawn by	Checked by	Approved by
ND	PR	SJH

Drawing Number: **182600-009** Rev **B**

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REFUSE VEHICLE UNDERTAKING LEFT-TURN MANOEUVRE INTO SITE ACCESS

REFUSE VEHICLE UNDERTAKING LEFT-TURN MANOEUVRE ONTO NEW ROAD

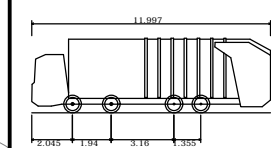


NOTES

1. ROAD MARKINGS TO BE PROVIDED IN ACCORDANCE WITH TRAFFIC SIGNS MANUAL CHAPTER 5.
2. INDICATIVE ACCESS LAYOUT AND VEHICLE SWEEP-PATH ANALYSIS SHOWN ONLY, SUBJECT TO AGREEMENT WITH KCC AND CONFIRMATION OF ANY SPECIFIC VEHICLE REQUIREMENTS.

KEY

— APPLICATION BOUNDARY



Vulture 3025(N) (with Scania P94GB 8x4 NB300 chassis)  
 Overall Length 11.997m  
 Overall Width 2.500m  
 Overall Body Height 3.749m  
 Min Body Ground Clearance 0.302m  
 Track Width 2.490m  
 Lock to lock time 4.00s  
 Kerb to Kerb Turning Radius 10.800m

DRAFT

Rev	Description	Drm	Chk	App	Date
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worksafe  
 www.ssmasid.com  
 SSIP  
 BUREAU VERITAS  
 Certification

Client  
**EAST MALLING TRUST**

Project Title  
**PARKSIDE (SITE C)**

Drawing Title  
**SITE ACCESS VEHICLE TRACKING**

A3 Scale	1:250	Date	30.04.19	Designed by	AH	
Drawn by	AH	Checked by	AB	Approved by	-	
Drawing Number	<b>182600-015</b>				Rev	-

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- NOTES**
1. PROPOSED HIGHWAY IMPROVEMENT SCHEME BASED ON KENT COUNTY COUNCIL DRAWING NUMBER S106-TM-707/1100/001.
  2. INDICATIVE IMPROVEMENTS SHOWN ONLY. ALL PROPOSED S278 WORKS SUBJECT TO FURTHER DISCUSSIONS AND AGREEMENT WITH KENT COUNTY COUNCIL.
  3. IMPROVEMENT SCHEME SUBJECT TO TOPOGRAPHICAL SURVEY AND DETAILED DESIGN.

DRAFT

Rev	Description	Dn	Chk	App	Date
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**worksafe consultant**  
www.smasid.com

**SSIP**  
SAFETY  
SIGNED  
INDEPENDENT  
CERTIFICATION

Client  
**EAST MALLING TRUST**

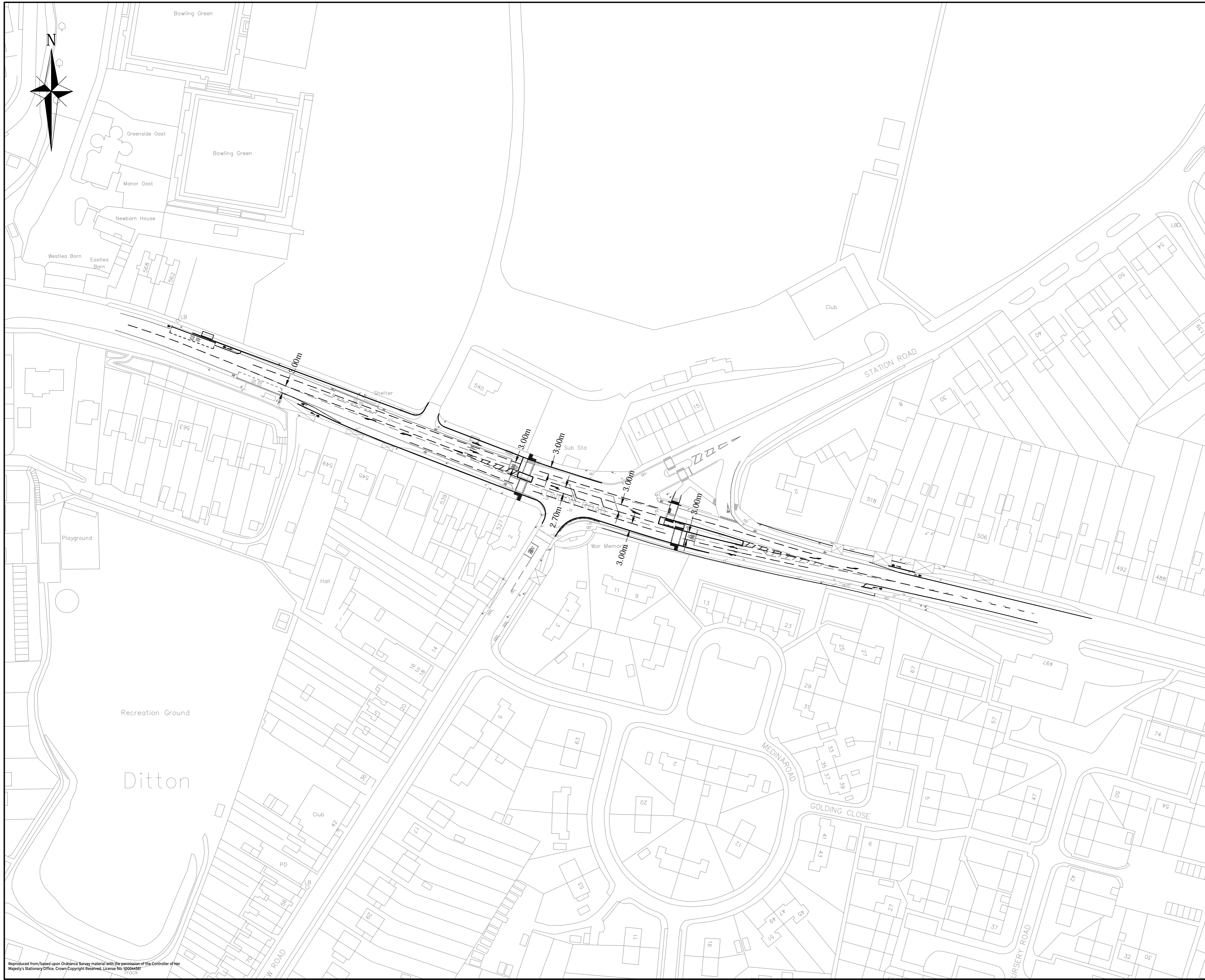
Project Title:  
**EAST MALLING (SITE B + SITE C)**

Drawing Title:  
**PROPOSED IMPROVEMENT TO A20 LONDON ROAD/NEW ROAD/HOTEL ACCESS JUNCTION**

A2 Scale	Date	Designed by
1:500	07.05.19	ND
Drawn by	Checked by	Approved by
ND	AH	ATB

Drawing Number **182600-016** Rev -

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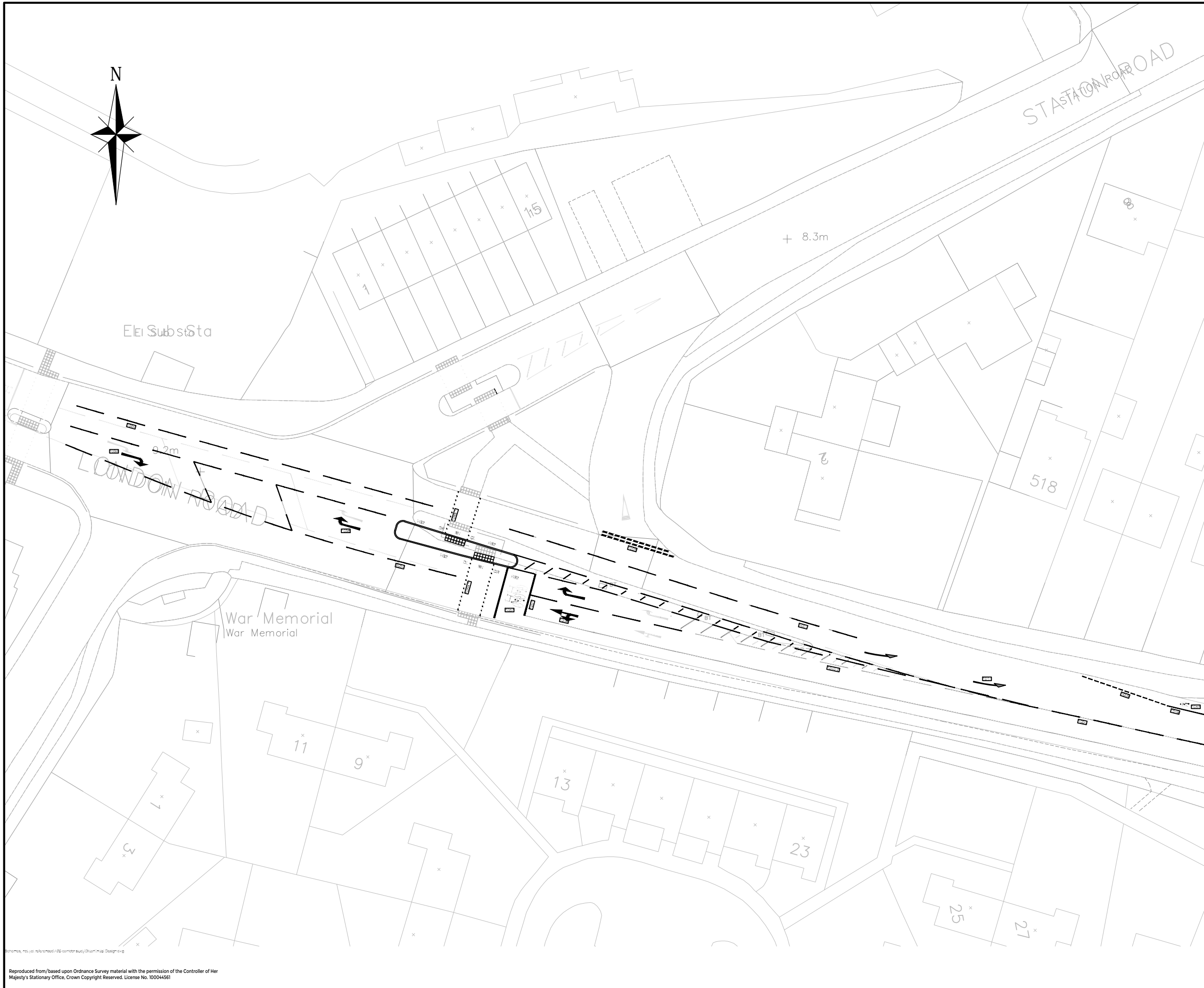


- NOTES**
1. PROPOSED HIGHWAY IMPROVEMENT SCHEME BASED ON KENT COUNTY COUNCIL DRAWING NUMBER S106-TM-604/1100/001.
  2. INDICATIVE IMPROVEMENTS SHOWN ONLY. ALL PROPOSED S278 WORKS SUBJECT TO FURTHER DISCUSSIONS AND AGREEMENT WITH KENT COUNTY COUNCIL.
  3. IMPROVEMENT SCHEME SUBJECT TO TOPOGRAPHICAL SURVEY AND DETAILED DESIGN.

DRAFT

Rev	Description	Drm	Chk	App	Date
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Client					
<b>EAST MALLING TRUST</b>					
Project Title:					
<b>EAST MALLING (SITE B + SITE C)</b>					
Drawing Title:					
<b>PROPOSED IMPROVEMENTS TO A20 LONDON ROAD/NEW ROAD/STATION ROAD JUNCTION</b>					
A2 Scale	Date	Designed by			
1:1000	07.05.19	ND			
Drawn by	Checked by	Approved by			
ND	AH	ATB			
Drawing Number					Rev
<b>182600-017</b>					-

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- NOTES**
1. PROPOSED JUNCTION IS SUBJECT TO SWEEPED PATH ANALYSIS.
  2. SUBJECT TO RECEIPT OF HIGHWAY BOUNDARY INFORMATION.
  3. JUNCTION IMPROVEMENTS SUBJECT TO TOPOGRAPHICAL SURVEY.

PRELIMINARY

Rev	Description	Dwn	Chk	App	Date
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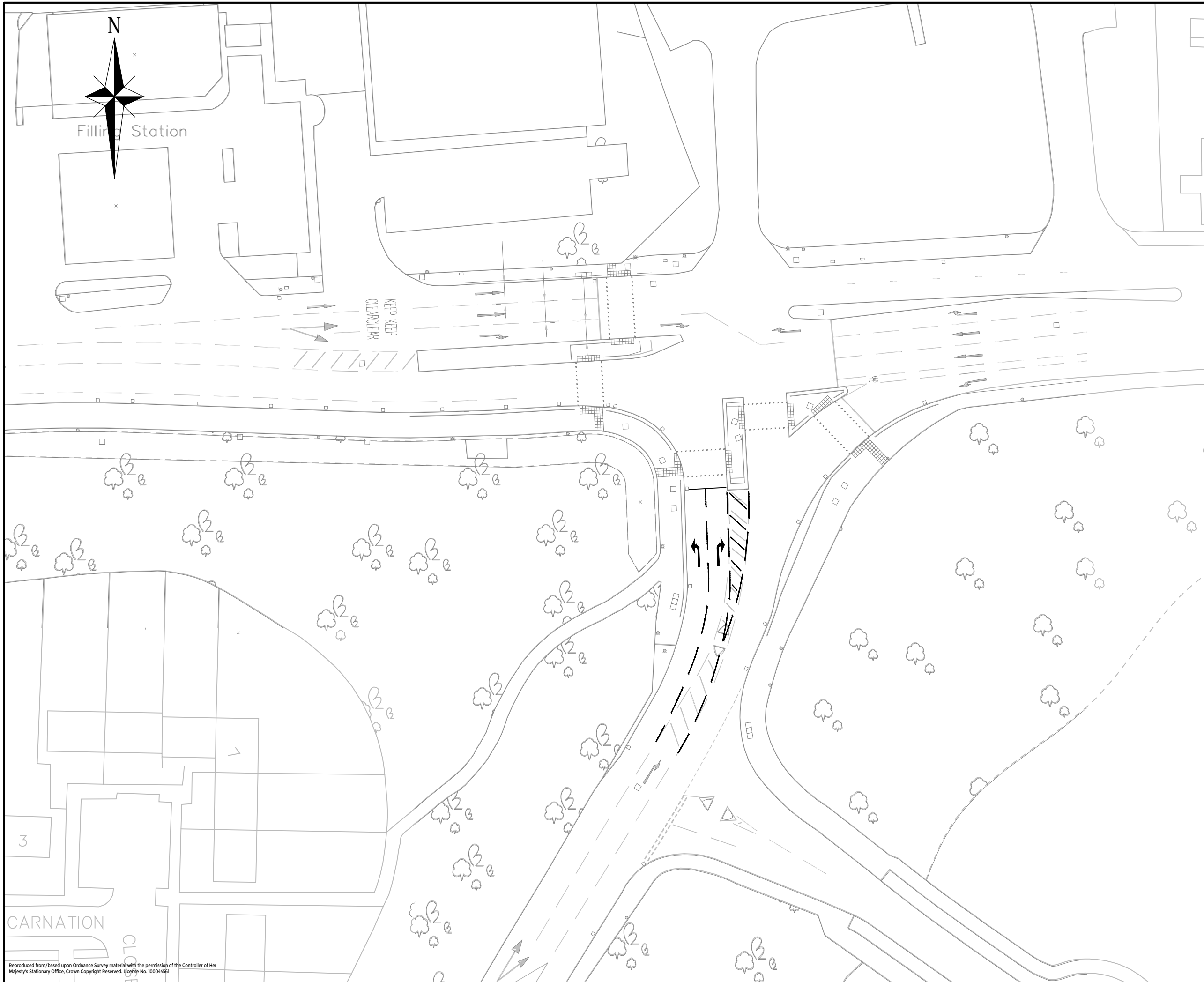

Client  
**EAST MALLING TRUST**

Project Title  
**DITTON EDGE (SITE B)**

Drawing Title  
**POTENTIAL IMPROVEMENTS AT A20 / STATION ROAD JUNCTION**

A3 Scale	Date	Designed by
1:500	26.10.18	PR
Drawn by	Checked by	Approved by
PR	ATB	-
Drawing Number	Rev	
<b>182600-007</b>	-	

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**NOTES**

1. PROPOSED JUNCTION IS SUBJECT TO SWEEPED PATH ANALYSIS.
2. SUBJECT TO RECEIPT OF HIGHWAY BOUNDARY INFORMATION.
3. JUNCTION IMPROVEMENTS SUBJECT TO TOPOGRAPHICAL SURVEY.

PRELIMINARY

Rev	Description	Drn	Chk	App	Date
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Client  
**EAST MALLING TRUST**

Project Title  
**PARKSIDE (SITE C)**

Drawing Title  
**POTENTIAL IMPROVEMENTS AT A20 /  
NEW ROAD / HOTEL JUNCTION**

A3 Scale	Date	Designed by
1:500	26.10.18	PR
Drawn by	Checked by	Approved by
PR	ATB	-
Drawing Number	Rev	
<b>182600-008</b>	-	

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Appendix A  
Correspondence with KCC



**Tonbridge & Malling Borough Council**  
Development Control  
Gibson Building  
Gibson Drive  
Kings Hill  
West Malling, Kent  
ME19 4LZ

**Highways and Transportation**

Ashford Highway Depot  
4 Javelin Way  
Ashford  
TN24 8AD

**Tel:** 03000 418181  
**Date:** 22 January 2019

**App. Ref. TM/18/03008/OA**

**Location Development Site East Of Clare Park Estate, New Road, East Malling West Malling**

**Proposal Outline Application: Development of the site to provide up to 110 dwellings (Use Class C3) and the site access arrangement. All other matters reserved for future consideration**

Maria

Thank you for inviting me to comment on this application. I note that the Transport Assessment considers both sites. It appears that site B, most notably for the Bradbourne Lane junction, is reliant on infrastructure improvements elsewhere, namely a connection between Bellingham Way and Station Road, to the north. Paragraph 6.16 of the TA on page 34 states 'Accordingly, no improvements are proposed at this specific junction, on the basis that wider planned Local Plan improvements along the A20 corridor would ease congestion elsewhere and relived pressure on this junction.' It is unclear what the applicant's intentions are with respect to timing of development and/or conditions relating to any approval. The site is at least dependent on a public highway connection being made between Bellingham Way and Station Road over private land.

With regard to this application, Site B, I note Drawing Number 182600-008, improvements at A20/New Road/Hotel Junction and the discussions of the junction given in the TA through paragraphs 6.19 to 6.21. From this discussion the applicant's intentions to establish these improvements, in a timely way to the development of Site B, is not clear.

I would be grateful if, in the first instance, clarification of these points could be made. I also understand that a Visum run of the A20 model, reflecting a revised Local Plan development strategy, is estimated to be available next week. It would seem prudent, as well as clarifying the points above, if re-analysis is undertaken on the revised Visum model results.

I hope the above is helpful, if in the meantime however, I can be of any further assistance, please do not hesitate to contact me.

Yours faithfully

**Terry Drury**  
Senior Development Planner





**Tonbridge & Malling Borough Council**

Development Control  
Gibson Building  
Gibson Drive  
Kings Hill  
West Malling, Kent  
ME19 4LZ

**Highways and Transportation**

Ashford Highway Depot  
4 Javelin Way  
Ashford  
TN24 8AD

**Tel:** 03000 418181  
**Date:** 21 January 2019

**Application - TM/18/02966/OA**

**Location - Development Site South Of Brampton Field Between Bradbourne Lane And Kiln Barn Road, Ditton, Aylesford, Kent**

**Proposal - Outline Application: Development of the site to provide up to 300 dwellings (Use Class C3) and provision of new access off Kiln Barn Road. All other matters reserved for future consideration.**

Dear Maria

Thank you for consulting me on this planning application. The applicant has provided a Transport Assessment Ref. 182600-06 dated December 2018 which considers the development of 300 homes on land off Kiln Barn Road at Ditton also known as Site B. The report also considers a development of 110 homes located off New road, East Malling and referred to as Parkside Site C. The TA considers the impact of both developments in isolation and in combination. My comments are as follows:

**Access**

Access to the site is proposed by means of a priority junction onto Kiln Barn Road. Visibility splays from the site access are acceptable.

The internal layout is designed with long straight distributor roads and this is likely to lead to problems of speeding. It is recommended that the layout is amended to a design which includes horizontal deflection which physically reduces traffic speeds to 20mph. Swept paths diagrams are also required.

Crossing facilities for pedestrians are shown to the north of the site access, however forward visibility for pedestrians crossing Kiln Barn road, appears to be restricted due to the bend in the carriageway.

The applicant proposes the extension of the 30mph speed limit and this should be pursued subject to agreement with our Schemes Team and Kent Police. A Traffic Regulation Order would be required.

A development of this scale requires an emergency access in accordance with Kent Design and this can be provided onto Kiln Barn Lane or Brampton Fields . The use of the tracks to the south

west of the site as an alternative emergency access would be subject to approval from emergency services.

The crash records for the study area have been interrogated and no mitigation measures are required.

A safety audit is required for all proposed work within the highway.

Parking is to be provided in accordance with IGN2 for suburban edge/village/rural and this is acceptable.

### **Accessibility**

A footway is required along Kiln Barn Lane to the south linking the development with the public right of way at Cyril West Lane and to the development at Franklin Kidd Lane as it is likely that pedestrian movements will take place between the two residential areas. Additionally, a link for pedestrians/cyclists is required to Brampton Fields to the north. This could also be considered for emergency access.

A cycle route along Kiln Barn Road to the north is not possible but there may be potential for routes along the PROWs and these could also provide a more direct route to the train station. Improvements are likely to be required and our Public Rights of Way team will be able to advise.

The distance to the nearest bus stop does seem excessive for a development of this size.

A Travel Plan is required together with a monitoring fee of £5000.

### **Impact**

Traffic generation has been estimated using TRICs which is acceptable.

The modal split has been calculated using census data and this is acceptable but please clarify area 014.

A future year assessment for 2031 is acceptable.

Site C is included in the Tonbridge and Malling Middle Super Output Area 004 not 014 as stated in the TA. Please check whether this affects the growth factors used.

With regard to paragraph 5.9 it is possible to run the Visum model with the development flows from this proposal but not possible within the timescale required.

The Visum model is currently being updated to reflect the revised Local Plan development strategy and the Forecast Junction Capacity Assessments will be amended accordingly. It is recommended that information from this work is used to assess the impact of this development proposal. The Visum work will be available in the next week or so and I can let you know when it is available.

I would recommend that the junctions within the study area are reassessed including the information from the revised Visum modelling.

Traffic Distribution and Assignment has been calculated using Census 2011 Google Maps for routing.

The resultant distribution diagram Figs. 1 and 2 indicate that for Site B 14.6% of traffic is likely to travel south on Kiln Barn Road and 85.4% north. It is estimated that of this 85.4%, 44.9% to travel along New Road to the A20 and 32.8% along Bradbourne Lane. I consider that the constraints along Bradbourne Lane will result in a reduced distribution along that route and an increased distribution along New Road. The results of the turning count at the New Road/St Peters Road junction could be used to inform the distribution.

The increase in traffic arising from the development as shown on Fig.5 is estimated to be:

Ditton Site B	AM Peak (2 way flows)	PM Peak (2 way flows)
Kiln Barn Road south	32	26
Kiln Barn Road north	141	53
Bradbourne Lane	71	58
New Road, Ditton	110	84

Site C distribution is shown on Figs 3 and 4 which indicated that 22.6% of traffic from the development is likely to travel to and from the south on New Road and 77.4% to the north.

The increase in traffic arising from the development as shown on Fig.6 is estimated to be:

East Malling Site C	AM Peak (2 way flows)	PM Peak (2 way flows)
New Road north	62	51
New road south	14	18

### **Off- site impact**

As mentioned previously a Visum model has been developed for the A20 corridor and junction capacity assessments have been prepared for the Local Plan evidence using 2031 future year. The Do Minimum scenario includes future growth but no Local Plan development and the Do Something includes the Local Plan development housing and employment allocations and new infrastructure. The Visum model is currently being updated to reflect the revised Local Plan development strategy and the Forecast Junction Capacity Assessments will be amended accordingly. It is recommended that information from this work is used to assess the impact of this development proposal. The Visum work will be available in the next week or so and I can let you know when it is available.

Kiln Barn Road south of the site is particularly narrow with poor forward visibility and not suited to an increase in traffic as is Bradbourne Lane.

### **A20/Hall Road/Mill Road**

The junction is already over capacity and the increase in traffic arising from this development will add to the congestion queues and delays. Improvement proposals are being prepared but are not sufficiently advanced to give any certainty of delivery at the present time.

### **A20/Station Road/New Road, Ditton**

The junction is already over capacity and the increase in traffic arising from this development will add to the congestion queues and delays. Drawing number 182600-007 shows potential improvements to mitigate the impact however a capacity assessment is not provided and this is required to assess the impact of the scheme. Additionally, a safety audit of the scheme is required.

I would recommend that the junctions within the study area are reassessed including the information from the revised Visum modelling.

#### **A20/Bradbourne Lane**

The junction is over capacity in the Do Minimum scenario and the increase in traffic arising from this development will add to the congestion queues and delays.

The capacity assessment for the Do Something scenario shows improved results, however this is reliant on the opening of the Bellingham Way Link which is subject to a potential future planning application at the Aylesford Newsprint site. As the timescale for the delivery of this link is not known, it will be necessary for mitigating measures to be provided by this development to address the capacity issues at this junction.

#### **A20/New Hythe Lane**

Again, this junction is over capacity in the Do Minimum scenario and the increase in traffic arising from this development will add to the congestion queues and delays.

The developments (Site B and Site C) are expected to generate an additional 114 movements during the AM peak and 92 in the PM peak. This is considered a significant impact.

Improvements proposals are being prepared but are not sufficiently advanced to give any certainty of delivery at the present time.

#### **A20/New Road/Hotel**

Drawing number 182600-005 has been provided to show a potential scheme to mitigate the impact of the development. A safety audit is required to assess the effects of the scheme.

#### **A20/Lunsford Lane/Winterfield Lane**

Drawing number 182600-006 has been provided to show a potential scheme to mitigate the impact of the development. A safety audit is required to assess the effects of the scheme.

#### **A20/Ashton Way/Oxley Shaw Lane/Castle Way**

The developments are expected to generate an additional 117 movements during the AM peak and 95 in the PM peak. The results of the capacity assessment indicate that there is a detrimental impact. An assessment of the situation using the flows from the revised Visum model would be useful.

#### **Kiln Barn Road/Site Access**

The results of the capacity assessment indicates that the proposed junction has sufficient capacity for each scenario modelled.

Table 6.7 provides an account of the traffic flows along the local roads. This appears to be incorrect as it doesn't correspond with Fig. 10 which shows the background traffic flows. For instance, Fig 10 indicates the 2031 flows of 216 on Bradbourne Lane in the AM peak and 84 in

the PM peak but Table 6.7 states the flow is 358 and 309 respectively. Similar significant discrepancies occur for Kiln Barn Road with Fig. 10 showing flows of 107 in the AM peak and 277 in the PM peak compared to flows of 461 and 536 respectively at Table 6.7.

Para. 5.11 states that the turning movements at the A20/Bradbourne Lane junction has been assumed to be 30% of that of the A20/Station Road/New Road junction. A separate traffic turning count is required in order to accurately assess the impact at this junction.

Para 2.18 indicates that a peak hour turning count was undertaken at the New Road/St. Peters Road junction so these flows could be used to inform the distribution diagrams.

### **Conclusion**

There are some areas where additional information is required as identified above.

The traffic generated by the development is at a level that would significantly add to existing capacity issues resulting in further delays and queuing on the existing highway network. Although some highway improvements are proposed these do not adequately mitigate the effects of the development.

Until these issues have been adequately addressed I am not able to find the application acceptable.

If you require any clarification on any of the above please let me know.

Kind Regards

Louise Rowlands

Principal Transport & Development Planner

## Andrew Braun

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**From:** Andrew Braun  
**Sent:** 21 February 2019 13:44  
**To:** Louise.Rowlands@kent.gov.uk  
**Cc:** 'Terry.Drury@kent.gov.uk'; 'Gregory Evans'; Paul Rynton; 'maria.brown@tmbc.gov.uk'  
**Subject:** RE: East Malling Sites B and C [Filing cancelled]  
**Attachments:** 182600-003C Access via Kiln Barn Road.pdf; 182600-009A Access via New Road.pdf; A20 London Rd\_Station Rd\_New Rd, Ditton - Proposed Layout Rev A- Amey Standard Linsig Report.pdf; Details of updated traffic distribution.pdf; slh25835 Potential Footpath at Kiln Barn Road - Technical Note (182600-10B).pdf; Traffic Flows (Site B and Site C) - Rev A.pdf

Louise,

Many thanks for taking the time to run through KCC's comments on the above application with me the other day. Further to our discussions, and in advance of the meeting with TMBC tomorrow, please see below some further notes on the key issues that we believe need to be addressed prior to determination. I appreciate there may not be time to review this in detail but hopefully it gives a useful guide on the points to discuss.

### **Footpath link to south of Site B**

- As I mentioned on the phone, we had previously reviewed the need for a footpath to the south along Kiln Barn Road in relation to Site B, looking at whether a need for this link would be generated by the site and taking into account potential constraints. Please see attached a Technical Note that covers this issue, which we hope will provide sufficient justification to avoid the need to provide this link as part of the Site B proposals.

### **VISUM modelling**

- You noted on the phone that since making your formal comments you have been giving further thought to whether use of the revised Visum model results is needed before KCC can support the scheme. We agree that if timescales were not an issue it would be sensible to wait for this new data and utilise it in our modelling of off-site impacts. However, the applicant is keen to reach the March planning committee, and we note that even if you receive the detailed results of the new Visum model by the end of this week they results won't be in the public domain until KCC have reviewed them, and so in practice there will not be sufficient time to take these into account. As such, we propose that we stick with the previous results submitted in our TA, noting that these should be robust as they include Site A traffic that is no longer in the draft Local Plan. Hopefully this will be a satisfactory way forward from KCC's point of view when taking into account the timescales we are working to.

