

Northfleet Harbourside Kent County Council Highway Consultee Comments

226728/N17

Introduction

1. This note has been prepared to provide a review and response to the transport comments made by Kent County Council (KCC) in response to the Northfleet Harbourside Planning application (ref. 2022/1064) with specific reference to the Transport Assessment Addendum (TAA) dated August 2023.
2. We have prepared a review of these comments and provided responses against each one in turn. The KCC comments are provided in ***Bold Italic*** font below, with our comments below.

Kent County Council Highway Comments

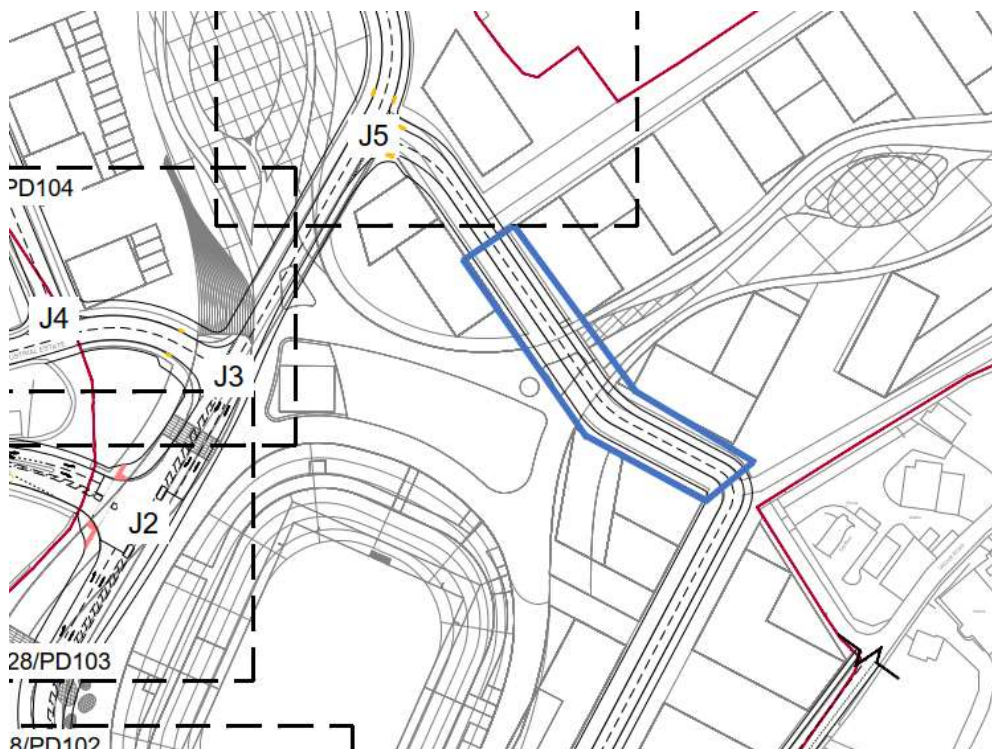
I have previously asked why Fastrack cannot connect through to Grove Road from the centre of the site instead of having to travel south first. The response was that this would require EDC land, which is correct (and would be ideal). However, a secondary road in The Boulevard character area is shown to connect the site with Grove Road. Please clarify why this cannot be a Fastrack route.

3. As set out in the third bullet point in Section 1.1 of the Design Code, all plans and diagrams are illustrative only unless contained within a box with a blue header. The current proposals make no allowance for a vehicular route in this location and therefore no Fastrack connection is possible.

It was understood that Fastrack would run on its own network through the majority of the site to increase its reliability and attractiveness by not getting caught up in general traffic, yet general vehicle access points to the Parkland, Riverside and Boulevard character areas suggest this is not the case. Please provide a plan showing the extent of the Fastrack only route.

4. The term 'majority' was not used when describing the Fastrack route through the site. We have held consultation meetings with the Fastrack operations team (Fastrack manager and design and procurement lead - KCC were also present at the meeting, dated 25th April 2023) and talked them through the proposals making it clear where the segregation was proposed. **Figure 1** overleaf illustrates the section of Fastrack only route which sits within the blue polygon.

Figure 1: Fastrack Only Route



Please confirm how the uses along the Boulevard (e.g hotel, offices) are accessed by vehicle? E.g How would deliveries / refuse access the buildings? Are all the residential buildings along the eastern side of this route accessed from Grove Road?

5. At this stage of the planning process, it is not possible to define the detailed access strategy for the Boulevard as the buildings and final land use quantum are not defined or designed. The delivery and servicing strategy will be developed through the associated Reserved Matters Application for this area. There are no vehicular accesses proposed from Grove Road.

Page 28 of the Design Code states Stonebridge Plaza is a “shared surface space with traffic calming measures to manage speeds and prioritise pedestrians and cyclists”. Please clarify exactly which section this relates to. The highway plans in appendix F show this area to be a strategic route (which is correct).

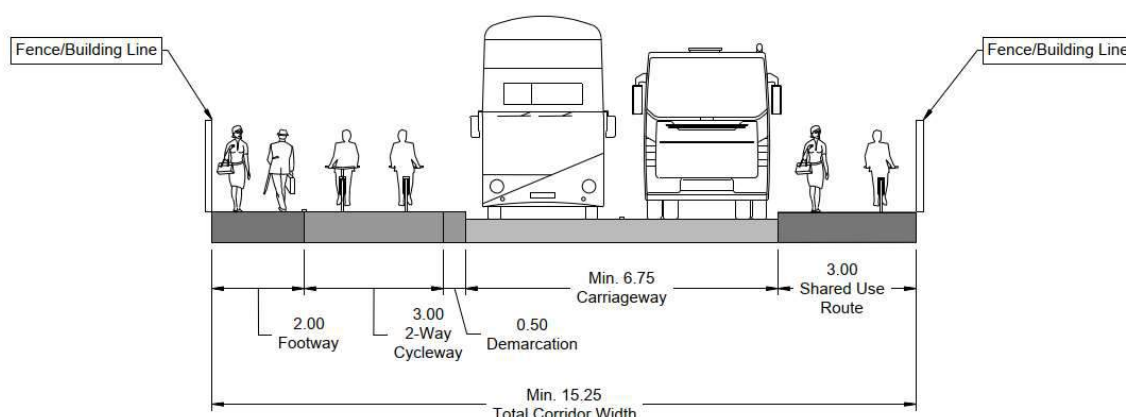
6. As referenced in paragraph 4 above, the plans and diagrams set out within the Area Code are illustrative, but Stonebridge Plaza references the area in and around Junction 9 of the highway layout plans submitted in Appendix F. The detailed design of this section of highway will be provided through the Reserved Matters Application for this area, noting the comment below about KCC adopting shared surfaces.

Page 29 of the Design Code states “The bus route, incorporating cycle path, should be 7m maximum. The footways either side will be 3m minimum in widths”. This does not correspond with the indicative section shown which has 6.75m carriageway, 4m footway (each side) and

2m cycle way (each side) plus planting. The bus route is key for this site. Please clarify the widths. Also note KCC are unlikely to adopt shared space areas.

7. The bus route is proposed to be as set out in the typical cross section plans (226728/PD07) and as shown on the wider highways proposal plan (PD100) which is shown below and sets out the following widths:

- a. 6.75m vehicle corridor
- b. 3.0m shared use footway / cycle way on the eastern side of the carriageway
- c. 0.5m demarcated buffer to the western side of the carriageway
- d. 3.0m two-way cycle way
- e. 2.0m footway



Bus Corridor (Fast Track)

Page 38 of the Design Code shows a 7.3m route with 2m emergency footway either side. Yet the highway plans in appendix F show footways and cycleways alongside the diverted route. Please confirm which is correct.

8. The highways plans included within Appendix F of the TAA should be referred to with regard to the geometries of the highway in all instances.

The majority of the documents refer to the stadium being '8000 seats'. We previously discussed this would be limited to 6000 seats, as per the live permission, and therefore the 2000 seats would not need to be assessed. Please confirm the stadium is being limited to 6000 seats, with large events also capped to the current live permission.

9. We can confirm that the capacity of the stadium will be limited to 6,000 until such time that further evidence is provided that a larger capacity can be accommodated. We would suggest a condition similar to the below:

- a. The Stadium shall be restricted to operate to a maximum capacity of 75% (6,000 spectators) until such time, based upon the submission of supplementary evidence and / or assessments, including the provision of any necessary mitigation, that occupation at the full capacity (8,000) can be agreed.

No dimensions are shown on the highway plans, this is required.

10. This is noted and revised highways plans have been prepared and included in **Appendix A**

Paragraph 4.29 of the TAA states there will be 73 two way bus trips in PM peak (the peak). This seems low. Is this correct?

11. The forecast bus trips were made based upon TRICS mode share data for the residential elements of the site and from local Census information for the commercial uses. These identified a mode share of 9% for residential uses and 6% for commercial uses.

12. As part of a review of the Travel Plan baseline and targets, we have reviewed the baseline mode share data for the residential land use and have adjusted this based upon the 50% parking provision. The original mode share for car driver and passenger was 61% in the Transport Assessment but this was revised through the Transport Assessment Addendum trip generation to 60% (revised trip rates). This has therefore been reduced, proportionally to 50% (24% car driver and 26% car passenger). The remaining 10% has then been redistributed, again proportionally, to bus and rail modes.

13. For the commercial uses, the target of 40% of all trips to be made by sustainable modes has been used as a baseline position for the site with car driver and passenger trips reduces to 60% from 81% as identified through the Journey to work data. The remaining 21% has been proportionally redistributed to bus and rail trips for the baseline forecast.

14. As a result, the forecast mode share for bus patronage is 13% for residential uses and 24% for commercial uses, this results in a forecast of 269 two-way bus trips during the PM peak.

The Jacobs Technical Note in Appendix K states that committed developments were modelled explicitly in the KTM. As previously discussed, there is a live application for Ebbsfleet Central (EDC 22/0168) and the Applicant is intending to make significant changes to the surrounding network, particularly on Thames Way (revised plans were submitted to EDC last week and can be seen on the planning portal). Please confirm whether the KTM model was run using the proposed Ebbsfleet Central highway layouts (the previous layouts shown with the application are ok for strategic modelling, the new plans submitted last week are generally in line with the previous versions).

15. We can confirm that the KTM model was run using the proposed Ebbsfleet Central highway layouts as submitted at the time of commissioning the model. These would be considered the ‘previous layouts’.

Paragraph 7.13 of the TAA states “This [local junction] modelling has been based upon the KTM traffic flow outputs provided in Appendix B and F of the Jacobs report”. Therefore, the committed developments appear to have been included in the local junction modelling work, however, the models appear to be based on the existing highway layouts and not the Ebbsfleet Central highway proposals. This is required. Please update using the layouts Ebbsfleet Central submitted last week.

16. We have included the Uncertainty log from which the KTM takes committed developments in **Appendix B**. We note that whilst the Ebbsfleet Central site is allocated for development, it has no current planning consent and as such the proposals are not permitted. Whilst we appreciated the work that has been undertaken to prepare the application by the applicant and KCC, the existing highway network remains the baseline, approved position.
17. In the interests of supporting KCC and the Ebbsfleet Central scheme, we have also prepared models for the junctions which Ebbsfleet Central are proposing to upgrade and modelled them with our development flows included. These comprised Junction 3, 4 and 5 with the results set out below. As these three junctions represent new layouts, only the with development scenarios have been run and due to the Ebbsfleet Central scheme not providing weekend assessments, only the weekday AM and PM scenarios have been run as we do not have access to any weekend trip data or distribution from this application. These modelling outputs are included in **Appendix C**.
18. It should be noted that all of the future year scenarios presented for all junctions within the TAA in support of the Northfleet Harbourside development demonstrated that the proposals did not cause any severe impact on the highway network, and as such did not require any junction mitigation improvements to be made at Junctions 3, 4 or 5.

Junction 3 A226 / Thames Way

2030 With Development (Max Commercial)						
Movement	AM Peak Hour			PM Peak Hour		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
A226 (NE)	61.8	17.5	15.9	81.8	25.3	24.9
A226 (SE)	92.2	43.0	35.0	85.2	35.2	24.0
Car Park Access (SW)	58.0	86.8	3.1	53.6	74.4	2.8

19. The results of the proposed layout presented by Ebbsfleet Central indicate that the junction will operate within capacity during all scenarios, though the A226 (SE) is forecast to exceed a Degree of Saturation of 90% during the AM scenario. A review of the delay indicates an increase in delay of just 5 seconds

over just the Ebbsfleet Central scheme with a queue increase of 16 PCUs. This length of queue does however not cause any additional blocking back issues over the Ebbsfleet Central results.

2030 With Development (Max Residential)						
Movement	AM Peak Hour			PM Peak Hour		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
A226 (NE)	60.1	17.1	15.0	83.0	26.1	25.7
A226 (SE)	92.1	43.2	35.0	84.5	34.3	23.6
Car Park Access (SW)	75.6	106.7	4.6	4.2	68.6	2.1

20. As with the 'Max Commercial' results, the results of the proposed layout presented by Ebbsfleet Central indicate that the junction will operate within capacity during all scenarios, though the A226 (SE) is forecast to exceed a Degree of Saturation of 90% during the AM scenario. A review of the delay indicates an increase in delay of just 4 seconds over just the Ebbsfleet Central scheme with a queue increase of 16 PCUs. This length of queue does however not cause any additional blocking back issues over the Ebbsfleet Central results.

Junction 4 – A226 Thames Way / A2260 Ebbsfleet Gateway / Springhead Parkway / Site Access

21. Junction 4 comprises three linked signalised junctions as part of the Ebbsfleet Central proposals and so the results are split into junctions and movements with the A226 comprising the northern most junction between the A226 and the A2260, International Way comprising the relocated site access in the centre and Springhead Parkway the southernmost junction.

2030 With Development (Max Commercial)							
Junction	Movement	AM Peak Hour			PM Peak Hour		
		Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
A226	A226 Thames Way (North)	66.6	21.4	8.0	83.1	27.0	12.2
	A2260 Left	55.4	4.3	5.8	57.0	2.5	1.9
	A2260 Right	72.7	22.7	5.3	84.2	21.1	7.8
	A226 Thames Way (South) - Left	31.9	18.2	3.2	49.2	20.1	5.5
	A226 Thames Way (South) - Ahead	66.7	42.0	7.7	82.4	60.0	9.3
International Way	A2260 (East) - Ahead	22.8	2.0	1.1	32.5	4.0	2.8
	A2260 (East) - Ahead+Right	64.5	14.0	5.2	54.6	10.5	4.5

	International Way	53.5	34.4	3.9	48.7	30.2	3.5
	A2260 (West) - Ahead+Left	68.7	1.4	0.9	55.6	3.5	1.2
	A2260 (West) - Ahead	21.2	2.2	0.4	27.9	4.0	0.8
Springhead Parkway	A2260 (East) - Ahead+Left	55.8	9.9	4.7	77.5	11.9	8.3
	A2260 (East) - Ahead+Right	49.8	10.9	10.9	71.2	16.0	11.9
	Springhead Parkway	6.0	48.3	0.3	0.0	0.0	0.0
	A2260 (West) - Ahead+Left	87.9	43.8	17.9	73.8	32.4	12.7
	A2260 (West) - Ahead+Right	21.5	21.1	2.7	29.1	22.1	3.8
	Podium Site Access	72.7	68.6	4.8	72.2	68.1	4.7

22. The results demonstrate that the linked network of junctions is forecast to operate within capacity during both the AM and PM peak scenarios with all arms below a degree of saturation of 90%. The largest queue is forecast on the A2260 (West) at Springhead Park, with an increase over the Ebbsfleet Central results of 2 PCUs during the AM peak and 4 PCUs during the PM peak.

2030 With Development (Max Residential)							
Junction	Movement	AM Peak Hour			PM Peak Hour		
		Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
A226	A226 Thames Way (North)	67.3	21.5	8.1	81.1	26.6	11.3
	A2260 Left	56.8	4.2	5.6	56.9	1.3	1.1
	A2260 Right	77.2	24.6	5.3	80.7	15.7	3.2
	A226 Thames Way (South) - Left	36.5	18.6	3.5	43.1	18.6	4.4
	A226 Thames Way (South) - Ahead	63.7	39.7	7.5	82.4	60.0	9.3
International Way	A2260 (East) - Ahead	27.1	1.8	1.1	34.3	3.4	2.2
	A2260 (East) - Ahead+Right	58.7	13.3	4.7	64.9	14.8	4.7
	International Way	49.7	32.4	3.7	48.7	37.0	3.4
	A2260 (West) - Ahead+Left	66.4	1.9	1.1	55.3	1.0	0.8
	A2260 (West) - Ahead	19.3	3.2	0.6	32.0	1.1	0.5
Springhead Parkway	A2260 (East) - Ahead+Left	65.7	11.4	7.2	78.6	11.8	7.7
	A2260 (East) - Ahead+Right	55.5	13.4	11.4	68.8	12.3	13.6

	Springhead Parkway	4.8	48.2	0.2	0.6	47.7	0.0
	A2260 (West) - Ahead+Left	87.9	43.9	17.9	82.1	37.5	15.5
	A2260 (West) - Ahead+Right	19.2	20.9	2.4	37.9	23.3	5.3
	Podium Site Access	87.4	95.9	7.1	78.1	75.5	5.4

23. The results demonstrate that the linked network of junctions is forecast to operate within capacity during both the AM and PM peak scenarios with all arms below a degree of saturation of 90%. The largest queue is forecast on the A2260 (West) at Springhead Park, with an increase over the Ebbsfleet Central results of 3 PCUs during the AM peak and 1 PCU during the PM peak.

The local junction models only appear to have been modelled for the ‘with development’ scenario. Some are predicted to operate over 0.85 RFC which is over desired capacity, but as the future base scenario is not provided I cannot determine whether there is a significant impact at these junctions.

24. The local junction models for junctions 6, 7, 8, 9, 10a and 10b have now also been run for the 2030 Without Development scenarios to allow a comparison to be made against the 2030 With Development scenarios. Junctions 1, 2, 3, 4, 5 and 10 are all revised and so do not have a 2030 Without Development scenario. These results are set out below with specific focus placed on those junctions forecast to exceed an RFC value of 0.85 as referenced above. The outputs are included in **Appendix D**.

Junction 6 A226 London Road / Pilgrim’s Road / A226 Galley Hill Road / High Street

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 Without Development Flows (Without LTC)									
A226 London Road (E)	73.1	25.3	10.4	47.2	14.8	6.9	80.3	35.5	6.7
High Street (S)	89.9	58.2	9.5	87.8	70.3	7.6	39.7	21.0	2.0
A226 London Road (W)	88.0	53.1	8.2	90.0	41.0	19.2	85.1	49.3	6.4
Pilgrims Road (N)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 With Development Flows (Without LTC)									

A226 London Road (E)	80.7	32.3	8.1	57.3	19.6	6.2	63.8	22.3	6.4
High Street (S)	40.5	22.8	2.2	39.5	27.4	2.1	47.3	26.1	2.5
A226 London Road (W)	70.9	28.0	6.5	83.2	33.9	10.5	78.1	36.1	5.9
Pilgrims Road (N)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

25. The results for Junction 6 show that the junction would operate within capacity and that the proposed development would not lead to any concerns regarding congestion. All the degree of saturation percentages are below 85% during all with development scenarios, with delay under 40 seconds on all arms, during all with development scenarios.

Junction 7 A226 London Road / Manor Way / Craylands Lane

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 Without Development Flows (Without LTC)									
A226 London Road (E)	86.2	34.9	21.0	61.7	25.8	10.5	78.0	36.3	9.2
Craylands Lane (S)	40.7	59.2	1.9	22.1	51.4	1.0	12.4	36.7	0.5
A226 London Road (W)	31.9	18.3	4.9	84.7	35.2	18.6	51.4	27.4	5.0
Manor Way (N)	44.5	60.3	2.1	28.4	52.5	1.3	17.3	37.3	0.7
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 With Development Flows (Without LTC)									
A226 London Road (E)	62.5	33.6	4.7	47.5	29.4	3.7	83.8	41.3	10.7
Craylands Lane (S)	65.9	49.3	3.5	49.6	44.9	2.3	12.4	36.7	0.5
A226 London Road (W)	81.0	45.8	7.7	86.3	48.0	10.7	56.1	28.4	5.6
Manor Way (N)	83.0	64.2	5.9	89.8	86.8	7.4	18.3	37.4	0.8

26. The results for Junction 7 show that the junction would operate within capacity and that the proposed development would not lead to any concerns regarding congestion. All the degree of saturation

percentages are below 90% during all scenarios, with delay under 90 seconds on all arms, during all scenarios.

Junction 8 A226 London Road / A206 / B255

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Without Development Flows (Without LTC)									
A206 (North) - LEFT TURN	0.3	4.2	0.21	2.3	12.0	0.70	0.3	4.3	0.24
A206 (North) - AHEAD	0.8	3.6	0.45	0.4	3.1	0.30	0.3	2.5	0.22
A226 London Road (East)	0.4	3.6	0.29	0.2	2.6	0.19	0.2	2.4	0.14
B255 (South) - LEFT TURN	0.1	5.1	0.12	0.1	4.0	0.09	0.0	3.6	0.05
B255 (South) - AHEAD	0.1	2.8	0.05	0.2	2.5	0.15	0.1	2.3	0.06
A226 London Road (West)	0.2	2.5	0.16	0.2	2.3	0.19	0.1	2.0	0.10
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 With Development Flows (Without LTC)									
A206 (North) - LEFT TURN	0.4	6.1	0.27	0.8	8.6	0.44	0.4	4.4	0.26
A206 (North) - AHEAD	1.3	5.1	0.55	7.6	21.9	0.89	0.3	2.6	0.23
A226 London Road (East)	11.8	35.6	0.94	16.8	62.6	0.98	0.2	2.5	0.15
B255 (South) - LEFT TURN	1.0	13.3	0.50	0.8	8.8	0.43	0.1	3.6	0.05
B255 (South) - AHEAD	7.2	26.8	0.89	2.1	8.3	0.67	0.1	2.3	0.07
A226 London Road (West)	3.0	16.5	0.75	2.0	9.2	0.67	0.1	2.1	0.11

27. During all modelled scenarios for Junction 8 the maximum RFC value forecast remains below 100, though during the With Development scenario the AM and PM peak experience values over 90 on the A226 London Road (East). A further review of this link identifies a forecast queue of 12 PCUs and a delay of 36 seconds during the AM peak. This queue would not cause any blocking back issues and the delay is not considered severe with a junction delay of 21.3 seconds and a level of service forecast of C (stable flow).
28. During the PM peak the queue is forecast to be 17 PCUs with a 63 second delay. This queue would also not cause any blocking and though greater than the AM delay, this delay is not considered severe with a junction delay of 23.7 seconds and a level of service forecast of C (stable flow).