### **Off-site improvements and S106 contributions**

- Based on your email and our discussions on the phone, and noting that our applications are being processed in advance of the Local Plan being adopted, the severe highway impacts of the development would need to be mitigated through a combinations of specific S278 improvements that we proposed, along with appropriate S106 contributions towards future Local Plan improvements. It is our view that the improvements at the following junctions highlighted in the TA would be sufficient to ensure the most notable impacts of the development are addressed and would not result in severe effects on capacity:
  - A20/Lunsford Lane
  - A20/New Road
  - A20/New Road/Station Road
- Beyond these junctions we believe that a suitable S106 contributions would suffice without the need to hold up the developments. One of the key issues to discuss tomorrow will therefore be a suitable mechanism/calculation to determine what an appropriate S106 contribution will be for highways.
- You have also noted that the potential improvements on the A20 KCC are looking at have altered since the ones you shared at the pre-app stage. Our proposed off-site works were designed to feed into the schemes that had

previously been shared, and so if we are going to make any updates we will need to review KCC's current schemes as soon as possible. Failing this, we will get the current proposals safety audited as soon as possible, such that these proposed schemes can be secured as part of any planning conditions.

- We have also updated our traffic distribution to reflect the comments on the proportion of traffic along Bradbourne Lane. Please see the attached note that covers this update, along with updated LinSig results for the A20/Station Road junction that show the proposed improvements would still be sufficient to offset the impacts of the proposals. We still need to revise the modelling for the Bradbourne Lane junction and so will share these details in due course.

### **Proposed access arrangements**

- We have updated the Site B access drawing to show visibility for the proposed crossings (see attached).
- Both the Site B and C access drawings have also been amended to show a crossing at the minor arm of the accesses as well.

I trust the above details are satisfactory for your purposes and look forward to discussing these matters further tomorrow. If you want to run through anything in advance then please do not hesitate to call.

Kind regards

**Andrew Braun**  
Associate



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**From:** Louise.Rowlands@kent.gov.uk <Louise.Rowlands@kent.gov.uk>  
**Sent:** 18 February 2019 15:34  
**To:** Andrew Braun <abraun@ardent-ce.co.uk>

**Cc:** GREvans@savills.com; Paul Rynton <prynton@ardent-ce.co.uk>; Terry.Drury@kent.gov.uk;  
Maria.Brown@tmbc.gov.uk

**Subject:** RE: East Malling Sites B and C

Dear Andrew

Thanks for letting me have an initial response to the points raised. My comments are as follows:

1. The layout should include horizontal deflection which physically reduces traffic speeds to 20mph. I note and accept that this is an outline design and therefore the layout is not a consideration at this stage.
2. I will comment on the visibility for pedestrians once the drawing is received.
3. The TRO for the speed limit could be conditioned as suggested.
4. I am concerned regarding the use of the tracks to the southwest of the site for emergency access. A development of this size requires an emergency access not just for use by emergency vehicles but also as an alternative access in the event of a blockage of the main access. The emergency access could be an additional pedestrian/cycleway onto either Kiln Barn Road or Brampton Fields with lockable bollards.
5. Stage 1 safety audits are required prior to permission being granted.
6. The number of pedestrian movements along Kiln Barn Road may not be high but it is important that those who do wish to walk can do so safely and therefore a pedestrian link is required.
7. Provision of cycle routes along the PROW would be welcome and I will seek advice from our PROW team.
8. Thanks for the explanation regarding the census data which is acceptable but it appears that Area 014 should be 004.
9. The results of the turning count at the New Road/St Peters Road junction should be used to inform the distribution of traffic.
10. The adjustments to the traffic distribution should be evidence based. Existing traffic flows on Kiln Barn Road are likely to be low therefore the increase arising from this development will constitute a significant impact.
11. I appreciate your concern regarding additional assessments to include the latest transport model results. The advice given pre-application was made with the information available at the time. We have received the 'headline results' for the updated Visum work and the report is due to be published within the next couple of weeks. It is sensible for us to consider this information when assessing the impact of your development proposal as your development sites are included in the Local Plan Development Strategy which has now been submitted to the Inspectorate.

It is clear that the development of sites B and C impact the junctions along the A20 and it is agreed that mitigating measures will be required. As you are aware KCC Highways are working on improvement schemes along the route and this includes junction capacity improvements and improvements for cycling. S278 works are required where there is a significant and direct impact and I would expect that to include the junctions of A20/New Road, East Malling and A20/Station Road/New Road, Ditton. S106 contributions will be required to deliver the wider improvement measures along the A20 corridor. The schemes are being developed and a cost estimate is being prepared. Once this is available appropriate contributions can be costed.

I hope that helps but we can discuss further when we meet on Friday.

Kind Regards

Louise Rowlands | Principal Transportation & Development Planner | Kent County Council | Highways,  
Transportation and Waste | Ashford Highway Depot | Henwood Industrial Estate, Javelin Way, Ashford, TN24 8AD |  
External: 03000 413787 | Mobile: 07595089559 | [www.kent.gov.uk](http://www.kent.gov.uk) |

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**From:** Andrew Braun <[abraun@ardent-ce.co.uk](mailto:abraun@ardent-ce.co.uk)>

**Sent:** 12 February 2019 15:00

**To:** Rowlands, Louise - GT HTW <[Louise.Rowlands@kent.gov.uk](mailto:Louise.Rowlands@kent.gov.uk)>; Drury, Terry - GT HTW <[Terry.Drury@kent.gov.uk](mailto:Terry.Drury@kent.gov.uk)>

**Cc:** Gregory Evans <[GREvans@savills.com](mailto:GREvans@savills.com)>; Paul Rynton <[prynton@ardent-ce.co.uk](mailto:prynton@ardent-ce.co.uk)>

**Subject:** East Malling Sites B and C



Louise/Terry,

Further to my email to Terry, we have now been passed KCC's consultation comments for Site B. Having now had chance to review the comments, please see below our initial response to the points raised (our responses shown in red). This follows up on our responses already provided on Site C in the email further below. On the subject of Site C, we assume the below addresses the initial queries and it would be good if you could confirm whether KCC have any further comments on Site C?

The intention of these initial responses to try and agree on what extent of extra information is actually required to address KCC's comments, such that the existing concerns can be addressed. We note that this intention is for the applications to be determined at the Planning Committee on 21<sup>st</sup> March, and as such if you are able to provide a response fairly quickly that should help us to ensure we can provide any extra information required well in advance of this date. I am due to attend the meeting scheduled for 22<sup>nd</sup> Feb, and so hopefully we can tick off a number of these points in advance of the meeting.

### **Access**

Access to the site is proposed by means of a priority junction onto Kiln Barn Road. Visibility splays from the site access are acceptable. **Noted**

The internal layout is designed with long straight distributor roads and this is likely to lead to problems of speeding. It is recommended that the layout is amended to a design which includes horizontal deflection which physically reduces traffic speeds to 20mph. Swept paths diagrams are also required. **Based on our notes from the pre-app meeting on 23/08/18 KCC had suggested vertical traffic calming would be acceptable, and so the illustrative layout was drawn up with this in mind. In any case, as this is an outline application we assume no further action is required at this stage?**

Crossing facilities for pedestrians are shown to the north of the site access, however forward visibility for pedestrians crossing Kiln Barn road, appears to be restricted due to the bend in the carriageway. **We will update the drawing to show visibility at the crossings.**

The applicant proposes the extension of the 30mph speed limit and this should be pursued subject to agreement with our Schemes Team and Kent Police. A Traffic Regulation Order would be required. **We assume that a 'best endeavours' condition for the TRO could be included as part of any decision, noting that the access would still provide sufficient visibility based on measured speeds if it is not possible to reduce the speed limit for any reason.**

A development of this scale requires an emergency access in accordance with Kent Design and this can be provided onto Kiln Barn Lane or Brampton Fields. The use of the tracks to the southwest of the site as an alternative emergency access would be subject to approval from emergency services. **Kent Fire and Rescue Service have confirmed this is acceptable.**

The crash records for the study area have been interrogated and no mitigation measures are required. **Noted**

A safety audit is required for all proposed work within the highway. Parking is to be provided in accordance with IG2 for suburban edge/village/rural and this is acceptable. **Noted. As per correspondence with Terry prior to the application we understand that any safety audits for the accesses for the two sites can be secured by condition. We assume the same approach can be applied to any off-site mitigation works as well (see comments below).**

### **Accessibility**

A footway is required along Kiln Barn Lane to the south linking the development with the public right of way at Cyril West Lane and to the development at Franklin Kidd Lane as it is likely that pedestrian movements will take place between the two residential areas. **We have not proposed such as link as our review of likely desire lines for pedestrians and the number of movements suggests that there would not be justification for this link in the context of the proposed development. We can share further information that led us to this conclusion if necessary.**

Additionally, a link for pedestrians/cyclists is required to Brampton Fields to the north. This could also be considered for emergency access. A link is proposed here as per the existing PROW, however this will not be used for emergency access.

A cycle route along Kiln Barn Road to the north is not possible but there may be potential for routes along the PROWs and these could also provide a more direct route to the train station. Improvements are likely to be required and our Public Rights of Way team will be able to advise. There may be scope to accommodate cyclists along the existing PROW that extends south from the site, noting that this follows an existing track that could already in theory accommodate cyclists. However, a continuous cycle route to the station along this PROW will not be possible as a section further south past the church falls outside of land under the applicants control.

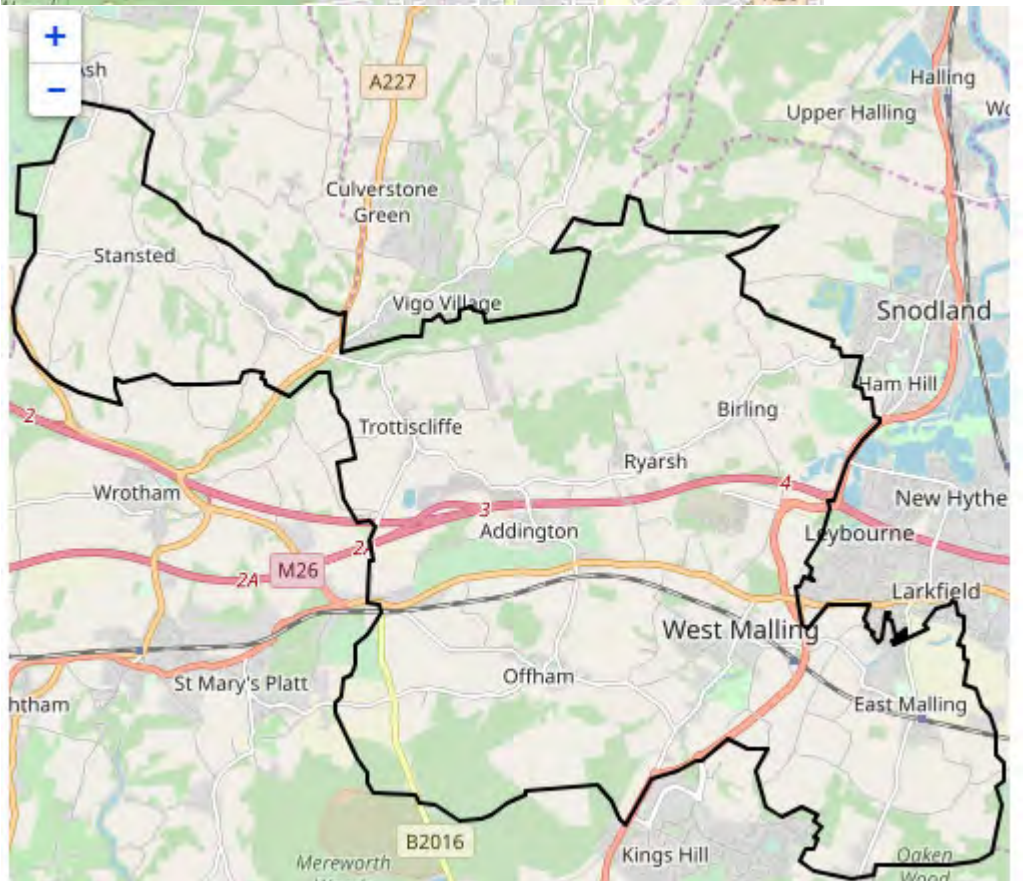
The distance to the nearest bus stop does seem excessive for a development of this size. Noted

A Travel Plan is required together with a monitoring fee of £5000. A Framework Travel Plan has been submitted as part of the application. The monitoring fee is noted and acceptable.

## **Impact**

Traffic generation has been estimated using TRICs which is acceptable. Noted

The modal split has been calculated using census data and this is acceptable but please clarify area 014. Areas 005 and 014 are shown in the maps below – Site B is in 005 and Site C is in 014. Given the significant overlaps between the assessments for the two sites, and to ensure a consistent approach we have used average values across the two sites for modal splits and growth.



A future year assessment for 2031 is acceptable. **Noted**

Site C is included in the Tonbridge and Malling Middle Super Output Area 004 not 014 as stated in the TA. Please check whether this affects the growth factors used. **See comments above.**

With regard to paragraph 5.9 it is possible to run the Visum model with the development flows from this proposal but not possible within the timescale required. **Noted.**

The Visum model is currently being updated to reflect the revised Local Plan development strategy and the Forecast Junction Capacity Assessments will be amended accordingly. It is recommended that information from this work is used to assess the impact of this development proposal. The Visum work will be available in the next week or so and I can let you know when it is available. **We note that if timescales/costs were not a factor it would be sensible to use the updated model results, if available. However, as it was agreed pre-application that we could use the previous results it is considered unreasonable to require these updates now the application is in, given this will mean it is likely the March committee would be missed and would also mean additional costs for the applicant. In light of this, we should be grateful if you could agree that the current approach used in the TAs will be acceptable.**

I would recommend that the junctions within the study area are reassessed including the information from the revised Visum modelling. **See above.**

Traffic Distribution and Assignment has been calculated using Census 2011 Google Maps for routing. **Noted.**

The resultant distribution diagram Figs. 1 and 2 indicate that for Site B 14.6% of traffic is likely to travel south on Kiln Barn Road and 85.4% north. It is estimated that of this 85.4%, 44.9% to travel along New Road to the A20 and 32.8% along Bradbourne Lane. I consider that the constraints along Bradbourne Lane will result in a reduced distribution along that route and an increased distribution along New Road. The results of the turning count at the New Road/St Peters Road junction could be used to inform the distribution. **We will update the distribution to reduce the level of traffic using Bradbourne Lane. This is also in keeping with the concerns raised by KCC regarding impacts at the A20/Bradbourne Lane junction and my suggestion of a sensitivity test whereby less traffic uses this congested junction.**

The increase in traffic arising from the development as shown on Fig.5 is estimated to be:

Ditton Site B	AM Peak (2 way flows)	PM Peak (2 way flows)
Kiln Barn Road south	32	26
Kiln Barn Road north	141	53
Bradbourne Lane	71	58
New Road, Ditton	110	84

Site C distribution is shown on Figs 3 and 4 which indicated that 22.6% of traffic from the development is likely to travel to and from the south on New Road and 77.4% to the north.

The increase in traffic arising from the development as shown on Fig.6 is estimated to be:

East Malling Site C	AM Peak (2 way flows)	PM Peak (2 way flows)
New Road north	62	51
New road south	14	18

**Off- site impact**

As mentioned previously a Visum model has been developed for the A20 corridor and junction capacity assessments have been prepared for the Local Plan evidence using 2031 future year. The Do Minimum scenario includes future growth but no Local Plan development and the Do Something includes the Local Plan development housing and employment allocations and new infrastructure. The Visum model is currently being updated to reflect the revised Local Plan development strategy and the Forecast Junction Capacity Assessments will be amended accordingly. It is recommended that information from this work is used to assess the impact of this development proposal. The Visum work will be available in the next week or so and I can let you know when it is available. **See above for comments on this point.**

Kiln Barn Road south of the site is particularly narrow with poor forward visibility and not suited to an increase in traffic as is Bradbourne Lane. **As noted above we will revise the distribution figures and then reassess the increases on Bradbourne Lane. As for Kiln Barn Road South, the TA shows a maximum of only 32 two-way hourly flows on this route, or circa one movement every 2 minutes on average. Given the former GOTA guidance suggested a starting**

point of 30 hourly movements for where significant impacts could occur, and noting there are no apparent safety issues on this route, it is considered that this increase should be acceptable.

#### **A20/Hall Road/Mill Road**

The junction is already over capacity and the increase in traffic arising from this development will add to the congestion queues and delays. Improvement proposals are being prepared but are not sufficiently advanced to give any certainty of delivery at the present time. This junction falls outside of the study area agreed with KCC at the pre-application stage (as per emails in July/August 2018), and so it is considered that the proposals should not be required to offer any specific mitigation at this location, noting that the issues here are existing and not likely to be severely exacerbated to a notable degree by the proposals.

#### **A20/Station Road/New Road, Ditton**

The junction is already over capacity and the increase in traffic arising from this development will add to the congestion queues and delays. Drawing number 182600-007 shows potential improvements to mitigate the impact however a capacity assessment is not provided and this is required to assess the impact of the scheme. Additionally, a safety audit of the scheme is required. It appears that the LinSig results for the proposed improvement scheme were omitted from the main TA text by mistake (albeit the results are included in the appendices). We will provide these results in our follow-up response/note. At present these confirm the improvements would be sufficient to offset the impact of the increases, albeit we will need to update and re-check the results following changes to the quantum of traffic that uses Bradbourne Lane. With respect to the safety audit this is noted and we assume this can be conditioned?

I would recommend that the junctions within the study area are reassessed including the information from the revised Visum modelling. See comments above.

#### **A20/Bradbourne Lane**

The junction is over capacity in the Do Minimum scenario and the increase in traffic arising from this development will add to the congestion queues and delays.

The capacity assessment for the Do Something scenario shows improved results, however this is reliant on the opening of the Bellingham Way Link which is subject to a potential future planning application at the Aylesford Newsprint site. As the timescale for the delivery of this link is not known, it will be necessary for mitigating measures to be provided by this development to address the capacity issues at this junction. We will re-assess the impacts at this junction following the revised distribution model, and will make conclusions based on the 'do minimum' background flows.

#### **A20/New Hythe Lane**

Again, this junction is over capacity in the Do Minimum scenario and the increase in traffic arising from this development will add to the congestion queues and delays.

The developments (Site B and Site C) are expected to generate an additional 114 movements during the AM peak and 92 in the PM peak. This is considered a significant impact. Improvements proposals are being prepared but are not sufficiently advanced to give any certainty of delivery at the present time. The TA sets out that to enact any significant improvements in capacity at this junction, wholesale reconfiguration of the layout will be required, rather than any interim 'tweaks' that would offset the proposed increases. It is considered that as there are existing capacity issues here without the developments in place, it would be unreasonable to expect the applicant to have to make such significant wholesale improvements here, noting that the impacts are not considered severe. There may be scope to agree to a suitable S106 contribution towards any future improvements here, albeit this should not prejudice the development coming forward.

#### **A20/New Road/Hotel**

Drawing number 182600-005 has been provided to show a potential scheme to mitigate the impact of the development. A safety audit is required to assess the effects of the scheme. It is assumed the audit can be secured by condition?

## **A20/Lunsford Lane/Winterfield Lane**

Drawing number 182600-006 has been provided to show a potential scheme to mitigate the impact of the development. A safety audit is required to assess the effects of the scheme. **It is assumed the audit can be secured by condition?**

## **A20/Ashton Way/Oxley Shaw Lane/Castle Way**

The developments are expected to generate an additional 117 movements during the AM peak and 95 in the PM peak. The results of the capacity assessment indicate that there is a detrimental impact. An assessment of the situation using the flows from the revised Visum model would be useful. **See above for comments and the use of the new Visum model. The LinSig model shows this junction would already be over capacity and the effects of the additional movements would only result in negligible changes that are not considered to be severe and would not warrant specific improvements. As with the New Hythe Lane junction, it may be the case that a suitable S106 contribution towards any future improvements KCC may have planned is appropriate.**

## **Kiln Barn Road/Site Access**

The results of the capacity assessment indicates that the proposed junction has sufficient capacity for each scenario modelled. **Noted**

Table 6.7 provides an account of the traffic flows along the local roads. This appears to be incorrect as it doesn't correspond with Fig. 10 which shows the background traffic flows. For instance, Fig 10 indicates the 2031 flows of 216 on Bradbourne Lane in the AM peak and 84 in the PM peak but Table 6.7 states the flow is 358 and 309 respectively. Similar significant discrepancies occur for Kiln Barn Road with Fig. 10 showing flows of 107 in the AM peak and 277 in the PM peak compared to flows of 461 and 536 respectively at Table 6.7. **We will review and re-check these figures and address any discrepancies if required.**

Para. 5.11 states that the turning movements at the A20/Bradbourne Lane junction has been assumed to be 30% of that of the A20/Station Road/New Road junction. A separate traffic turning count is required in order to accurately assess the impact at this junction. **See above comments.**

Para 2.18 indicates that a peak hour turning count was undertaken at the New Road/St. Peters Road junction so these flows could be used to inform the distribution diagrams. **Noted – we will take this into account in our revised distribution calcs.**

Based on the above, it is considered that the following additional information needs to be provided to KCC to allow you to update your comments, and we should be grateful if you could respond to confirm this approach is acceptable:

- Update access drawing to show visibility at proposed crossings
- Share further findings in respect of the lack of a need for a footway/footpath to the south of the site along Kiln Barn Road.
- Secure KCC's agreement that use of the updated Visum model results is not necessary in this instance.
- Update traffic distribution to reduce Bradbourne Lane traffic and re-model junctions where applicable (A20/Station Road/New Road and A20/Bradbourne Lane junctions).
- Review/re-check traffic flow figures on local roads.
- Issue another email or short Tech Note to summarise the above points.
- Discuss any outstanding issues at the meeting scheduled for 22<sup>nd</sup> Feb.

I trust these details are satisfactory for your purposes and look forward to hearing from you in due course. Please feel free to call if you have any queries or wish to discuss any of the above in further detail.

Kind regards

**Andrew Braun**  
Associate

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Appendix B  
Kiln Barn Road Footpath – Technical Note



February 2019

Date : February 2019

Project : East Malling Trust: Land at Ditton Edge, Ditton

Project Ref : 182600

Report Title : Technical Note – Potential Footpath at Kiln Barn Road

Report Ref : 182600-10B

## DOCUMENT CONTROL

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	First Issue	ATB	ATB	SJH	11/09/18
A	Updated following comments from Savills	ATB	ATB	SJH	13/09/18
B	Updated for final issue to KCC/TMBC	ATB	ATB	SJH	21/02/19

*ATB*      *SJH*

## 1.0 INTRODUCTION

1.1 This Technical Note has been produced by Ardent Consulting Engineers (ACE) acting on behalf of the East Malling Trust (EMT), in relation to potential residential development at Ditton Edge (the Site), located at Kiln Barn Road, Ditton. This note follows discussions with Tonbridge and Malling Borough Council (TMBC) and Kent County Council (KCC) highways at pre-application and post-submission of an outline planning application for up to 300 dwellings at the Site (App Ref: TM/18/02966/OA).

1.2 The potential for a new footpath link extending south from the Site along Kiln Barn Road has been discussed. It is understood that such a footpath link was considered by the developers of the recent Orchard Gate residential scheme located further south along Kiln Barn Road, to connect that scheme with Ditton. However, no path has been delivered, noting that this was not secured through any planning conditions or as part of a S106 Agreement. As such, TMBC noted that there could be local support for such a footpath

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link to be provided as part of the Ditton Edge proposals, or at least provide a new footpath along the Site's frontage which could link to any new extended footpath in the future should one come forward.

- 1.3 Further to the above, the purpose of this Technical Note is to consider how a possible footpath link could be provided and whether this could be justified as part of the Ditton Edge proposals, taking into account factors such as need, demand, safety and constraints.

## 2.0 FOOTPATH ROUTE AND POTENTIAL USAGE

- 2.1 Plate 1 below shows an indicative route of a possible footpath link extending south from the Site towards the Orchard Gate development. The extent of highway verge along the western edge of Kiln Barn Road along this route is not sufficient to accommodate an adoptable footway alongside the carriageway. **Even if EMT's land is utilised** this would have a significant impact on the existing vegetation and trees alongside the carriageway. As such, the image below shows how the footpath would instead need to **extend through EMT's land behind the existing tree line. This would require** new security fencing to separate the path from the rest of **EMT's land** and it would not be lit, presenting possible safety concerns and limiting the potential use of the path (discussed in more detail later in this Note).

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Plate 1: Indicative Route of Potential Footpath adjacent to Kiln Barn Road (Site B = Ditton Edge planning application site)

- 2.2 The potential extended footpath link would connect with a new section of footway along the western edge of Kiln Barn Road past the frontage of the Site, and would then extend further north and link to a new crossing to connect with the existing footways within Ditton. As part of the access proposals for the Site, a 'best endeavours' requirement to relocate the existing national speed limit further south around the bend on Kiln Barn Road is being considered, to extend the existing 30mph limit past the whole eastern boundary of the site.
- 2.3 Plate 2 below shows an extract from KCC's online Public Rights of Way map, which highlights the locations of existing public footpaths in the

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vicinity of this section of Kiln Barn Road. The image below also shows the route of the potential footpath link considered in this Technical Note.



Plate 2: Existing Public Rights of Way

- 2.4 The above figure shows that the potential new footpath link along Kiln Barn Road would provide a route between Site B and existing footpath MR102, which forms a route to the east towards Hermitage Lane and Barming Railway Station. However, a more direct route to this location already exists via footpath MR481 and the adjoining paths. Furthermore, MR481 also forms part of a route from the site towards the Quarry Wood Estate (albeit not a very direct route). Based on these existing connections, a new footpath link would not be likely to be well used by residents at Ditton Edge, given the lack of destinations it would open up new routes to.
- 2.5 Further to the above, the primary function of the possible footpath would be to provide the opportunity for residents of the Orchard Gate development to walk into Ditton. It is important to note that providing a new route for these residents would not be required to make the proposals for Ditton Edge acceptable in planning terms, and could only instead be offered to address historic issues from local residents and Council Members.

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2.6 In terms of potential usages of a **new path, ACE's person trip generation** calculations for the Site (assuming up to 300 dwellings) show a daily demand for 162 two-way walking trips in total. On the assumption that a very small proportion of trips could in theory use this new link (0.5%), this only equates to 1 daily pedestrian movement. Applying the same rates to the Orchard Gate scheme, and assuming 70% of trips use this route, this results in a further 13 daily two-way pedestrian movements. Finally, it can be assumed that some pedestrians using the existing public footpath network may use this new route between Ditton and the east, estimated at 5 two-way trips. Overall, there could therefore be a possible demand for 19 daily two-way trips along this route, or 1-2 per hour if spread over a 12-hour daytime period. This demand is considered to be very minimal, and if anything could be an overestimate given that the chances of anyone other than Orchard Gate residents using the footpath would be low. This negligible level of demand would not justify the need for a footpath on this route.

### 3.0 PERTINENT ISSUES TO CONSIDER IN RELATION TO POTENTIAL FOOTPATH

#### *Security and Public Use*

3.1 The required route of the footpath would result in members of the public **walking through EMT's land. As such, access to the remainder of EMT's land** would need to be restricted, requiring new security fencing along the western boundary of the footpath.

#### *Design Considerations*

3.2 Given the low predicted footfall, it is considered that a footpath width of 1.5m would be suitable, as this is sufficient for two pedestrians to pass one another, or a pedestrian and wheelchair/pushchair user to pass one another. Additional margins of 0.5m either side would also be preferable (e.g. grass verge).

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3.3 Any new footpath would need to be formally surfaced, either with loose chippings/gravel, or preferably a bound surface. In terms of construction, it is anticipated that extending the footpath alongside the existing mature **trees would necessitate a 'no-dig' approach to construction** to protect these roots.

3.4 The potential route of this footpath may raise personal security concerns, owing to the fact that it would be screened on one side by the new security fence and on the other by existing trees and vegetation. Consistent with the majority of the public footpaths in the local area, the footpath is unlikely to have lighting given the minimal anticipated footfall and associated costs. This would further exacerbate security concerns and limit use of the path during hours of darkness (particularly during winter months).

#### 4.0 RECOMMENDATIONS IN RESPECT OF PROVISION OF NEW FOOTPATH

4.1 Based on the findings of this Technical Note, there is no planning or highways justification for the provision of a new footpath along Kiln Barn Road to connect the Site with the Orchard Gate development. A footpath at this location is not required to make development at the Site acceptable in planning terms., especially given that the location of a potential footpath does not fall on any key desire line for pedestrians travelling to and from the Site. On this basis, there should be no requirement to propose this path to assist with securing planning permission for the new development. Any such proposals would therefore only serve to provide a walking route for residents of Orchard Gate towards Ditton. The provision of a footway along the extent of the eastern edge of the Ditton Edge site at Kiln Barn Road has been proposed as part of the current planning application, designed such that this could tie into any future footpath to the south in the future.

4.2 This Technical Note highlights several constraints affecting the possible footpath, including:

- **The need for fencing to maintain security for EMT's land.**

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- Personal security concerns for potential users of the footpath, given the footpath will be screened on both sides, with no lighting.
- The lack of an obvious need to accommodate this desire line, noting alternative routes nearby and the low predicted footfall.

4.3 It is not considered necessary for a footpath along Kiln Barn Road south of the site to be provided as part of the application at Ditton Edge. However, the current planning application proposes a footway along the eastern edge of the Site and this would ensure that existing infrastructure would have been delivered at this location to allow a suitable connection into any new future footpath link south along Kiln Barn Road.