Junction 9 A206 / Station Road / Station Approach

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (pcu)	Delay (s/pcu)	RFC	Queue (pcu)	Delay (s/pcu)	RFC	Queue (pcu)	Delay (s/pcu)	RFC
2030 Without Development Flows (Without LTC)									
Station Road (North)	0.1	2.6	0.09	0.1	3.2	0.05	0.0	2.5	0.03
Station Approach (East)	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00
A206 St Clements Way (South)	0.5	2.3	0.34	0.3	2.0	0.20	0.2	1.9	0.18
A206 Crossways Boulevard (W)	0.1	1.3	0.09	0.3	1.5	0.26	0.1	1.3	0.10
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (pcu)	Delay (s/pcu)	RFC	Queue (pcu)	Delay (s/pcu)	RFC	Queue (pcu)	Delay (s/pcu)	RFC
2030 With Development Flows (Without LTC)									
Station Road (North)	0.2	3.6	0.14	0.2	5.6	0.19	0.0	2.6	0.03
Station Approach (East)	0.1	4.7	0.06	0.2	7.7	0.11	0.0	0.0	0.00
A206 St Clements Way (South)	1.6	4.0	0.60	0.8	2.9	0.43	0.2	1.9	0.19
A206 Crossways Boulevard (W)	0.3	1.8	0.23	0.9	2.4	0.48	0.1	1.3	0.11

29. The results for Junction 9 show that the proposed development would have a negligible impact on Junction 9. The maximum RFC value would be 0.48 which remains significantly below the review threshold RFC of 0.85.

Junction 10a A2260 / A2 (northern roundabout)

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 Without Development Flows (Without LTC)									
A2260 (N) lane 1&2	49.6	6.9	6.1	53.3	6.7	6.9	38.0	6.1	4.1
A2260 (N) Lane 3	44.3	7.6	5.2	43.5	7.0	5.1	29.8	6.5	3.1

A2260 (E) Lane 1&2	65.4	16.3	6.4	57.7	14.0	5.9	41.4	12.7	3.7
A2260 (E) Lane 3	78.8	17.5	8.3	71.4	15.1	8.1	55.6	13.9	5.8
A2 W/B Off slip Lane 1	18.2	12.6	1.6	13.9	20.1	1.0	5.6	13.7	0.4
A2 W/B Off Slip Lane 2&3	35.4	12.5	2.4	35.0	19.9	2.2	20.8	13.6	1.3
Ackers Drive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 With Development Flows (Without LTC)									
A2260 (N) lane 1&2	45.9	6.0	4.6	10.9	4.6	0.8	45.4	6.0	4.7
A2260 (N) Lane 3	31.7	6.1	3.3	1.7	4.8	0.1	34.2	6.3	3.5
A2260 (E) Lane 1&2	29.5	11.9	2.3	1.5	5.0	0.1	44.7	12.3	4.2
A2260 (E) Lane 3	54.0	13.8	5.5	8.0	5.1	0.7	58.7	13.5	6.4
A2 W/B Off slip Lane 1	27.9	15.6	2.5	2.2	5.0	0.2	12.7	14.2	1.0
A2 W/B Off Slip Lane 2&3	46.0	15.4	3.3	9.6	4.9	0.6	30.0	14.1	2.0
Ackers Drive	45.5	30.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0

30. The results show that the junction would operate within capacity and that the proposed development would not lead to any concerns regarding congestion. All the degree of saturation percentages are below 85% during all scenarios, with delay under 31 seconds on all arms, during all scenarios.

Junction 10b A2260 / A2 (southern roundabout)

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 Without Development Flows (Without LTC)									
A2260 (W) Lane 1&2	64.7	16.9	2.2	71.1	19.1	3.6	50.0	15.6	1.7
A2260 (W) Lane 3	0.0	0.0	0.0	61.3	18.4	2.5	18.4	15.2	0.7
Access (N)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A2 E/B Off Slip Left	55.3	2.1	0.6	54.8	2.1	0.6	42.4	1.6	0.4
A2 E/B Off Slip Lane 2&3	34.2	11.7	3.5	56.7	11.9	6.8	31.7	12.1	3.1

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 With Development Flows (Without LTC)									
A2260 (W) Lane 1&2	52.3	11.1	2.2	26.8	19.8	1.0	55.5	14.1	2.2
A2260 (W) Lane 3	34.8	11.0	2.0	28.0	19.8	1.1	20.6	13.7	0.9
Access (N)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A2 E/B Off Slip Left	36.9	1.5	0.3	6.1	1.0	0.0	47.0	1.8	0.4
A2 E/B Off Slip Lane 2&3	44.8	18.2	4.2	54.8	10.4	6.1	35.8	14.4	3.5

31. The results show that the junction would operate within capacity and that the proposed development would not lead to any concerns regarding congestion. All the degree of saturation percentages are below 85% during all scenarios, with delay under 20 seconds on all arms, during all scenarios.

In addition, if the site is not built out by 2030, the impact could be larger than predicted. Further information is required. Please send plans showing the geometry used for the models.

32. The construction programme has been shared with KCC and was used to inform the methodology proposed for using the KTM. This methodology has been agreed and was subsequently adopted for the use of the KTM. Plans showing the geometries used for the modelling of the stand-alone junctions is provided in **Appendix E**. For Signalised junctions the highways geometry plans have been used.

Please can you send the Road Safety Audit for the highway proposals?

33. The Road Safety Audit (RSA) has been included in **Appendix F**. The RSA raised three matters with regard to the highway proposals associated with the development which are as follows:

- a. Signalised crossing not being proposed at the signalised junctions.
 - i. The highway proposals deliver dedicated pedestrian and cycle routes with crossing provided for all desired movements, albeit not on all arms. Consideration will be given to the appropriate safety implications during the detailed design of each junction.
- b. Bus Stops on Galley Hill Road are close together.
 - i. During the detailed design stage for Galley Hill Road we will engage with the relevant stakeholders to establish the most suitable location for the bus stops on Galley Hill Road inconsideration of the timetabling at that time.
- c. Flexible Bus Route – corner tracking does not allow two-way working

- i. We have liaised with Fastrack directly over this route and agreed that since visibility will be maintained, the corners do not need to facilitate two-way working for a flexible bus.

No improvements to Grove Road along the site boundary are shown. These are required, especially since the scope of the improvements by the Northfleet West site may be reduced due to S106 limits.

34. The proposals include for an unbroken, 2m footway to be provided alongside the carriageway of Grove Road which is a significant improvement over the existing provisions which are predominantly less than 1.5m in width. The proposals also facilitate significantly improved facilities through the Boulevard including for segregated footway and cycleways. This is the area in which pedestrian and cyclists will be directed rather than alongside the Grove Road carriageway which may be used by large vehicles.
35. The potential lack of improvements offered by an adjacent development cannot require these proposals to deliver more infrastructure on their behalf. This must be resolved with the Northfleet West scheme independently.
36. Furthermore, this scheme is committed to investing in a transport infrastructure toolkit fund to deliver enhancements to the local transport networks if and when identified.

Improvements to walking and cycling facilities are shown to be required in the walking and cycling audit, yet no improvements are proposed. This is required and should be implemented through a S278 not S106. Ebbsfleet Central proposals should be considered so that different proposals for the same areas are not proposed. Please note Green Corridors Site 11 scheme is located to the east of the site. It is assumed this is fully funded but I have asked for confirmation from the Project Manager.

37. Significant improvements are proposed through the highway designs of the development including for new, dedicated pedestrian and cycling routes and crossings. These are identified within the audit and will all be secured through S278 agreements on the adopted highway. Furthermore, as set out within the audit, the proposals will assist in upgrading all the identified routes through the removal of existing industrial uses.
38. A number of the recommendations resulting from the audit related to maintenance issues such as overgrown vegetation, littering or poorly surfaced footways. We have engaged with National Trail with regard to the England Coast Path and will continue to do so through the Reserved Matters Applications.
39. We are also keen to enter into discussions about funding off-site improvements such as additional planting or seating that are demonstrated to be required as a result of the development proposals.

With regard to the 'typical cross sections' shown in Appendix F, the 0.5m separation should be widened to 1m and changed to a verge, to further separate peds and cyclists from vehicles, and create a more attractive route.

40. The typical cross section has been produced in consideration of LTN1/20 which states that the minimum buffer distance between the carriageway and cycle track is 0m with a desirable width of 0.5m. As such this is in line with this guidance. Given this cross-section is also predominantly covered by the podium, reducing the area of hard landscaping is considered to be more environmentally considerate. A grass verge is unlikely to be sustainable in a covered environment.

With regard to the Highway Plans in appendix F:

Drawings 226728/PD100/AT02 and 226728/PD100/AT03 show the buses require the full width of the carriageway to turn to/from The Boulevard. This bend should be widened. Please also show the appropriate forward visibility is achievable. The visibility for peds and cyclists is also a concern here and whilst the application is only outline, this must be shown to be achievable in line with the space permitted by the parameter plans.

41. Discussions with the Fastrack operations team identified that two-way working was not a requirement on the corners provided visibility could be maintained for drivers. We have therefore plotted the forward visibility envelopes along this route to show where must be safeguarded. We would envisage the speed limit being 20mph in this location but have shown the envelopes for both 20mph and 30mph for reference.

42. These drawings (226728_PD100_AT02/03) are included in **Appendix G**.

Drawing 226728/PD104/AT01 (J3) shows the HGV needs to use the southbound lane in order to turn north from Northfleet industrial Estate. As this will be a main route for residents in the western parcel, the radius should be larger to accommodate this turn.

43. This junction has been revised to ensure that an HGV does not need to use the southbound lane. Drawing 226728_PD104_AT01_Rev A is provided in **Appendix G**.

Drawing 226728/PD105/AT01 (J6) shows the access into the existing use is not large enough to accommodate the HGV turning into / out of it and needs to be widened.

44. This junction has been revised to ensure that an HGV does not need to cross the carriageway centreline on egress. Drawing 226728_PD105_AT01_Rev A is provided in **Appendix G**.

Drawing 226728/PD101/AT01 (J1) need to be considered alongside the proposals for Ebbsfleet Central, as the Ebbsfleet Central proposals also include changes to Thames Way under the railway bridge. Please provide a plan to confirm both schemes can be accommodated. In addition, anyone from the site wanting to access Ebbsfleet International Station would travel along the western side of Thames Way, under the railway bridge. The proposed cycle route along the realigned A226 should continue south along Thames Way to where the link to PROW NU2 starts, just south of the bridge, to accommodate this flow (the pinch point under the bridge is acknowledged). The proposals for both NFH and Ebbsfleet Central would therefore together provide a high quality walking and cycling link between Galley Hill Road and International Way. This missing link would also prevent cyclists travelling N/S along Thames

Way and E/W on the A226 from having to cross twice at the A226 Thames Way / Stonebridge Road junction, as no facilities are provided on the southern arm.

45. The Ebbsfleet Central proposals have been incorporated into the highway plan with the indicative cycle route extended southbound towards the NU2 PROW connection. Drawing 226728_PD101_Rev A is included in **Appendix G**.

Drawing 226728/PD106 (J 7,8,9). There is concern that the junctions are located too close together. The plans should be updated to demonstrate the distance between the junctions meet KDG standards. Drawing 226728/PD100/AT04 shows a larger vehicle needs to use both lanes to turn into the priority arm (car park). If vehicles are waiting to turn out, the larger vehicles would have to wait, potentially blocking back to the A226. Given the high level of use of this access, this is not acceptable and should be revised. The estimated level of traffic to/from junction access points should also be provided as right turn bays are likely to be required, to prevent queuing on the B2175 Stonebridge Road. Drawing 226728/PD106 (J 7,8,9) does not show how peds and cyclists access Station Road (for Northfleet Station) from this junction. This should cater for the high volumes of people expected to be travelling by rail and recognise the location directly opposite The Boulevard. The Grove Road junctions do not have Fastrack priority which is required to prevent delay, if they are to use this route.

46. An updated drawing (226728_PD106 Rev A) demonstrating the geometries of this junction is included in **Appendix A**. The layout of the junctions ensures good visibility for all users and the RSA completed for the proposals did not raise any concerns with the proposals. Furthermore, the modelling completed for this junction shows the forecast flows (17 right turning during the AM and 44 during the PM) and delay here, with no congestion issues forecast. As a result, a right turn bay is not considered appropriate or necessary.
47. Having reviewed the likely operation of the stadium, this access would be used as a car park entrance and not serve large vehicles into the site which would be served via the Strategic route and roundabout on the A226.
48. There is a dedicated signalised pedestrian crossing point provided as part of the development proposals on the B2175 to facilitate access to location south of the carriageway.
49. The specific arrangements for Fastrack priority is a matter to be addressed at Reserved Matters stage but it is agreed that where appropriate, priority measures should be secured on Fastrack routes.

Drawing 226728/PD106/AT01 (J7) shows tracking of a panel van entering and leaving J7 (Grove Road). This road will be used by HGVs (and Fastrack) and additional tracking is required for these vehicles.

50. Two additional tracking drawings (226728_PD106_AT02 and 226728_PD106_AT03) have been prepared which are provided in **Appendix G**.

The A226 is part of the Kent Resilient Network and used by a high number of HGVs. Please provide tracking showing HGVs travelling from Stonebridge Road (east of Grove Road) to J1, to ensure they will stay in lane as they manoeuvre around the bend.

51. Drawing 226728_PD106_AT02 provides tracking showing an HGV travelling on the route requested. This is provided in **Appendix G**.

Drawing 226728/PD100/AT05 shows tracking for a refuse vehicle, but should be updated to show HGVs accessing this area.

52. Drawing 226728_PD100_AT06 demonstrates an HGV accessing the site via the roundabout access. HGVs would not be permitted to access the site using the second access from The Boulevard. This drawing is included in **Appendix G**.

Where segregated cycle routes are connected via a crossing point, the crossing facilities should be segregated. All cycle crossings should be developed in line with LTN 1/20.

53. Drawings 226728_PD101_Rev A and 226728_PD103_Rev A have been created with segregated cycle crossings included for the cycle crossings. These are provided in **Appendix G**.

Comments from signals:

226728/PD103 (J2): Left turn filter arrows have been included for phases D and F. It will make very little difference to the Linsig results but I would wish to see phases C, D, E and F all as full green phases. We will then be able to close any phase at will. The central islands for all approaches should be a minimum of 2.0m in width. This will allow the installation of double secondary signals heads on the new link road and buff tactile paving between the central islands for the uncontrolled pedestrian crossing in Galley Hill Road. The stop line and central island for the southern new link road approach will need to be moved south as it is too close to the left turn radius to install the nearside primary signal in a useful location. As the primary signal will be located 2.5m downstream of the stop line it will currently be too far to the left of the normal driver view. This alteration may add a second of additional intergreen to the Linsig calculations.

54. We acknowledge the feedback from the signals team and would suggest that further engagement is secured through subsequent Reserved Matters Applications to feed into the detailed design of the signalised junctions. We have demonstrated the ability to deliver within the site boundary and that capacity can be secured for the scheme but identify that as an outline scheme, the junctions are not required to be design to a construction ready level.
55. Drawing 226728_PD103_Rev A (**Appendix G**) shows a revised layout incorporating 2.0m central islands, and a relocated stop line on the southern approach. The modelling presented above includes for these physical changes and the operational changes also requested by this comment.

226728/PD101 (J1): The Linsig in Appendix L does not show any pedestrian crossings despite these being shown on the highway plans. All traffic islands to be a minimum width of 2.0m to allow for the provision of multiple signal heads and to provide a safe working space for the traffic signal maintenance engineer. The western arm has the islands splitting the left and right turn movements which may be acceptable in some cases. I would prefer that the lanes were pushed together and the island located between the IN and OUT movements. Firstly, this would provide a physical barrier between the right turn lane and vehicles entering the western arm which reduces the likelihood of collision. Secondly, we would be able to adopt a nearside primary and secondary signal for the left turn lane and an offside primary and secondary signal in the central islands for the right turn lane. The current island proposal would require a nearside primary for the left turn lane but also an offside primary in the island to avoid confusion with the primary for the right turn lane.

56. Given the preferences made as part of this comment we have retained the layout as is, with the LinSig revised to include for the running of all pedestrian crossings. We are happy to explore the detailed layout of this junction further as part of the detailed design through a subsequent Reserved Matters application.

All signal junctions with signalised crossing facilities should be modelled with the crossings running. Given the size of the development and the low parking provision, crossing facilities should be run every cycle.

57. This is noted and all modelling completed and presented within this note includes for this.

Drawing NFH-UNS-MAST-DR-1014 in appendix H Shows a service / emergency route off Galley Hill Road, outside of the red line boundary, yet this is not shown on the highway plans. Is this an error?

58. This is an error as no vehicular connection is provided in this location.

Please clarify why the tables in the TAA (7) document, the '2030 Without Development Flows (With LTC)' flows are lower than the 'Base flows'. E.g

At Site 1 - Galley Hill Road/Lower Road, there is a base flow of 1094 in the AM, but only 701 in '2030 without development flows (with LTC)' scenario. It is recognised that LTC will change routes, but no flows are shown entering or leaving Lower Road.

At Site 2 - Stonebridge Road/Thames Way there is a base flow of 1306 in the AM, but only 988 in '2030 without development flows (without LTC)' scenario. 85 and 65 are shown entering and leaving the Grove Road arm (respectively), yet the flow is zero in the '2030 without development flows (with LTC)' scenario, despite this being the access into the Northfleet West site. The flow also reduces significantly on the Thames Way (south) arm despite this being located adjacent to Ebbsfleet Central.

Some of the junctions e.g Site 8 - London Road/A206 and Site 9 A206/Crossways Boulevard show significant reductions in trips (1000+) between the base and '2030 without development' (both with and without LTC) scenarios, what is the reasoning for this?

59. We would suggest that KCC clarify with their modelling team the methodology they use in running the KTM. Whilst we provided observed traffic flows to help inform the KTM, the derivation of the Base year is not something we fed into as part of the modelling request, for which we were charged a significant fee.

The Travel Plan targets should be based on the trip generation assessment and monitored (through traffic counts) on an annual basis. No remedial measures, or funding for remedial measures have been proposed, should the Travel Plan not achieve its targets. This is important given the site's size and complexities. It was previously discussed that a toolkit fund should be established, based on a suggested input of between £300 and £2000 per unit, which could be drawn down on with the agreement of the TRG. This would only be used in the event that the Travel Plan exceeds its targets. Please confirm this is acceptable.

60. We confirm this is acceptable, subject to evidencing and agreement of the resulting sum and as such would suggest a separate conversation between KCC and the applicant.

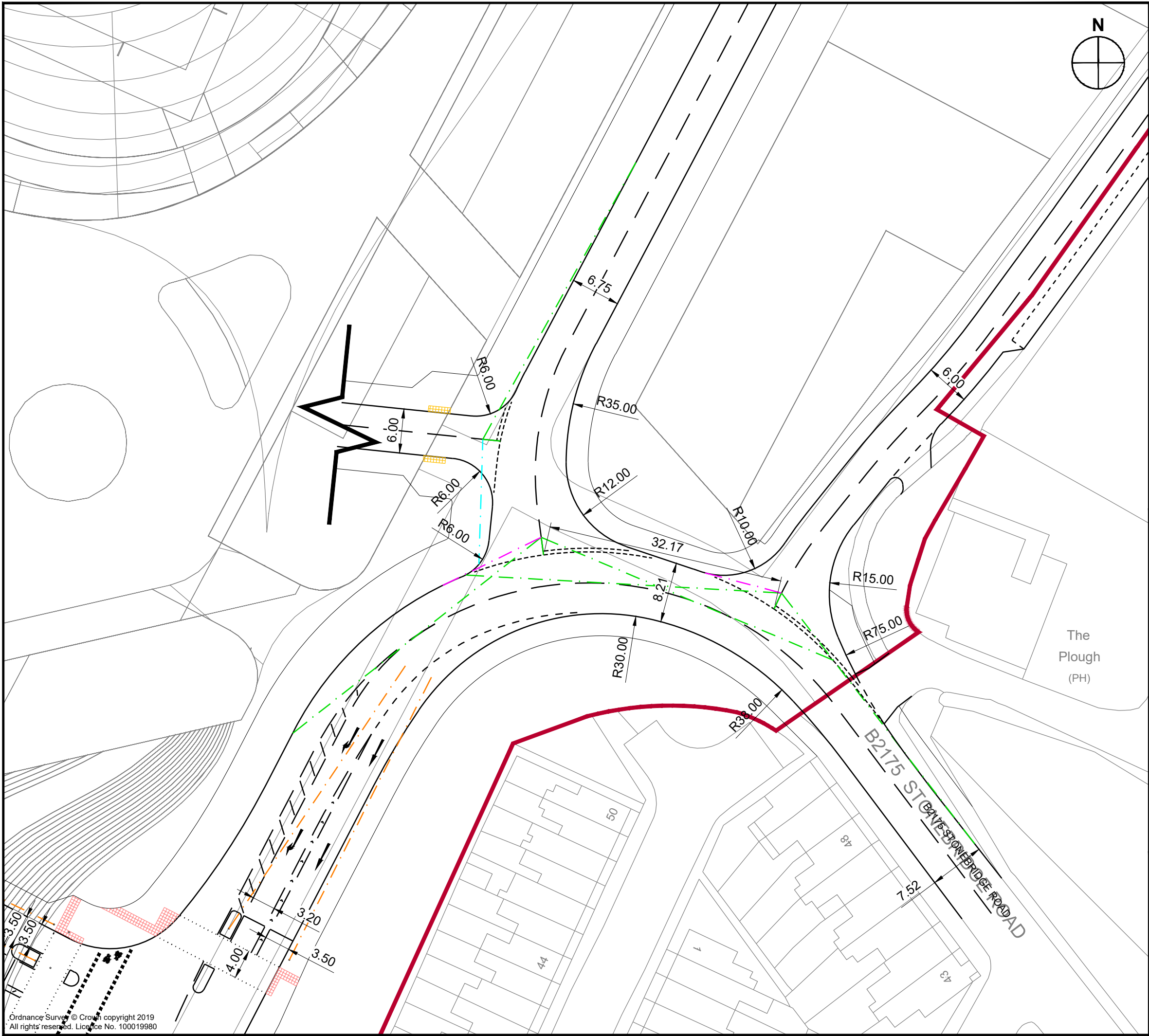
I am concerned that construction of phase 2 (Riverwalk Gardens) would require construction vehicles to use the main route through the site, part of which is the Fastrack route. Can further information be provided demonstrating how a separate construction access could be created? Would the existing A226 need to close whilst the uses above it are constructed? If so, how long would this be for? I am concerned not only as this is a strategic route for all vehicles, but this would prevent bus access for this area of Northfleet.