Appendix C  
LinSig Output Data



Existing Layout

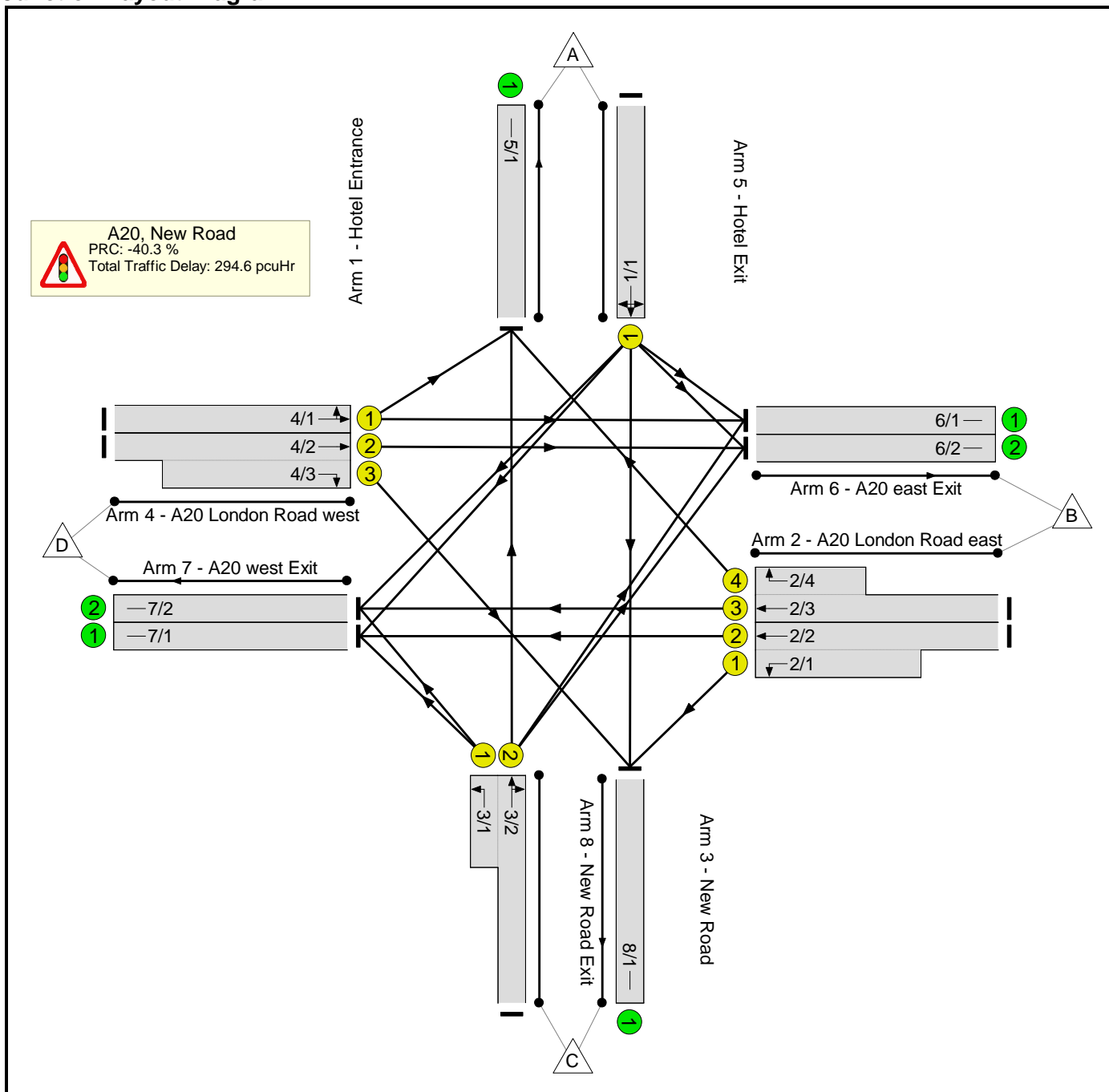
# Amey Standard Linsig Report

## User and Project Details

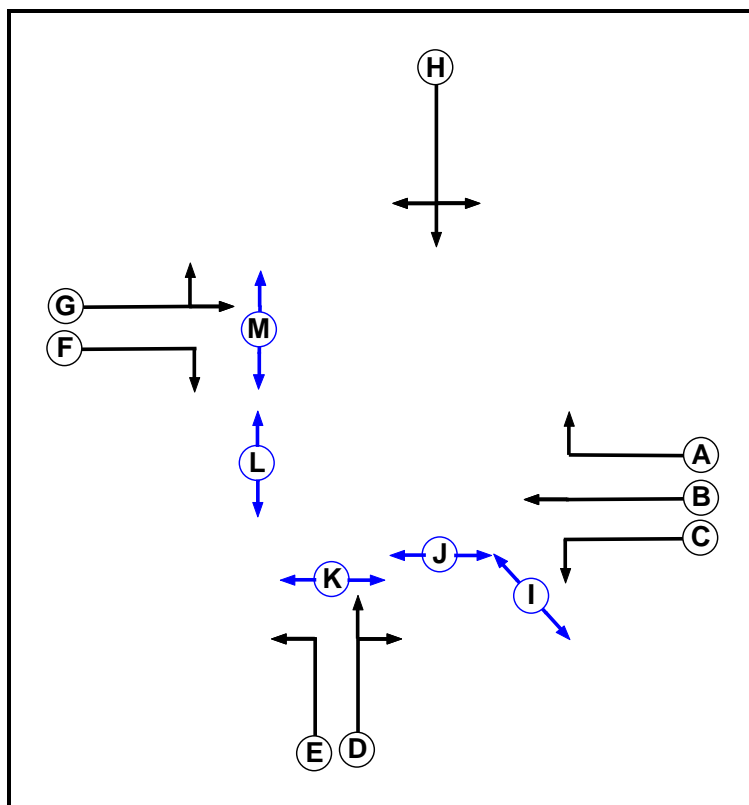
Project:	A20, Maidstone
Title:	
Location:	A20, New Road
File name:	A20 London Rd_New Rd - Existing Layout Rev A.lsg3x

Scenario 1: '2031 DM AM' (FG1: '2031 DM AM', Plan 1: 'Network Control Plan 1')

## Junction Layout Diagram



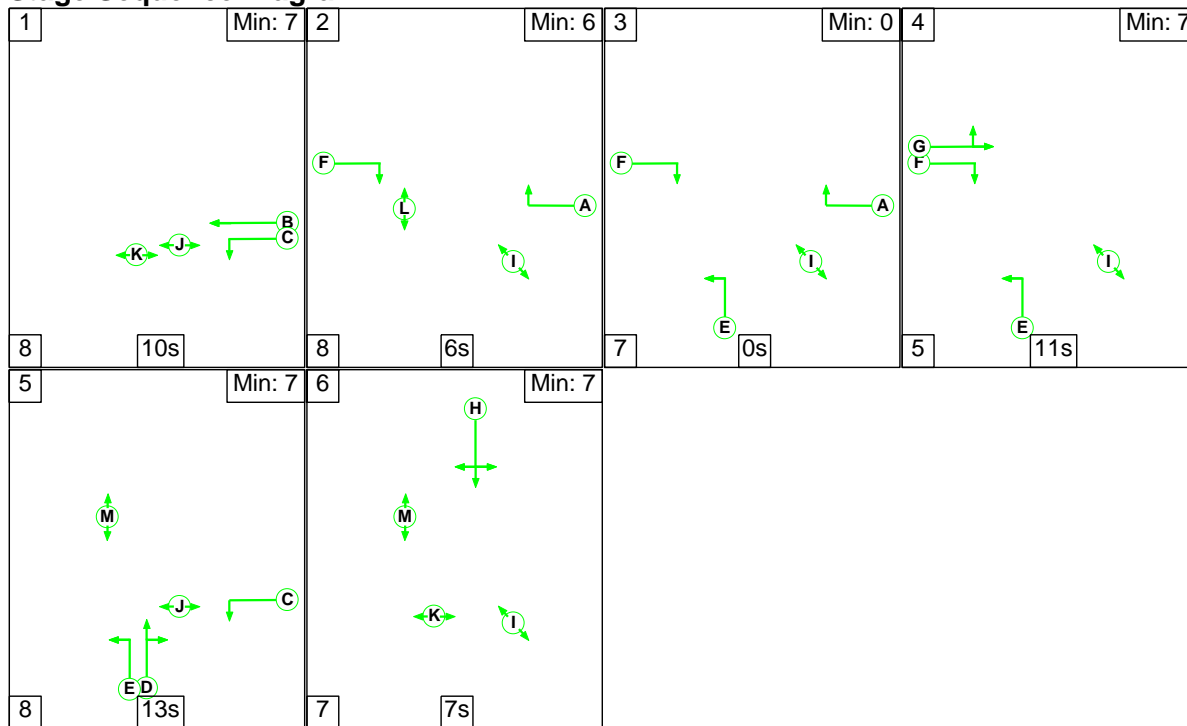
# Phase Diagram



### Phase Intergreens Matrix

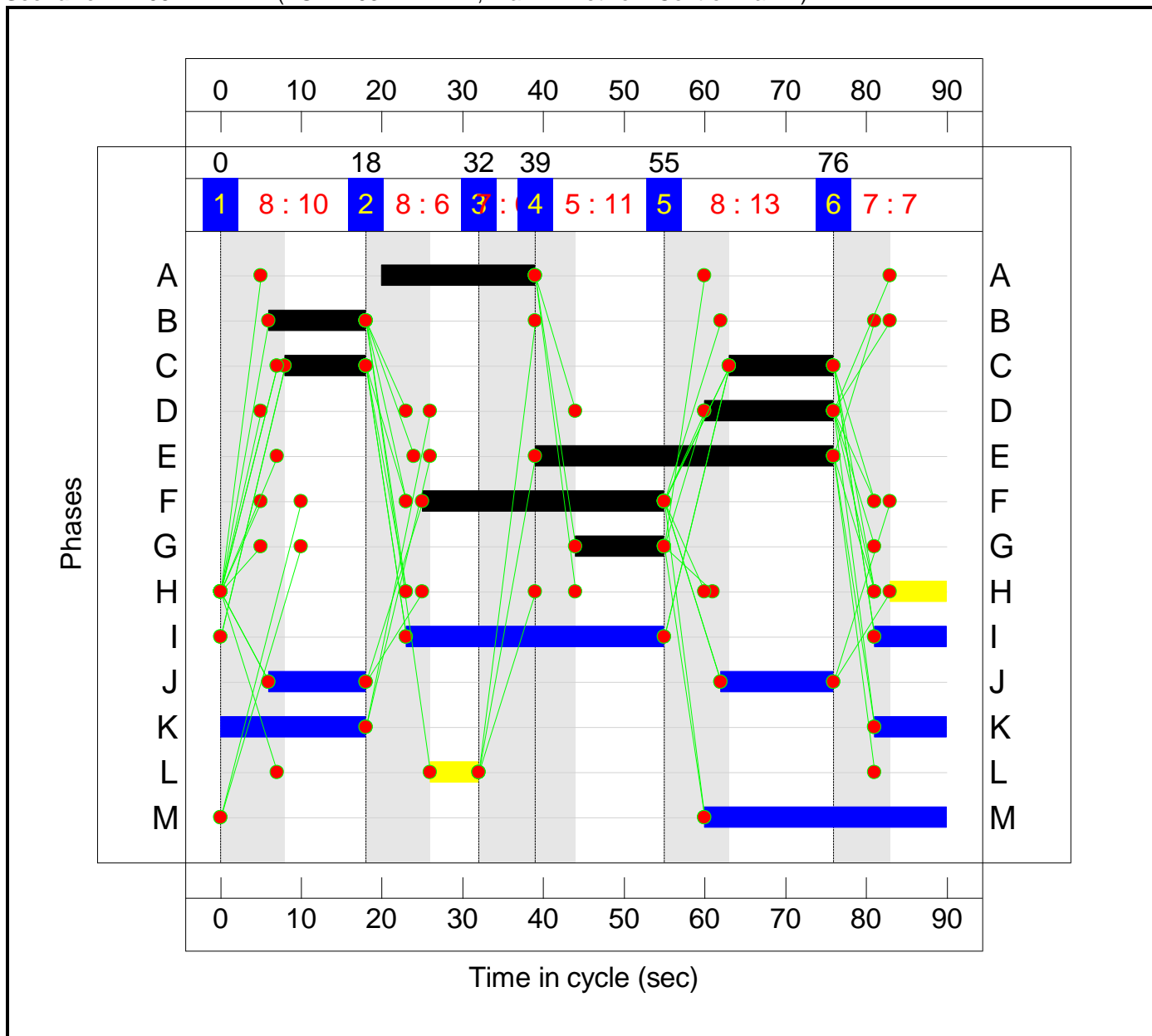
		Starting Phase												
		A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A	-	-	5	-	-	5	5	-	-	-	-	-	-
	B	-	-	5	6	5	-	5	-	-	-	8	-	-
	C	-	-	-	-	5	-	5	5	-	-	-	-	-
	D	7	7	-	-	5	5	5	-	-	5	-	-	-
	E	-	5	-	-	-	-	5	-	-	5	5	-	-
	F	-	7	8	5	-	-	5	-	7	-	-	5	-
	G	5	-	-	5	-	-	-	6	-	-	-	-	5
	H	5	6	7	5	7	5	5	-	6	-	7	-	-
	I	-	-	8	-	-	-	-	-	-	-	-	-	-
	J	-	-	-	-	7	-	7	-	-	-	-	-	-
	K	-	-	-	8	8	-	-	-	-	-	-	-	-
	L	-	7	-	-	7	-	-	7	-	-	-	-	-
	M	-	-	-	-	-	10	10	-	-	-	-	-	-

### Stage Sequence Diagram



### Signal Timings Diagram

Scenario 1: '2031 DM AM' (FG1: '2031 DM AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

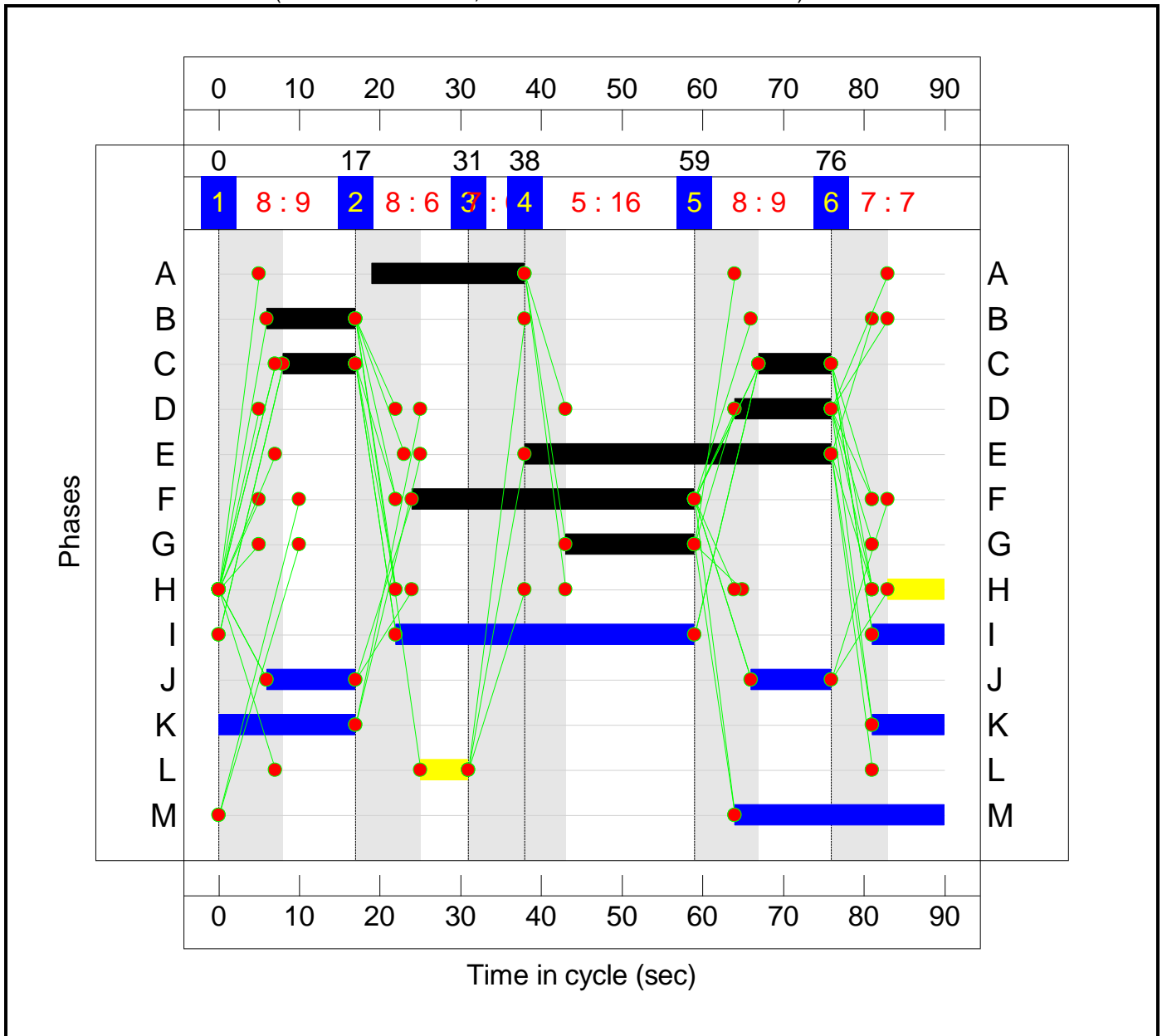
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	3	3
	B	3	0	402	703	1108
	C	1	356	0	226	583
	D	0	587	259	0	846
	Tot.	4	943	661	932	2540

## Link 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	-	-	-		-	-	-	-	-	-	126.2%	0	0	0	294.6	-	-				
A20, New Road	-	-	-		-	-	-	-	-	-	126.2%	0	0	0	294.6	-	-				
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1				
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	12:23	-	755	1950:1650	282+321	125.3 : 125.3%	-	-	-	88.9	424.1	92.8				
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	12:19	-	353	1950:1600	282+2	124.3 : 124.3%	-	-	-	43.8	446.4	47.8				
3/2+3/1	New Road Ahead Right Left	U	D E		1	16:37	-	583	1800:1650	283+179	126.2 : 126.2%	-	-	-	72.1	445.2	78.6				
4/1	A20 London Road west Left Ahead	U	G		1	11	-	272	1700	227	120.0%	-	-	-	29.9	395.9	33.3				
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	574	1950:1600	260+214	121.2 : 121.2%	-	-	-	59.9	375.5	62.1				
C1		PRC for Signalled Lanes (%):		-40.3		Total Delay for Signalled Lanes (pcuHr):		294.63		Cycle Time (s):		90		PRC Over All Lanes (%):		-40.3		Total Delay Over All Lanes(pcuHr):		294.63	

### Signal Timings Diagram

Scenario 2: '2031 DM PM' (FG2: '2031 DM PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

		Destination				Tot.
		A	B	C	D	
Origin	A	0	1	0	1	2
	B	1	0	372	656	1029
	C	0	317	0	67	384
	D	4	888	243	0	1135
	Tot.	5	1206	615	724	2550

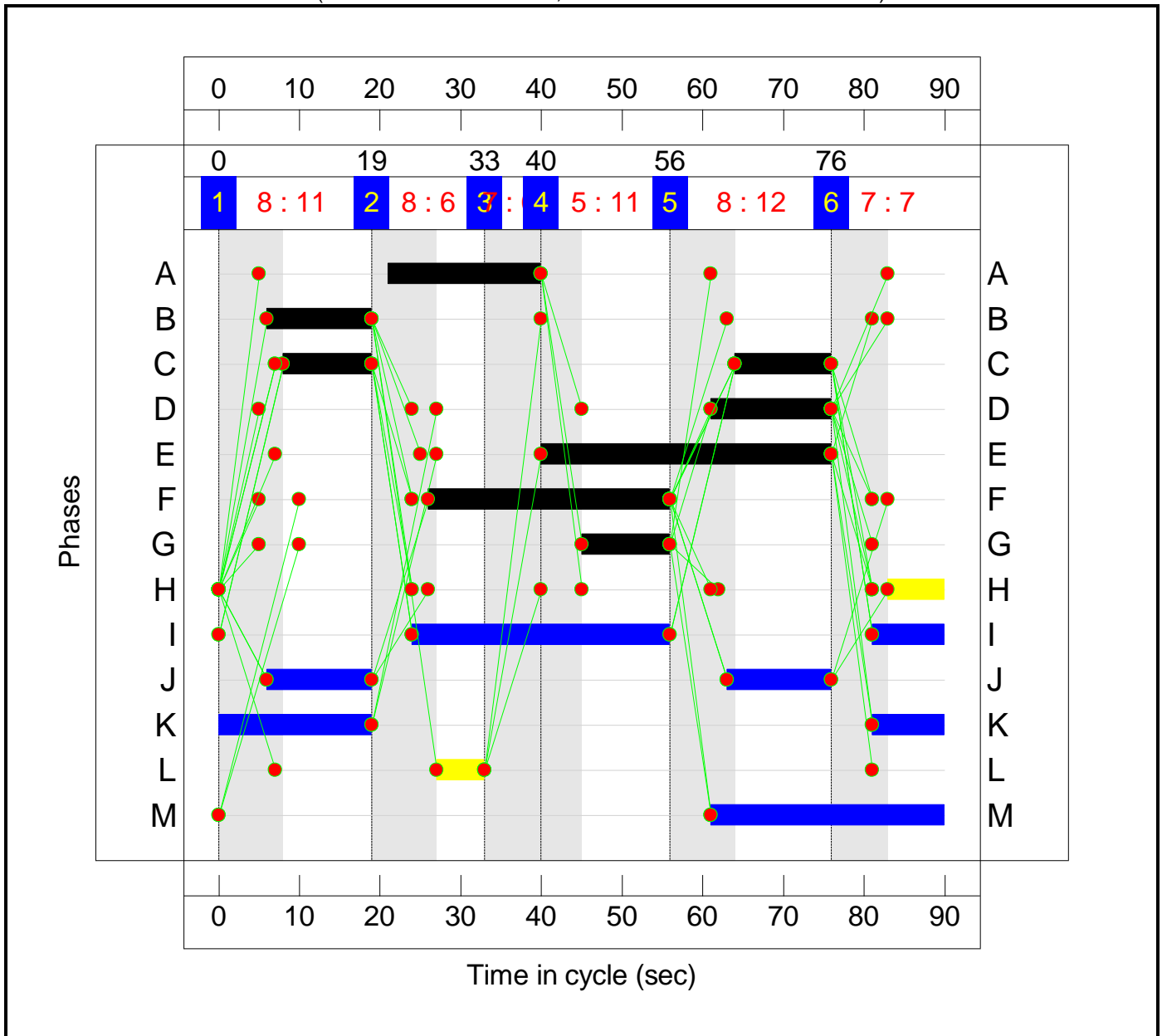
## Link Results

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	-	-	-		-	-	-	-	-	-	129.8%	0	0	0	296.0	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	129.8%	0	0	0	296.0	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	11:18	-	700	1950:1650	260+367	126.2 : 101.5%	-	-	-	50.8	261.2	53.4		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	11:19	-	329	1950:1600	260+1	126.2 : 126.2%	-	-	-	43.1	471.3	46.7		
3/2+3/1	New Road Ahead Right Left	U	D E		1	12:38	-	384	1800:1650	249+53	127.4 : 127.4%	-	-	-	50.2	470.2	55.0		
4/1	A20 London Road west Left Ahead	U	G		1	16	-	414	1700	321	128.9%	-	-	-	56.0	487.4	61.2		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	16:35	-	721	1950:1600	368+187	129.8 : 129.8%	-	-	-	95.9	478.7	103.3		
C1		PRC for Signalled Lanes (%):		-44.2		PRC Over All Lanes (%):		-44.2		Total Delay for Signalled Lanes (pcuHr):		295.97		Total Delay Over All Lanes(pcuHr):		295.97		Cycle Time (s): 90	



### Signal Timings Diagram

Scenario 3: '2031 DM AM + B' (FG3: '2031 DM AM + B', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

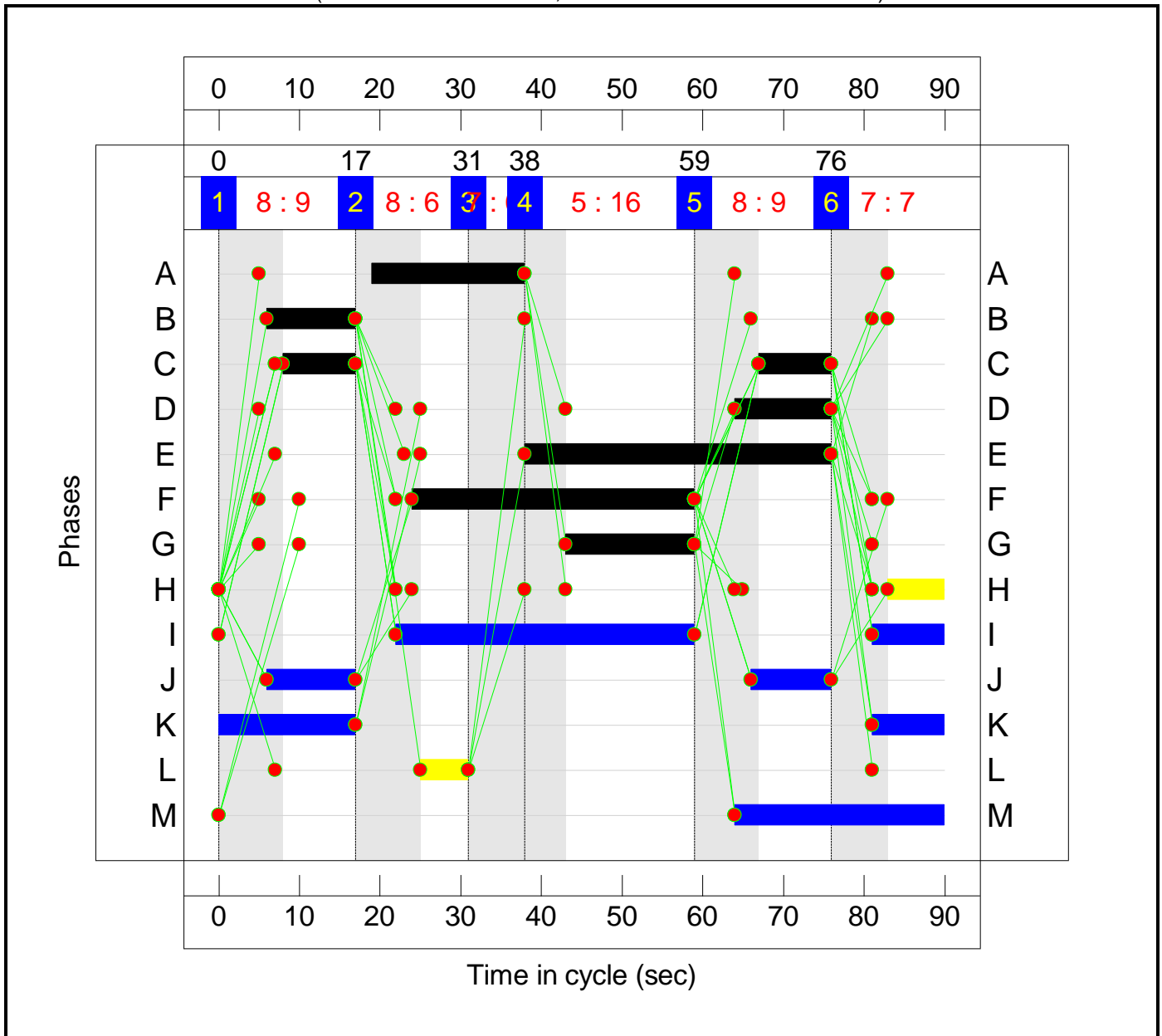
		Destination				Tot.
		A	B	C	D	
Origin	A	0	0	0	3	3
	B	3	0	402	768	1173
	C	1	356	0	226	583
	D	0	607	259	0	866
	Tot.	4	963	661	997	2625

## Link 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	-	-	-		-	-	-	-	-	-	131.7%	0	0	0	334.2	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	131.7%	0	0	0	334.2	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:23	-	787	1950:1650	303+317	126.9 : 126.9%	-	-	-	97.7	447.0	102.0		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	386	1950:1600	303+2	126.3 : 126.3%	-	-	-	50.2	467.7	54.6		
3/2+3/1	New Road Ahead Right Left	U	D E		1	15:36	-	583	1800:1650	271+172	131.7 : 131.7%	-	-	-	82.6	510.1	88.9		
4/1	A20 London Road west Left Ahead	U	G		1	11	-	281	1700	227	124.0%	-	-	-	34.5	442.2	37.9		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	585	1950:1600	260+207	125.4 : 125.4%	-	-	-	69.1	425.4	71.4		
C1		PRC for Signalled Lanes (%):		-46.4		PRC Over All Lanes (%):		-46.4		Total Delay for Signalled Lanes (pcuHr):		334.15		Total Delay Over All Lanes(pcuHr):		334.15		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 4: '2031 DM PM + B' (FG4: '2031 DM PM + B', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

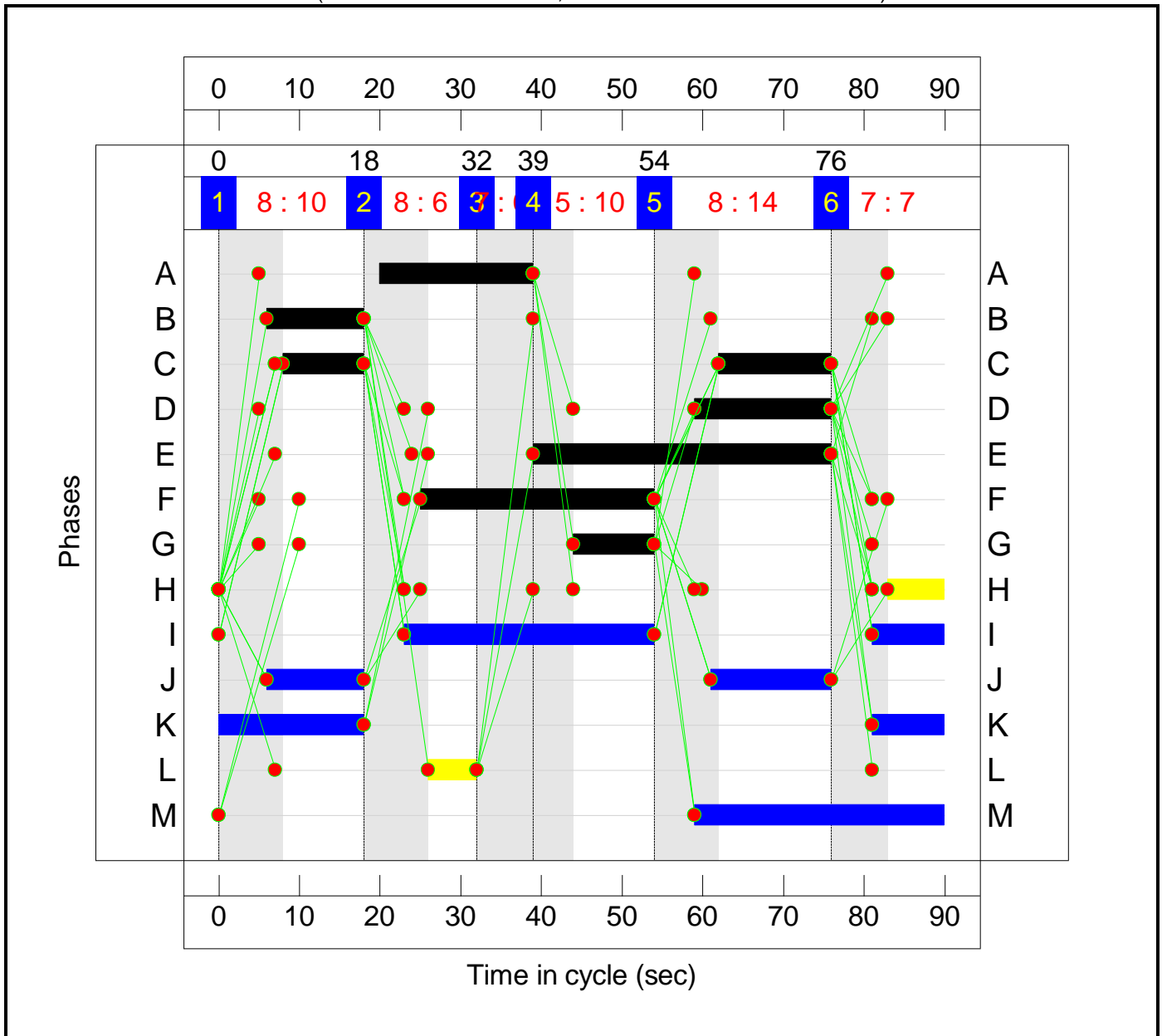
		Destination				Tot.
		A	B	C	D	
Origin	A	0	1	0	1	2
	B	1	0	372	680	1053
	C	0	317	0	67	384
	D	4	933	243	0	1180
	Tot.	5	1251	615	748	2619

## Link 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	-	-	-		-	-	-	-	-	-	136.3%	0	0	0	350.2	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	136.3%	0	0	0	350.2	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	11:18	-	713	1950:1650	260+341	131.2 : 109.2%	-	-	-	70.3	355.0	73.0		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	11:19	-	340	1950:1600	260+1	130.4 : 130.4%	-	-	-	49.0	518.7	52.6		
3/2+3/1	New Road Ahead Right Left	U	D E		1	12:38	-	384	1800:1650	249+53	127.4 : 127.4%	-	-	-	50.2	470.2	55.0		
4/1	A20 London Road west Left Ahead	U	G		1	16	-	435	1700	321	135.5%	-	-	-	67.2	556.3	72.5		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	16:35	-	745	1950:1600	368+178	136.3 : 136.3%	-	-	-	113.6	548.7	121.2		
C1		PRC for Signalled Lanes (%):		-51.4		PRC Over All Lanes (%):		-51.4		Total Delay for Signalled Lanes (pcuHr):		350.25		Total Delay Over All Lanes(pcuHr):		350.25		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 5: '2031 DM AM + C' (FG5: '2031 DM AM + C', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

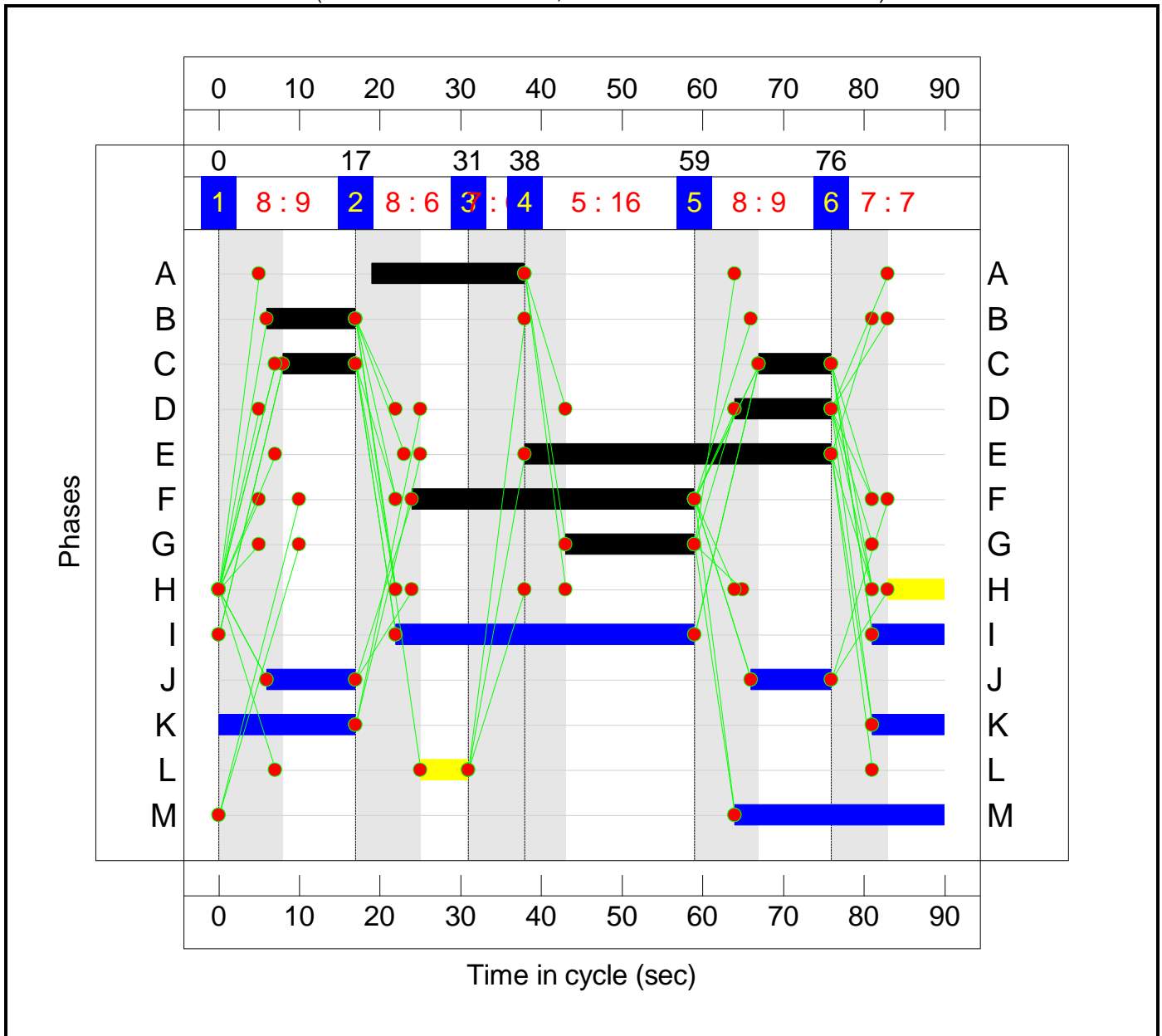
		Destination				Tot.
		A	B	C	D	
Origin	A	0	0	0	3	3
	B	3	0	408	703	1114
	C	1	375	0	252	628
	D	0	587	267	0	854
	Tot.	4	962	675	958	2599

## Link 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	-	-	-		-	-	-	-	-	-	132.2%	0	0	0	335.9	-	-				
A20, New Road	-	-	-		-	-	-	-	-	-	132.2%	0	0	0	335.9	-	-				
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1				
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	12:24	-	761	1950:1650	282+326	125.3 : 125.3%	-	-	-	89.5	423.3	93.4				
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	12:19	-	353	1950:1600	282+2	124.3 : 124.3%	-	-	-	43.8	446.4	47.8				
3/2+3/1	New Road Ahead Right Left	U	D E		1	17:37	-	628	1800:1650	292+196	128.6 : 128.6%	-	-	-	82.4	472.1	89.4				
4/1	A20 London Road west Left Ahead	U	G		1	10	-	272	1700	208	130.9%	-	-	-	39.4	521.3	42.5				
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	10:29	-	582	1950:1600	238+202	132.2 : 132.2%	-	-	-	80.8	499.8	83.4				
C1		PRC for Signalled Lanes (%):		-46.9		Total Delay for Signalled Lanes (pcuHr):		335.85		Cycle Time (s):		90		PRC Over All Lanes (%):		-46.9		Total Delay Over All Lanes(pcuHr):		335.85	

### Signal Timings Diagram

Scenario 6: '2031 DM PM + C' (FG6: '2031 DM PM + C', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

		Destination				Tot.
		A	B	C	D	
Origin	A	0	1	0	1	2
	B	1	0	385	656	1042
	C	0	324	0	77	401
	D	4	888	261	0	1153
	Tot.	5	1213	646	734	2598

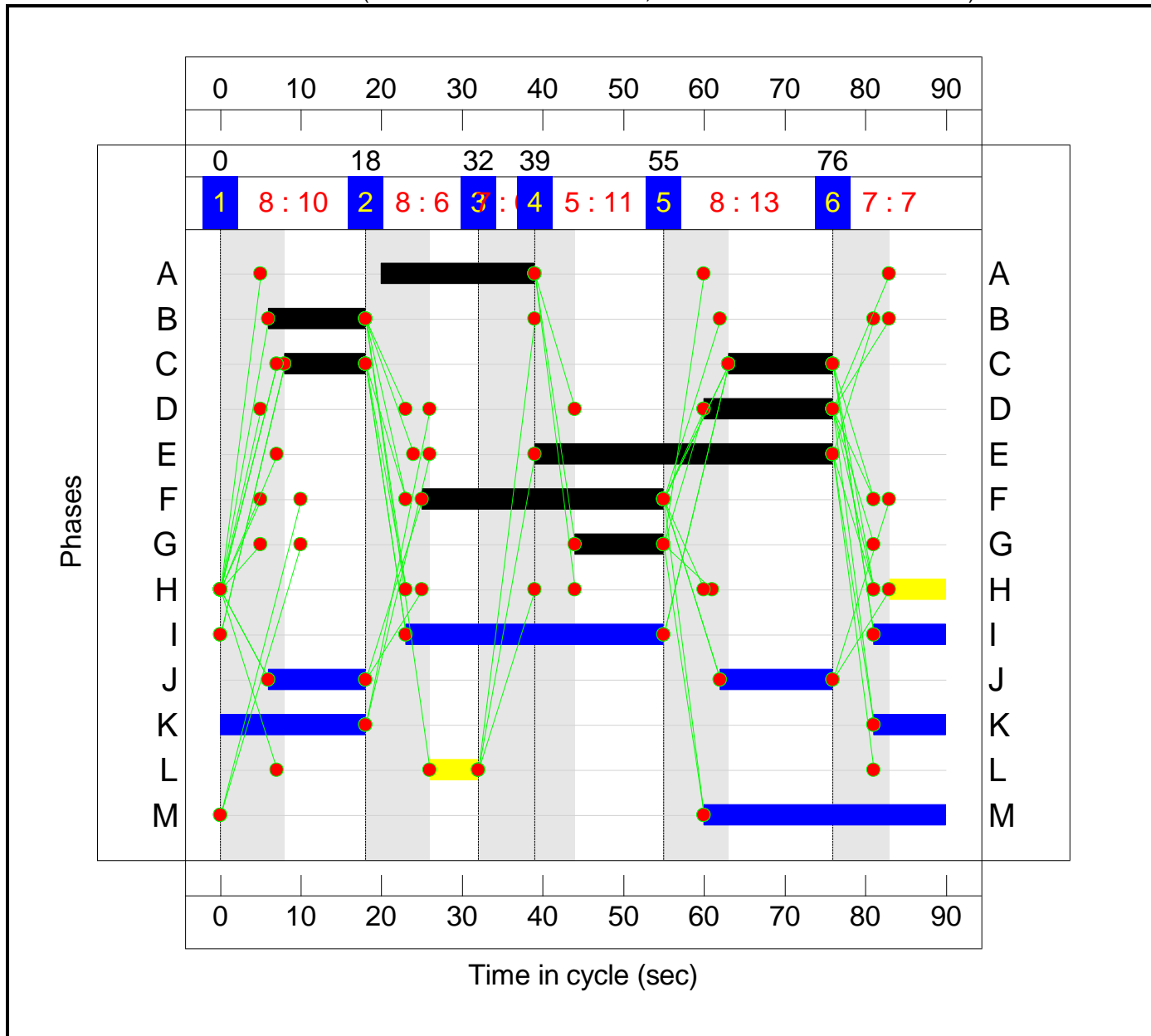
## Link Results

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	-	-	-		-	-	-	-	-	-	130.8%	0	0	0	311.1	-	-				
A20, New Road	-	-	-		-	-	-	-	-	-	130.8%	0	0	0	311.1	-	-				
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1				
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	11:18	-	714	1950:1650	260+367	126.5 : 105.0%	-	-	-	57.7	291.1	60.1				
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	11:19	-	328	1950:1600	260+1	125.8 : 125.8%	-	-	-	42.5	466.9	46.2				
3/2+3/1	New Road Ahead Right Left	U	D E		1	12:38	-	401	1800:1650	248+59	130.8 : 130.8%	-	-	-	56.6	508.2	61.6				
4/1	A20 London Road west Left Ahead	U	G		1	16	-	414	1700	321	128.9%	-	-	-	56.0	487.4	61.2				
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	16:35	-	739	1950:1600	368+201	129.8 : 129.8%	-	-	-	98.1	478.1	105.6				
C1		PRC for Signalled Lanes (%):		-45.4		Total Delay for Signalled Lanes (pcuHr):		311.09		Cycle Time (s):		90		PRC Over All Lanes (%):		-45.4		Total Delay Over All Lanes(pcuHr):		311.09	



### Signal Timings Diagram

Scenario 7: '2031 DM AM + B & C' (FG7: '2031 DM AM + B & C', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

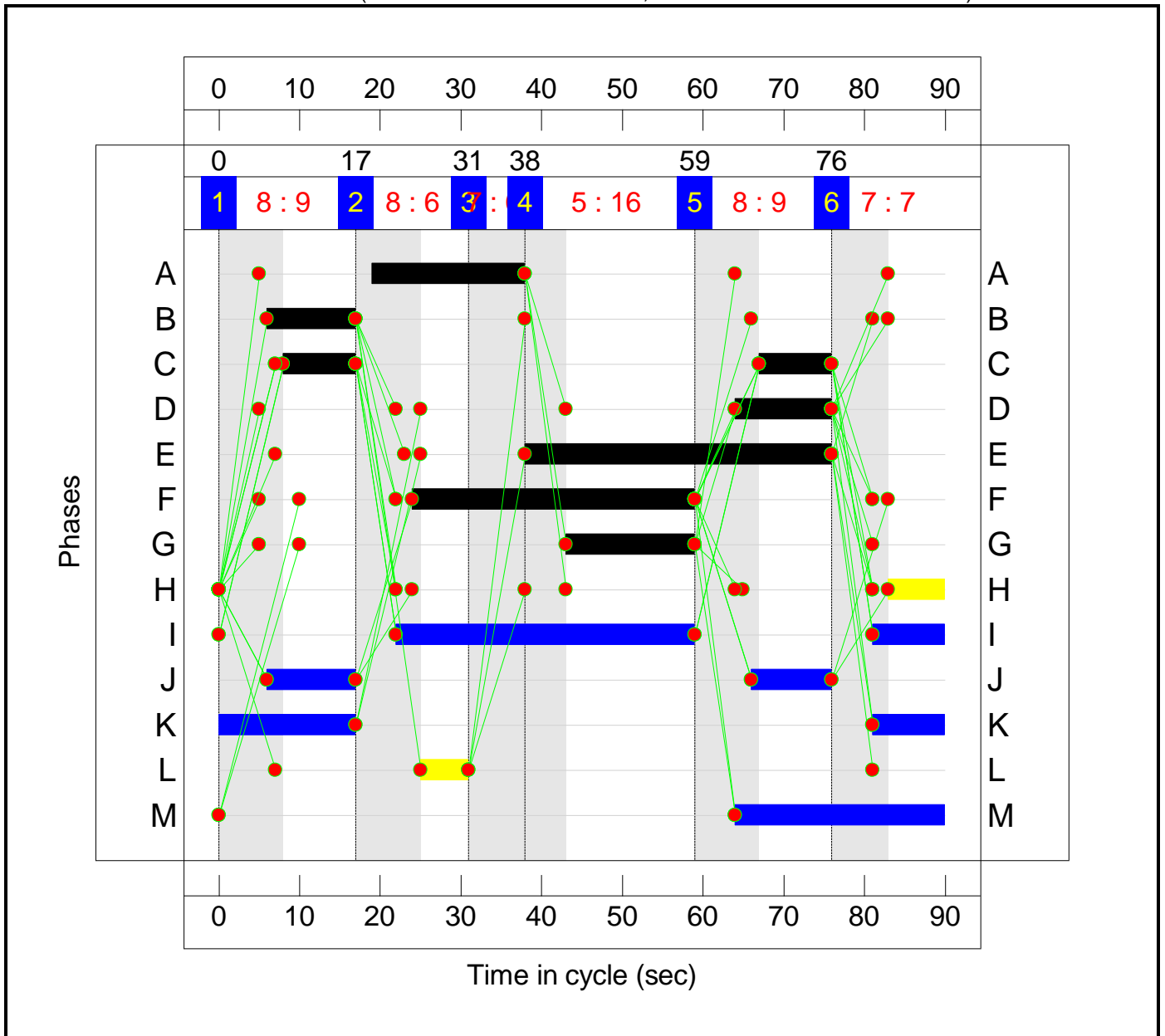
		Destination				Tot.
		A	B	C	D	
Origin	A	0	0	0	3	3
	B	3	0	408	768	1179
	C	1	375	0	252	628
	D	0	607	267	0	874
	Tot.	4	982	675	1023	2684

## Link 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	-	-	-		-	-	-	-	-	-	136.7%	0	0	0	380.9	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	136.7%	0	0	0	380.9	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	12:23	-	793	1950:1650	282+298	136.7 : 136.7%	-	-	-	121.8	552.8	125.6		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	12:19	-	386	1950:1600	282+2	136.0 : 136.0%	-	-	-	61.7	575.3	65.6		
3/2+3/1	New Road Ahead Right Left	U	D E		1	16:37	-	628	1800:1650	281+188	133.9 : 133.9%	-	-	-	92.9	532.4	99.7		
4/1	A20 London Road west Left Ahead	U	G		1	11	-	281	1700	227	124.0%	-	-	-	34.5	442.4	37.9		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	593	1950:1600	260+213	125.4 : 125.4%	-	-	-	70.0	425.0	72.2		
C1		PRC for Signalled Lanes (%):		-51.9		PRC Over All Lanes (%):		-51.9		Total Delay for Signalled Lanes (pcuHr):		380.92		Total Delay Over All Lanes(pcuHr):		380.92		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 8: '2031 DM PM + B & C' (FG8: '2031 DM PM + B & C', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

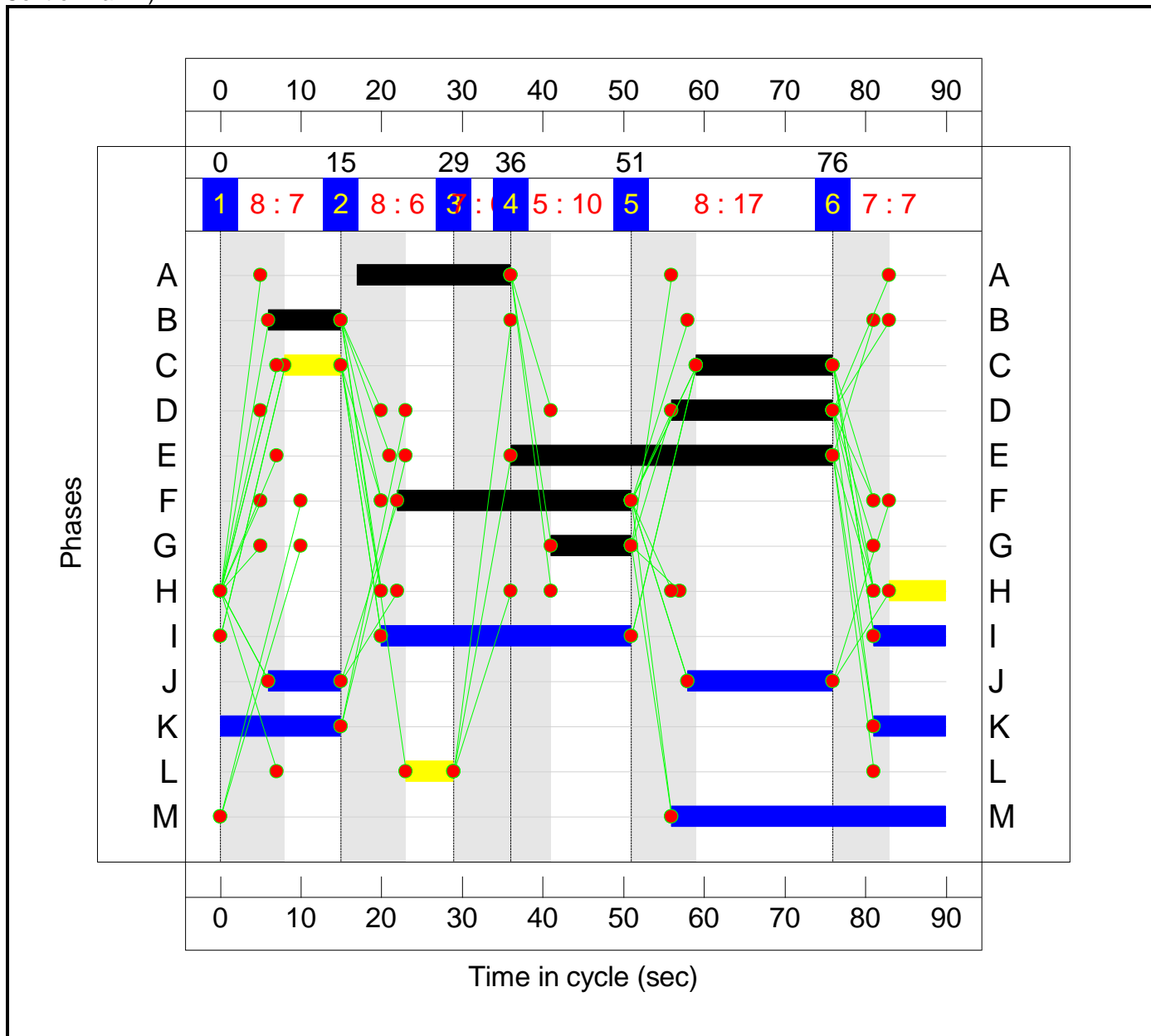
		Destination				Tot.
		A	B	C	D	
Origin	A	0	1	0	1	2
	B	1	0	385	680	1066
	C	0	324	0	77	401
	D	4	933	261	0	1198
	Tot.	5	1258	646	758	2667

## Link 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	-	-	-		-	-	-	-	-	-	136.3%	0	0	0	354.4	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	136.3%	0	0	0	354.4	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	11:18	-	726	1950:1650	260+365	131.2 : 105.5%	-	-	-	65.4	324.1	67.9		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	11:19	-	340	1950:1600	260+1	130.4 : 130.4%	-	-	-	49.0	518.7	52.6		
3/2+3/1	New Road Ahead Right Left	U	D E		1	12:38	-	401	1800:1650	248+59	130.8 : 130.8%	-	-	-	56.6	508.2	61.6		
4/1	A20 London Road west Left Ahead	U	G		1	16	-	435	1700	321	135.5%	-	-	-	67.2	556.3	72.5		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	16:35	-	763	1950:1600	368+192	136.3 : 136.3%	-	-	-	116.2	548.1	123.9		
C1		PRC for Signalled Lanes (%):		-51.4		PRC Over All Lanes (%):		-51.4		Total Delay for Signalled Lanes (pcuHr):		354.39		Total Delay Over All Lanes(pcuHr):		354.39		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 9: '2031 DS minus Site B Local Plan Flows AM' (FG9: '2031 DS - Site B LP Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

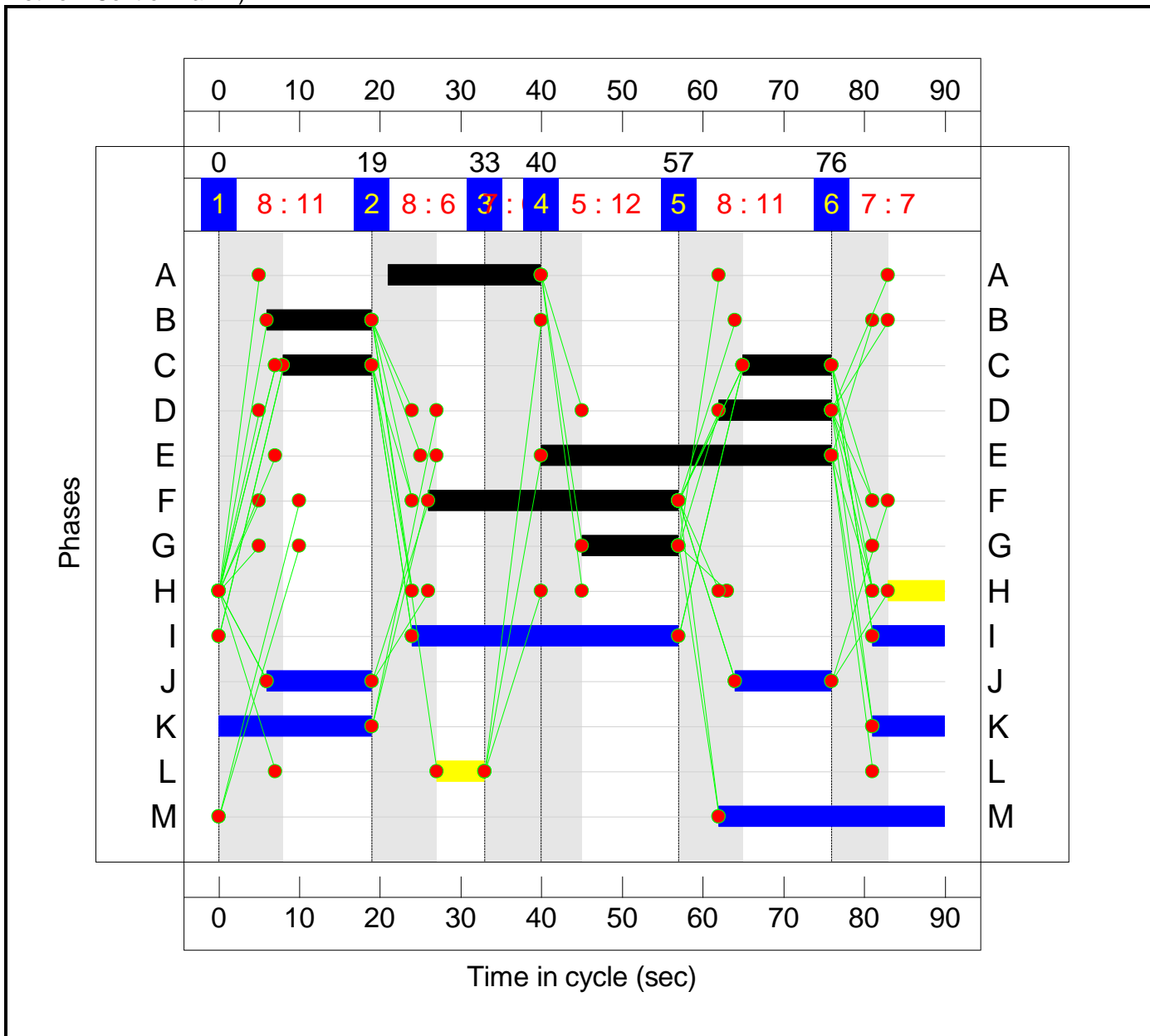
Origin	Destination				
	A	B	C	D	Tot.
A	0	0	0	3	3
B	3	0	284	605	892
C	1	578	0	182	761
D	0	735	406	0	1141
Tot.	4	1313	690	790	2797

## Link 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	-	-	-		-	-	-	-	-	-	165.7%	0	0	0	559.1	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	165.7%	0	0	0	559.1	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:24	-	587	1950:1650	217+203	139.8 : 139.8%	-	-	-	94.2	578.0	97.1		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	305	1950:1600	217+2	139.4 : 139.4%	-	-	-	52.1	615.5	55.1		
3/2+3/1	New Road Ahead Right Left	U	D E		1	20:40	-	761	1800:1650	364+114	159.1 : 159.1%	-	-	-	162.0	766.6	172.0		
4/1	A20 London Road west Left Ahead	U	G		1	10	-	340	1700	208	163.6%	-	-	-	76.0	804.2	79.2		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	10:29	-	801	1950:1600	238+245	165.7 : 165.7%	-	-	-	174.7	785.1	179.2		
C1		PRC for Signalled Lanes (%):		-84.1		PRC Over All Lanes (%):		-84.1		Total Delay for Signalled Lanes (pcuHr):		559.11		Total Delay Over All Lanes(pcuHr):		559.11		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 10: '2031 DS minus Site B Local Plan Flows PM' (FG10: '2031 DS - Site B LP Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	1	0	1	2
B	1	0	225	872	1098	
C	0	371	0	337	708	
D	4	803	393	0	1200	
Tot.	5	1175	618	1210	3008	