61. We are not at a stage where we are able to plan the construction of the proposals but are happy to Condition a Construction Phasing and Management Plan to secure this so KCC can gain surety ahead of construction.

Please can you confirm the maximum number of units / sqm that would be developed before Fastrack can run through the site? This should be secured via condition. Fastrack is usually required from first occupation as otherwise residents / visitors can start to develop other travel habits, but also, due to the significantly low parking provision, residents / visitors would rely on having suitable bus provision available. Please also confirm the maximum number of units to be accessed from a single road, during construction, noting KCC's design guidance requires an emergency access for 50 units and secondary access for 300 units.

62. The phasing of the construction is not yet confirmed and as such it is difficult to advise on this point, We would suggest a figure is proposed by KCC through a draft Condition which we can then review and comment upon. We can confirm all units will be delivered in line with KCC's design guidance.

Appendix A



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Visibility splay 2.4m x 17m (MfS 15mph)
- Tangential visibility

REV.	DETAILS	DRAWN	CHECKED	DATE
A	Dimensions added	NS	RS	18.10.2023

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

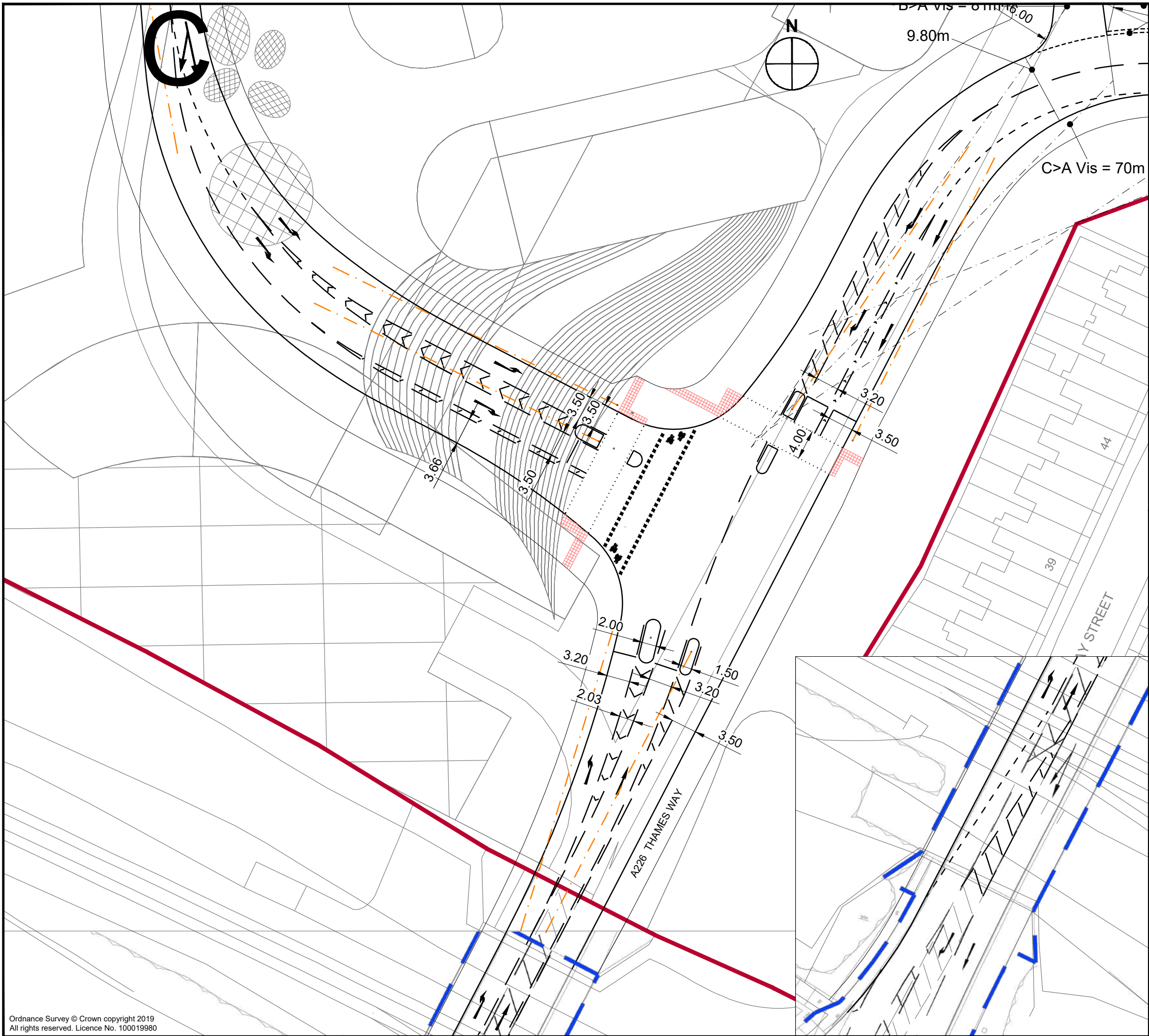
DRAWING TITLE:
**Site Access Plans
Junction 7, 8 & 9**

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	23.08.2023
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DRAWING NUMBER:	226728/PD106	REVISION:	A
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility to Signal Head (MfS 30mph)

REV.	A	Dimensions added	NS	RS	18.10.2023
		DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

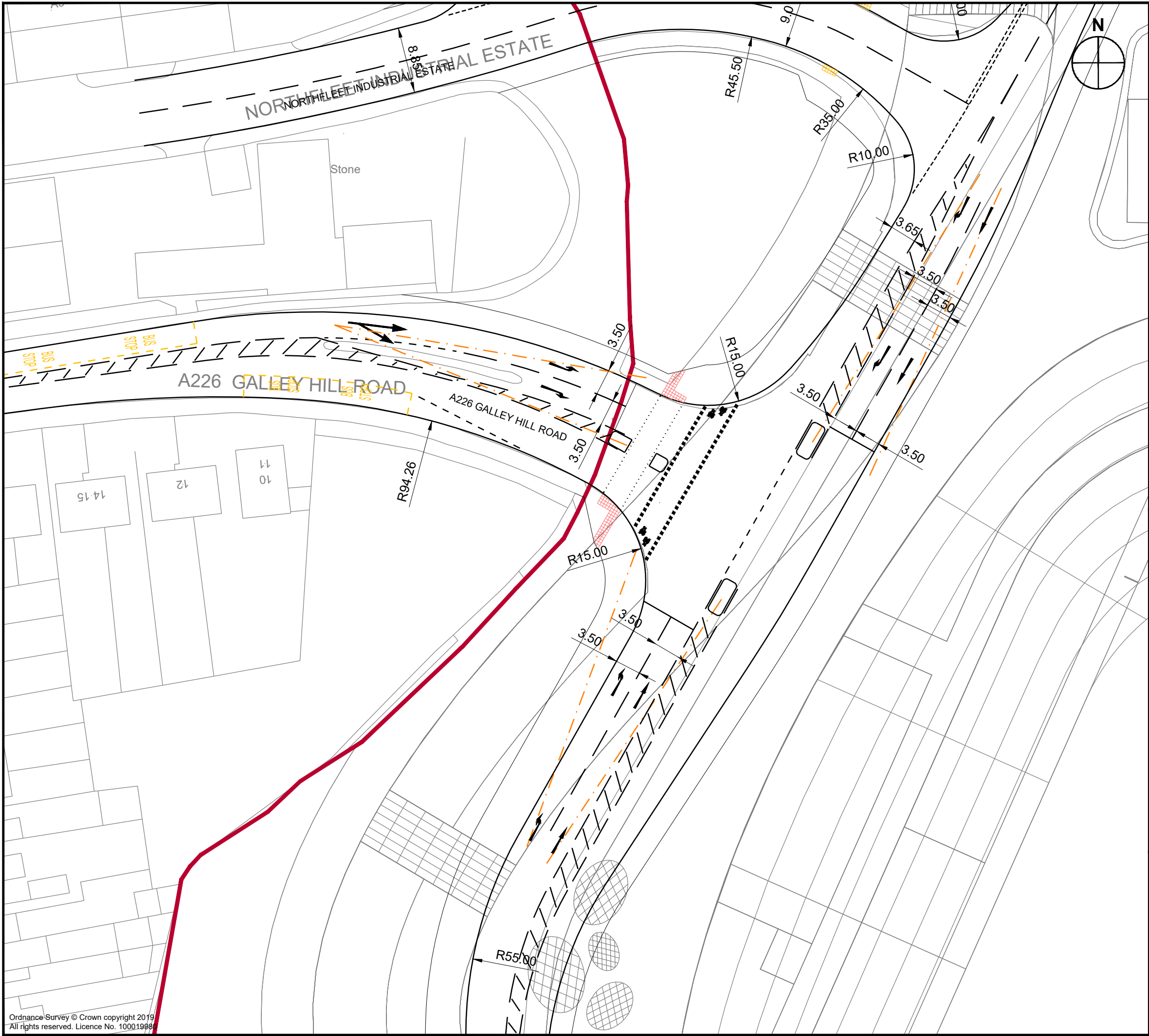
DRAWING TITLE:
**Site Access Plans
Junction 1**

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
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DRAWING NUMBER:	226728/PD101	REVISION:	A
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility to Signal Head (MfS 30mph)

A		Dimensions added	NS	RS	18.10.2023
REV.		DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

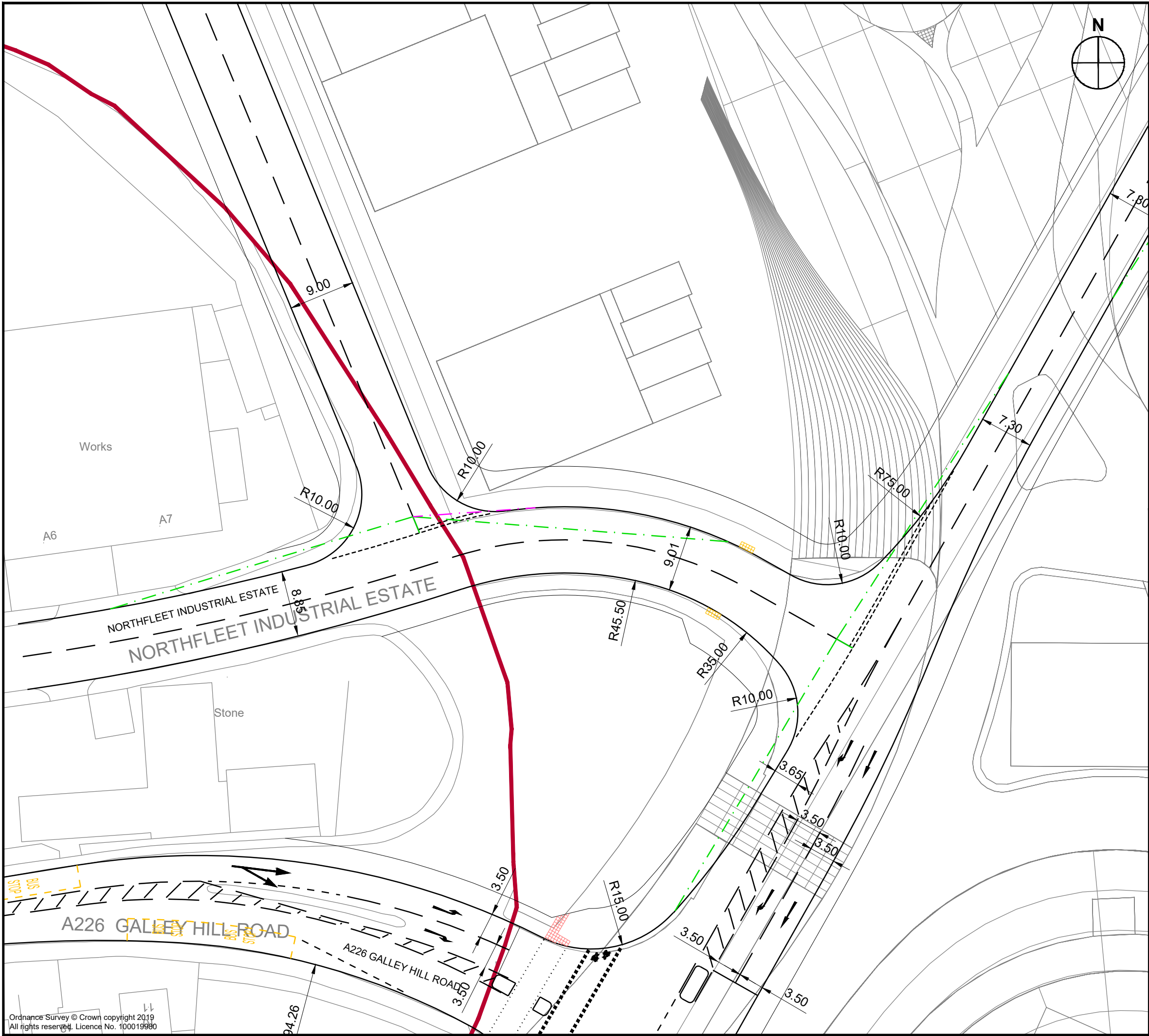
DRAWING TITLE:
**Site Access Plans
Junction 2**

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
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DRAWING NUMBER:	226728/PD103	REVISION:	A
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Tangential visibility

A	J3 north west kerb radii amended	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

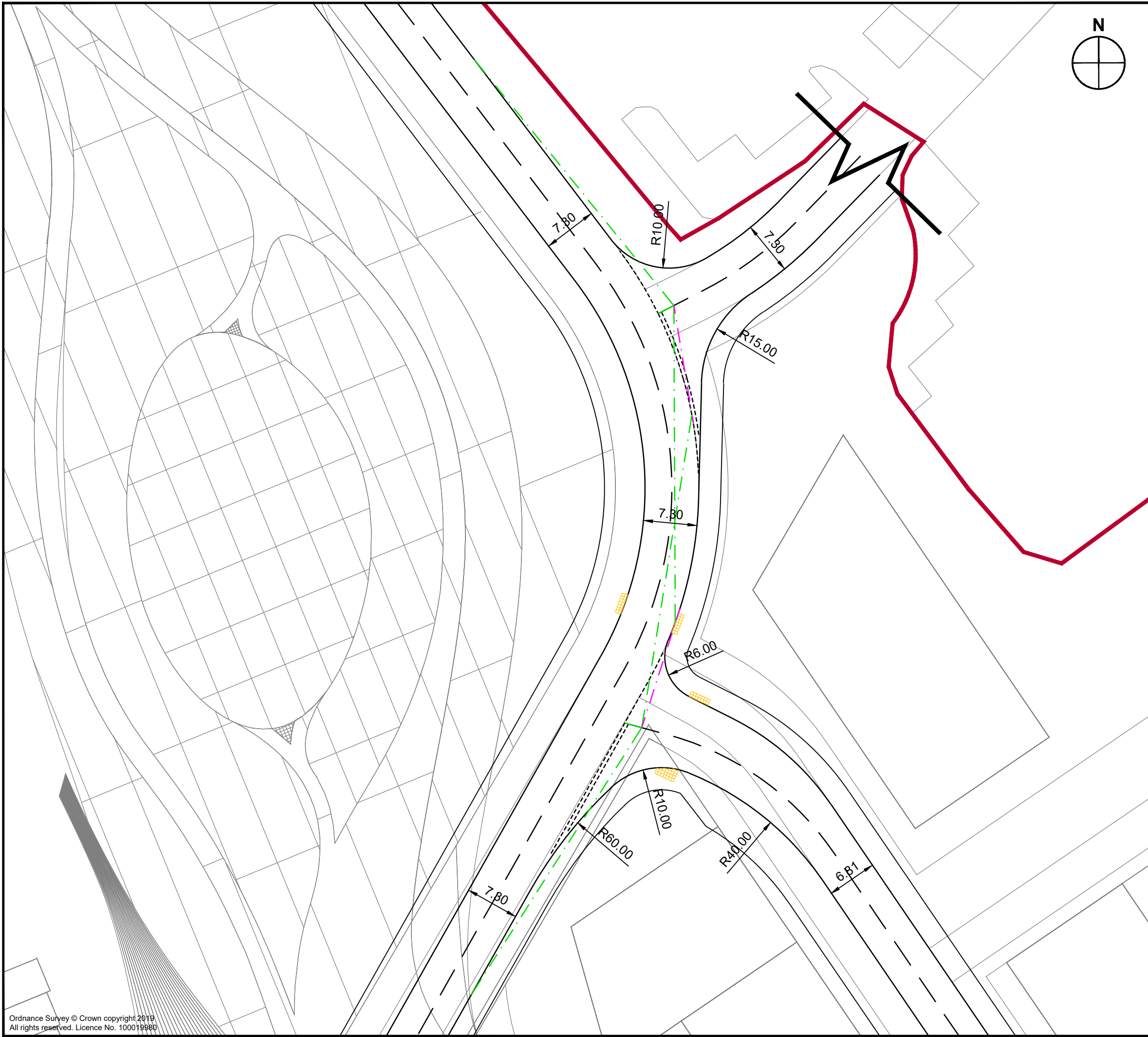
DRAWING TITLE:
**Site Access Plans
Junction 3 & 4**

SCALES:		1:500 at A3	
DRAWN:	JM	CHECKED:	RS
		DATE:	23.08.2023



DRAWING NUMBER:
226728/PD104

REVISION:
A



Notes:

1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Tangential visibility

A	J6 south east kerb radii amended	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central Gravesham

DRAWING TITLE:

Site Access Plans
Junction 5 & 6

SCALES:

1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	23.08.2023
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DRAWING NUMBER:	226728/PD105	REVISION:	A
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Appendix B

Serial No.	Unique ID	Development	Land Use Type	Development Measure	Sq M	units	Borough/District	Uncertainty	Development Size - Core		2030* and 2040* currently represents the growth from 2015	Quantum Built-out between 2016-2019		
									2016	2040		2016	2040	
118	1	1	Dartford 118	Dartford Town Centre	C3-Dwelling House	Res units	420	Dartford	Near Certain	420	420	2	418	418
119	1	1	Dartford 119	Northern Gateway	C3-Dwelling House	Res units	870	Dartford	0	870	0	0	0	0
120	1	1	Dartford 120	Dartford Town Centre and Northern Gateway	A2-Financial and Professional Services	Sq m	8,600	Dartford	More Than Likely	8,600	8,600	0	8,600	8,600
121	2	A	Dartford 121_A	Northern Gateway East and Mill Road	C3-Dwelling House	Res units	750	Dartford	Near Certain	750	750	345	405	405
121	2	B	Dartford 121_B	Northern Gateway East and Mill Road	A1-Retail	Sq m	1,500	Dartford	0	1,500	1,500	400	1,400	1,400
122	1	1	Dartford 122	Northern Gateway - GSK North Site	B2-Industry	Sq m	23,000	Dartford	Near Certain	23,000	23,000	19,609	7,061	7,061
123	1	1	Dartford 123	Blewaker	A1-Retail	Sq m	30,500	Dartford	Near Certain	30,500	30,500	3268	27,232	27,232
124	2	A	Dartford 124_A	The Bridge	C3-Dwelling House	Res units	450	Dartford	Near Certain	450	450	450	0	0
124	2	B	Dartford 124_B	The Bridge	B1(a)-Light Industry (Business Park)	Sq m	91,000	Dartford	Near Certain	91,000	91,000	0	81,000	81,000
125	6	A	Dartford 125_A	Elbfleet - Station Quarter North	C3-Dwelling House	Res units	931	Dartford	Near Certain	942	931	0	642	931
125	6	B	Dartford 125_B	Elbfleet - Station Quarter North	A3-Restaurants and cafes	Sq m	12,000	Dartford	Near Certain	12,000	12,000	0	12,000	12,000
125	6	C	Dartford 125_C	Elbfleet - Station Quarter North	B1(a)-Business Office	Sq m	162,657	Dartford	Near Certain	162,657	162,657	0	138,819	162,657
125	6	D	Dartford 125_D	Elbfleet - Station Quarter North	D1-Non-residential Institutions	Sq m	2,000	Dartford	Near Certain	1,530	2,000	0	1,500	2,000
125	6	E	Dartford 125_E	Elbfleet - Station Quarter North	D2-Assembly and Leisure	Sq m	17,191	Dartford	Near Certain	13,065	17,191	0	13,065	17,191
125	6	F	Dartford 125_F	Elbfleet - Station Quarter North	C1-Hotels	Sq m	9,032	Dartford	Near Certain	9,032	9,032	0	9,032	9,032
125	6	A	Dartford 125_A	Elbfleet - Station Quarter South	C3-Dwelling House	Res units	1,300	Dartford	Near Certain	1,026	1,300	0	1,026	1,300
126	5	B	Dartford 126_B	Elbfleet - Station Quarter South	A3-Restaurants and cafes	Sq m	3,500	Dartford	Near Certain	2,660	3,500	0	2,660	3,500
126	5	C	Dartford 126_C	Elbfleet - Station Quarter South	B1(a)-Business Office	Sq m	61,035	Dartford	Near Certain	46,387	61,035	0	46,387	61,035
126	5	D	Dartford 126_D	Elbfleet - Station Quarter South	D1-Non-residential Institutions	Sq m	2,500	Dartford	Near Certain	1,900	2,500	0	1,900	2,500
126	5	E	Dartford 126_E	Elbfleet - Station Quarter South	D2-Assembly and Leisure	Sq m	18,195	Dartford	Near Certain	13,828	18,195	0	13,828	18,195
127	6	A	Dartford 127_A	Eastern Quarry	C3-Dwelling House	Res units	6,130	Dartford	Near Certain	4,042	6,130	802	3,940	5,328
127	6	D	Dartford 127_D	Eastern Quarry	A1-Retail	Sq m	26,000	Dartford	Near Certain	19,760	26,000	0	19,760	26,000
127	6	E	Dartford 127_E	Eastern Quarry	B1(a)-Business Office	Sq m	120,000	Dartford	Near Certain	84,000	120,000	0	84,000	120,000
127	6	J	Dartford 127_J	Eastern Quarry	D2-Assembly and Leisure	Sq m	50,000	Dartford	Near Certain	35,000	50,000	0	35,000	50,000
127	6	M	Dartford 127_M	Eastern Quarry	D2-Assembly and Leisure	Sq m	24,000	Dartford	Near Certain	16,800	24,000	0	16,800	24,000
127	6	N	Dartford 127_N	Eastern Quarry	C1-Hotels	Sq m	11,000	Dartford	Near Certain	11,000	11,000	0	11,000	11,000
128	5	A	Dartford 128_A	Northeast West Substation/Elbfleet Green	C3-Dwelling House	Res units	950	Dartford	Near Certain	950	950	671	671	671
128	5	B	Dartford 128_B	Northeast West Substation/Elbfleet Green	C1-Hotels	Sq m	5,000	Dartford	Near Certain	5,000	5,000	0	5,000	5,000
128	5	C	Dartford 128_C	Northeast West Substation/Elbfleet Green	D1-Non-residential Institutions	Sq m	1,758	Dartford	Near Certain	1,758	1,758	0	1,758	1,758
128	5	D	Dartford 128_D	Northeast West Substation/Elbfleet Green	A1-Retail	Sq m	339	Dartford	Near Certain	237	339	0	237	339
128	5	E	Dartford 128_E	Northeast West Substation/Elbfleet Green	A3-Restaurants and cafes	Sq m	920	Dartford	Near Certain	920	920	734	188	188
129	1	1	Dartford 129	St James Lane Pt	C3-Dwelling House	Res units	850	Dartford	Near Certain	850	850	0	850	850
130	1	1	Dartford 130	St James Lane Pt	C3-Dwelling House	Res units	200	Dartford	Near Certain	200	200	0	200	200
131	1	A	Dartford 131_A	Croxways	B2-Industry	Sq m	102,000	Dartford	Near Certain	102,000	102,000	0	101,634	101,634
132	1	A	Dartford 132_A	Lowfield St	C3-Dwelling House	Res units	690	Dartford	Near Certain	648	690	0	648	690
133	1	1	Dartford 133	Littlesink Power Station (Phase 1)	B8-Storage & Distribution	Sq m	41,800	Dartford	Near Certain	41,800	41,800	0	41,800	41,800
134	1	1	Dartford 134	Littlesink Power Station (Phase 2 and 3)	B8-Storage & Distribution	Sq m	120,000	Dartford	More Than Likely	120,000	120,000	0	120,000	120,000
136	2	A	Dartford 136_A	Swancombe Peninsula (includes Croston Quarry)	C3-Dwelling House	Res units	800	Dartford	Near Certain	800	800	0	800	800
136	2	B	Dartford 136_B	Swancombe Peninsula (includes Croston Quarry)	B2-Industry	Sq m	2,300	Dartford	Near Certain	2,300	2,300	0	2,300	2,300
141	1	1	Graresham 141	Elbfleet Valley (including KOD)	C3-Dwelling House	Res units	84	Graresham	Near Certain	84	84	0	84	84
142	1	1	Graresham 142	Elbfleet Valley (Northfield Rise Quarter)	C3-Dwelling House	Res units	164	Graresham	Near Certain	164	164	0	164	164
143	4	A	Graresham 143_A	Elbfleet Northfield Rise Quarter-Post GBC Core Strategy	A1-Retail	Sq m	2,040	Graresham	Near Certain	2,040	2,040	0	2,040	2,040
143	4	B	Graresham 143_B	Elbfleet Northfield Rise Quarter-Post GBC Core Strategy	B1(a)-Business Office	Sq m	102,000	Graresham	Near Certain	102,000	102,000	0	102,000	102,000
143	4	C	Graresham 143_C	Elbfleet Northfield Rise Quarter-Post GBC Core Strategy	D1-Non-residential Institutions	Sq m	5,950	Graresham	Near Certain	5,950	5,950	0	5,950	5,950
143	4	D	Graresham 143_D	Elbfleet Northfield Rise Quarter-Post GBC Core Strategy	C1-Hotels	Sq m	9,000	Graresham	Near Certain	9,000	9,000	0	9,000	9,000
144	4	A	Graresham 144_A	Elbfleet Valley (Springhead Quarter)	B1(a)-Business Office	Sq m	4,250	Graresham	Near Certain	4,250	4,250	0	4,250	4,250
144	4	B	Graresham 144_B	Elbfleet Valley (Springhead Quarter)	A1-Retail	Sq m	425	Graresham	Near Certain	425	425	0	425	425
144	4	C	Graresham 144_C	Elbfleet Valley (Springhead Quarter)	D1-Non-residential Institutions	Sq m	8,500	Graresham	Near Certain	8,500	8,500	0	8,500	8,500
144	4	D	Graresham 144_D	Elbfleet Valley (Springhead Quarter)	C3-Dwelling House	Res units	405	Graresham	Near Certain	405	405	205	200	200
145	7	A	Graresham 145_A	Northeast Embankment West: Former Cement Works	C3-Dwelling House	Res units	532	Graresham	Near Certain	453	532	0	453	532
145	7	B	Graresham 145_B	Northeast Embankment West: Former Cement Works	B1(a)-Business Office	Sq m	5,355	Graresham	Near Certain	5,355	5,355	0	5,355	5,355
145	7	C	Graresham 145_C	Northeast Embankment West: Former Cement Works	B1(c)-Light Industry (Business Park)	Sq m	11,248	Graresham	Near Certain	11,248	11,248	0	11,248	11,248
145	7	D	Graresham 145_D	Northeast Embankment West: Former Cement Works	B2-Industry	Sq m	11,248	Graresham	Near Certain	11,248	11,248	0	11,248	11,248
145	7	E	Graresham 145_E	Northeast Embankment West: Former Cement Works	B8-Storage & Distribution	Sq m	11,248	Graresham	Near Certain	11,248	11,248	0	11,248	11,248
145	7	F	Graresham 145_F	Northeast Embankment West: Former Cement Works	A1-Retail	Sq m	723	Graresham	Near Certain	723	723	0	723	723
145	7	G	Graresham 145_G	Northeast Embankment West: Former Cement Works	A2-Financial and Professional Services	Sq m	425	Graresham	Near Certain	425	425	0	425	425
146	1	1	Graresham 146	Northeast Embankment East (Residential Site) Ore Hall Road Northfield Grc	C3-Dwelling House	Res units	598	Graresham	Near Certain	598	598	0	598	598
147	5	A	Graresham 147_A	Northeast Embankment East (Employment Site) Ore Hall Road Northfield Grc	B1(c)-Light Industry (Business Park)	Sq m	14,000	Graresham	Near Certain	14,000	14,000	0	14,000	14,000
147	5	B	Graresham 147_B	Northeast Embankment East (Employment Site) Ore Hall Road Northfield Grc	B1(a)-Business Office	Sq m	1,450	Graresham	Near Certain	1,450	1,450	0	1,450	1,450
147	5	C	Graresham 147_C	Northeast Embankment East (Employment Site) Ore Hall Road Northfield Grc	B1(a)-Business Office	Sq m	3,176	Graresham	Near Certain	3,176	3,176	0	3,176	3,176
147	5	D	Graresham 147_D	Northeast Embankment East (Employment Site) Ore Hall Road Northfield Grc	B1(c)-Light Industry (Business Park)	Sq m	14,000	Graresham	Near Certain	14,000	14,000	0	14,000	14,000
147	5	E	Graresham 147_E	Northeast Embankment East (Employment Site) Ore Hall Road Northfield Grc	A3-Restaurants and cafes	Sq m	518	Graresham	Near Certain	518	518	0	518	518
148	1	1	Graresham 148	Land At Colkharbour Road Northfield Graeswood Kent	C3-Dwelling House	Res units	400	Graresham	Near Certain	400	400	0	400	400
149	2	A	Graresham 149_A	Land South Of Colkharbour Road Northfield Graeswood Kent	A1-Retail	Sq m	1,125	Graresham	More Than Likely	1,125	1,125	0	1,125	1,125
149	2	B	Graresham 149_B	Land South Of Colkharbour Road Northfield Graeswood Kent	B1(c)-Light Industry (Business Park)	Sq m	3,210	Graresham	Near Certain	3,210	3,210	0	3,210	3,210
150	6	A	Graresham 150_A	Graeswood Town Centre: Heritage Quarter	C3-Dwelling House	Res units	141	Graresham	Near Certain	141	141	0	141	141
150	6	B	Graesham 150_B	Graeswood Town Centre: Heritage Quarter	C3-Dwelling House	Res units	141	Graesham	Near Certain	141	141	0	141	141
150	6	D	Graesham 150_D	Graeswood Town Centre: Heritage Quarter	A1-Retail	Sq m	628	Graesham	Near Certain	628	628	0	628	628
150	6	E	Graesham 150_E	Graeswood Town Centre: Heritage Quarter	C1-Hotels	Sq m	2,048	Graesham	Near Certain	2,048	2,048	0	2,048	2,048
150	6	F	Graesham 150_F	Graeswood Town Centre: Heritage Quarter	A3-Restaurants and cafes	Sq m	1,352	Graesham	Near Certain	1,352	1,352	0	1,352	1,352
150	6	G	Graesham 150_G	Graeswood Town Centre: Heritage Quarter	B1(a)-Business Office	Sq m	255	Graesham	Near Certain	255	255	0	255	255
151	4	A	Graesham 151_A	Northeast Graeswood	C3-Dwelling House	Res units	68	Graesham	Near Certain	68	68	0	68	68
151	4	B	Graesham 151_B	Northeast Graeswood	C3-Dwelling House	Res units	88	Graesham	Near Certain	88	88	0	88	88
151	4	C	Graesham 151_C	Northeast Graeswood	B2-Industry	Sq m	14,935	Graesham	Near Certain	14,935	14,935	0	14,935	14,935
151	4	D	Graesham 151_D	Northeast Graeswood	D2-Assembly and Leisure	Sq m	3,400	Graesham	Near Certain	3,400	3,400	0	3,400	3,400
153	1	1	Graesham 153	Land at Grove Road	C3-Dwelling House	Res units	320	Graesham	More Than Likely	320	320	0	320	320
154	1	1	Graesham 154	Elbfleet United FC, Stonebridge Road	C1-Hotels	Sq m	1,833	Graesham	Near Certain	1,833	1,833	0	1,833	1,833
204	1	1	Maldstone 204	East of Hermitage Lane	C3-Dwelling House	Res units	500	Maldstone	Near Certain	440	500	0	440	500
205	1	1	Maldstone 205	West of Hermitage Lane	C3-Dwelling House	Res units	250	Maldstone	Near Certain	250	250	0	250	250
206	3	A	Maldstone 206_A	Lengley Park, Sutton Road, Boughton Monchelsea	C3-Dwelling House	Res units	600	Maldstone	Near Certain	600	600	0	600	600
206	3	B	Maldstone 206_B	Lengley Park, Sutton Road, Boughton Monchelsea	A1-Retail	Sq m	1,500	Maldstone	Near Certain	1,500	1,500	0	1,500	1,500
206	3	C	Maldstone 206_C	Lengley Park, Sutton Road, Boughton Monchelsea	D1-Non-residential Institutions	Sq m	2,500	Maldstone	Near Certain	2,500	2,500	0	2,500	2,500
207	2	1	Maldstone 207	Land North Of Bicknor Street, Sutton Road	C3-Dwelling House	Res units	250	Maldstone	Near Certain	250	250	0	250	250
209	1	1	Maldstone 209	Land At Bicknor Farm, Sutton Road	C3-Dwelling House	Res units	271	Maldstone	Near Certain	271	271	0	271	271
210	1	1	Maldstone 210	Land South of Sutton Road, Lengley	C3-Dwelling House	Res units	800	Maldstone	Near Certain	584	800	0	584	800
211	1	1	Maldstone 211	Springfield, Royal Engineers' Road	C3-Dwelling House	Res units	192	Maldstone	Near Certain	192	192	0	192	192
212	1	1	Maldstone 212	KCC Springfield Library Site, Sandring Road	C3-Dwelling House	Res units	114	Maldstone	Near Certain	114	114	0	114	114
213	1	1	Maldstone 213	Land adjacent to Royal Engineers' Road	C3-Dwelling House	Res units	310	Maldstone	Near Certain	310	310	0	310	310
215	1	1	Maldstone 215	Land Off Fawcett Hill Tour Kent	C3-Dwelling House	Res units	272	Maldstone	Near Certain	259	272	0	259	272
216	1	1												