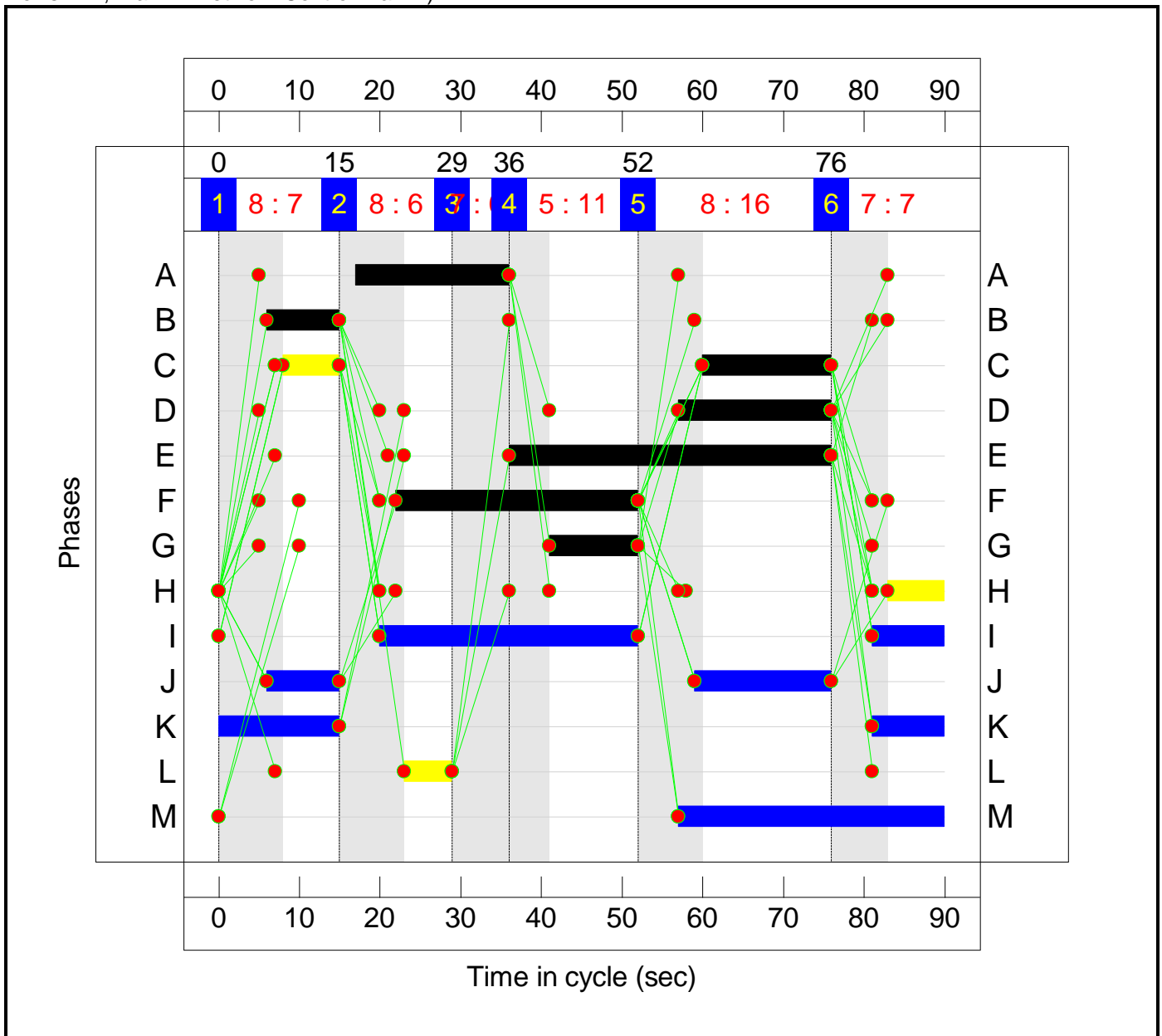
## Link Results

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	-	-	-		-	-	-	-	-	-	154.1%	0	0	0	562.1	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	154.1%	0	0	0	562.1	-	-
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:22	-	662	1950:1650	303+156	144.1 : 144.1%	-	-	-	116.8	635.0	121.3
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	436	1950:1600	303+1	143.4 : 143.4%	-	-	-	78.3	646.1	82.4
3/2+3/1	New Road Ahead Right Left	U	D E		1	14:36	-	708	1800:1650	250+227	148.3 : 148.3%	-	-	-	132.6	674.0	139.3
4/1	A20 London Road west Left Ahead	U	G		1	12	-	373	1700	246	151.9%	-	-	-	73.7	711.5	77.7
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	12:31	-	827	1950:1600	282+255	154.1 : 154.1%	-	-	-	160.8	700.0	166.9
C1		PRC for Signalled Lanes (%):		-71.2		PRC Over All Lanes (%):		-71.2		Total Delay for Signalled Lanes (pcuHr):		562.14		Cycle Time (s):		90	
										Total Delay Over All Lanes(pcuHr):		562.14					



### Signal Timings Diagram

Scenario 11: '2031 DS minus Site B Local Plan Flows + Site B AM' (FG11: '2031 DS - Site B LP Flows + Site B Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

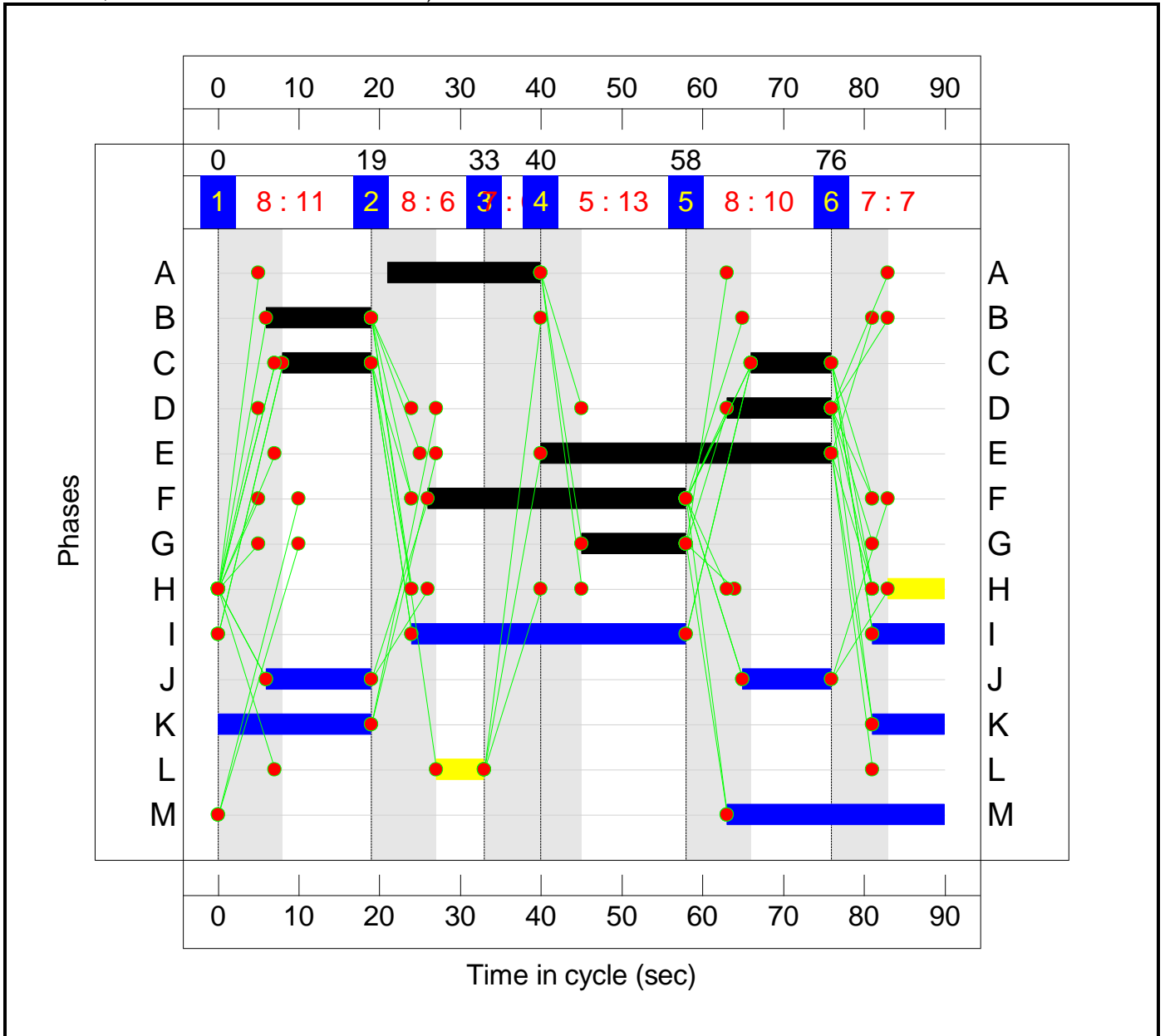
	Destination					
	A	B	C	D	Tot.	
Origin	A	0	0	0	3	3
	B	3	0	284	670	957
	C	1	578	0	182	761
	D	0	755	406	0	1161
	Tot.	4	1333	690	855	2882

## Link 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	-	-	-		-	-	-	-	-	-	165.9%	0	0	0	599.2	-	-				
A20, New Road	-	-	-		-	-	-	-	-	-	165.9%	0	0	0	599.2	-	-				
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1				
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:23	-	622	1950:1650	217+182	156.0% : 156.0%	-	-	-	125.3	725.2	129.1				
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	335	1950:1600	217+2	153.2% : 153.2%	-	-	-	68.7	738.1	72.1				
3/2+3/1	New Road Ahead Right Left	U	D E		1	19:40	-	761	1800:1650	349+110	165.9% : 165.9%	-	-	-	172.9	817.9	182.7				
4/1	A20 London Road west Left Ahead	U	G		1	11	-	349	1700	227	154.0%	-	-	-	70.8	730.4	74.3				
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	812	1950:1600	260+260	156.2% : 156.2%	-	-	-	161.5	715.8	166.4				
C1		PRC for Signalled Lanes (%):		-84.4		PRC Over All Lanes (%):		-84.4		Total Delay for Signalled Lanes (pcuHr):		599.18		Total Delay Over All Lanes(pcuHr):		599.18		Cycle Time (s):		90	

### Signal Timings Diagram

Scenario 12: '2031 DS minus Site B Local Plan Flows + Site B PM' (FG12: '2031 DS - Site B LP Flows + Site B Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

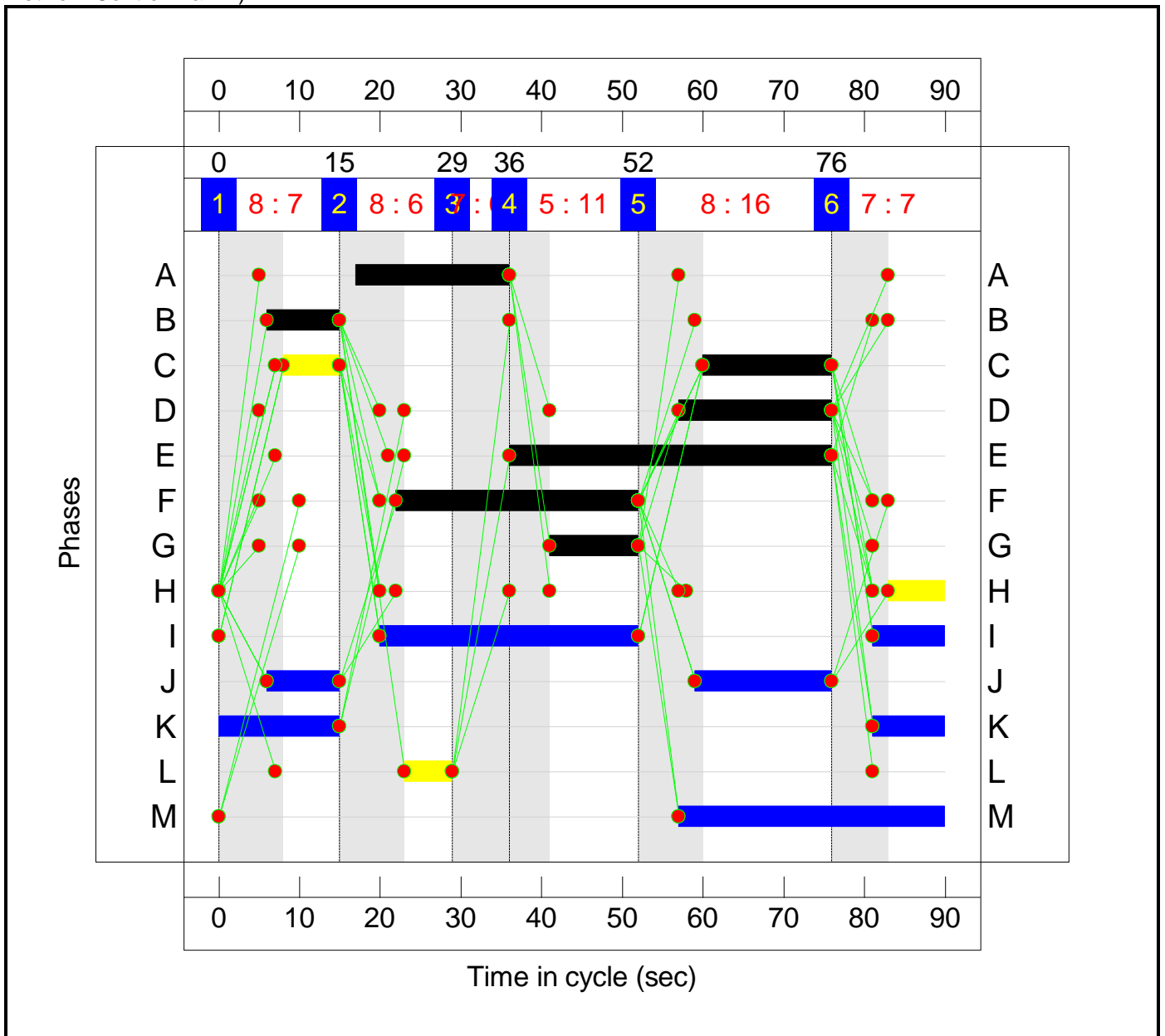
Origin	Destination				
	A	B	C	D	Tot.
A	0	1	0	1	2
B	1	0	225	896	1122
C	0	371	0	337	708
D	4	848	393	0	1245
Tot.	5	1220	618	1234	3077

## Link 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	-	-	-		-	-	-	-	-	-	154.5%	0	0	0	588.7	-	-				
A20, New Road	-	-	-		-	-	-	-	-	-	154.5%	0	0	0	588.7	-	-				
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1				
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:21	-	674	1950:1650	303+152	148.0 : 148.0%	-	-	-	125.7	671.6	130.2				
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	448	1950:1600	303+1	147.4 : 147.4%	-	-	-	84.9	681.9	89.2				
3/2+3/1	New Road Ahead Right Left	U	D E		1	13:36	-	708	1800:1650	240+218	154.5 : 154.5%	-	-	-	143.1	727.8	149.7				
4/1	A20 London Road west Left Ahead	U	G		1	13	-	394	1700	264	149.0%	-	-	-	75.0	685.6	79.4				
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	13:32	-	851	1950:1600	303+260	151.0 : 151.0%	-	-	-	159.9	676.5	166.6				
C1		PRC for Signalled Lanes (%):		-71.6		Total Delay for Signalled Lanes (pcuHr):		588.71		Cycle Time (s):		90		PRC Over All Lanes (%):		-71.6		Total Delay Over All Lanes(pcuHr):		588.71	

### Signal Timings Diagram

Scenario 13: '2031 DS minus Site C Local Plan Flows AM' (FG13: '2031 DS - Site C LP Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

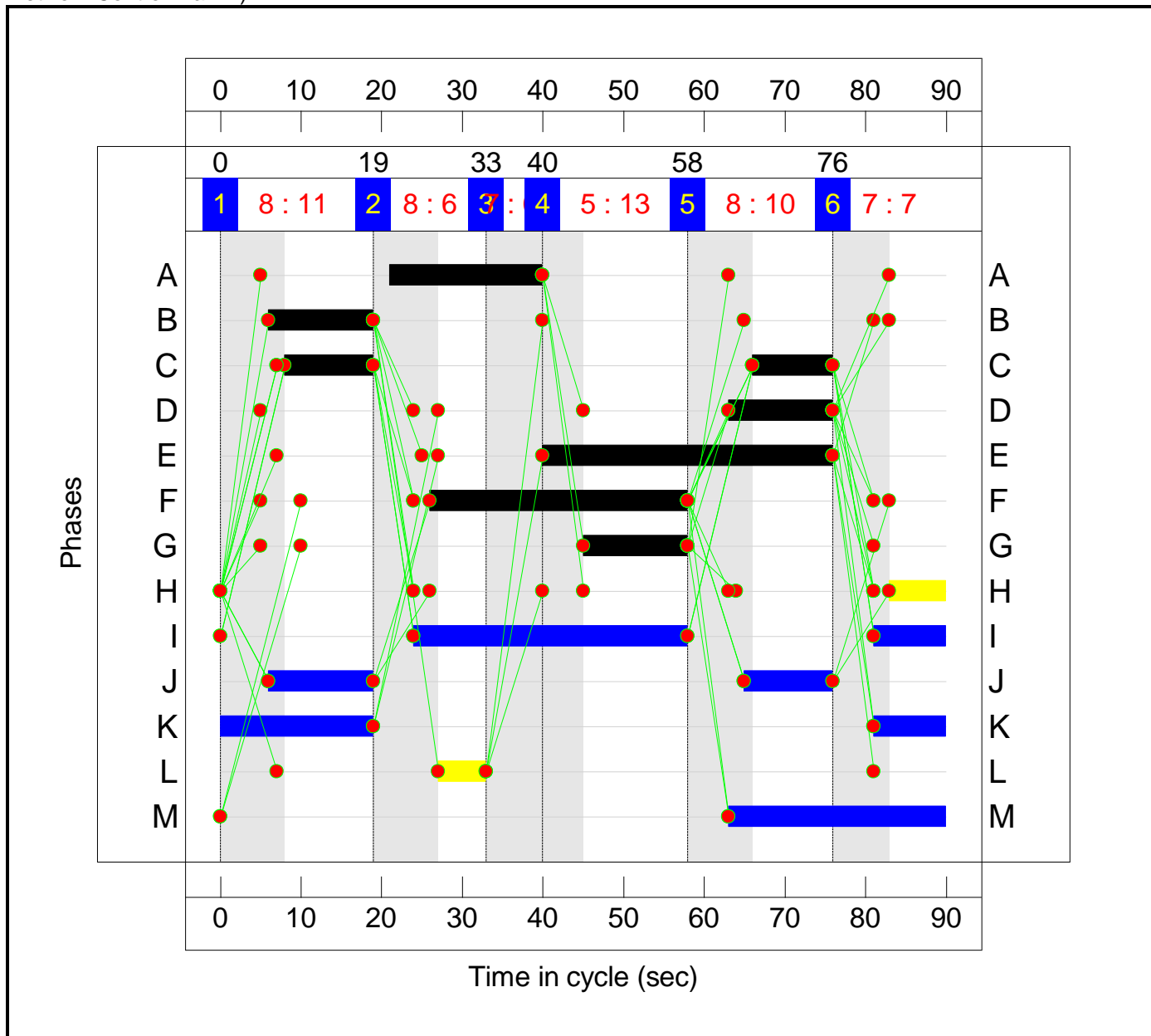
	Destination					
	A	B	C	D	Tot.	
Origin	A	0	0	0	3	3
B	3	0	273	651	927	
C	1	543	0	134	678	
D	0	749	391	0	1140	
Tot.	4	1292	664	788	2748	

## Link 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	-	-	-		-	-	-	-	-	-	155.0%	0	0	0	538.0	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	155.0%	0	0	0	538.0	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:23	-	603	1950:1650	217+179	152.3 : 152.3%	-	-	-	116.4	695.0	120.0		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	324	1950:1600	217+2	148.2 : 148.2%	-	-	-	62.6	695.6	65.8		
3/2+3/1	New Road Ahead Right Left	U	D E		1	19:40	-	678	1800:1650	358+88	152.1 : 152.1%	-	-	-	133.8	710.3	142.8		
4/1	A20 London Road west Left Ahead	U	G		1	11	-	346	1700	227	152.6%	-	-	-	69.2	719.9	72.7		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	794	1950:1600	260+252	155.0 : 155.0%	-	-	-	155.9	707.1	160.8		
C1		PRC for Signalled Lanes (%):		-72.2		PRC Over All Lanes (%):		-72.2		Total Delay for Signalled Lanes (pcuHr):		537.96		Total Delay Over All Lanes(pcuHr):		537.96		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 14: '2031 DS minus Site C Local Plan Flows PM' (FG14: '2031 DS - Site C LP Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	1	0	1	2
B	1	0	205	890	1096	
C	0	358	0	319	677	
D	4	835	360	0	1199	
Tot.	5	1194	565	1210	2974	

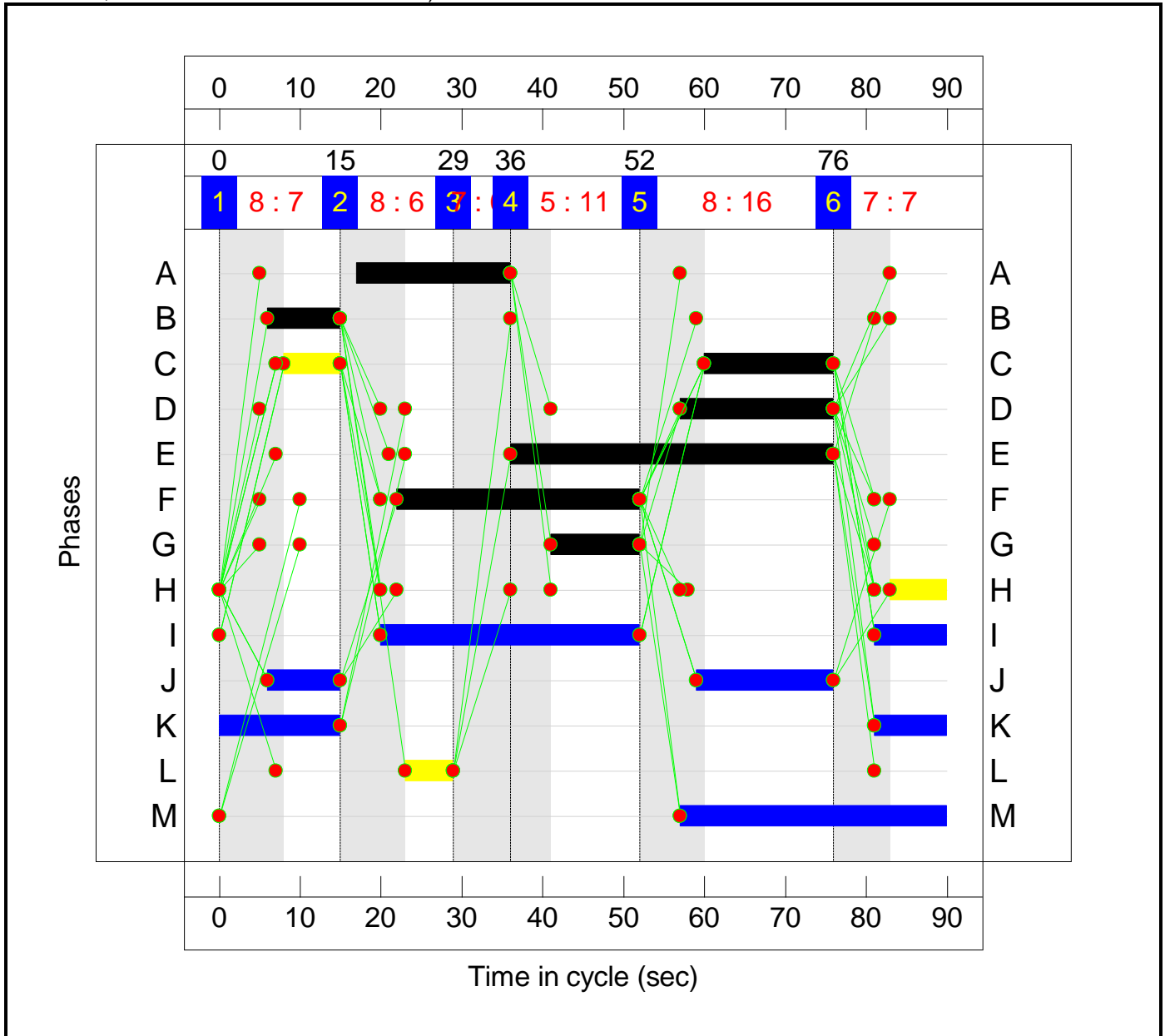
## Link Results

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	-	-	-		-	-	-	-	-	-	148.8%	0	0	0	550.9	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	148.8%	0	0	0	550.9	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:21	-	651	1950:1650	303+139	147.0 : 147.0%	-	-	-	120.0	663.6	124.5		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	445	1950:1600	303+1	146.4 : 146.4%	-	-	-	83.2	673.1	87.5		
3/2+3/1	New Road Ahead Right Left	U	D E		1	13:36	-	677	1800:1650	241+214	148.8 : 148.8%	-	-	-	127.8	679.3	134.0		
4/1	A20 London Road west Left Ahead	U	G		1	13	-	388	1700	264	146.7%	-	-	-	71.7	665.7	76.1		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	13:32	-	811	1950:1600	303+242	148.7 : 148.7%	-	-	-	148.1	657.6	154.7		
C1		PRC for Signalled Lanes (%):		-65.4		PRC Over All Lanes (%):		-65.4		Total Delay for Signalled Lanes (pcuHr):		550.86		Total Delay Over All Lanes(pcuHr):		550.86		Cycle Time (s): 90	



### Signal Timings Diagram

Scenario 15: '2031 DS minus Site C Local Plan Flows + Site C AM' (FG15: '2031 DS - Site C LP Flows + Site C Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

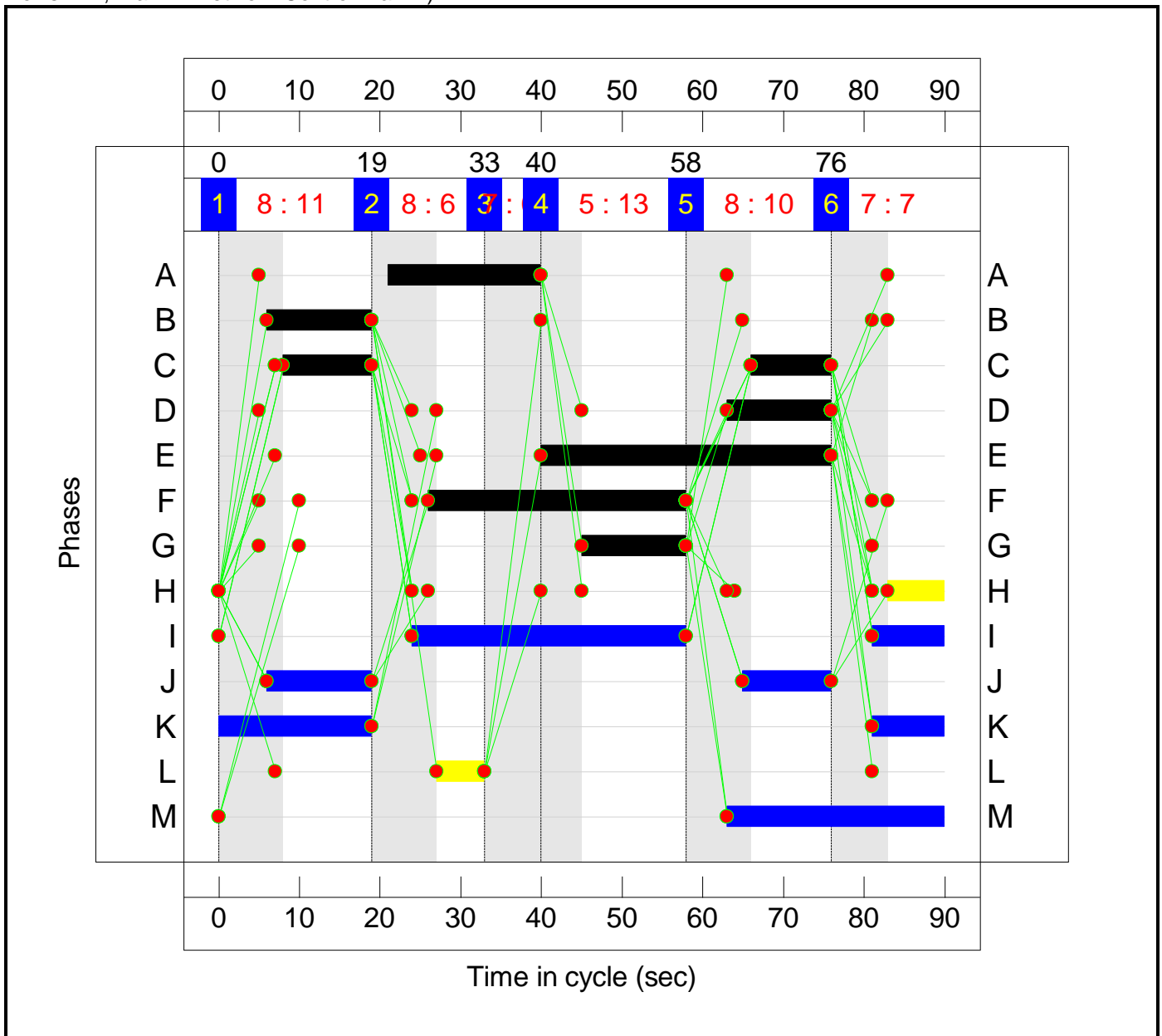
	Destination					
	A	B	C	D	Tot.	
Origin	A	0	0	0	3	3
B	3	0	279	651	933	
C	1	562	0	160	723	
D	0	749	399	0	1148	
Tot.	4	1311	678	814	2807	

## Link 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	-	-	-		-	-	-	-	-	-	159.6%	0	0	0	561.7	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	159.6%	0	0	0	561.7	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:23	-	609	1950:1650	217+183	152.3 : 152.3%	-	-	-	117.5	694.6	121.0		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	324	1950:1600	217+2	148.2 : 148.2%	-	-	-	62.6	695.6	65.8		
3/2+3/1	New Road Ahead Right Left	U	D E		1	19:40	-	723	1800:1650	353+100	159.6 : 159.6%	-	-	-	154.9	771.2	164.3		
4/1	A20 London Road west Left Ahead	U	G		1	11	-	346	1700	227	152.6%	-	-	-	69.2	719.9	72.7		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	802	1950:1600	260+257	155.0 : 155.0%	-	-	-	157.5	706.8	162.3		
C1		PRC for Signalled Lanes (%):		-77.4		PRC Over All Lanes (%):		-77.4		Total Delay for Signalled Lanes (pcuHr):		561.67		Total Delay Over All Lanes(pcuHr):		561.67		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 16: '2031 DS minus Site C Local Plan Flows + Site C PM' (FG16: '2031 DS - Site C LP Flows + Site C Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