305	3	B	Tonbridge&Malling_305_B	Kings Hill Phase 3 Kings Hill West Malling Kent	D1-Non-residential institutions	Sq.m	2,405	Tonbridge&Malling	Near Certain	2,405	2,405	0	2,405	2,405
306	3	C	Tonbridge&Malling_305_C	Kings Hill Phase 3 Kings Hill West Malling Kent	D2-Assembly and Leisure	Sq.m	1,275	Tonbridge&Malling	Near Certain	1,275	1,275	0	1,275	1,275
306	1	I	Tonbridge&Malling_306	Former Holborough Quarry	C3-Dwelling House	Res units	349	Tonbridge&Malling	Near Certain	349	349	0	349	349
307	1	I	Tonbridge&Malling_307	Leybourne Grange	C3-Dwelling House	Res units	440	Tonbridge&Malling	Near Certain	440	440	0	440	440
308	1	I	Tonbridge&Malling_308	DK, Supply Chain Warehouse, 2020 Industrial Estate, Laventhorpe Road, ME16 7JH	B8-Storage & Distribution	Sq.m	21,000	Tonbridge&Malling	Near Certain	21,000	21,000	0	21,000	21,000
309	1	I	Tonbridge&Malling_309	Former Arundel House, Old Grove, ME19 4LX	B1(a)-Business Office	Sq.m	16,084	Tonbridge&Malling	Near Certain	16,084	16,084	0	16,084	16,084
310	2	A	Tonbridge&Malling_310_A	Vantage Point, Holborough Road, ME6 5SL	B1(a)-Business Office	Sq.m	4,700	Tonbridge&Malling	Near Certain	4,700	4,700	0	4,700	4,700
310	2	B	Tonbridge&Malling_310_B	Vantage Point, Holborough Road, ME6 5SL	B1(c)-Light Industry (Business Park)	Sq.m	7,300	Tonbridge&Malling	Near Certain	7,300	7,300	0	7,300	7,300
329	1	I	Dartford_329	Crossways Quarter	C3-Dwelling House	Res units	258	Dartford	More Than Likely	258	258	0	258	258
330	1	A	Dartford_330_A	Land at Dartford International Ferry Terminal, Clipper Boulevard, Dartford	C3-Dwelling House	Res units	43,047	Dartford	Near Certain	43,047	43,047	0	43,047	43,047
331	5	A	Dartford_331_A	Westgate, Dartford	C3-Dwelling House	Res units	120	Dartford	More Than Likely	120	120	0	120	120
331	5	B	Dartford_331_B	Westgate, Dartford	A1-Retail	Sq.m	2,682	Dartford	More Than Likely	2,682	2,682	0	2,682	2,682
331	5	C	Dartford_331_C	Westgate, Dartford	C1-Hotels	Sq.m	3,000	Dartford	More Than Likely	3,000	3,000	0	3,000	3,000
331	5	D	Dartford_331_D	Westgate, Dartford	D1-Non-residential institutions	Sq.m	2,686	Dartford	More Than Likely	2,686	2,686	0	2,686	2,686
331	5	E	Dartford_331_E	Westgate, Dartford	D2-Assembly and Leisure	Sq.m	2,792	Dartford	More Than Likely	2,792	2,792	0	2,792	2,792
332	1	I	Graresham_332	Offen Silwasy, Graresham	C3-Dwelling House	Res units	227	Graresham	More Than Likely	227	227	0	227	227
333	1	I	Maldstone_333	Land West of Church Road, Offham, Maidstone	C3-Dwelling House	Res units	440	Maldstone	More Than Likely	440	440	0	440	440
334	2	A	Maldstone_334_A	Yalding Enterprise Park, Hempstead Lane, Yalding, Kent	B2-Industry	Sq.m	19,943	Maldstone	More Than Likely	19,943	19,943	0	19,943	19,943
334	2	B	Maldstone_334_B	Yalding Enterprise Park, Hempstead Lane, Yalding, Kent	B8-Storage & Distribution	Sq.m	26,504	Maldstone	More Than Likely	26,504	26,504	0	26,504	26,504
335	2	A	Maldstone_335_A	Land off Oakdale Lane, Barning Phase 2	C3-Dwelling House	Res units	187	Maldstone	More Than Likely	187	187	0	187	187
335	2	B	Maldstone_335_B	Land off Oakdale Lane, Barning Phase 2	C3-Dwelling House	Res units	118	Maldstone	More Than Likely	118	118	0	118	118
336	1	A	Maldstone_336	Land to the West of Crown Quay Lane, Sittingbourne	C3-Dwelling House	Res units	383	Maldstone	Near Certain	383	383	0	383	383
337	4	A	Maldstone_337_A	Sittingbourne Town Centre Regeneration	C3-Dwelling House	Res units	215	Maldstone	Near Certain	215	215	0	215	215
337	4	B	Maldstone_337_B	Sittingbourne Town Centre Regeneration	A1-Retail	Sq.m	318	Maldstone	Near Certain	318	318	0	318	318
337	4	C	Maldstone_337_C	Sittingbourne Town Centre Regeneration	A3-Restaurants and cafes	Sq.m	230	Maldstone	Near Certain	230	230	0	230	230
337	4	D	Maldstone_337_D	Sittingbourne Town Centre Regeneration	A3-Assembly and Leisure	Sq.m	228	Maldstone	Near Certain	228	228	0	228	228
338	4	A	Maldstone_338_A	Len House (Rooles, Maidstone), Mill Street	C3-Dwelling House	Res units	159	Maldstone	More Than Likely	159	159	0	159	159
338	4	B	Maldstone_338_B	Len House (Rooles, Maidstone), Mill Street	ebie commercial floorspace (A1/A2/A3/A4/A5/B1/c1/c2)	Sq.m	3,612	Maldstone	More Than Likely	1,204	3,612	0	1,204	3,612
338	4	C	Maldstone_338_C	Len House (Rooles, Maidstone), Mill Street	ebie commercial floorspace (A1/A2/A3/A4/A5/B1/c1/c2)	Sq.m	3,612	Maldstone	More Than Likely	1,204	3,612	0	1,204	3,612
338	4	D	Maldstone_338_D	Len House (Rooles, Maidstone), Mill Street	ebie commercial floorspace (A1/A2/A3/A4/A5/B1/c1/c2)	Sq.m	3,612	Maldstone	More Than Likely	1,204	3,612	0	1,204	3,612
339	1	I	Maldstone_339	13-14 Vaux Street, Maidstone	C1-Hotels	Sq.m	5,493	Maldstone	Near Certain	5,493	5,493	0	5,493	5,493
340	1	I	Maldstone_340	Adf store, South Court Business Park	A1-Retail	Sq.m	1,933	Maldstone	More Than Likely	1,933	1,933	0	1,933	1,933
341	1	I	Maldstone_341	Oakland Cae, Dorothy Lucy Centre, Maidstone	C2-Residential institutions	Res units	66	Maldstone	Near Certain	66	66	0	66	66
342	1	A	Maldstone_342_A	Stones Farm, Sittingbourne	C3-Dwelling House	Res units	600	Maldstone	Near Certain	600	600	0	600	600
342	1	A	Maldstone_342_A	Medway_343_A	C3-Dwelling House	Res units	800	Medway	More Than Likely	800	800	0	800	800
343	3	B	Medway_343_B	East HL, Hempstead Valley	D1-Non-residential institutions	Sq.m	1,100	Medway	More Than Likely	1,100	1,100	0	1,100	1,100
343	3	C	Medway_343_C	East HL, Hempstead Valley	A1-Retail	Sq.m	150	Medway	More Than Likely	150	150	0	150	150
344	1	I	Medway_344	Land west of Town Road, Cliff Woods, Medway	C3-Dwelling House	Res units	225	Medway	More Than Likely	225	225	0	225	225
345	1	I	Medway_345	St Andrews Lane, Forry Road, Hadding, Kent	D2-Assembly and Leisure	Sq.m	2,837	Medway	More Than Likely	2,837	2,837	0	2,837	2,837
346	1	I	Medway_346	Lidl Food Store, Medway Road, Gillingham	A1-Retail	Sq.m	1,669	Medway	More Than Likely	1,669	1,669	0	1,669	1,669
347	1	I	Medway_347	East Mall, Hempstead Valley Shopping Centre	D2-Assembly and Leisure	Sq.m	2,720	Medway	Near Certain	2,720	2,720	0	2,720	2,720
348	1	A	Medway_348_A	Leigh Academy, Rainham	D1-Non-residential institutions	Sq.m	8,820	Medway	Near Certain	8,820	8,820	0	8,820	8,820
349	1	I	Medway_349	Land at Queens Street Car Park, Chatham	C3-Dwelling House	Res units	229	Medway	More Than Likely	229	229	0	229	229
350	1	I	Medway_350	Training Centre, Chatham Freight Station, Chatham Docks	D1-Non-residential institutions	Sq.m	3,850	Medway	Near Certain	3,850	3,850	0	3,850	3,850
351	3	A	Medway_351_A	Barclay Wharf, Rochester	C3-Dwelling House	Res units	314	Medway	Near Certain	314	314	0	314	314
351	3	B	Medway_351_B	Barclay Wharf, Rochester	A1-Retail	Sq.m	1,283	Medway	Near Certain	1,283	1,283	0	1,283	1,283
351	3	C	Medway_351_C	Barclay Wharf, Rochester	B1(a)-Business Office	Sq.m	967	Medway	Near Certain	967	967	0	967	967
352	1	I	Medway_352	Phase 3, Land West of Rochester Road/Maldstone Road, Bonstall, Rochester	B8-Storage & Distribution	Sq.m	6,880	Medway	Near Certain	6,880	6,880	0	6,880	6,880
353	2	A	Medway_353_A	Innovation Park, Medway	B1, B2	Sq.m	10,100	Medway	More Than Likely	23,700	23,700	0	23,700	23,700
353	2	B	Medway_353_B	Innovation Park, Medway	B1, B2	Sq.m	10,100	Medway	More Than Likely	76,948	76,948	0	76,948	76,948
354	2	A	Medway_354_A	Horsted Retail Park, Chatham	D2-Assembly and Leisure	Sq.m	1,700	Medway	Near Certain	1,700	1,700	1700	0	0
354	2	B	Medway_354_B	Horsted Retail Park, Chatham	A1-Retail	Sq.m	2,002	Medway	Near Certain	2,002	2,002	2002	0	0
355	1	I	Medway_355_A	Cathedral View Hotel, Corporation Street, Rochester	C1-Hotels	Sq.m	3,891	Medway	Near Certain	3,891	3,891	0	3,891	3,891
356	2	B	Medway_356_A	MCCityLink, Plot 1 Medway City Estate	a flexible mix of B2/B8	Sq.m	12,300	Medway	Near Certain	6,150	6,150	0	6,150	6,150
356	2	B	Medway_356_B	MCCityLink, Plot 1 Medway City Estate	a flexible mix of B2/B8	Sq.m	12,300	Medway	Near Certain	6,150	6,150	0	6,150	6,150
356	1	I	Medway_356	SE2Chalk Lane, Corston, Bridge Road	Sq.m	4,405	Medway	Near Certain	4,405	4,405	0	4,405	4,405	
359	5	A	Sevensalls_359_A	Stonehouse Park, Sevensalls	C3-Dwelling House	Res units	450	Sevensalls	More Than Likely	850	850	0	850	850
359	5	B	Sevensalls_359_B	Stonehouse Park, Sevensalls	C2-Residential institutions	Res units	180	Sevensalls	More Than Likely	180	180	0	180	180
359	5	C	Sevensalls_359_C	Stonehouse Park, Sevensalls	A1-A3	Sq.m	1,150	Sevensalls	More Than Likely	1,150	1,150	0	1,150	1,150
359	5	D	Sevensalls_359_D	Stonehouse Park, Sevensalls	B1(a)-Business Office	Sq.m	3,716	Sevensalls	More Than Likely	3,716	3,716	0	3,716	3,716
359	5	E	Sevensalls_359_E	Stonehouse Park, Sevensalls	D1-Non-residential institutions	Sq.m	1,000	Sevensalls	More Than Likely	1,000	1,000	0	1,000	1,000
360	1	I	Sevensalls_360	NHS Epsombridge Health and Wellbeing Centre	C3-Dwelling House	Res units	2,066	Sevensalls	Near Certain	2,066	2,066	0	2,066	2,066
361	1	I	Sevensalls_361	The Woodcocks, Hilda Way Avenue, Swinley	C2-Residential institutions	Res units	75	Sevensalls	Near Certain	75	75	0	75	75
369	2	A	Tonbridge&Malling_369_A	Land North of Lower Haydens Lane, Tonbridge	C3-Dwelling House	Res units	125	Tonbridge&Malling	More Than Likely	125	125	0	125	125
369	2	B	Tonbridge&Malling_369_B	Land North of Lower Haydens Lane, Tonbridge	D1-Non-residential institutions	Sq.m	2,800	Tonbridge&Malling	More Than Likely	2,800	2,800	0	2,800	2,800
370	1	I	Tonbridge&Malling_370	Land South of London Road, Leybourne	C3-Dwelling House	Res units	250	Tonbridge&Malling	More Than Likely	250	250	0	250	250
372	1	A	Tonbridge&Malling_372_A	Phase 4, Palm Industrial Estate, Maidstone Road	B2-Industry	Sq.m	1,614	Tonbridge&Malling	Near Certain	1,614	1,614	0	1,614	1,614
372	2	A	Tonbridge&Malling_372_A	76c High Street, Tonbridge	C1-Hotels	Sq.m	2,095	Tonbridge&Malling	More Than Likely	2,095	2,095	0	2,095	2,095
372	2	B	Tonbridge&Malling_372_B	76c High Street, Tonbridge	C3-Dwelling House	Res units	10	Tonbridge&Malling	More Than Likely	10	10	0	10	10
373	1	I	Tonbridge&Malling_373	Lidl Food Store, London Road, Otford	A1-Retail	Sq.m	1,674	Tonbridge&Malling	Near Certain	1,674	1,674	0	1,674	1,674
374	1	I	Tonbridge&Malling_374	Holdeborough Valley, Tonbridge Road, Hildenborough	C2-Residential institutions	Res units	75	Tonbridge&Malling	Near Certain	75	75	0	75	75
375	3	A	Tonbridge&Malling_375_A	Former Colas Roads Site, Vale Road, Tonbridge	B1(c), B2 and B8	Sq.m	9,025	Tonbridge&Malling	Near Certain	3,248	3,248	0	3,248	3,248
375	3	B	Tonbridge&Malling_375_B	Former Colas Roads Site, Vale Road, Tonbridge	B1(c), B2 and B8	Sq.m	9,025	Tonbridge&Malling	Near Certain	3,248	3,248	0	3,248	3,248
375	3	C	Tonbridge&Malling_375_C	Former Colas Roads Site, Vale Road, Tonbridge	B1(c), B2 and B8	Sq.m	9,025	Tonbridge&Malling	Near Certain	3,248	3,248	0	3,248	3,248
376	3	A	Tonbridge&Malling_376_A	Oakdene Business Park	B1, B2 and B8	Sq.m	3,160	Tonbridge&Malling	Near Certain	1,053	1,053	0	1,053	1,053
376	3	B	Tonbridge&Malling_376_B	Oakdene Business Park	B1, B2 and B8	Sq.m	3,160	Tonbridge&Malling	Near Certain	1,053	1,053	0	1,053	1,053
376	3	C	Tonbridge&Malling_376_C	Oakdene Business Park	B1, B2 and B8	Sq.m	3,160	Tonbridge&Malling	Near Certain	1,053	1,053	0	1,053	1,053
403	3	A	Dartford_403_A	Former Lynch Plant Site, Hawley Road	B1(c), B2 and B8	Sq.m	1,054	Dartford	More Than Likely	3,521	3,521	0	3,521	3,521
403	3	B	Dartford_403_B	Former Lynch Plant Site, Hawley Road	B1(c), B2 and B8	Sq.m	1,054	Dartford	More Than Likely	3,521	3,521	0	3,521	3,521
403	3	C	Dartford_403_C	Former Lynch Plant Site, Hawley Road	B1(c), B2 and B8	Sq.m	1,054	Dartford	More Than Likely	3,521	3,521	0	3,521	3,521
412	6	A	Graresham_412_A	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	A1	Sq.m	800	Graresham	More Than Likely	800	800	0	800	800
412	6	B	Graresham_412_B	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	A3	Sq.m	900	Graresham	More Than Likely	900	900	0	900	900
412	6	C	Graresham_412_C	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	B1c	Sq.m	1,125	Graresham	More Than Likely	1,125	1,125	0	1,125	1,125
412	6	D	Graresham_412_D	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	B1c	Sq.m	1,675	Graresham	More Than Likely	1,675	1,675	0	1,675	1,675
412	6	E	Graresham_412_E	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	C3, C2	Res units	1,370	Graresham	More Than Likely	1,370	1,370	0	1,370	1,370
412	6	F	Graresham_412_F	Alton Waterside Canal Basin Gravelled Kent DA12 2RN	C3, C2	Res units	130	Graresham	More Than Likely	130	130	0	130	130
414	1	I	Maldstone_414	Kent Science Park Shrimm Road	B1 - Business	Sq.m	12,000	Maldstone	More Than Likely	12,000	12,000	0	12,000	12,000
415	1	I	Maldstone_415	Land At Bicknor Farm	C3	Res units	302	Maldstone	More Than Likely	302	302	0	302	302
417	2	A	Maldstone_417_A	Brogdale Farm	Mixed Use - D1, B1	Sq.m	2735	Maldstone	More Than Likely	275	275	0	275	275
417	2	B	Maldstone_417_B	Brogdale Farm	Mixed Use - D1, B1	Sq.m	2735	Maldstone	More Than Likely	2,375	2,375	0	2,375	2,375
418	1	I	Medway_418	Land off City Way (Former Paying Field)	D1 - Non-residential institution	Sq.m	9,065	Medway	More Than Likely	9,065	9,065	0	9,065	9,065
419														

Appendix C

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021		
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com		
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution		

Filename: J5 - A2260_B259 (PF Proposed) v2.0.j10

Path: C:\DSN\226728 - Northfleet

Report generation date: 24/10/2023 11:10:55

- »2030 Without Dev Flows (Without LTC), AM
- »2030 Without Dev Flows (Without LTC), PM
- »2030 Without Dev Flows (Without LTC), SAT
- »2030 Adjusted Flows (Without LTC), AM
- »2030 Adjusted Flows (Without LTC), PM
- »2030 With Dev Flows (Without LTC), SAT

Summary of junction performance

	AM			PM			SAT		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Without Dev Flows (Without LTC)									
1 - A2260 (E)	1.1	3.49	0.51	1.2	3.76	0.54	0.5	2.40	0.32
2 - A2260 (S)	1.0	1.98	0.48	0.8	1.83	0.44	0.5	1.50	0.32
3 - B259 (W)	2.8	11.52	0.74	0.9	4.83	0.48	0.6	3.61	0.36
4 - International Way (N)	0.2	6.27	0.17	1.4	10.27	0.58	0.6	5.81	0.39
2030 Adjusted Flows (Without LTC)									
1 - A2260 (E)	1.1	3.55	0.50	1.1	3.32	0.53			
2 - A2260 (S)	0.8	1.94	0.41	0.6	1.68	0.38			
3 - B259 (W)	1.2	5.79	0.54	0.7	4.05	0.39			
4 - International Way (N)	0.2	8.45	0.08	0.2	6.01	0.10			
2030 With Dev Flows (Without LTC)									
1 - A2260 (E)							0.8	2.92	0.44
2 - A2260 (S)							0.7	1.69	0.39
3 - B259 (W)							0.7	4.26	0.40
4 - International Way (N)							1.0	8.07	0.49

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

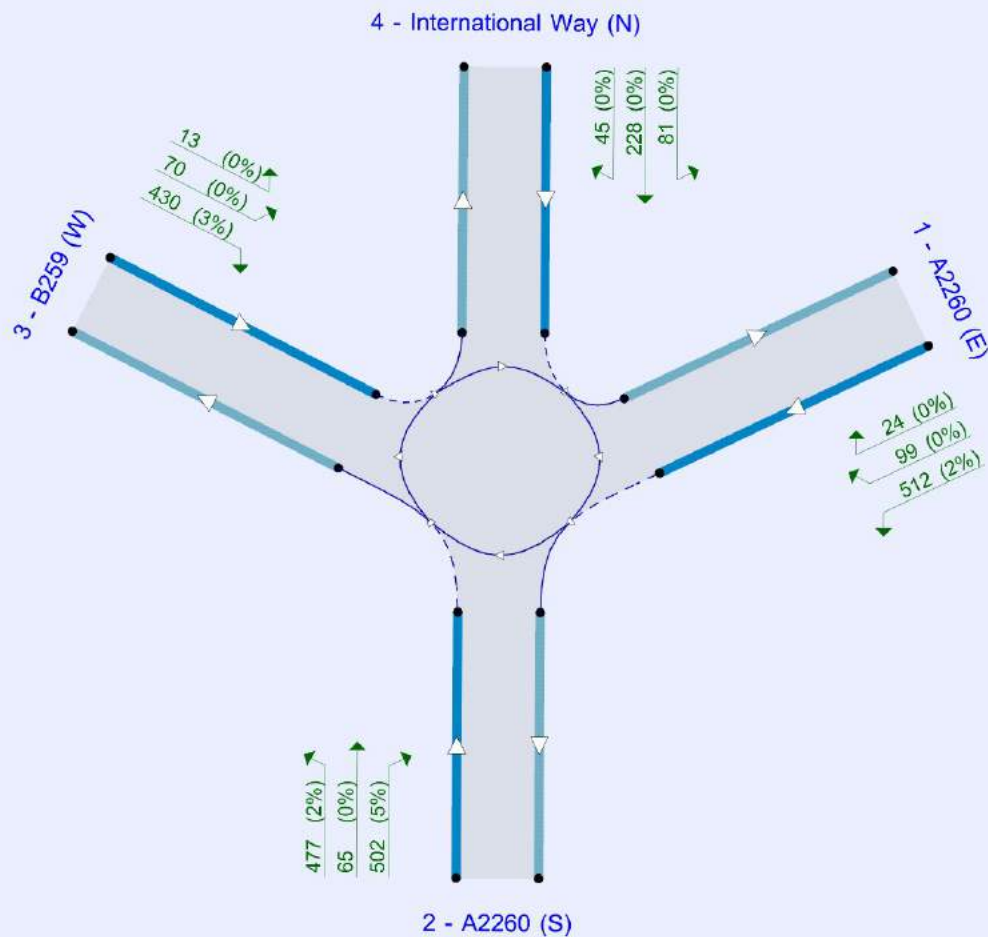
File summary

File Description

Title	Northfleet
Location	J5 - A2260 / B259 Roundabout
Site number	
Date	24/10/2023
Version	
Status	Pell Frischmann Proposed Junction Layout
Identifier	
Client	
Jobnumber	226728
Enumerator	David Noyce
Description	Geometric dimensions copied from Pell Frischmann model.

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓
D4	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D6	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2030 Without Dev Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	4.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.76	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A2260 (E)		
2	A2260 (S)		
3	B259 (W)		
4	International Way (N)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A2260 (E)	6.30	11.60	17.2	26.0	70.0	31.0		
2 - A2260 (S)	7.30	14.80	29.6	40.0	70.0	10.6		
3 - B259 (W)	3.50	7.50	23.5	24.0	70.0	16.0		
4 - International Way (N)	3.15	6.80	12.4	16.1	70.0	23.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2260 (E)	0.671	2739
2 - A2260 (S)	0.855	3785
3 - B259 (W)	0.558	1950
4 - International Way (N)	0.484	1543

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	1030	100.000
2 - A2260 (S)		ONE HOUR	✓	1596	100.000
3 - B259 (W)		ONE HOUR	✓	822	100.000
4 - International Way (N)		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	875	71	84
	2 - A2260 (S)	793	0	491	312
	3 - B259 (W)	131	632	0	59
	4 - International Way (N)	20	79	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	5	0	0
	2 - A2260 (S)	5	0	2	1
	3 - B259 (W)	0	1	0	0
	4 - International Way (N)	0	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.51	3.49	1.1	A	945	1418
2 - A2260 (S)	0.48	1.98	1.0	A	1465	2197
3 - B259 (W)	0.74	11.52	2.8	B	754	1131
4 - International Way (N)	0.17	6.27	0.2	A	99	149

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	775	194	539	2377	0.326	773	709	0.0	0.5	2.336	A
2 - A2260 (S)	1202	300	123	3680	0.327	1200	1190	0.0	0.5	1.497	A
3 - B259 (W)	619	155	894	1451	0.427	616	429	0.0	0.7	4.328	A
4 - International Way (N)	81	20	1168	978	0.083	81	342	0.0	0.1	4.156	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	926	231	646	2306	0.402	925	848	0.5	0.7	2.716	A
2 - A2260 (S)	1435	359	147	3659	0.392	1434	1424	0.5	0.7	1.670	A
3 - B259 (W)	739	185	1068	1353	0.546	737	513	0.7	1.2	5.870	A
4 - International Way (N)	97	24	1397	867	0.112	97	409	0.1	0.1	4.843	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1134	284	788	2210	0.513	1132	1038	0.7	1.1	3.476	A
2 - A2260 (S)	1757	439	180	3631	0.484	1756	1740	0.7	1.0	1.982	A
3 - B259 (W)	905	226	1308	1219	0.742	899	628	1.2	2.8	11.100	B
4 - International Way (N)	119	30	1707	717	0.166	119	500	0.1	0.2	6.229	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1134	284	793	2207	0.514	1134	1039	1.1	1.1	3.495	A
2 - A2260 (S)	1757	439	181	3631	0.484	1757	1746	1.0	1.0	1.984	A
3 - B259 (W)	905	226	1309	1219	0.743	905	629	2.8	2.8	11.523	B
4 - International Way (N)	119	30	1713	714	0.167	119	501	0.2	0.2	6.265	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	926	231	652	2301	0.402	928	850	1.1	0.7	2.733	A
2 - A2260 (S)	1435	359	148	3659	0.392	1436	1432	1.0	0.7	1.672	A
3 - B259 (W)	739	185	1070	1352	0.546	745	514	2.8	1.2	6.036	A
4 - International Way (N)	97	24	1405	863	0.113	97	410	0.2	0.1	4.873	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	775	194	544	2374	0.327	776	711	0.7	0.5	2.348	A
2 - A2260 (S)	1202	300	124	3679	0.327	1202	1196	0.7	0.5	1.502	A
3 - B259 (W)	619	155	896	1450	0.427	621	430	1.2	0.8	4.387	A
4 - International Way (N)	81	20	1174	975	0.083	81	343	0.1	0.1	4.174	A

2030 Without Dev Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	3.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	1012	100.000
2 - A2260 (S)		ONE HOUR	✓	1423	100.000
3 - B259 (W)		ONE HOUR	✓	632	100.000
4 - International Way (N)		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	840	142	30
	2 - A2260 (S)	707	0	636	80
	3 - B259 (W)	81	535	0	16
	4 - International Way (N)	82	298	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	1	0	0
	2 - A2260 (S)	4	0	0	0
	3 - B259 (W)	0	1	0	0
	4 - International Way (N)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.54	3.76	1.2	A	929	1393
2 - A2260 (S)	0.44	1.83	0.8	A	1306	1959
3 - B259 (W)	0.48	4.83	0.9	A	580	870
4 - International Way (N)	0.58	10.27	1.4	B	405	607

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	762	190	670	2289	0.333	760	654	0.0	0.5	2.370	A
2 - A2260 (S)	1071	268	175	3635	0.295	1070	1255	0.0	0.4	1.430	A
3 - B259 (W)	476	119	614	1607	0.296	474	630	0.0	0.4	3.201	A
4 - International Way (N)	332	83	994	1062	0.313	330	95	0.0	0.5	4.939	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	910	227	802	2201	0.413	909	782	0.5	0.7	2.809	A
2 - A2260 (S)	1279	320	209	3606	0.355	1279	1502	0.4	0.6	1.576	A
3 - B259 (W)	568	142	734	1540	0.369	567	754	0.4	0.6	3.732	A
4 - International Way (N)	396	99	1188	968	0.410	396	113	0.5	0.7	6.321	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1114	279	981	2081	0.536	1112	957	0.7	1.2	3.743	A
2 - A2260 (S)	1567	392	256	3566	0.439	1566	1838	0.6	0.8	1.834	A
3 - B259 (W)	696	174	899	1448	0.481	694	923	0.6	0.9	4.810	A
4 - International Way (N)	486	121	1455	839	0.579	483	139	0.7	1.3	10.102	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1114	279	984	2079	0.536	1114	958	1.2	1.2	3.763	A
2 - A2260 (S)	1567	392	257	3566	0.439	1567	1842	0.8	0.8	1.835	A
3 - B259 (W)	696	174	900	1448	0.481	696	924	0.9	0.9	4.829	A
4 - International Way (N)	486	121	1457	838	0.579	485	139	1.3	1.4	10.269	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	910	227	807	2197	0.414	912	783	1.2	0.7	2.826	A
2 - A2260 (S)	1279	320	210	3605	0.355	1280	1508	0.8	0.6	1.580	A
3 - B259 (W)	568	142	735	1539	0.369	569	755	0.9	0.6	3.747	A
4 - International Way (N)	396	99	1191	967	0.410	399	113	1.4	0.7	6.416	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	762	190	674	2286	0.333	763	656	0.7	0.5	2.385	A
2 - A2260 (S)	1071	268	176	3635	0.295	1072	1261	0.6	0.4	1.433	A
3 - B259 (W)	476	119	615	1606	0.296	476	632	0.6	0.4	3.214	A
4 - International Way (N)	332	83	997	1061	0.313	333	95	0.7	0.5	4.987	A

2030 Without Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	2.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	635	100.000
2 - A2260 (S)		ONE HOUR	✓	1044	100.000
3 - B259 (W)		ONE HOUR	✓	513	100.000
4 - International Way (N)		ONE HOUR	✓	354	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	512	99
	2 - A2260 (S)	502	0	477
	3 - B259 (W)	70	430	0
	4 - International Way (N)	81	228	45

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	2	0
	2 - A2260 (S)	5	0	2
	3 - B259 (W)	0	3	0
	4 - International Way (N)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.32	2.40	0.5	A	583	874
2 - A2260 (S)	0.32	1.50	0.5	A	958	1437
3 - B259 (W)	0.36	3.61	0.6	A	471	706
4 - International Way (N)	0.39	5.81	0.6	A	325	487

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	478	120	527	2385	0.200	477	491	0.0	0.3	1.917	A
2 - A2260 (S)	786	196	126	3677	0.214	785	878	0.0	0.3	1.285	A
3 - B259 (W)	386	97	444	1702	0.227	385	467	0.0	0.3	2.800	A
4 - International Way (N)	267	67	753	1179	0.226	265	77	0.0	0.3	3.936	A

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	571	143	631	2315	0.247	571	587	0.3	0.3	2.096	A
2 - A2260 (S)	939	235	151	3656	0.257	938	1051	0.3	0.4	1.367	A
3 - B259 (W)	461	115	531	1653	0.279	461	558	0.3	0.4	3.094	A
4 - International Way (N)	318	80	900	1107	0.287	318	92	0.3	0.4	4.558	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	699	175	773	2220	0.315	699	718	0.3	0.5	2.404	A
2 - A2260 (S)	1149	287	185	3627	0.317	1149	1287	0.4	0.5	1.500	A
3 - B259 (W)	565	141	650	1587	0.356	564	683	0.4	0.6	3.607	A
4 - International Way (N)	390	97	1102	1010	0.386	389	112	0.4	0.6	5.791	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	699	175	774	2220	0.315	699	719	0.5	0.5	2.405	A
2 - A2260 (S)	1149	287	185	3627	0.317	1149	1288	0.5	0.5	1.500	A
3 - B259 (W)	565	141	651	1586	0.356	565	684	0.6	0.6	3.610	A
4 - International Way (N)	390	97	1103	1009	0.386	390	112	0.6	0.6	5.811	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	571	143	633	2314	0.247	571	588	0.5	0.3	2.099	A
2 - A2260 (S)	939	235	151	3656	0.257	939	1053	0.5	0.4	1.368	A
3 - B259 (W)	461	115	532	1653	0.279	462	559	0.6	0.4	3.101	A
4 - International Way (N)	318	80	902	1107	0.288	319	92	0.6	0.4	4.577	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	478	120	530	2383	0.201	478	492	0.3	0.3	1.920	A
2 - A2260 (S)	786	196	127	3677	0.214	786	882	0.4	0.3	1.286	A
3 - B259 (W)	386	97	445	1701	0.227	387	468	0.4	0.3	2.809	A
4 - International Way (N)	267	67	755	1178	0.226	267	77	0.4	0.3	3.954	A

2030 Adjusted Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	3.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.45	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	1039	100.000
2 - A2260 (S)		ONE HOUR	✓	1327	100.000
3 - B259 (W)		ONE HOUR	✓	687	100.000
4 - International Way (N)		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	786	227	26
	2 - A2260 (S)	688	6	446	187
	3 - B259 (W)	124	524	1	38
	4 - International Way (N)	6	51	0	2

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	20	1	0
	2 - A2260 (S)	20	0	1	16
	3 - B259 (W)	2	1	0	19
	4 - International Way (N)	21	89	0	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.50	3.55	1.1	A	953	1430
2 - A2260 (S)	0.41	1.94	0.8	A	1218	1827
3 - B259 (W)	0.54	5.79	1.2	A	630	946
4 - International Way (N)	0.08	8.45	0.2	A	54	81

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	782	196	438	2445	0.320	780	615	0.0	0.5	2.477	A
2 - A2260 (S)	999	250	192	3621	0.276	997	1026	0.0	0.4	1.540	A
3 - B259 (W)	517	129	683	1568	0.330	515	506	0.0	0.5	3.482	A
4 - International Way (N)	44	11	1008	1055	0.042	44	190	0.0	0.1	6.376	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	934	234	524	2387	0.391	933	735	0.5	0.7	2.839	A
2 - A2260 (S)	1193	298	230	3588	0.332	1192	1228	0.4	0.6	1.686	A
3 - B259 (W)	618	154	817	1494	0.413	617	606	0.5	0.7	4.184	A
4 - International Way (N)	53	13	1206	959	0.055	53	227	0.1	0.1	7.113	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1144	286	641	2309	0.496	1142	900	0.7	1.1	3.536	A
2 - A2260 (S)	1461	365	281	3544	0.412	1460	1502	0.6	0.8	1.938	A
3 - B259 (W)	756	189	1000	1391	0.544	754	741	0.7	1.2	5.750	A
4 - International Way (N)	65	16	1476	829	0.078	65	278	0.1	0.2	8.439	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1144	286	643	2307	0.496	1144	901	1.1	1.1	3.548	A
2 - A2260 (S)	1461	365	282	3544	0.412	1461	1505	0.8	0.8	1.939	A
3 - B259 (W)	756	189	1001	1391	0.544	756	742	1.2	1.2	5.787	A
4 - International Way (N)	65	16	1479	828	0.079	65	279	0.2	0.2	8.454	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	934	234	527	2385	0.392	936	736	1.1	0.7	2.852	A
2 - A2260 (S)	1193	298	231	3588	0.333	1194	1232	0.8	0.6	1.687	A
3 - B259 (W)	618	154	818	1493	0.414	620	607	1.2	0.7	4.213	A
4 - International Way (N)	53	13	1210	958	0.055	53	228	0.2	0.1	7.132	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	782	196	440	2443	0.320	783	616	0.7	0.5	2.488	A
2 - A2260 (S)	999	250	193	3620	0.276	1000	1031	0.6	0.4	1.541	A
3 - B259 (W)	517	129	685	1567	0.330	518	508	0.7	0.5	3.502	A
4 - International Way (N)	44	11	1012	1053	0.042	45	191	0.1	0.1	6.392	A

2030 Adjusted Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	1135	100.000
2 - A2260 (S)		ONE HOUR	✓	1230	100.000
3 - B259 (W)		ONE HOUR	✓	536	100.000
4 - International Way (N)		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	947	179	9
	2 - A2260 (S)	611	4	505	110
	3 - B259 (W)	89	427	1	19
	4 - International Way (N)	25	60	0	2

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	4	2	13
	2 - A2260 (S)	6	0	0	27
	3 - B259 (W)	0	2	0	13
	4 - International Way (N)	0	68	0	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.53	3.32	1.1	A	1041	1562
2 - A2260 (S)	0.38	1.68	0.6	A	1129	1693
3 - B259 (W)	0.39	4.05	0.7	A	492	738
4 - International Way (N)	0.10	6.01	0.2	A	80	120

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	854	214	371	2490	0.343	852	545	0.0	0.5	2.277	A
2 - A2260 (S)	926	232	143	3662	0.253	925	1080	0.0	0.4	1.380	A
3 - B259 (W)	404	101	553	1641	0.246	402	515	0.0	0.3	2.962	A
4 - International Way (N)	65	16	850	1132	0.058	65	105	0.0	0.1	4.758	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1020	255	444	2441	0.418	1020	651	0.5	0.7	2.626	A
2 - A2260 (S)	1106	276	172	3638	0.304	1105	1292	0.4	0.5	1.491	A
3 - B259 (W)	482	120	661	1580	0.305	481	616	0.3	0.4	3.339	A
4 - International Way (N)	78	20	1017	1051	0.074	78	126	0.1	0.1	5.217	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1250	312	543	2374	0.526	1248	798	0.7	1.1	3.311	A
2 - A2260 (S)	1354	339	210	3605	0.376	1354	1581	0.5	0.6	1.677	A
3 - B259 (W)	590	148	810	1498	0.394	589	754	0.4	0.7	4.040	A
4 - International Way (N)	96	24	1245	940	0.102	96	154	0.1	0.2	6.005	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1250	312	544	2374	0.526	1250	798	1.1	1.1	3.321	A
2 - A2260 (S)	1354	339	210	3605	0.376	1354	1583	0.6	0.6	1.677	A
3 - B259 (W)	590	148	810	1497	0.394	590	754	0.7	0.7	4.047	A
4 - International Way (N)	96	24	1246	940	0.102	96	154	0.2	0.2	6.011	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	1020	255	445	2440	0.418	1022	652	1.1	0.7	2.635	A
2 - A2260 (S)	1106	276	172	3638	0.304	1106	1295	0.6	0.5	1.492	A
3 - B259 (W)	482	120	662	1580	0.305	483	616	0.7	0.4	3.350	A
4 - International Way (N)	78	20	1019	1050	0.074	78	126	0.2	0.1	5.223	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	854	214	372	2489	0.343	855	546	0.7	0.5	2.286	A
2 - A2260 (S)	926	232	144	3662	0.253	926	1084	0.5	0.4	1.380	A
3 - B259 (W)	404	101	554	1640	0.246	404	516	0.4	0.3	2.970	A
4 - International Way (N)	65	16	853	1130	0.058	66	105	0.1	0.1	4.768	A

2030 With Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J5 - A2260 / B259 Roundabout	Standard Roundabout		1, 2, 3, 4	3.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A2260 (E)		ONE HOUR	✓	880	100.000
2 - A2260 (S)		ONE HOUR	✓	1284	100.000
3 - B259 (W)		ONE HOUR	✓	516	100.000
4 - International Way (N)		ONE HOUR	✓	395	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	734	114
	2 - A2260 (S)	740	0	478
	3 - B259 (W)	77	426	0
	4 - International Way (N)	122	228	45

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1 - A2260 (E)	2 - A2260 (S)	3 - B259 (W)	4 - International Way (N)
From	1 - A2260 (E)	0	2	0
	2 - A2260 (S)	4	0	2
	3 - B259 (W)	0	3	0
	4 - International Way (N)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A2260 (E)	0.44	2.92	0.8	A	808	1211
2 - A2260 (S)	0.39	1.69	0.7	A	1178	1767
3 - B259 (W)	0.40	4.26	0.7	A	473	710
4 - International Way (N)	0.49	8.07	1.0	A	362	544

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	663	166	524	2387	0.278	661	705	0.0	0.4	2.118	A
2 - A2260 (S)	967	242	143	3662	0.264	965	1042	0.0	0.4	1.375	A
3 - B259 (W)	388	97	630	1598	0.243	387	479	0.0	0.3	3.044	A
4 - International Way (N)	297	74	934	1091	0.273	296	83	0.0	0.4	4.518	A

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	791	198	628	2318	0.341	791	844	0.4	0.5	2.396	A
2 - A2260 (S)	1154	289	172	3638	0.317	1154	1247	0.4	0.5	1.492	A
3 - B259 (W)	464	116	753	1529	0.303	463	572	0.3	0.4	3.458	A
4 - International Way (N)	355	89	1117	1003	0.354	354	100	0.4	0.5	5.548	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	969	242	768	2224	0.436	968	1033	0.5	0.8	2.911	A
2 - A2260 (S)	1414	353	210	3605	0.392	1413	1526	0.5	0.7	1.691	A
3 - B259 (W)	568	142	922	1435	0.396	567	701	0.4	0.7	4.247	A
4 - International Way (N)	435	109	1367	881	0.493	433	122	0.5	1.0	8.004	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	969	242	770	2223	0.436	969	1034	0.8	0.8	2.918	A
2 - A2260 (S)	1414	353	210	3605	0.392	1414	1528	0.7	0.7	1.691	A
3 - B259 (W)	568	142	923	1435	0.396	568	701	0.7	0.7	4.256	A
4 - International Way (N)	435	109	1369	881	0.494	435	122	1.0	1.0	8.072	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	791	198	630	2316	0.342	792	845	0.8	0.5	2.402	A
2 - A2260 (S)	1154	289	172	3638	0.317	1155	1250	0.7	0.5	1.496	A
3 - B259 (W)	464	116	754	1529	0.303	465	573	0.7	0.4	3.468	A
4 - International Way (N)	355	89	1119	1002	0.355	357	100	1.0	0.6	5.597	A

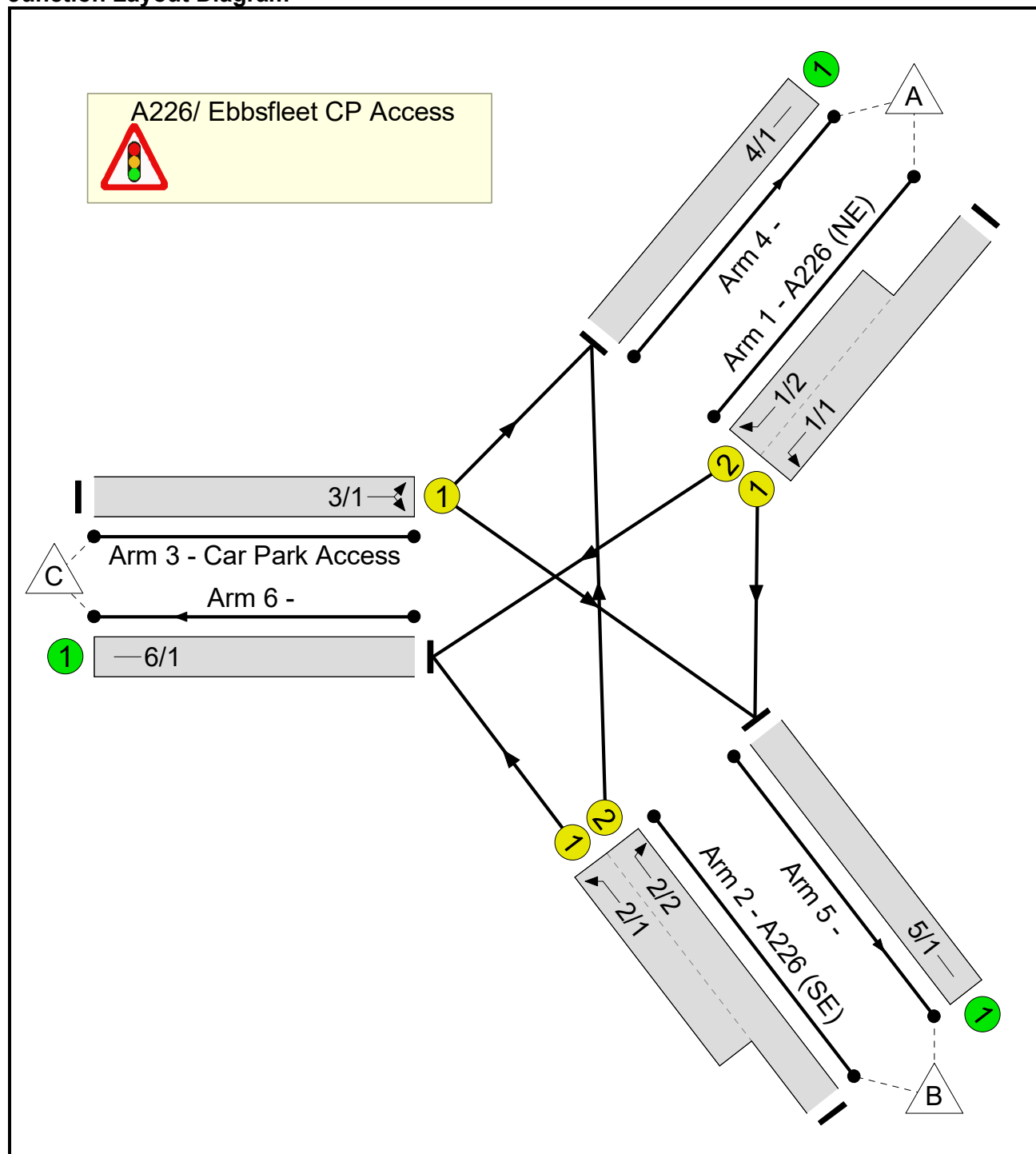
13:00 - 13:15

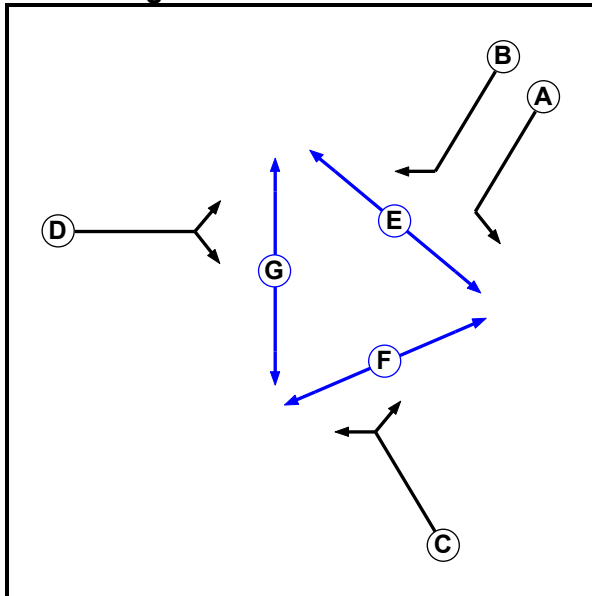
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A2260 (E)	663	166	527	2385	0.278	663	707	0.5	0.4	2.125	A
2 - A2260 (S)	967	242	144	3662	0.264	967	1046	0.5	0.4	1.376	A
3 - B259 (W)	388	97	631	1597	0.243	389	480	0.4	0.3	3.053	A
4 - International Way (N)	297	74	937	1090	0.273	298	84	0.6	0.4	4.552	A

User and Project Details

Project:	Northfleet
Title:	J3 - A226_Ebbsfleet Car Park C Access
Design Layout Ref:	Pell Frischmann Proposed Layout
File name:	J3 - A226_Ebbsfleet CPC (PF Proposed) v2.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Junction Layout Diagram



Phase Diagram**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Pedestrian		-9999	8
F	Pedestrian		-9999	8
G	Pedestrian		-9999	7

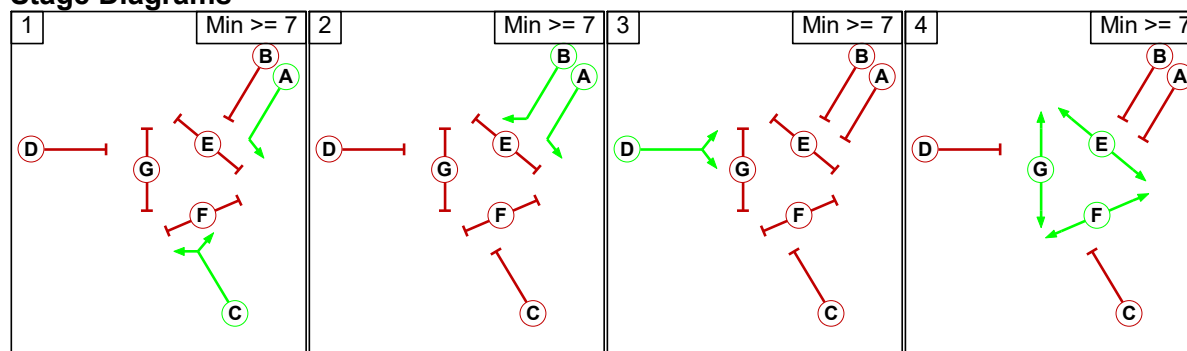
Intergreens

	Starting Phase							
		A	B	C	D	E	F	G
Terminating Phase	A		-	-	5	5	9	-
	B	-		6	6	5	-	10
	C	-	5		6	10	5	8
	D	5	5	5		9	9	5
	E	14	14	14	14		-	-
	F	14	-	14	14	-		-
	G	-	12	12	12	-	-	

Stage Data

Stage No.	Phases in Stage
1	A C
2	A B
3	D
4	E F G

Stage Diagrams



Phase Delays

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

Lane Input Data

Junction: A226/ Ebbsfleet CP Access												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A226 (NE))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	38.00
1/2 (A226 (NE))	U	B	2	3	7.8	Geom	-	3.40	0.00	Y	Arm 6 Right	6.00
2/1 (A226 (SE))	U	C	2	3	8.9	Geom	-	3.50	0.00	Y	Arm 6 Left	12.00
2/2 (A226 (SE))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Right	42.00
3/1 (Car Park Access)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Right	25.00
											Arm 4 Left	15.00

Give-Way Lane Input Data

Junction: A226/ Ebbsfleet CP Access	
There are no Opposed Lanes in this Junction	

Scenario 1: '2032 Base+Comm+Max Commercial, AM'

(FG1: '2032 Base+Comm+Max Commercial, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	422	21	443
	B	638	0	91	729
	C	11	63	0	74
	Tot.	649	485	112	1246

Stage Timings

Stage	1	2	3	4
Duration	36	7	7	8
Change Point	0	50	62	75

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	85.9%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	85.9%	-	-
1/1+1/2	A226 (NE) Left Right	A B	48:7	443	1965:1955	1021+51	41.3 : 41.3%	16.9	6.7
2/2+2/1	A226 (SE) Right Left	C	36	729	1965:1965	743+106	85.9 : 85.9%	38.3	18.4
3/1	Car Park Access Left Right	D	7	74	1965	171	43.3%	58.3	2.2
C1		PRC for Signalled Lanes (%):	4.8	Total Delay for Signalled Lanes (pcuHr):		11.04	Cycle Time (s): 92		
		PRC Over All Lanes (%):	4.8	Total Delay Over All Lanes(pcuHr):		11.04			

Scenario 2: '2032 Base+Comm+Max Commercial, PM'

(FG2: '2032 Base+Comm+Max Commercial, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	559	8	567
	B	375	0	54	429
	C	10	65	0	75
	Tot.	385	624	62	1071