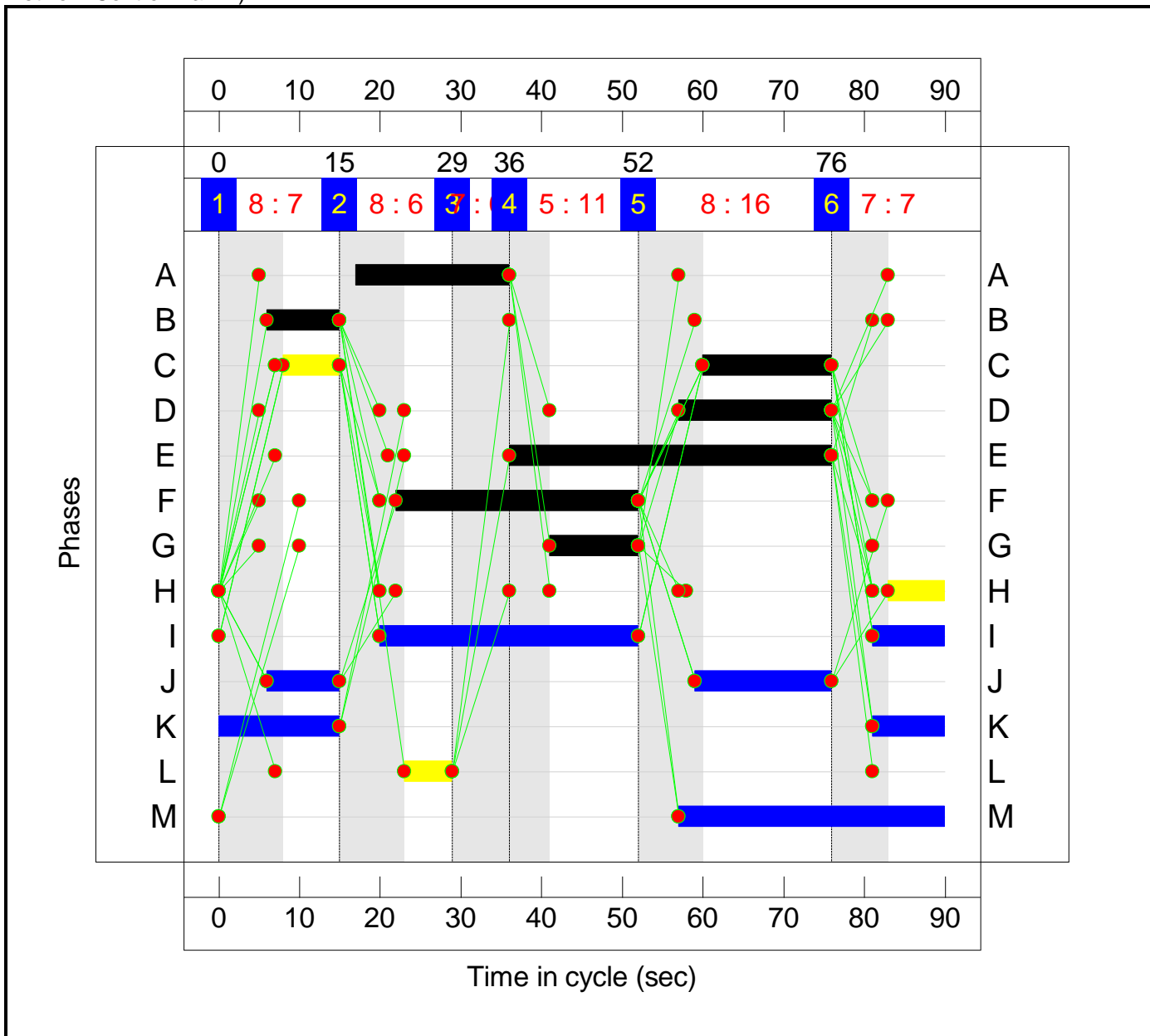
	Destination				
	A	B	C	D	Tot.
Origin					
A	0	1	0	1	2
B	1	0	218	890	1109
C	0	365	0	329	694
D	4	835	378	0	1217
Tot.	5	1201	596	1220	3022

## Link 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	-	-	-		-	-	-	-	-	-	151.9%	0	0	0	564.6	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	151.9%	0	0	0	564.6	-	-
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:21	-	664	1950:1650	303+148	147.0 : 147.0%	-	-	-	122.3	663.0	126.7
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	445	1950:1600	303+1	146.4 : 146.4%	-	-	-	83.2	673.1	87.5
3/2+3/1	New Road Ahead Right Left	U	D E		1	13:36	-	694	1800:1650	240+217	151.9 : 151.9%	-	-	-	136.1	705.9	142.5
4/1	A20 London Road west Left Ahead	U	G		1	13	-	388	1700	264	146.7%	-	-	-	71.7	665.7	76.1
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	13:32	-	829	1950:1600	303+254	148.7 : 148.7%	-	-	-	151.3	657.0	157.9
C1					PRC for Signalled Lanes (%):		-68.7	Total Delay for Signalled Lanes (pcuHr):				564.65	Cycle Time (s): 90				
					PRC Over All Lanes (%):		-68.7	Total Delay Over All Lanes(pcuHr):				564.65					

### Signal Timings Diagram

Scenario 17: '2031 DS minus Site BC Local Plan Flows AM' (FG17: '2031 DS - Site BC LP Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

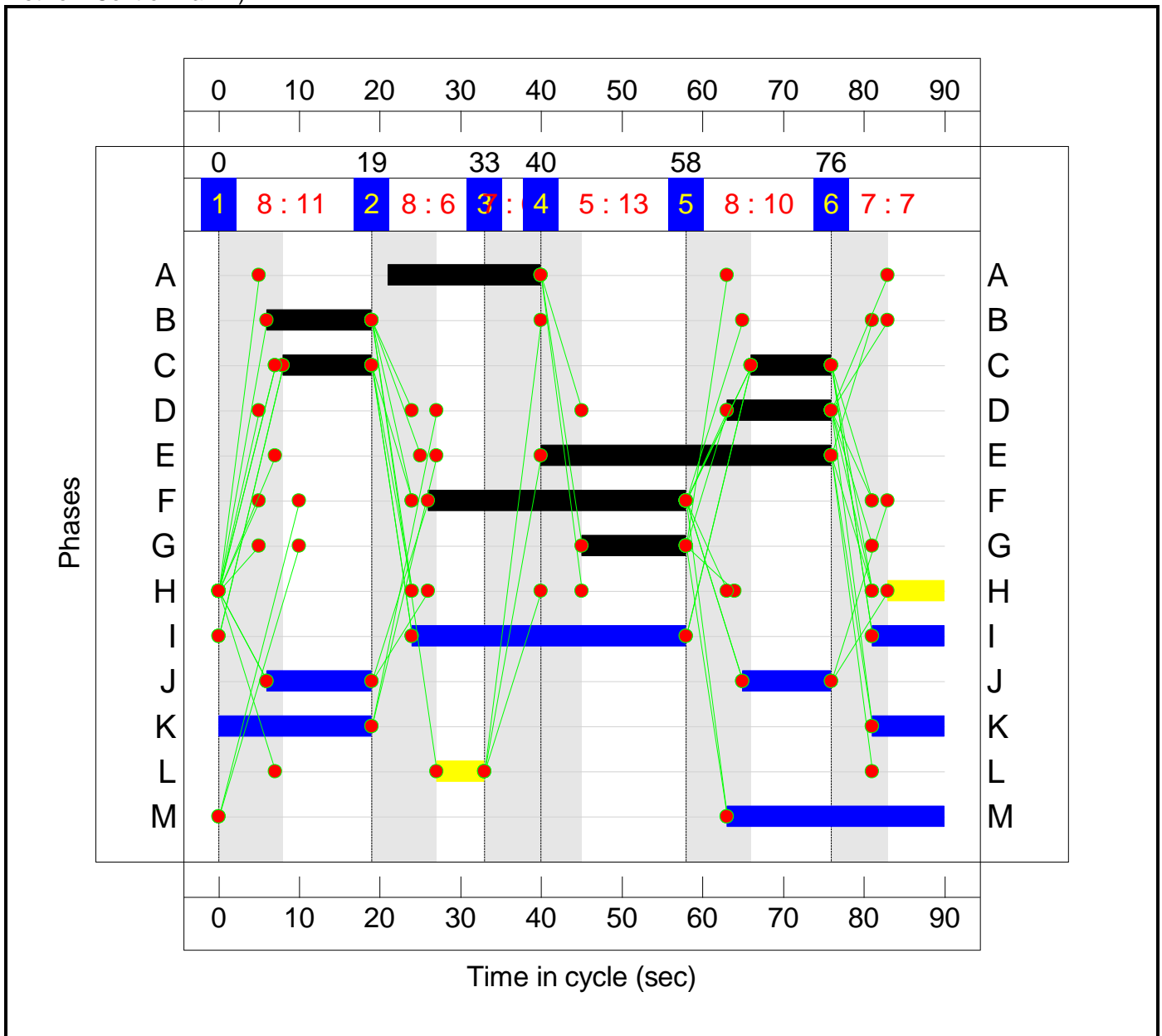
	Destination				
	A	B	C	D	Tot.
Origin					
A	0	0	0	3	3
B	3	0	273	605	881
C	1	543	0	134	678
D	0	735	391	0	1126
Tot.	4	1278	664	742	2688

## Link 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	-	-	-		-	-	-	-	-	-	152.1%	0	0	0	496.6	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	152.1%	0	0	0	496.6	-	-
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:23	-	585	1950:1650	217+190	144.0 : 144.0%	-	-	-	100.7	619.8	103.7
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	296	1950:1600	217+2	135.2 : 135.2%	-	-	-	47.2	574.3	50.1
3/2+3/1	New Road Ahead Right Left	U	D E		1	19:40	-	678	1800:1650	358+88	152.1 : 152.1%	-	-	-	133.8	710.3	142.8
4/1	A20 London Road west Left Ahead	U	G		1	11	-	340	1700	227	150.0%	-	-	-	66.0	698.3	69.5
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	786	1950:1600	260+257	151.9 : 151.9%	-	-	-	148.9	681.9	153.6
C1					PRC for Signalled Lanes (%):		-69.0	Total Delay for Signalled Lanes (pcuHr):				496.59	Cycle Time (s): 90				
					PRC Over All Lanes (%):		-69.0	Total Delay Over All Lanes(pcuHr):				496.59					

### Signal Timings Diagram

Scenario 18: '2031 DS minus Site BC Local Plan Flows PM' (FG18: '2031 DS - Site BC LP Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

Origin	Destination				
	A	B	C	D	Tot.
A	0	1	0	1	2
B	1	0	205	872	1078
C	0	358	0	319	677
D	4	803	360	0	1167
Tot.	5	1162	565	1192	2924

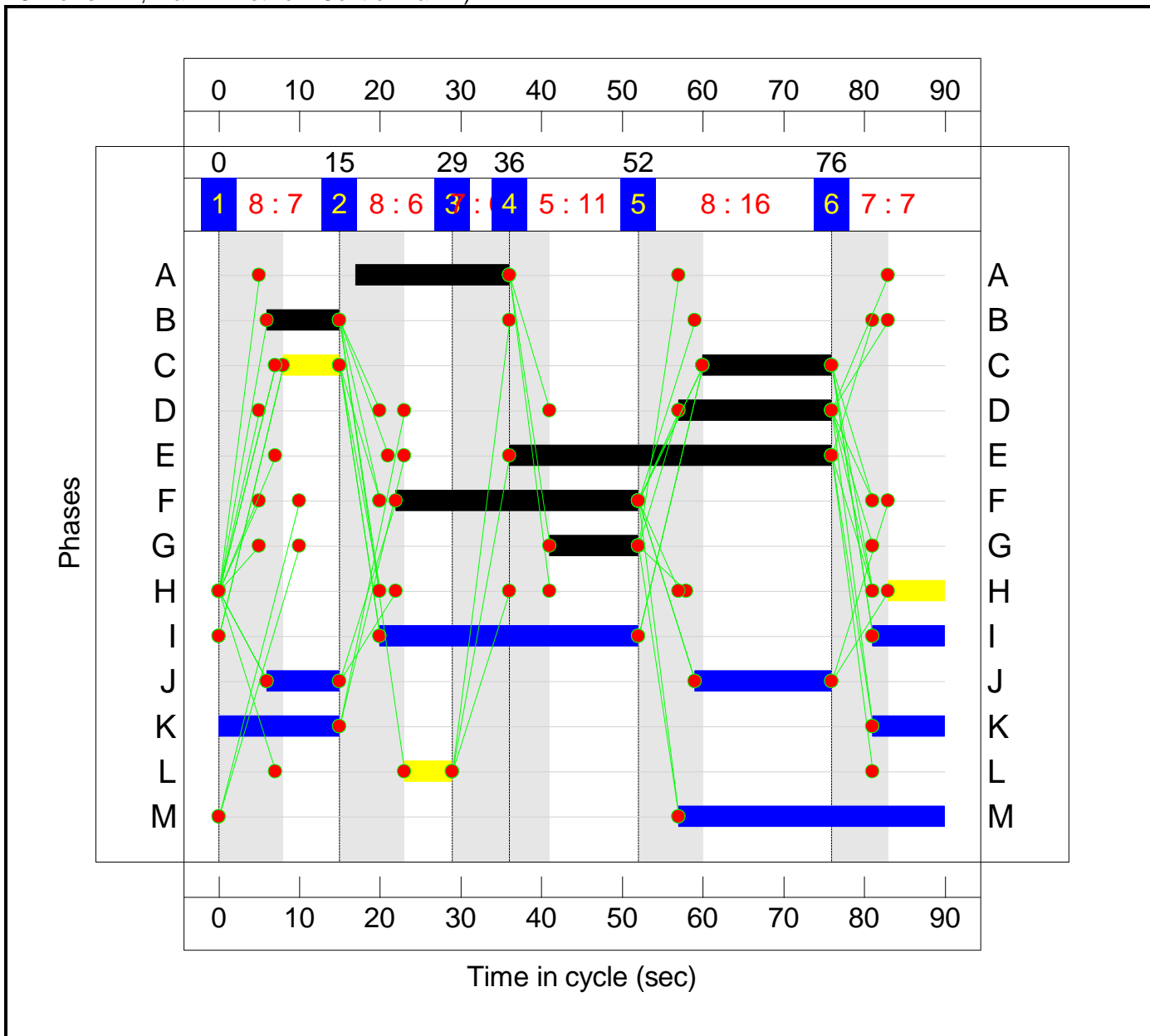
## Link Results

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	-	-	-		-	-	-	-	-	-	148.8%	0	0	0	517.0	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	148.8%	0	0	0	517.0	-	-
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:21	-	642	1950:1650	303+142	144.1% : 144.1%	-	-	-	113.5	636.2	118.0
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	436	1950:1600	303+1	143.4% : 143.4%	-	-	-	78.3	646.1	82.4
3/2+3/1	New Road Ahead Right Left	U	D E		1	13:36	-	677	1800:1650	241+214	148.8% : 148.8%	-	-	-	127.8	679.3	134.0
4/1	A20 London Road west Left Ahead	U	G		1	13	-	373	1700	264	141.1%	-	-	-	63.7	614.8	68.0
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	13:32	-	794	1950:1600	303+252	143.1% : 143.1%	-	-	-	133.8	606.9	140.1
C1		PRC for Signalled Lanes (%):		-65.4		PRC Over All Lanes (%):		-65.4		Total Delay for Signalled Lanes (pcuHr):		517.03		Cycle Time (s):		90	
										Total Delay Over All Lanes(pcuHr):		517.03					



### Signal Timings Diagram

Scenario 19: '2031 DS minus Site BC Local Plan Flows + Site BC AM' (FG19: '2031 DS - Site BC LP Flows + Site BC Flows AM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

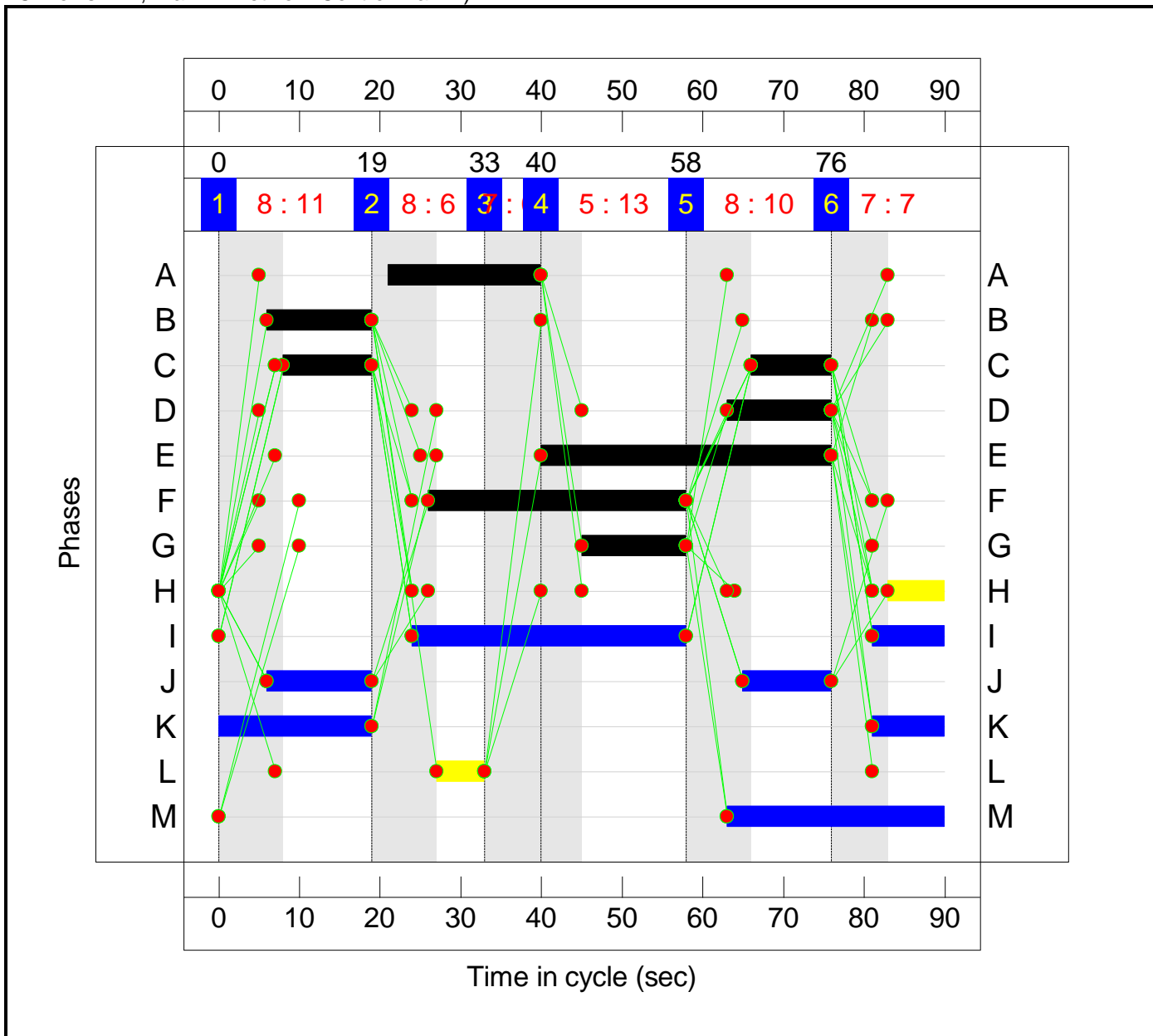
Origin	Destination				
	A	B	C	D	Tot.
A	0	0	0	3	3
B	3	0	279	670	952
C	1	562	0	160	723
D	0	755	399	0	1154
Tot.	4	1317	678	833	2832

## Link 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	-	-	-		-	-	-	-	-	-	159.6%	0	0	0	578.9	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	159.6%	0	0	0	578.9	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	3	1600	142	2.1%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	9:23	-	617	1950:1650	217+179	156.0% : 156.0%	-	-	-	124.3	725.5	128.1		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	9:19	-	335	1950:1600	217+2	153.2% : 153.2%	-	-	-	68.7	738.1	72.1		
3/2+3/1	New Road Ahead Right Left	U	D E		1	19:40	-	723	1800:1650	353+100	159.6% : 159.6%	-	-	-	154.9	771.2	164.3		
4/1	A20 London Road west Left Ahead	U	G		1	11	-	349	1700	227	154.0%	-	-	-	70.8	730.4	74.3		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	11:30	-	805	1950:1600	260+256	156.2% : 156.2%	-	-	-	160.1	716.0	165.0		
C1		PRC for Signalled Lanes (%):		-77.4		PRC Over All Lanes (%):		-77.4		Total Delay for Signalled Lanes (pcuHr):		578.86		Total Delay Over All Lanes(pcuHr):		578.86		Cycle Time (s): 90	

### Signal Timings Diagram

Scenario 20: '2031 DS minus Site BC Local Plan Flows + Site BC PM' (FG20: '2031 DS - Site BC LP Flows + Site BC Flows PM', Plan 1: 'Network Control Plan 1')



### Traffic Flows, Actual

Actual Flow :

Origin	Destination				
	A	B	C	D	Tot.
A	0	1	0	1	2
B	1	0	218	896	1115
C	0	366	0	329	695
D	4	848	378	0	1230
Tot.	5	1215	596	1226	3042

## Link 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	-	-	-		-	-	-	-	-	-	152.3%	0	0	0	578.0	-	-		
A20, New Road	-	-	-		-	-	-	-	-	-	152.3%	0	0	0	578.0	-	-		
1/1	Hotel Entrance Left Right Ahead	U	H		1	7	-	2	1600	142	1.4%	-	-	-	0.0	50.7	0.1		
2/2+2/1	A20 London Road east Ahead Left	U	B C		1:2	13:21	-	667	1950:1650	303+147	148.0 : 148.0%	-	-	-	124.5	671.9	128.9		
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	13:19	-	448	1950:1600	303+1	147.4 : 147.4%	-	-	-	84.9	681.9	89.2		
3/2+3/1	New Road Ahead Right Left	U	D E		1	13:36	-	695	1800:1650	240+216	152.3 : 152.3%	-	-	-	136.9	709.2	143.4		
4/1	A20 London Road west Left Ahead	U	G		1	13	-	396	1700	264	149.7%	-	-	-	76.2	692.3	80.5		
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	13:32	-	834	1950:1600	303+251	150.3 : 150.3%	-	-	-	155.5	671.3	162.2		
C1		PRC for Signalled Lanes (%):		-69.2		PRC Over All Lanes (%):		-69.2		Total Delay for Signalled Lanes (pcuHr):		577.96		Total Delay Over All Lanes(pcuHr):		577.96		Cycle Time (s): 90	

KCC Improvement Scheme

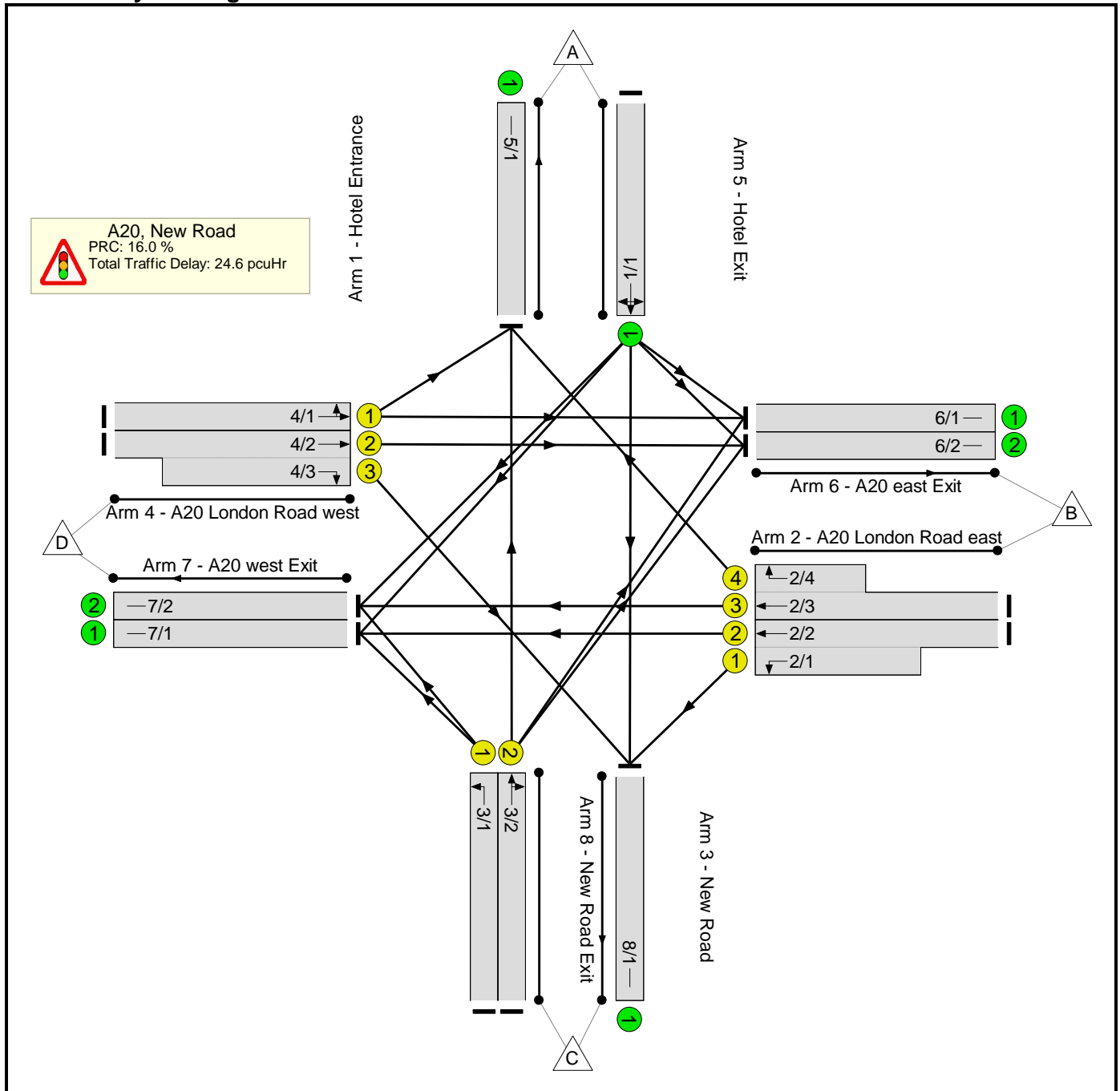
# C&A Standard Linsig Report

## User and Project Details

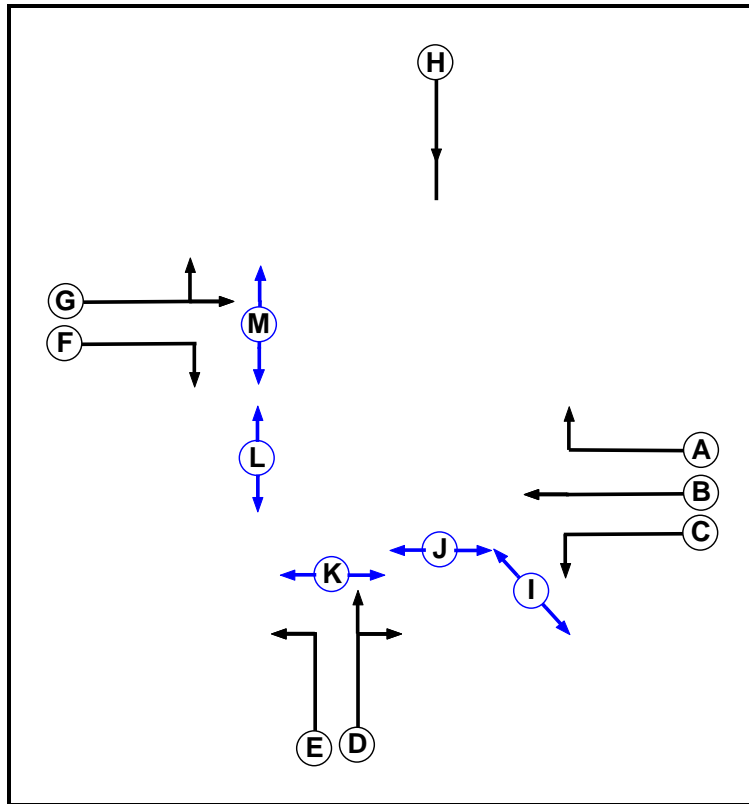
Project:	A20, Maidstone
Title:	
Location:	A20, New Road
File name:	A20 London Rd_New Rd - KCC Proposed Layout.lsg3x

Scenario 1: '2031 DM AM + B' (FG1: '2031 DM AM + B', Plan 2: 'Network Control Plan 2')