Stage Timings

Stage	1	2	3	4
Duration	16	7	7	8
Change Point	0	30	42	55

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	80.8%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	80.8%	-	-
1/1+1/2	A226 (NE) Left Right	A B	28:7	567	1965:1955	791+11	70.6 : 70.6%	25.7	10.5
2/2+2/1	A226 (SE) Right Left	C	16	429	1965:1965	464+67	80.8 : 80.8%	42.4	9.0
3/1	Car Park Access Left Right	D	7	75	1965	218	34.4%	42.1	1.6
C1		PRC for Signalled Lanes (%):	11.4	Total Delay for Signalled Lanes (pcuHr):		9.98	Cycle Time (s): 72		
		PRC Over All Lanes (%):	11.4	Total Delay Over All Lanes(pcuHr):		9.98			

Scenario 3: '2032 Base+Comm+Max Resi, AM'

(FG3: '2032 Base+Comm+Max Resi, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	401	21	422
	B	653	0	69	722
	C	14	83	0	97
	Tot.	667	484	90	1241

Stage Timings

Stage	1	2	3	4
Duration	36	7	7	8
Change Point	0	50	62	75

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	86.4%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	86.4%	-	-
1/1+1/2	A226 (NE) Left Right	A B	48:7	422	1965:1955	1020+53	39.3 : 39.3%	16.7	6.3
2/2+2/1	A226 (SE) Right Left	C	36	722	1965:1965	756+80	86.4 : 86.4%	39.4	18.7
3/1	Car Park Access Left Right	D	7	97	1965	171	56.8%	64.3	3.0
C1		PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):		11.58	Cycle Time (s): 92		
		PRC Over All Lanes (%):	4.2	Total Delay Over All Lanes(pcuHr):		11.58			

Scenario 4: '2032 Base+Comm+Max Resi, PM'

(FG4: '2032 Base+Comm+Max Resi, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	571	11	582
	B	357	0	71	428
	C	10	47	0	57
	Tot.	367	618	82	1067

Stage Timings

Stage	1	2	3	4
Duration	16	7	7	8
Change Point	0	30	42	55

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	76.9%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	76.9%	-	-
1/1+1/2	A226 (NE) Left Right	A B	28:7	582	1965:1955	791+15	72.1 : 72.1%	26.2	10.9
2/2+2/1	A226 (SE) Right Left	C	16	428	1965:1965	464+92	76.9 : 76.9%	38.7	8.3
3/1	Car Park Access Left Right	D	7	57	1965	218	26.1%	40.4	1.2
C1		PRC for Signalled Lanes (%):	17.0	Total Delay for Signalled Lanes (pcuHr):		9.48	Cycle Time (s): 72		
		PRC Over All Lanes (%):	17.0	Total Delay Over All Lanes(pcuHr):		9.48			

Scenario 5: '2032 Base+Comm+Max Commercial + DEV, AM'

(FG7: '2032 Base+Comm+Max Commercial + DEV, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	765	23	788
	B	921	0	91	1012
	C	13	63	0	76
	Tot.	934	828	114	1876

Stage Timings

Stage	1	2	3	4
Duration	64	7	7	8
Change Point	0	78	90	103

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	92.2%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	92.2%	-	-
1/1+1/2	A226 (NE) Left Right	A B	76:7	788	1965:1955	1239+37	61.8 : 61.8%	17.5	15.9
2/2+2/1	A226 (SE) Right Left	C	64	1012	1965:1965	999+99	92.2 : 92.2%	43.0	35.0
3/1	Car Park Access Left Right	D	7	76	1965	131	58.0%	86.3	3.1
C1		PRC for Signalled Lanes (%):	-2.5	Total Delay for Signalled Lanes (pcuHr):		17.74	Cycle Time (s): 120		
		PRC Over All Lanes (%):	-2.5	Total Delay Over All Lanes(pcuHr):		17.74			

Scenario 6: '2032 Base+Comm+Max Commercial + DEV, PM'

(FG8: '2032 Base+Comm+Max Commercial + DEV, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	965	12	977
	B	791	0	54	845
	C	13	65	0	78
	Tot.	804	1030	66	1900

Stage Timings

Stage	1	2	3	4
Duration	52	7	7	8
Change Point	0	66	78	91

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	85.2%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	85.2%	-	-
1/1+1/2	A226 (NE) Left Right	A B	64:7	977	1965:1955	1180+15	81.8 : 81.8%	25.3	24.9
2/2+2/1	A226 (SE) Right Left	C	52	845	1965:1965	929+63	85.2 : 85.2%	35.2	24.0
3/1	Car Park Access Left Right	D	7	78	1965	146	53.6%	74.4	2.8
C1		PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):		16.75	Cycle Time (s): 108		
		PRC Over All Lanes (%):	5.7	Total Delay Over All Lanes(pcuHr):		16.75			

Scenario 7: '2032 Base+Comm+Max Resi + DEV, AM'

(FG9: '2032 Base+Comm+Max Resi + DEV, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	744	23	767
	B	936	0	69	1005
	C	16	83	0	99
	Tot.	952	827	92	1871

Stage Timings

Stage	1	2	3	4
Duration	64	7	7	8
Change Point	0	78	90	103

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	92.1%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	92.1%	-	-
1/1+1/2	A226 (NE) Left Right	A B	76:7	767	1965:1955	1238+38	60.1 : 60.1%	17.1	15.0
2/2+2/1	A226 (SE) Right Left	C	64	1005	1965:1965	1016+75	92.1 : 92.1%	43.2	35.0
3/1	Car Park Access Left Right	D	7	99	1965	131	75.6%	106.7	4.6
C1		PRC for Signalled Lanes (%):	-2.4	Total Delay for Signalled Lanes (pcuHr):		18.64	Cycle Time (s): 120		
		PRC Over All Lanes (%):	-2.4	Total Delay Over All Lanes(pcuHr):		18.64			

Scenario 8: '2032 Base+Comm+Max Resi + DEV, PM'

(FG10: '2032 Base+Comm+Max Resi + DEV, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination			
Origin		A	B	C	Tot.
	A	0	977	15	992
	B	773	0	71	844
	C	13	47	0	60
	Tot.	786	1024	86	1896

Stage Timings

Stage	1	2	3	4
Duration	52	7	7	8
Change Point	0	66	78	91

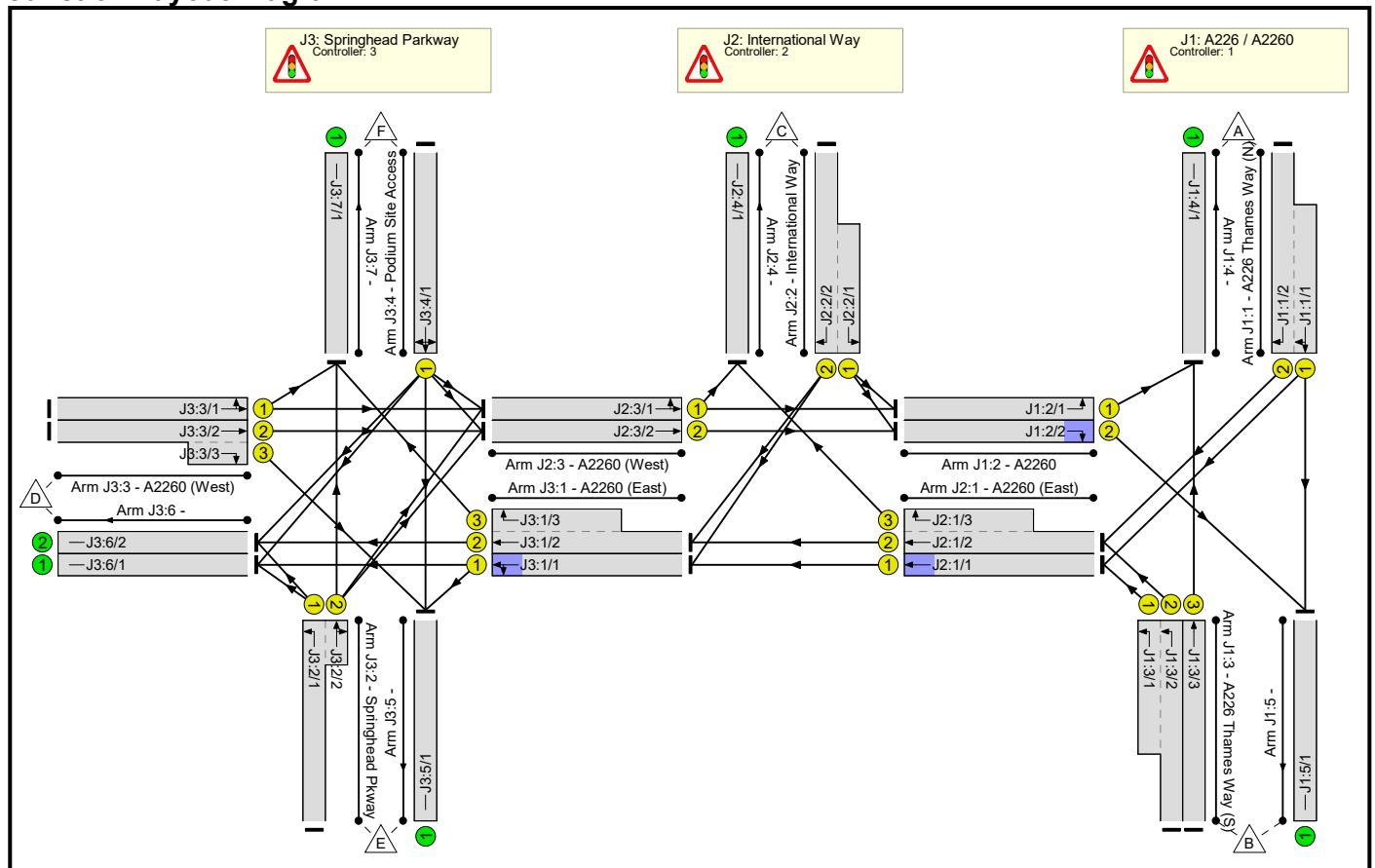
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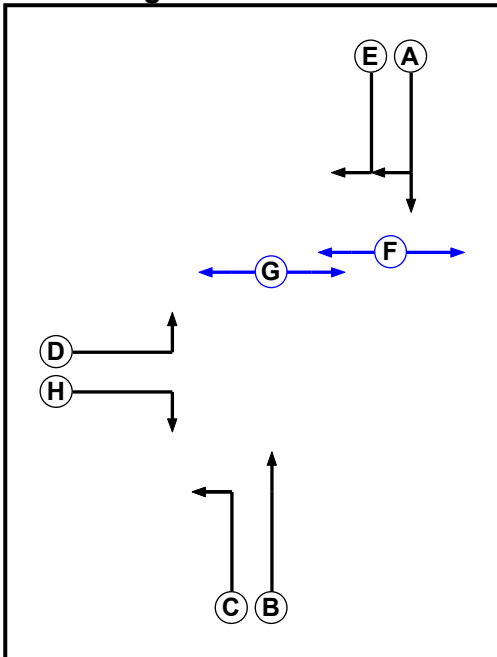
Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J3 - A226_Ebbsfleet Car Park C Access	-	-	-	-	-	-	84.5%	-	-
A226/ Ebbsfleet CP Access	-	-	-	-	-	-	84.5%	-	-
1/1+1/2	A226 (NE) Left Right	A B	64:7	992	1965:1955	1177+18	83.0 : 83.0%	26.1	25.7
2/2+2/1	A226 (SE) Right Left	C	52	844	1965:1965	915+84	84.5 : 84.5%	34.3	23.6
3/1	Car Park Access Left Right	D	7	60	1965	146	41.2%	68.6	2.1
C1		PRC for Signalled Lanes (%): PRC Over All Lanes (%):	6.5 6.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		16.39 16.39	Cycle Time (s): 108		

User and Project Details

Project:	Northfleet
Title:	A2260 / A226 Thames Way
Design Layout Ref:	Pell Frischmann Proposed Network Layout
File name:	J4 - A2260_Thames Way (PF Proposed) v2.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Junction Layout Diagram



C1 - A226**Phase Diagram****Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Traffic		-9999	7
F	Pedestrian		-9999	6
G	Pedestrian		-9999	6
H	Traffic		-9999	7

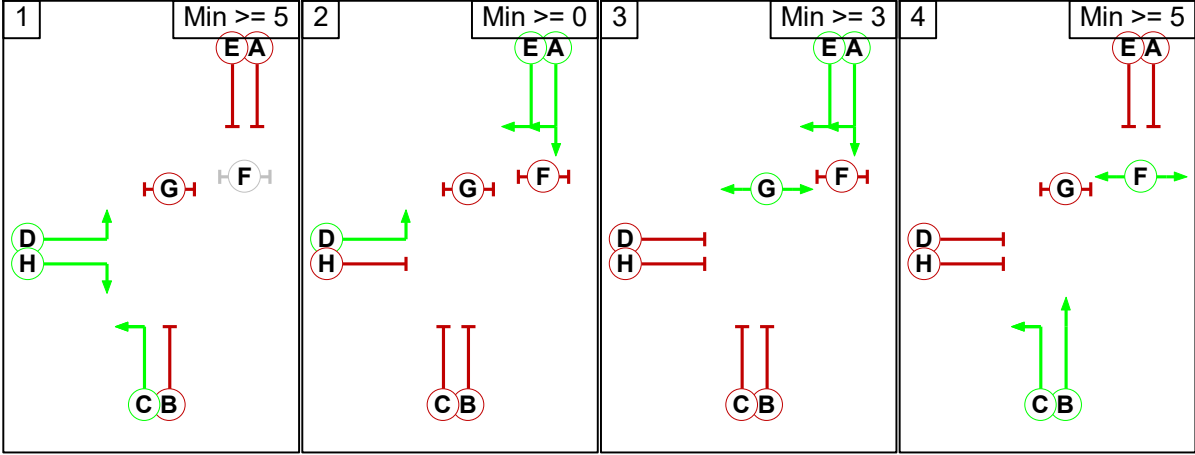
Intergreens

	Starting Phase								
		A	B	C	D	E	F	G	H
Terminating Phase	A		5	7	-	-	5	-	5
	B	5		-	7	10	-	9	5
	C	5	-		-	5	-	-	-
	D	-	5	-		-	-	7	-
	E	-	5	7	-		5	-	5
	F	8	-	-	-	12		-	-
	G	-	8	-	8	-	-		-
	H	5	5	-	-	5	-	-	

Stage Data

Stage No.	Phases in Stage
1	C D H
2	A D E
3	A E G
4	B C F

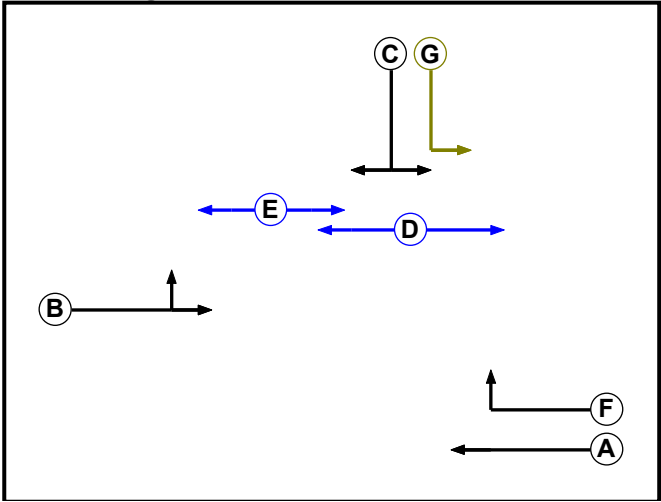
Stage Diagrams



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	4	A	Losing	3	3
3	4	E	Losing	3	3

C2 - Int. Way
Phase Diagram



Phase Input Data

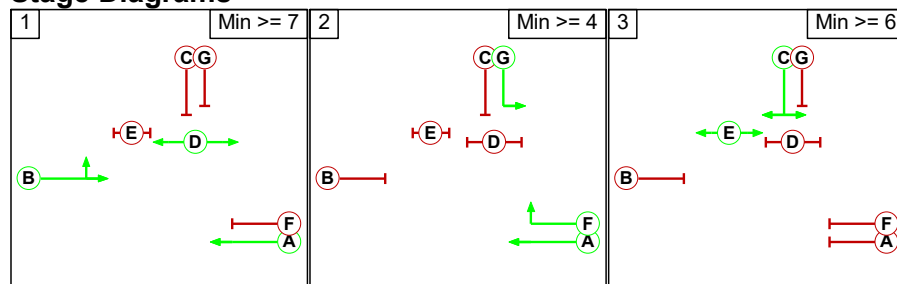
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Pedestrian		-9999	6
E	Pedestrian		-9999	6
F	Traffic		-9999	7
G	Filter	C	-9999	4

Intergreens

Terminating Phase	Starting Phase						
	A	B	C	D	E	F	G
	A	-	6	-	12	-	-
	B	-	7	-	10	5	7
	C	5	5	5	-	5	-
	D	-	8	-	-	8	-
	E	8	8	-	-	8	8
	F	-	7	6	12	-	-
	G	-	5	5	-	-	-

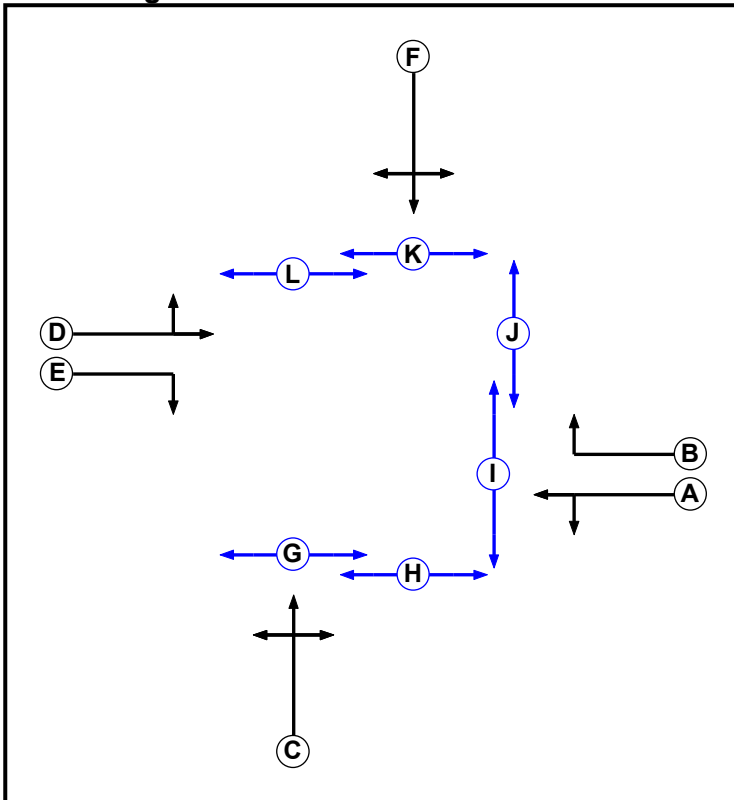
Stage Data

Stage No.	Phases in Stage
1	A B D
2	A F G
3	C E

Stage Diagrams**Phase Delays**

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

C3 - Springhead Phase Diagram



Phase Input Data

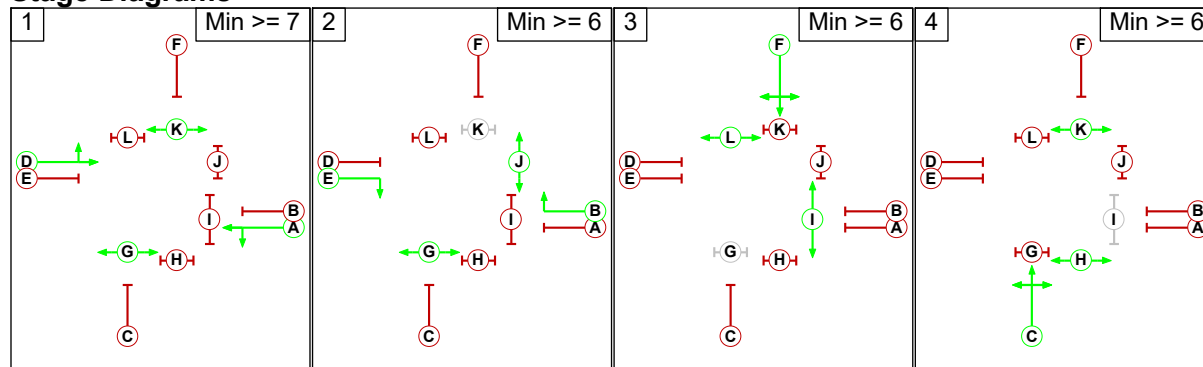
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Traffic		-9999	7
F	Traffic		-9999	7
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6
I	Pedestrian		-9999	6
J	Pedestrian		-9999	6
K	Pedestrian		-9999	6
L	Pedestrian		-9999	6

Intergreens

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

Stage Data

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

Stage Diagrams**Phase Delays**

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

Lane Input Data

Junction: J1: A226 / A2260												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A226 Thames Way (N))	U	A	2	3	10.0	Geom	-	3.00	0.00	Y	Arm J1:5 Ahead	Inf
J1:1/2 (A226 Thames Way (N))	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:1 Right	15.00
J1:2/1 (A2260)	U	D	2	3	13.0	Geom	-	3.25	0.00	Y	Arm J2:1 Right	15.00
J1:2/2 (A2260)	U	H	2	3	13.0	Geom	-	3.25	0.00	Y	Arm J1:4 Left	18.00
J1:3/1 (A226 Thames Way (S))	U	C	2	3	9.0	Geom	-	3.00	0.00	Y	Arm J1:5 Right	22.00
J1:3/2 (A226 Thames Way (S))	U	C	2	3	29.0	Geom	-	3.00	0.00	Y	Arm J2:1 Left	23.00
J1:3/3 (A226 Thames Way (S))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:1 Left	21.00
J1:3/3 (A226 Thames Way (S))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:4 Ahead	Inf