## Junction Layout Diagram



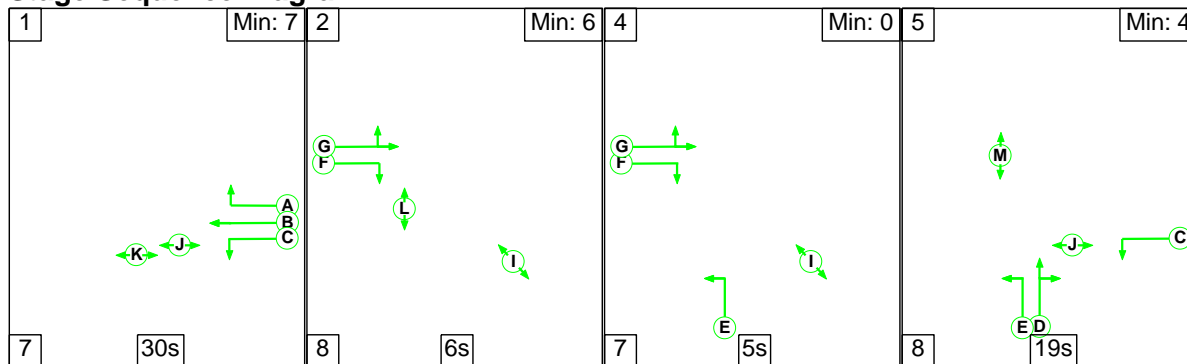
# Phase Diagram



### Phase Intergreens Matrix

		Starting Phase												
		A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A	-	-	-	5	-	-	5	5	-	-	-	-	-
	B	-	-	-	5	6	5	-	5	-	-	-	8	-
	C	-	-	-	-	-	5	-	5	5	-	-	-	-
	D	7	7	-	-	-	5	6	6	-	-	5	-	-
	E	-	5	-	-	-	-	-	5	-	-	5	5	-
	F	-	7	8	5	-	-	-	5	-	7	-	-	5
	G	5	-	-	5	-	-	-	6	-	-	-	-	5
	H	5	6	7	5	7	5	5	-	-	6	-	7	-
	I	-	-	8	-	-	-	-	-	-	-	-	-	-
	J	-	-	-	-	-	7	-	7	-	-	-	-	-
	K	-	-	-	8	8	-	-	-	-	-	-	-	-
	L	-	7	-	-	7	-	-	7	-	-	-	-	-
	M	-	-	-	-	-	10	10	-	-	-	-	-	-

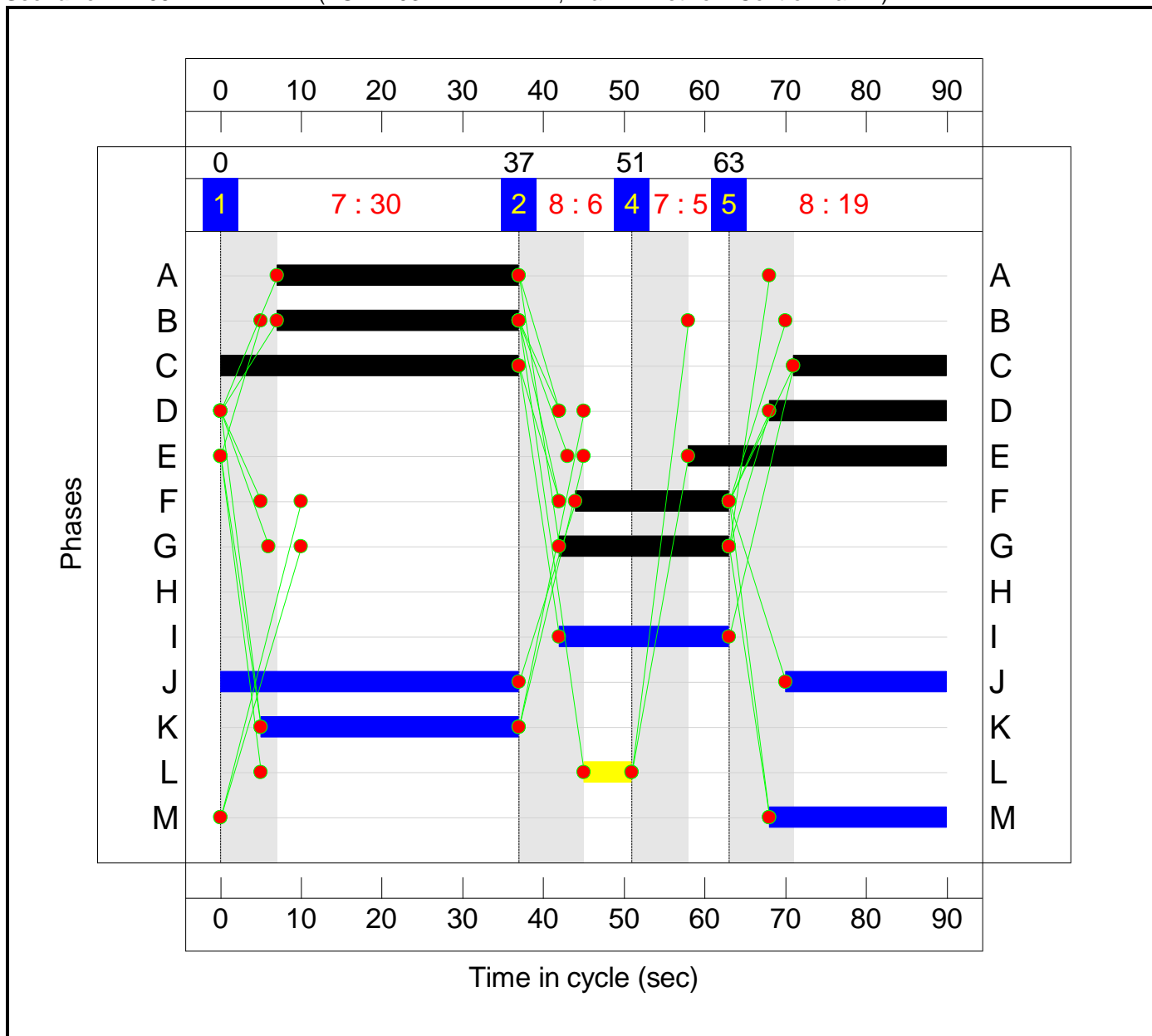
### Stage Sequence Diagram





### Signal Timings Diagram

Scenario 1: '2031 DM AM + B' (FG1: '2031 DM AM + B', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

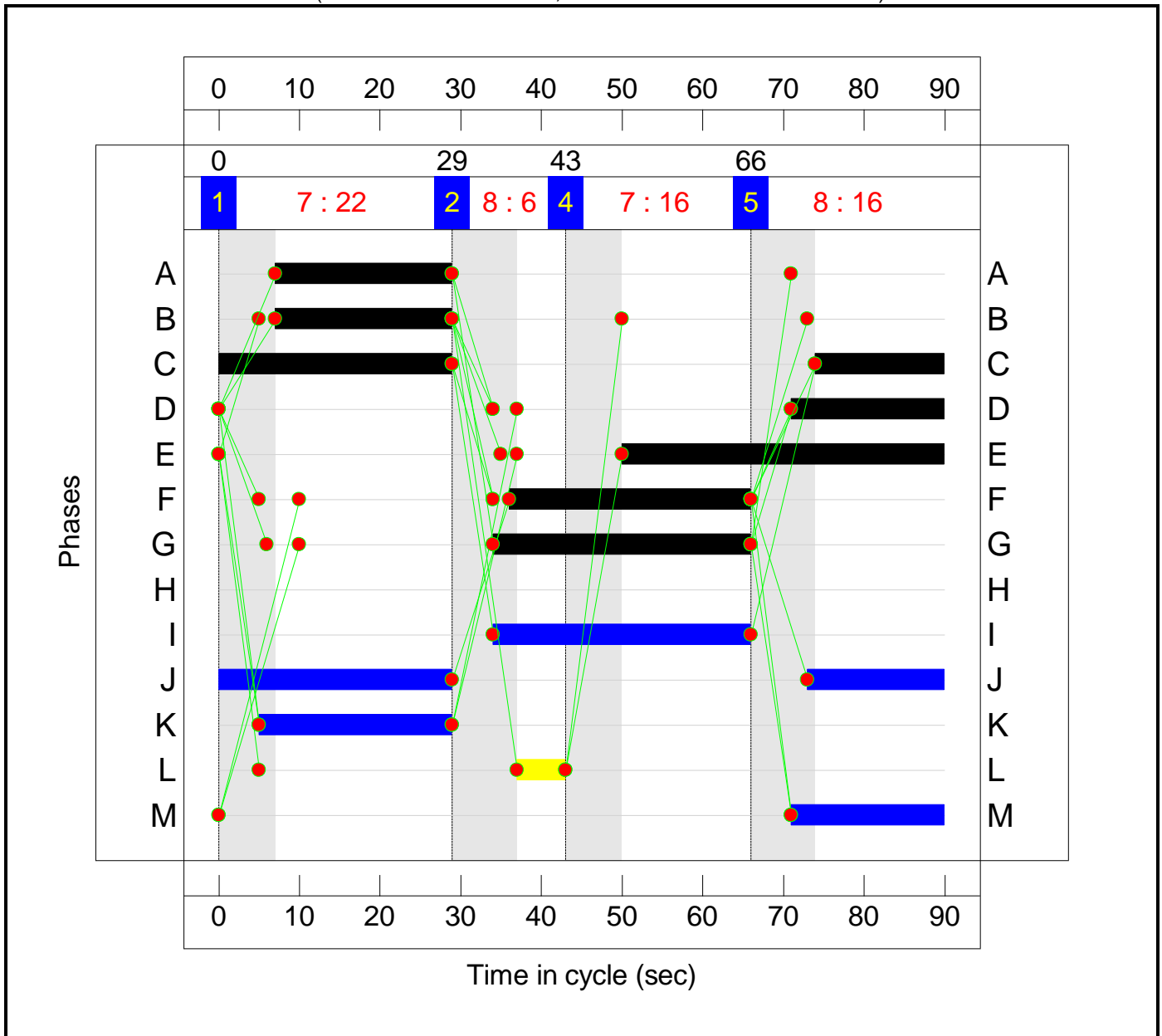
	Destination					Tot.
	A	B	C	D	Tot.	
Origin	A	0	0	0	3	3
	B	3	0	402	768	1173
	C	1	356	0	226	583
	D	0	607	259	0	866
	Tot.	4	963	661	997	2625

## Link 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	-	-	-		-	-	-	-	-	-	77.6%	0	0	0	24.6	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	77.6%	0	0	0	24.6	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	30:56	-	778	1950:1650	494+528	76.1 : 76.1%	-	-	-	5.0	23.0	9.2
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	30	-	395	1950:1600	669+5	58.6 : 58.6%	-	-	-	3.4	30.6	8.7
3/1	New Road Left	U	E		1	32	-	226	1650	605	37.4%	-	-	-	1.6	25.7	4.4
3/2	New Road Ahead Right	U	D		1	22	-	357	1800	460	77.6%	-	-	-	4.8	48.0	9.9
4/1	A20 London Road west Left Ahead	U	G		1	21	-	258	1700	416	62.1%	-	-	-	3.0	41.6	6.5
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	21:19	-	608	1950:1600	459+340	76.1 : 76.1%	-	-	-	6.9	41.1	9.5
<p style="text-align: center;">C1      PRC for Signalled Lanes (%): 16.0      Total Delay for Signalled Lanes (pcuHr): 24.62      Cycle Time (s): 90  PRC Over All Lanes (%): 16.0      Total Delay Over All Lanes(pcuHr): 24.62</p>																	

### Signal Timings Diagram

Scenario 2: '2031 DM PM + B' (FG2: '2031 DM PM + B', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

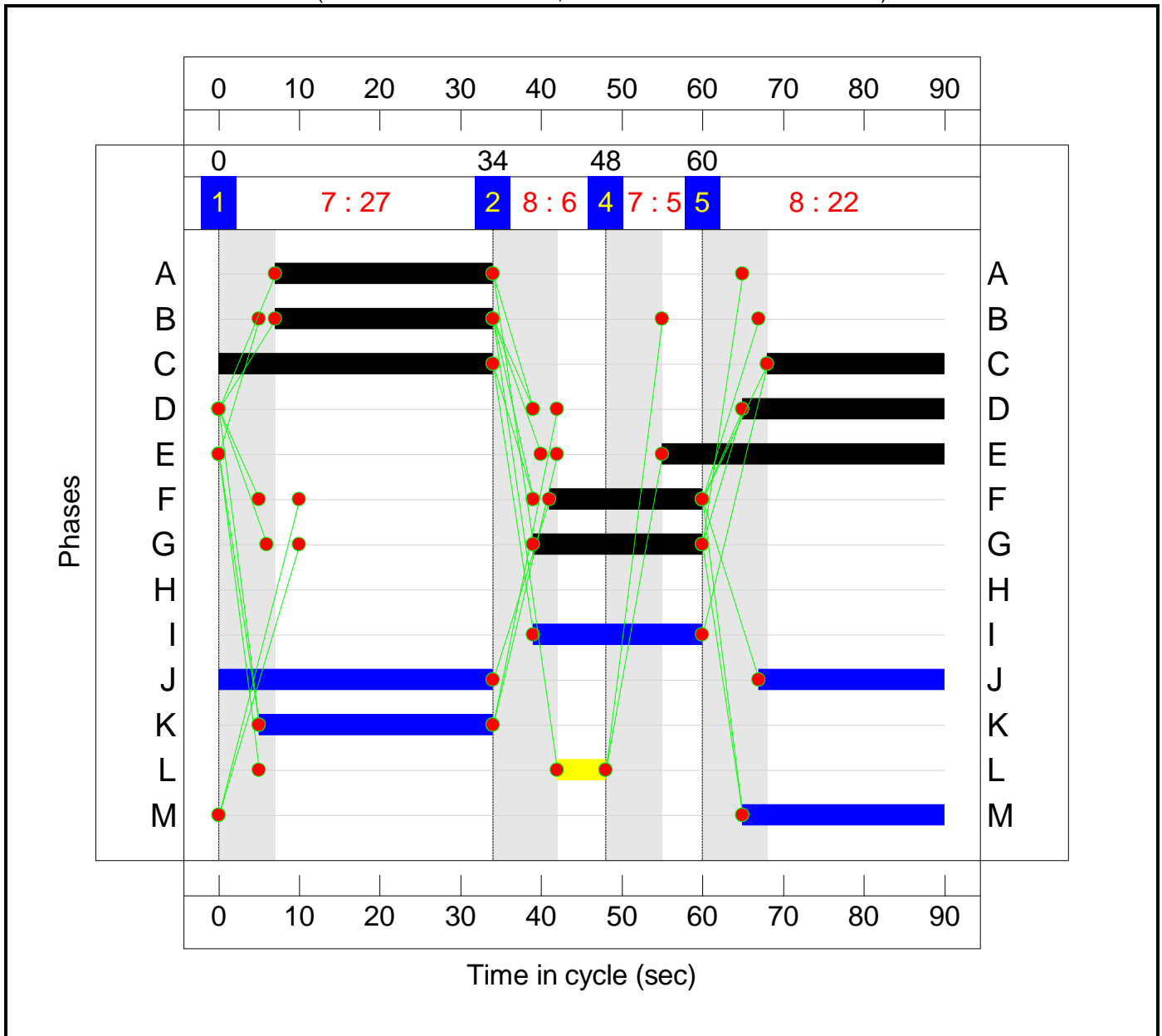
		Destination				Tot.
		A	B	C	D	
Origin	A	0	1	0	1	2
	B	1	0	372	680	1053
	C	0	317	0	67	384
	D	4	933	243	0	1180
	Tot.	5	1251	615	748	2619

## Link 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	-	-	-		-	-	-	-	-	-	80.5%	0	0	0	26.4	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	80.5%	0	0	0	26.4	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	2	1600	1600	0.1%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	22:45	-	707	1950:1650	416+462	80.5 : 80.5%	-	-	-	6.3	31.8	9.5
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	22	-	346	1950:1600	498+1	69.2 : 69.2%	-	-	-	4.0	41.8	8.9
3/1	New Road Left	U	E		1	40	-	67	1650	752	8.9%	-	-	-	0.3	16.5	1.0
3/2	New Road Ahead Right	U	D		1	19	-	317	1800	400	79.3%	-	-	-	4.7	53.8	9.2
4/1	A20 London Road west Left Ahead	U	G		1	32	-	444	1700	623	71.2%	-	-	-	4.2	34.3	10.7
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	32:30	-	736	1950:1600	615+303	80.2 : 80.2%	-	-	-	6.8	33.4	12.4
<p>C1      PRC for Signalled Lanes (%): 11.8      Total Delay for Signalled Lanes (pcuHr): 26.38      Cycle Time (s): 90</p> <p>PRC Over All Lanes (%): 11.8      Total Delay Over All Lanes(pcuHr): 26.38</p>																	

### Signal Timings Diagram

Scenario 3: '2031 DM AM + C' (FG3: '2031 DM AM + C', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

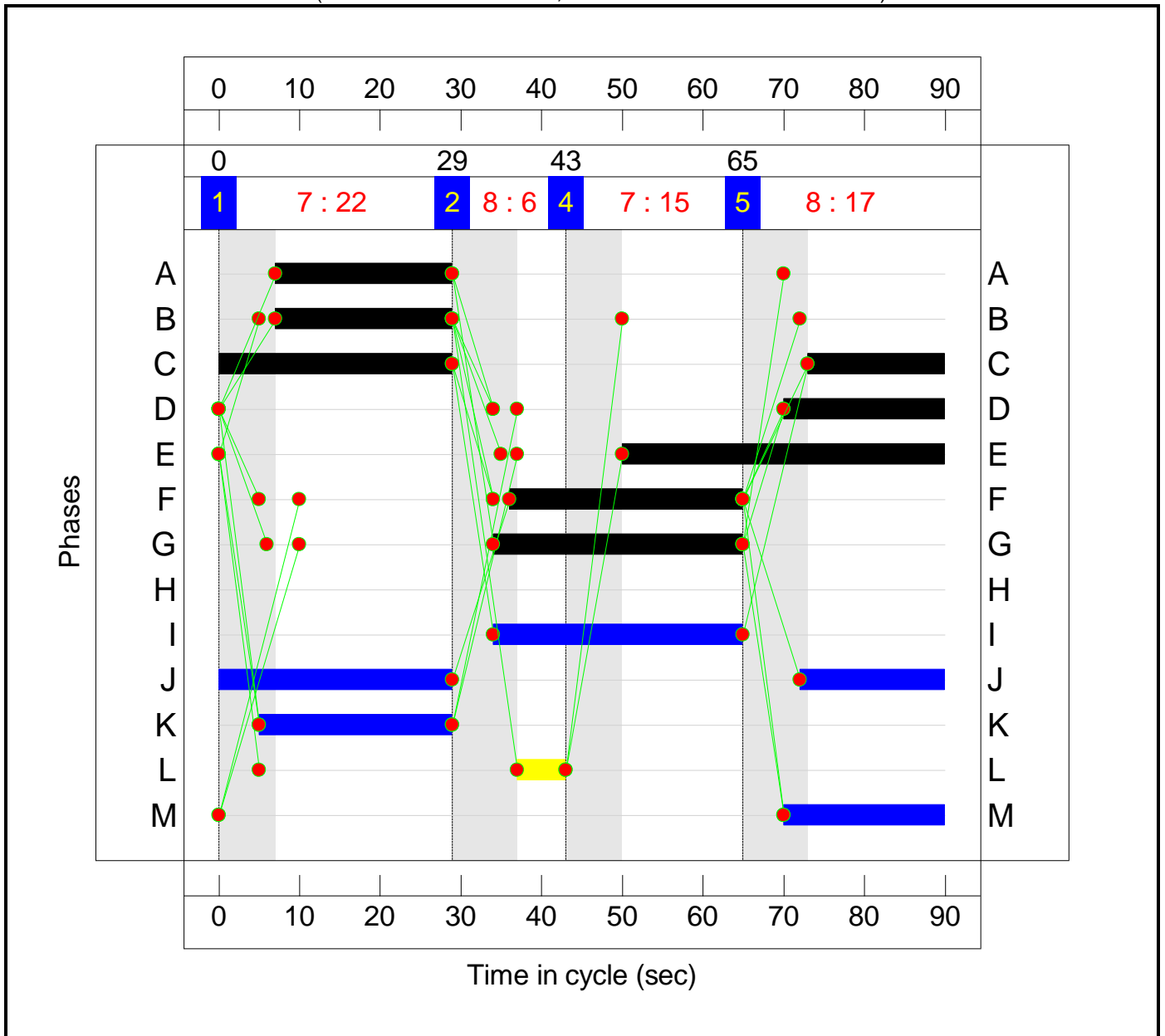
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	3	3
	B	3	0	408	703	1114
	C	1	375	0	252	628
	D	0	587	267	0	854
	Tot.	4	962	675	958	2599

## Link 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	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	23.8	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	23.8	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	27:56	-	753	1950:1650	459+543	75.1 : 75.1%	-	-	-	4.9	23.4	8.7
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	27	-	361	1950:1600	605+5	59.2 : 59.2%	-	-	-	3.3	33.3	8.2
3/1	New Road Left	U	E		1	35	-	252	1650	660	38.2%	-	-	-	1.6	23.5	4.7
3/2	New Road Ahead Right	U	D		1	25	-	376	1800	520	72.3%	-	-	-	4.3	41.0	9.6
4/1	A20 London Road west Left Ahead	U	G		1	21	-	244	1700	416	58.7%	-	-	-	2.7	40.4	6.1
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	21:19	-	610	1950:1600	458+356	74.9 : 75.1%	-	-	-	6.9	40.6	9.3
<p style="text-align: center;">C1      PRC for Signalled Lanes (%): 19.8      Total Delay for Signalled Lanes (pcuHr): 23.78      Cycle Time (s): 90                      PRC Over All Lanes (%): 19.8      Total Delay Over All Lanes(pcuHr): 23.78</p>																	

### Signal Timings Diagram

Scenario 4: '2031 DM PM + C' (FG4: '2031 DM PM + C', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	0	1	2
	B	1	0	385	656	1042
	C	0	324	0	77	401
	D	4	888	261	0	1153
	Tot.	5	1213	646	734	2598

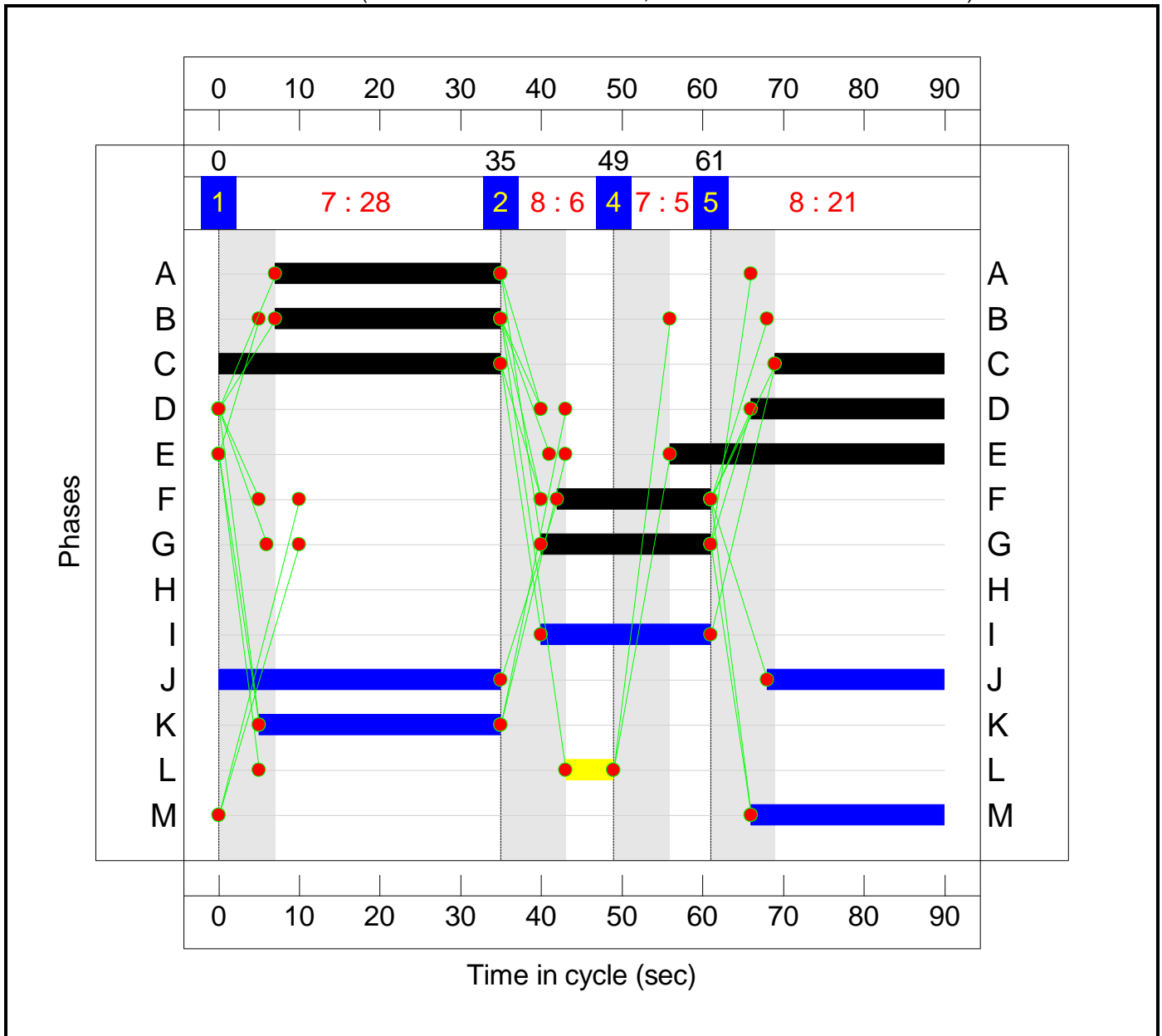
## Link Results

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	-	-	-		-	-	-	-	-	-	79.7%	0	0	0	25.5	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	79.7%	0	0	0	25.5	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	2	1600	1600	0.1%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	22:46	-	711	1950:1650	414+489	78.7 : 78.7%	-	-	-	6.0	30.2	9.1
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	22	-	331	1950:1600	498+2	66.2 : 66.2%	-	-	-	3.7	40.6	8.3
3/1	New Road Left	U	E		1	40	-	77	1650	752	10.2%	-	-	-	0.4	16.7	1.1
3/2	New Road Ahead Right	U	D		1	20	-	324	1800	420	77.1%	-	-	-	4.5	50.4	9.2
4/1	A20 London Road west Left Ahead	U	G		1	31	-	419	1700	604	69.3%	-	-	-	4.0	34.4	10.0
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	31:29	-	734	1950:1600	594+328	79.7 : 79.7%	-	-	-	6.9	33.8	11.9
<p>C1      PRC for Signalled Lanes (%): 13.0      Total Delay for Signalled Lanes (pcuHr): 25.48      Cycle Time (s): 90</p> <p>PRC Over All Lanes (%): 13.0      Total Delay Over All Lanes(pcuHr): 25.48</p>																	



### Signal Timings Diagram

Scenario 5: '2031 DM AM + B & C' (FG5: '2031 DM AM + B & C', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

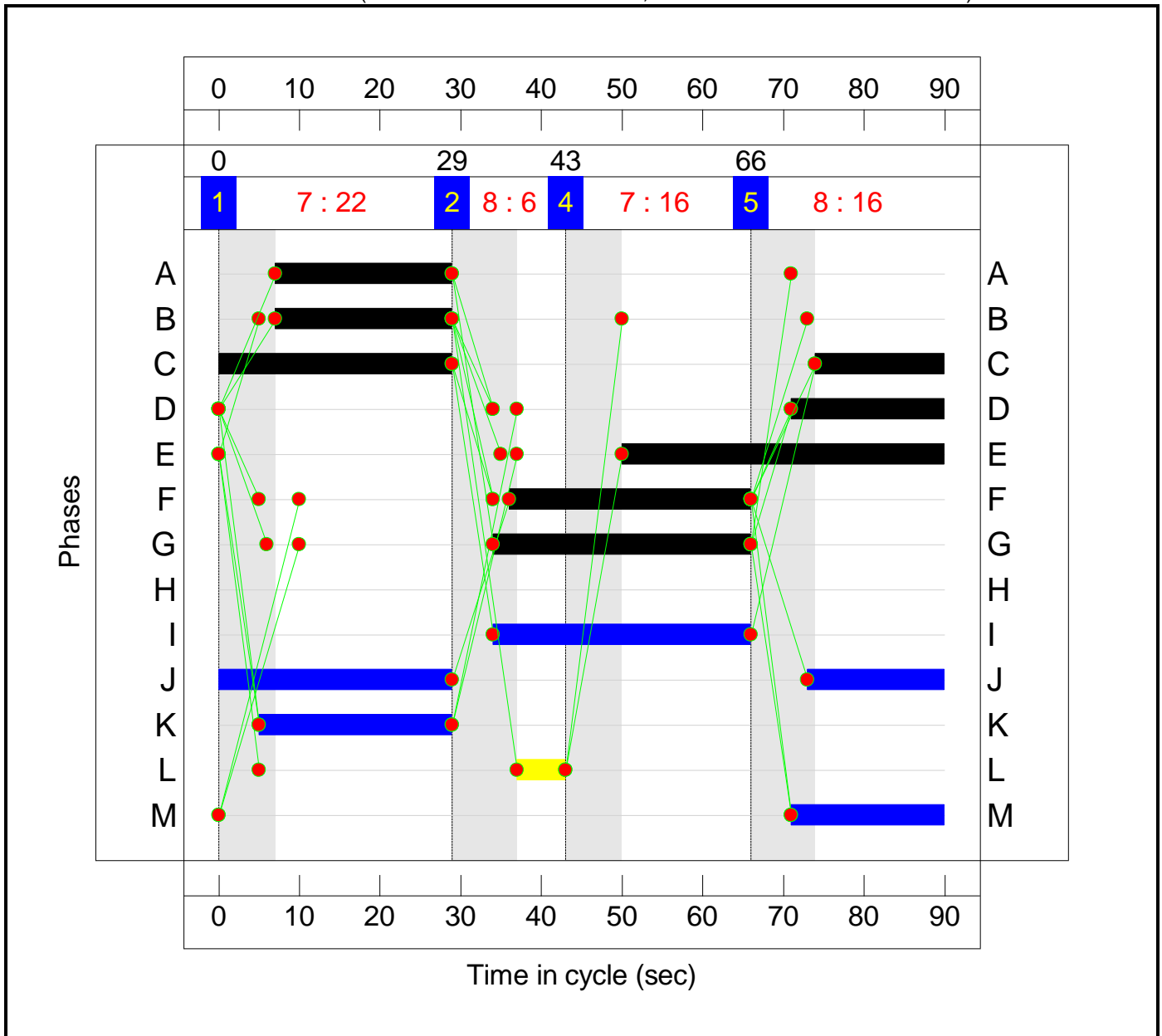
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	3	3
	B	3	0	408	768	1179
	C	1	375	0	252	628
	D	0	607	267	0	874
	Tot.	4	982	675	1023	2684

## Link 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	-	-	-		-	-	-	-	-	-	78.2%	0	0	0	25.4	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	78.2%	0	0	0	25.4	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	28:56	-	778	1950:1650	473+521	78.2 : 78.2%	-	-	-	5.3	24.5	9.5
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	28	-	401	1950:1600	626+5	63.5 : 63.5%	-	-	-	3.8	33.7	9.3
3/1	New Road Left	U	E		1	34	-	252	1650	642	39.3%	-	-	-	1.7	24.4	4.8
3/2	New Road Ahead Right	U	D		1	24	-	376	1800	500	75.2%	-	-	-	4.6	43.9	10.0
4/1	A20 London Road west Left Ahead	U	G		1	21	-	255	1700	416	61.4%	-	-	-	2.9	41.3	6.4
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	21:19	-	619	1950:1600	458+348	76.8 : 76.8%	-	-	-	7.1	41.4	9.6
			C1	PRC for Signalled Lanes (%):			15.0	Total Delay for Signalled Lanes (pcuHr):			25.40	Cycle Time (s):			90		
				PRC Over All Lanes (%):			15.0	Total Delay Over All Lanes(pcuHr):			25.40						

### Signal Timings Diagram

Scenario 6: '2031 DM PM + B & C' (FG6: '2031 DM PM + B & C', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

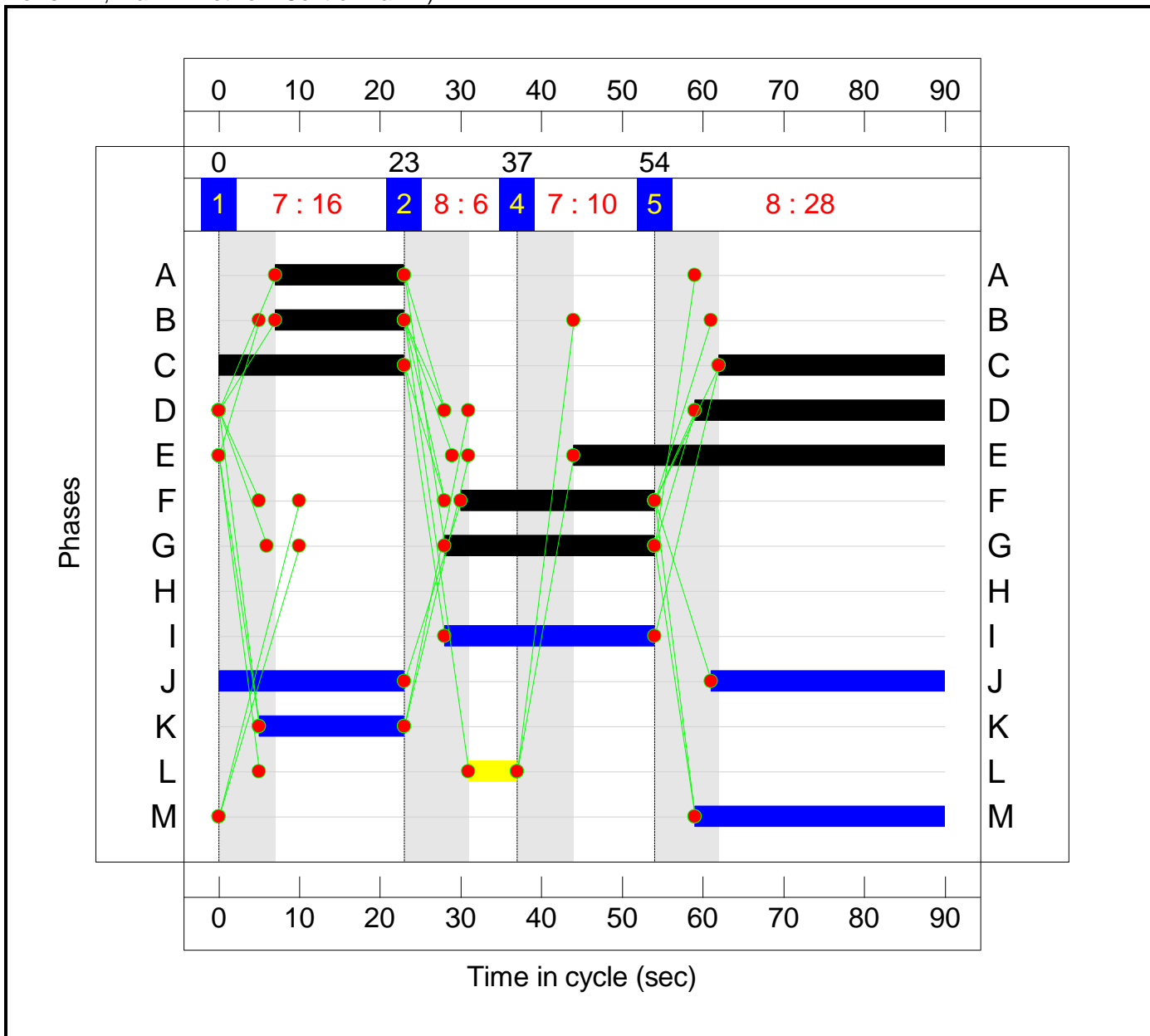
		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	0	1	2
	B	1	0	385	680	1066
	C	0	324	0	77	401
	D	4	933	261	0	1198
	Tot.	5	1258	646	758	2667

## Link 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	-	-	-		-	-	-	-	-	-	81.0%	0	0	0	27.0	-	-	
A20, New Road	-	-	-		-	-	-	-	-	-	81.0%	0	0	0	27.0	-	-	
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	2	1600	1600	0.1%	-	-	-	0.0	1.1	0.0	
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	22:45	-	720	1950:1650	415+477	80.7 : 80.7%	-	-	-	6.3	31.7	9.5	
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	22	-	346	1950:1600	498+1	69.2 : 69.2%	-	-	-	4.0	41.8	8.9	
3/1	New Road Left	U	E		1	40	-	77	1650	752	10.2%	-	-	-	0.4	16.7	1.1	
3/2	New Road Ahead Right	U	D		1	19	-	324	1800	400	81.0%	-	-	-	5.0	55.7	9.7	
4/1	A20 London Road west Left Ahead	U	G		1	32	-	445	1700	623	71.4%	-	-	-	4.3	34.4	10.7	
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	32:30	-	753	1950:1600	610+323	80.7 : 80.7%	-	-	-	7.0	33.6	12.4	
			C1	PRC for Signalled Lanes (%):			11.1	Total Delay for Signalled Lanes (pcuHr):			27.01	Cycle Time (s):			90			
				PRC Over All Lanes (%):			11.1	Total Delay Over All Lanes(pcuHr):			27.01							

### Signal Timings Diagram

Scenario 7: '2031 DS minus Site B Local Plan Flows + Site B AM' (FG7: '2031 DS - Site B LP Flows + Site B Flows AM', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

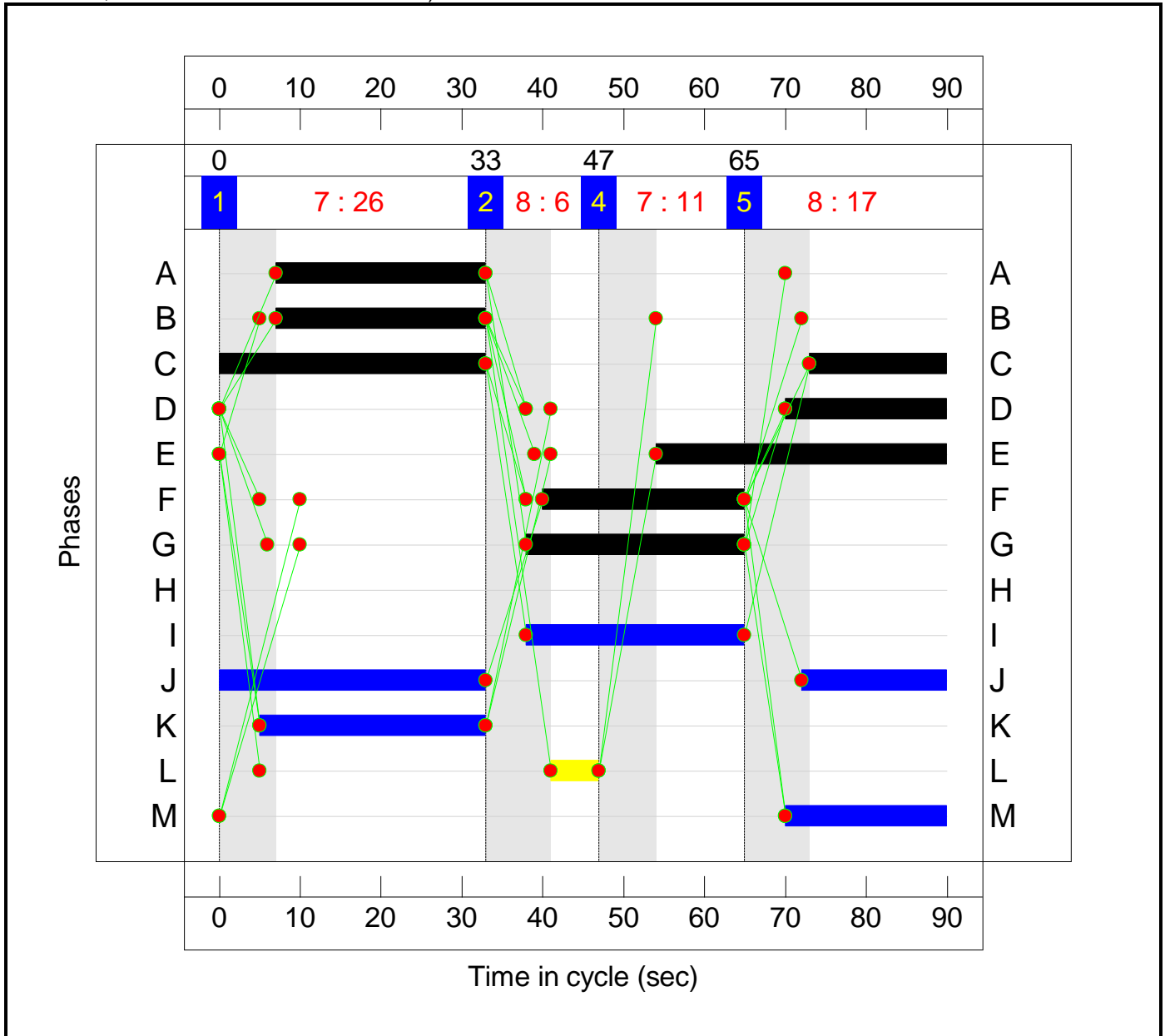
Origin	Destination					Tot.
	A	B	C	D	Tot.	
A	0	0	0	3	3	
B	3	0	284	670	957	
C	1	578	0	182	761	
D	0	755	406	0	1161	
Tot.	4	1333	690	855	2882	

## Link 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	-	-	-		-	-	-	-	-	-	93.4%	0	0	0	45.0	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	93.4%	0	0	0	45.0	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	16:51	-	615	1950:1650	360+309	91.9 : 91.9%	-	-	-	8.9	52.0	12.8
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	16	-	342	1950:1600	368+3	92.0 : 92.0%	-	-	-	7.9	82.6	12.8
3/1	New Road Left	U	E		1	46	-	182	1650	862	21.1%	-	-	-	0.7	14.2	2.6
3/2	New Road Ahead Right	U	D		1	31	-	579	1800	640	90.5%	-	-	-	8.6	53.5	17.8
4/1	A20 London Road west Left Ahead	U	G		1	26	-	455	1700	510	89.2%	-	-	-	7.5	59.0	14.5
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	26:24	-	706	1950:1600	321+435	93.4 : 93.4%	-	-	-	11.4	58.3	15.5
<p>C1      PRC for Signalled Lanes (%): -3.7      Total Delay for Signalled Lanes (pcuHr): 44.96      Cycle Time (s): 90</p> <p>          PRC Over All Lanes (%): -3.7            Total Delay Over All Lanes(pcuHr): 44.96</p>																	

### Signal Timings Diagram

Scenario 8: '2031 DS minus Site B Local Plan Flows + Site B PM' (FG8: '2031 DS - Site B LP Flows + Site B Flows PM', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

Origin	Destination				
	A	B	C	D	Tot.
A	0	1	0	1	2
B	1	0	225	896	1122
C	0	371	0	337	708
D	4	848	393	0	1245
Tot.	5	1220	618	1234	3077

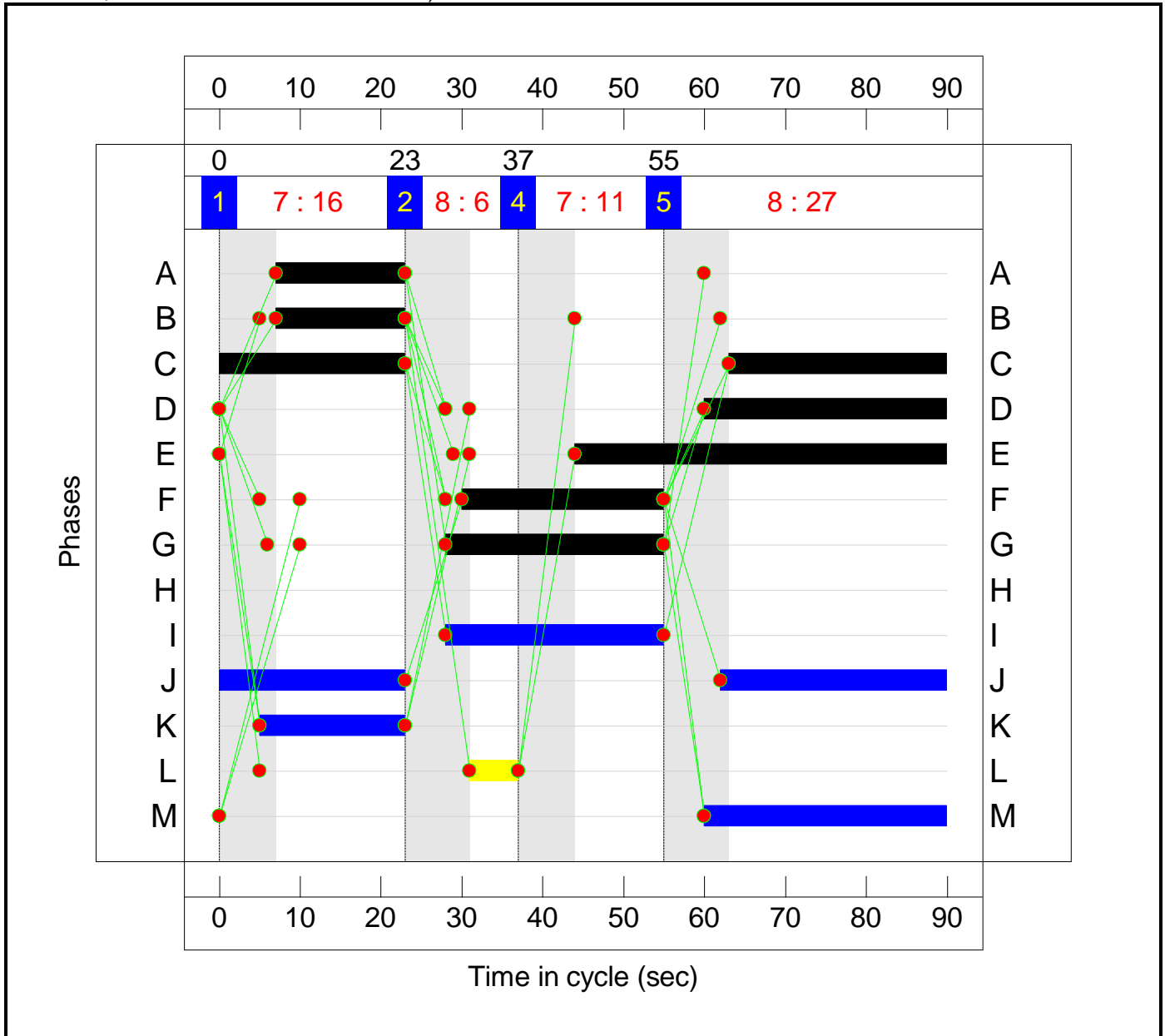
## Link Results

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	-	-	-		-	-	-	-	-	-	88.9%	0	0	0	37.6	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	88.9%	0	0	0	37.6	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	2	1600	1600	0.1%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	26:50	-	654	1950:1650	494+259	86.9 : 86.9%	-	-	-	7.1	39.2	13.4
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	26	-	468	1950:1600	585+1	79.8 : 79.8%	-	-	-	5.7	43.7	12.6
3/1	New Road Left	U	E		1	36	-	337	1650	678	49.7%	-	-	-	2.3	24.9	6.7
3/2	New Road Ahead Right	U	D		1	20	-	371	1800	420	88.3%	-	-	-	6.8	65.7	12.2
4/1	A20 London Road west Left Ahead	U	G		1	27	-	429	1700	529	81.1%	-	-	-	5.5	45.9	11.8
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	27:25	-	816	1950:1600	476+442	88.9 : 88.9%	-	-	-	10.2	45.2	13.0
<p>C1      PRC for Signalled Lanes (%): 1.2      Total Delay for Signalled Lanes (pcuHr): 37.60      Cycle Time (s): 90</p> <p>PRC Over All Lanes (%): 1.2      Total Delay Over All Lanes(pcuHr): 37.61</p>																	



### Signal Timings Diagram

Scenario 9: '2031 DS minus Site C Local Plan Flows + Site C AM' (FG9: '2031 DS - Site C LP Flows + Site C Flows AM', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

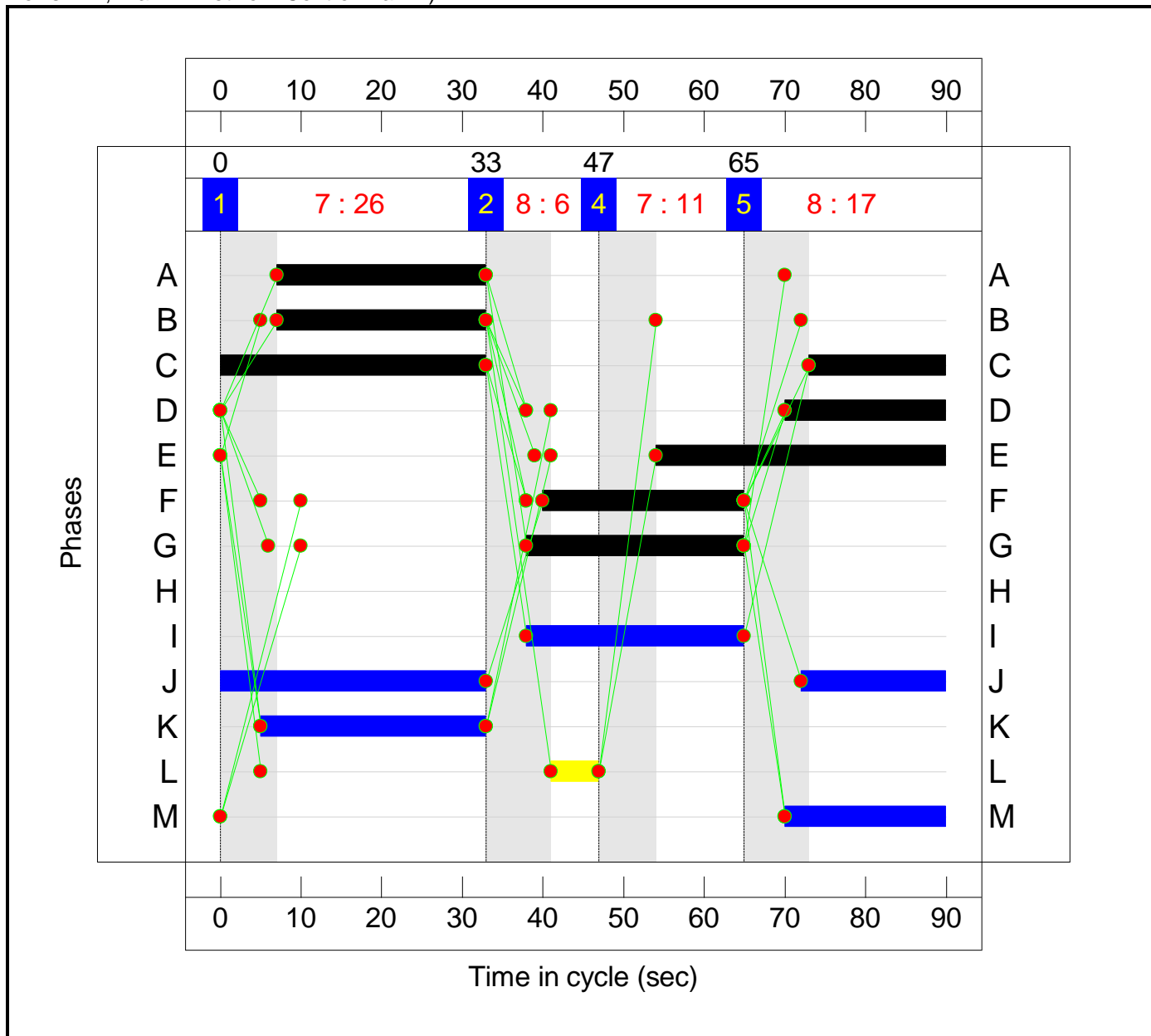
Origin	Destination					Tot.
	A	B	C	D	Tot.	
A	0	0	0	3	3	
B	3	0	279	651	933	
C	1	562	0	160	723	
D	0	749	399	0	1148	
Tot.	4	1311	678	814	2807	

## Link 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	-	-	-		-	-	-	-	-	-	90.8%	0	0	0	39.4	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	90.8%	0	0	0	39.4	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	16:50	-	602	1950:1650	360+311	89.7 : 89.7%	-	-	-	7.9	47.2	11.7
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	16	-	331	1950:1600	368+3	89.0 : 89.0%	-	-	-	6.7	73.4	11.4
3/1	New Road Left	U	E		1	46	-	160	1650	862	18.6%	-	-	-	0.6	14.0	2.2
3/2	New Road Ahead Right	U	D		1	30	-	563	1800	620	90.8%	-	-	-	8.7	55.6	17.6
4/1	A20 London Road west Left Ahead	U	G		1	27	-	443	1700	529	83.8%	-	-	-	6.0	48.7	12.7
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	27:25	-	705	1950:1600	342+446	89.5 : 89.5%	-	-	-	9.4	48.1	13.3
<p>C1      PRC for Signalled Lanes (%): -0.9      Total Delay for Signalled Lanes (pcuHr): 39.37      Cycle Time (s): 90</p> <p>          PRC Over All Lanes (%): -0.9            Total Delay Over All Lanes(pcuHr): 39.37</p>																	

### Signal Timings Diagram

Scenario 10: '2031 DS minus Site C Local Plan Flows + Site C PM' (FG10: '2031 DS - Site C LP Flows + Site C Flows PM', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

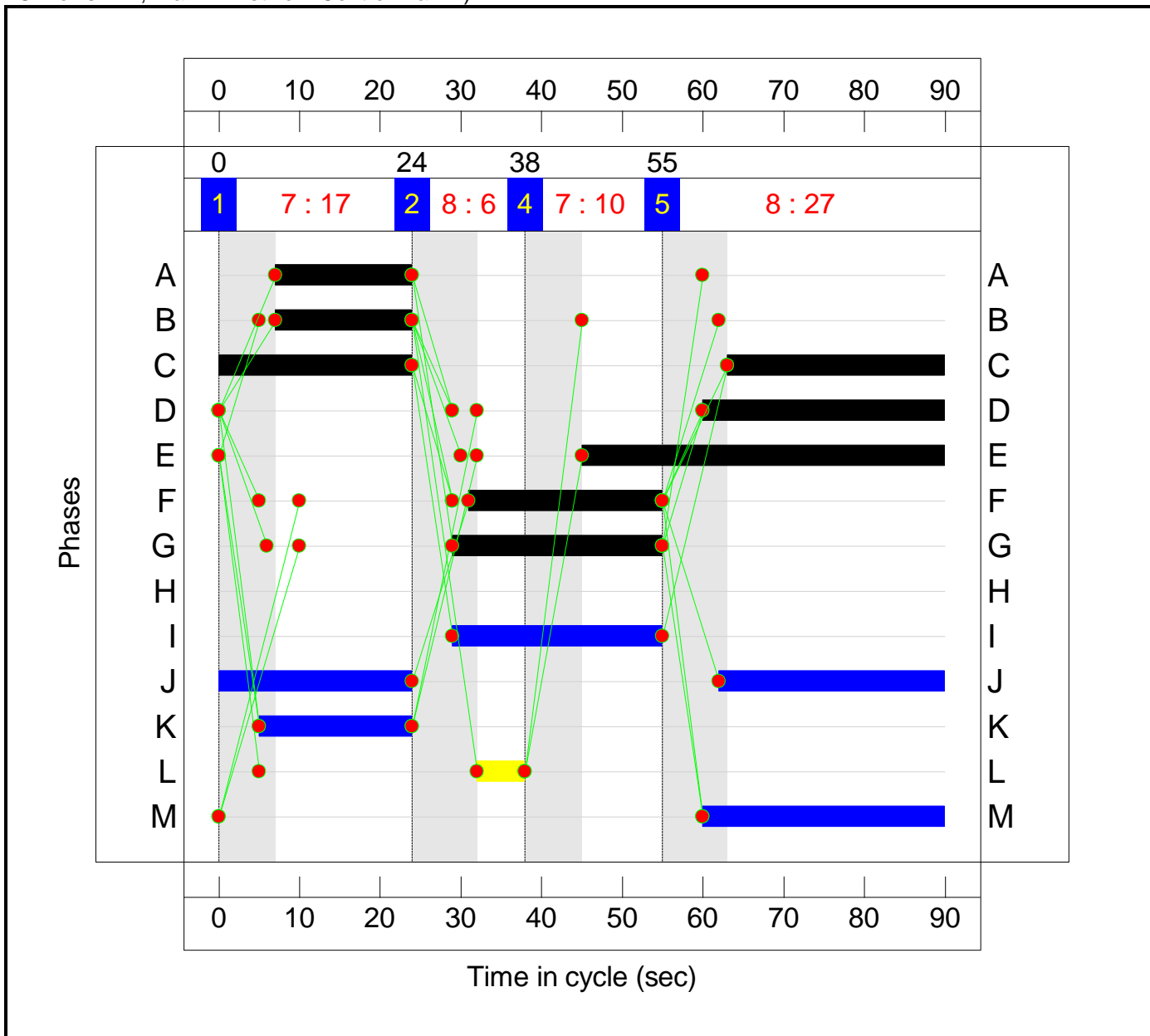
Origin	Destination				
	A	B	C	D	Tot.
A	0	1	0	1	2
B	1	0	218	890	1109
C	0	365	0	329	694
D	4	835	378	0	1217
Tot.	5	1201	596	1220	3022

## Link 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	-	-	-		-	-	-	-	-	-	86.9%	0	0	0	35.1	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	86.9%	0	0	0	35.1	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	2	1600	1600	0.1%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	26:50	-	645	1950:1650	495+253	86.2 : 86.2%	-	-	-	6.9	38.6	13.2
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	26	-	464	1950:1600	585+1	79.1 : 79.1%	-	-	-	5.6	43.2	12.4
3/1	New Road Left	U	E		1	36	-	329	1650	678	48.5%	-	-	-	2.3	24.6	6.5
3/2	New Road Ahead Right	U	D		1	20	-	365	1800	420	86.9%	-	-	-	6.4	62.7	11.7
4/1	A20 London Road west Left Ahead	U	G		1	27	-	398	1700	529	75.3%	-	-	-	4.6	41.3	10.3
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	27:25	-	819	1950:1600	513+440	85.9 : 85.9%	-	-	-	9.4	41.5	12.7
			C1	PRC for Signalled Lanes (%):			3.6	Total Delay for Signalled Lanes (pcuHr):			35.10	Cycle Time (s):			90		
				PRC Over All Lanes (%):			3.6	Total Delay Over All Lanes(pcuHr):			35.10						

### Signal Timings Diagram

Scenario 11: '2031 DS minus Site BC Local Plan Flows + Site BC AM' (FG11: '2031 DS - Site BC LP Flows + Site BC Flows AM', Plan 2: 'Network Control Plan 2')



### Traffic Flows, Actual

Actual Flow :

Origin	Destination					Tot.
	A	B	C	D	Tot.	
A	0	0	0	3	3	
B	3	0	279	670	952	
C	1	562	0	160	723	
D	0	755	399	0	1154	
Tot.	4	1317	678	833	2832	

## Link 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	-	-	-		-	-	-	-	-	-	91.8%	0	0	0	40.6	-	-
A20, New Road	-	-	-		-	-	-	-	-	-	91.8%	0	0	0	40.6	-	-
1/1	Hotel Entrance Left Right Ahead	U	-		-	-	-	3	1600	1600	0.2%	-	-	-	0.0	1.1	0.0
2/2+2/1	A20 London Road east Ahead Left	U	B C		1	17:51	-	610	1950:1650	371+313	89.3 : 89.3%	-	-	-	7.7	45.5	11.7
2/3+2/4	A20 London Road east Right Ahead	U	B A		1	17	-	342	1950:1600	390+3	86.9 : 86.9%	-	-	-	6.3	66.2	11.2
3/1	New Road Left	U	E		1	45	-	160	1650	843	19.0%	-	-	-	0.6	14.6	2.3
3/2	New Road Ahead Right	U	D		1	30	-	563	1800	620	90.8%	-	-	-	8.7	55.6	17.6
4/1	A20 London Road west Left Ahead	U	G		1	26	-	443	1700	510	86.9%	-	-	-	6.7	54.5	13.5
4/2+4/3	A20 London Road west Ahead Right	U	G F		1	26:24	-	711	1950:1600	340+435	91.8 : 91.8%	-	-	-	10.6	53.7	14.4
<p>C1      PRC for Signalled Lanes (%): -2.0      Total Delay for Signalled Lanes (pcuHr): 40.64      Cycle Time (s): 90</p> <p>PRC Over All Lanes (%): -2.0      Total Delay Over All Lanes(pcuHr): 40.64</p>																	