Junction: J2: International Way												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (A2260 (East))	U	A	2	3	12.2	Geom	-	3.25	0.00	Y	Arm J3:1 Ahead	Inf
J2:1/2 (A2260 (East))	U	A	2	3	12.2	Geom	-	3.25	0.00	Y	Arm J3:1 Ahead	Inf
J2:1/3 (A2260 (East))	U	F	2	3	8.7	Geom	-	3.25	0.00	Y	Arm J2:4 Right	15.00
J2:2/1 (International Way)	U	C G	2	3	8.7	Geom	-	3.25	0.00	Y	Arm J1:2 Left	16.50
J2:2/2 (International Way)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:1 Right	30.00
J2:3/1 (A2260 (West))	U	B	2	3	23.8	Geom	-	3.25	0.00	Y	Arm J1:2 Ahead	Inf
											Arm J2:4 Left	16.75
J2:3/2 (A2260 (West))	U	B	2	3	23.8	Geom	-	3.25	0.00	Y	Arm J1:2 Ahead	Inf

Junction: J3: Springhead Parkway												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J3:1/1 (A2260 (East))	U	A	2	3	26.4	Geom	-	3.30	0.00	Y	Arm J3:5 Left	15.00
J3:1/2 (A2260 (East))	U	A	2	3	26.4	Geom	-	3.25	0.00	Y	Arm J3:6 Ahead	Inf
J3:1/3 (A2260 (East))	U	B	2	3	8.7	Geom	-	3.26	0.00	Y	Arm J3:6 Ahead	Inf
J3:2/1 (Springhead Pkway)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J3:7 Right	15.00
J3:2/2 (Springhead Pkway)	U	C	2	3	3.0	Geom	-	3.00	0.00	N	Arm J3:6 Left	15.00
J3:3/1 (A2260 (West))	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J2:3 Right	20.00
J3:3/2 (A2260 (West))	U	D	2	3	28.9	Geom	-	3.25	0.00	Y	Arm J3:7 Ahead	Inf
J3:3/3 (A2260 (West))	U	E	2	3	4.0	Geom	-	3.50	0.00	Y	Arm J2:3 Ahead	Inf
J3:4/1 (Podium Site Access)	U	F	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:5 Right	15.00
											Arm J2:3 Left	15.00
											Arm J3:5 Ahead	Inf
											Arm J3:6 Right	20.00

Give-Way Lane Input Data**Junction: J1: A226 / A2260**

There are no Opposed Lanes in this Junction

Junction: J2: International Way

There are no Opposed Lanes in this Junction

Junction: J3: Springhead Parkway

There are no Opposed Lanes in this Junction

Lane Connector Input Data**Junction: J1: A226 / A2260**

Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J1:5/1	Internal	5	35
J1:1/1	J2:1/1	Leaving	10	N/A
J1:1/2	J2:1/2	Leaving	10	N/A
J1:2/1	J1:4/1	Internal	5	35
J1:2/2	J1:5/1	Internal	5	35
J1:3/1	J2:1/1	Leaving	8	N/A
J1:3/2	J2:1/2	Leaving	8	N/A
J1:3/3	J1:4/1	Internal	5	35
J2:2/1	J1:2/1	Entering	9	N/A
J2:2/1	J1:2/2	Entering	9	N/A
J2:3/1	J1:2/1	Entering	10	N/A
J2:3/2	J1:2/2	Entering	10	N/A

Junction: J2: International Way				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J2:1/1	Entering	10	N/A
J1:1/2	J2:1/2	Entering	10	N/A
J1:3/1	J2:1/1	Entering	8	N/A
J1:3/2	J2:1/2	Entering	8	N/A
J2:1/1	J3:1/1	Leaving	16	N/A
J2:1/2	J3:1/2	Leaving	16	N/A
J2:1/3	J2:4/1	Internal	5	35
J2:2/1	J1:2/1	Leaving	9	N/A
J2:2/1	J1:2/2	Leaving	9	N/A
J2:2/2	J3:1/1	Leaving	17	N/A
J2:2/2	J3:1/2	Leaving	17	N/A
J2:3/1	J1:2/1	Leaving	10	N/A
J2:3/1	J2:4/1	Internal	5	35
J2:3/2	J1:2/2	Leaving	10	N/A
J3:2/2	J2:3/1	Entering	13	N/A
J3:2/2	J2:3/2	Entering	18	N/A
J3:3/1	J2:3/1	Entering	15	N/A
J3:3/2	J2:3/2	Entering	15	N/A
J3:4/1	J2:3/1	Entering	16	N/A
J3:4/1	J2:3/2	Entering	16	N/A

Junction: J3: Springhead Parkway				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J2:1/1	J3:1/1	Entering	16	N/A
J2:1/2	J3:1/2	Entering	16	N/A
J2:2/2	J3:1/1	Entering	17	N/A
J2:2/2	J3:1/2	Entering	17	N/A
J3:1/1	J3:5/1	Internal	5	35
J3:1/1	J3:6/1	Internal	5	35
J3:1/2	J3:6/2	Internal	5	35
J3:1/3	J3:7/1	Internal	5	35
J3:2/1	J3:6/1	Internal	5	35
J3:2/1	J3:6/2	Internal	5	35
J3:2/2	J2:3/1	Leaving	13	N/A
J3:2/2	J2:3/2	Leaving	18	N/A
J3:2/2	J3:7/1	Internal	5	35
J3:3/1	J2:3/1	Leaving	15	N/A
J3:3/1	J3:7/1	Internal	5	35
J3:3/2	J2:3/2	Leaving	15	N/A
J3:3/3	J3:5/1	Internal	5	35
J3:4/1	J2:3/1	Leaving	16	N/A
J3:4/1	J2:3/2	Leaving	16	N/A
J3:4/1	J3:5/1	Internal	5	35
J3:4/1	J3:6/1	Internal	5	35
J3:4/1	J3:6/2	Internal	5	35

Scenario 1: '2032 Base + Comm + PF Max Commercial, AM'

(FG5: '2032 Base + Comm + PF Max Commercial, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination						
Origin		A	B	C	D	E	F	Tot.
	A	0	239	98	342	15	21	715
	B	483	0	158	465	23	33	1162
	C	71	47	0	140	2	4	264
	D	328	324	162	0	80	124	1018
	E	28	19	4	119	0	0	170
	F	25	17	3	103	0	0	148
	Tot.	935	646	425	1169	120	182	3477

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	21	7	6	25
Change Point	32	60	72	85

C2 - Int. Way

Stage	1	2	3
Duration	42	12	6
Change Point	87	49	69

C3 - Springhead

Stage	1	2	3	4
Duration	32	6	6	6
Change Point	2	42	58	75

Scenario 2: '2032 Base + Comm + PF Max Commercial, PM'

(FG6: '2032 Base + Comm + PF Max Commercial, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination						
Origin		A	B	C	D	E	F	Tot.
	A	0	314	48	498	15	23	898
	B	288	0	30	360	10	15	703
	C	94	90	0	129	1	3	317
	D	273	263	45	0	47	94	722
	E	12	12	0	74	0	0	98
	F	23	22	1	101	0	0	147
	Tot.	690	701	124	1162	73	135	2885

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	20	19	6	14
Change Point	43	70	6	19

C2 - Int. Way

Stage	1	2	3
Duration	39	15	6
Change Point	25	72	7

C3 - Springhead

Stage	1	2	3	4
Duration	31	6	7	6
Change Point	21	60	76	6

Scenario 3: '2032 Base + Comm + PF Max Resi, AM'

(FG7: '2032 Base + Comm + PF Max Resi, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	246	62	397	17	25	747
	B	443	0	80	451	21	31	1026
	C	74	57	0	140	2	4	277
	D	297	320	160	0	80	130	987
	E	26	21	4	119	0	0	170
	F	28	22	4	124	0	0	178
	Tot.	868	666	310	1231	120	190	3385

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	22	9	6	22
Change Point	13	42	56	69

C2 - Int. Way

Stage	1	2	3
Duration	40	14	6
Change Point	2	50	72

C3 - Springhead

Stage	1	2	3	4
Duration	31	6	7	6
Change Point	84	35	51	69

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2260 / A226 Thames Way	-	-	-	-	-	-	82.5%	-	-
J1: A226 / A2260	-	-	-	-	-	-	81.4%	-	-
1/2+1/1	A226 Thames Way (N) Ahead Right	C1:E C1:A	25	747	1741:1847	445+483	80.5 : 80.5%	37.3	10.4
2/1	A2260 Left	C1:D	36	425	1791	753	56.4%	8.3	3.5
2/2	A2260 Right	C1:H	24	420	1816	516	81.4%	14.1	4.0
3/2+3/1	A226 Thames Way (S) Left	C1:C	51	583	1787:1798	642+739	42.2 : 42.2%	11.1	4.1
3/3	A226 Thames Way (S) Ahead	C1:B	24	443	1915	544	81.4%	46.4	12.1
J2: International Way	-	-	-	-	-	-	59.1%	-	-
1/1	A2260 (East) Ahead	C2:A	62	455	1940	1389	32.8%	5.4	5.3
1/2+1/3	A2260 (East) Right Ahead	C2:A C2:F	62:17	629	1940:1764	1146+334	42.5 : 42.5%	9.1	3.6
2/2+2/1	International Way Left Right	C2:C	12:32	277	1848:1778	273+245	53.5 : 53.5%	34.5	3.9
3/1	A2260 (West) Ahead Left	C2:B	40	519	1885	878	59.1%	1.7	1.5
3/2	A2260 (West) Ahead	C2:B	40	363	1940	904	40.2%	1.3	1.0
J3: Springhead Parkway	-	-	-	-	-	-	82.5%	-	-
1/1	A2260 (East) Left Ahead	C3:A	31	539	1931	702	76.8%	14.3	7.8
1/2+1/3	A2260 (East) Ahead Right	C3:A C3:B	31:11	549	1940:1765	673+83	72.7 : 72.7%	16.8	12.0
2/1+2/2	Springhead Pkway Right Left Ahead	C3:C	7	170	1741:1912	151+65	78.7 : 78.7%	75.0	4.5
3/1	A2260 (West) Ahead Left	C3:D	32	587	1898	712	82.5%	38.8	15.2
3/2+3/3	A2260 (West) Ahead Right	C3:D C3:E	32:11	400	1940:1786	614+154	52.1 : 52.1%	28.3	6.9
4/1	Podium Site Access Left Ahead Right	C3:F	10	178	1792	224	79.5%	73.7	6.0
C1 - A226 C2 - Int. Way C3 - Springhead			PRC for Signalled Lanes (%): 10.5 PRC for Signalled Lanes (%): 52.3 PRC for Signalled Lanes (%): 9.1 PRC Over All Lanes (%): 9.1	Total Delay for Signalled Lanes (pcuHr): 17.88 Total Delay for Signalled Lanes (pcuHr): 5.31 Total Delay for Signalled Lanes (pcuHr): 21.35 Total Delay Over All Lanes(pcuHr): 44.54	Cycle Time (s): 88 Cycle Time (s): 88 Cycle Time (s): 88				

Scenario 4: '2032 Base + Comm + PF Max Resi, PM'

(FG8: '2032 Base + Comm + PF Max Resi, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	276	50	472	15	28	841
	B	292	0	33	356	10	19	710
	C	47	30	0	129	1	3	210
	D	334	238	45	0	47	115	779
	E	14	9	0	74	0	0	97
	F	29	19	1	110	0	0	159
	Tot.	716	572	129	1141	73	165	2796

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	13	15	10	13
Change Point	40	60	0	17

C2 - Int. Way

Stage	1	2	3
Duration	37	9	6
Change Point	25	70	7

C3 - Springhead

Stage	1	2	3	4
Duration	24	6	6	6
Change Point	24	56	72	9

Scenario 5: '2032 Base + Comm + PF Max Commercial + DEV, AM'

(FG9: '2032 Base + Comm + PF Max Commercial + DEV, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination						
Origin		A	B	C	D	E	F	Tot.
	A	0	211	98	455	0	21	785
	B	305	0	158	146	1	33	643
	C	71	47	0	140	2	4	264
	D	360	161	162	0	0	124	807
	E	6	0	4	0	0	0	10
	F	25	17	3	103	0	0	148
	Tot.	767	436	425	844	3	182	2657

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	12	23	6	18
Change Point	49	68	8	21

C2 - Int. Way

Stage	1	2	3
Duration	37	17	6
Change Point	29	74	11

C3 - Springhead

Stage	1	2	3	4
Duration	32	6	6	6
Change Point	19	59	75	4

Scenario 6: '2032 Base + Comm + PF Max Commercial + DEV, PM'

(FG10: '2032 Base + Comm + PF Max Commercial + DEV, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	270	48	612	1	23	954
	B	305	0	158	325	0	15	803
	C	94	90	0	129	1	3	317
	D	405	218	45	0	0	94	762
	E	0	0	0	0	0	0	0
	F	23	22	1	101	0	0	147
	Tot.	827	600	252	1167	2	135	2983

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	16	23	6	14
Change Point	46	69	9	22

C2 - Int. Way

Stage	1	2	3
Duration	38	16	6
Change Point	29	75	11

C3 - Springhead

Stage	1	2	3	4
Duration	32	6	6	6
Change Point	25	65	81	10

[illegible]

Scenario 7: '2032 Base + Comm + PF Max Resi + DEV, AM'

(FG11: '2032 Base + Comm + PF Max Resi + DEV, AM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination						
Origin		A	B	C	D	E	F	Tot.
	A	0	211	62	485	2	25	785
	B	305	0	158	228	-1	31	721
	C	74	57	0	140	2	4	277
	D	356	144	160	0	0	130	790
	E	4	0	4	0	0	0	8
	F	28	22	4	124	0	0	178
	Tot.	767	434	388	977	3	190	2759

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	11	23	6	19
Change Point	26	44	72	85

C2 - Int. Way

Stage	1	2	3
Duration	38	15	7
Change Point	5	51	74

C3 - Springhead

Stage	1	2	3	4
Duration	32	6	6	6
Change Point	85	37	53	70

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2260 / A226 Thames Way	-	-	-	-	-	-	87.9%	-	-
J1: A226 / A2260	-	-	-	-	-	-	77.2%	-	-
1/2+1/1	A226 Thames Way (N) Ahead Right	C1:E C1:A	39	785	1741:1835	611+556	67.3 : 67.3%	21.5	8.1
2/1	A2260 Left	C1:D	39	462	1791	814	56.8%	4.2	5.6
2/2	A2260 Right	C1:H	13	223	1816	289	77.2%	24.6	5.3
3/2+3/1	A226 Thames Way (S) Left	C1:C	37	417	1787:1798	572+570	36.5 : 36.5%	18.6	3.5
3/3	A226 Thames Way (S) Ahead	C1:B	21	305	1915	479	63.7%	39.7	7.5
J2: International Way	-	-	-	-	-	-	66.4%	-	-
1/1	A2260 (East) Ahead	C2:A	61	371	1940	1367	27.1%	1.8	1.1
1/2+1/3	A2260 (East) Right Ahead	C2:A C2:F	61:18	620	1940:1764	682+375	58.7 : 58.7%	13.3	4.7
2/2+2/1	International Way Left Right	C2:C	13:34	277	1848:1778	294+264	49.7 : 49.7%	32.4	3.7
3/1	A2260 (West) Ahead Left	C2:B	38	556	1889	837	66.4%	1.9	1.1
3/2	A2260 (West) Ahead	C2:B	38	166	1940	860	19.3%	3.2	0.6
J3: Springhead Parkway	-	-	-	-	-	-	87.9%	-	-
1/1	A2260 (East) Left Ahead	C3:A	32	479	1943	729	65.7%	11.4	7.2
1/2+1/3	A2260 (East) Ahead Right	C3:A C3:B	32:11	438	1940:1765	681+108	55.5 : 55.5%	13.4	11.4
2/1+2/2	Springhead Pkway Right Left Ahead	C3:C	7	8	1915:1912	0+166	0.0 : 4.8%	48.2	0.2
3/1	A2260 (West) Ahead Left	C3:D	33	646	1902	735	87.9%	43.9	17.9
3/2+3/3	A2260 (West) Ahead Right	C3:D C3:E	33:11	144	1940:1965	750+0	19.2 : 0.0%	20.9	2.4
4/1	Podium Site Access Left Ahead Right	C3:F	9	178	1792	204	87.4%	95.9	7.1
C1 - A226 C2 - Int. Way C3 - Springhead PRC for Signalled Lanes (%): 16.6 PRC for Signalled Lanes (%): 35.5 PRC for Signalled Lanes (%): 2.4 PRC Over All Lanes (%): 2.4 Total Delay for Signalled Lanes (pcuHr): 12.27 Total Delay for Signalled Lanes (pcuHr): 5.39 Total Delay for Signalled Lanes (pcuHr): 16.71 Total Delay Over All Lanes(pcuHr): 34.37 Cycle Time (s): 88 Cycle Time (s): 88 Cycle Time (s): 88									

Scenario 8: '2032 Base + Comm + PF Max Resi + DEV, PM'

(FG12: '2032 Base + Comm + PF Max Resi + DEV, PM', Plan 1: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	270	50	605	1	28	954
	B	305	0	158	318	0	19	800
	C	47	30	0	129	1	3	210
	D	444	284	45	0	0	115	888
	E	1	0	0	0	0	0	1
	F	29	19	1	110	0	0	159
	Tot.	826	603	254	1162	2	165	3012

Stage Timings**C1 - A226**

Stage	1	2	3	4
Duration	17	22	6	14
Change Point	51	75	14	27

C2 - Int. Way

Stage	1	2	3
Duration	42	12	6
Change Point	33	83	15

C3 - Springhead

Stage	1	2	3	4
Duration	32	6	6	6
Change Point	28	68	84	13

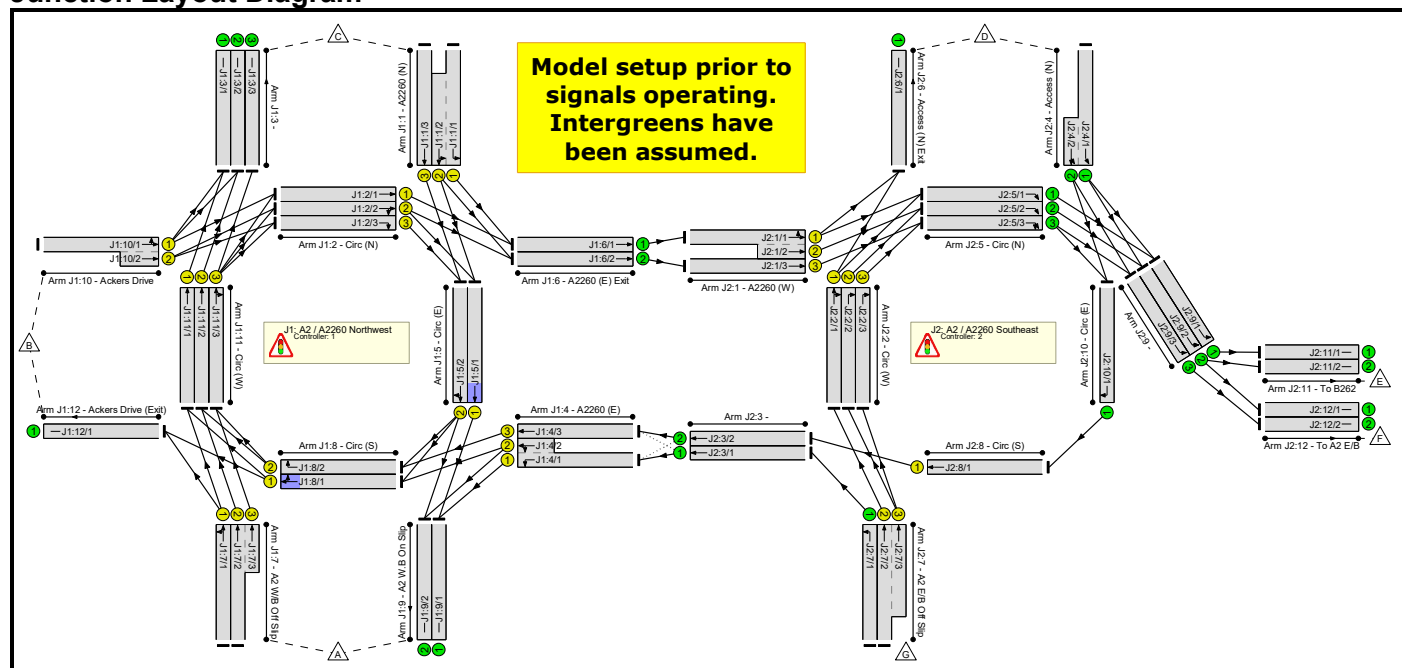
Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2260 / A226 Thames Way	-	-	-	-	-	-	82.4%	-	-
J1: A226 / A2260	-	-	-	-	-	-	82.4%	-	-
1/2+1/1	A226 Thames Way (N) Ahead Right	C1:E C1:A	38	954	1741:1832	567+609	81.1 : 81.1%	26.6	11.3
2/1	A2260 Left	C1:D	44	521	1791	916	56.9%	1.3	1.1
2/2	A2260 Right	C1:H	19	333	1816	413	80.7%	15.7	3.2
3/2+3/1	A226 Thames Way (S) Left	C1:C	38	495	1787:1798	561+587	43.1 : 43.1%	18.6	4.4
3/3	A226 Thames Way (S) Ahead	C1:B	16	305	1915	370	82.4%	60.0	9.3
J2: International Way	-	-	-	-	-	-	64.9%	-	-
1/1	A2260 (East) Ahead	C2:A	62	477	1940	1389	34.3%	3.4	2.2
1/2+1/3	A2260 (East) Right Ahead	C2:A C2:F	62:15	702	1940:1764	762+321	64.9 : 64.9%	14.8	4.7
2/2+2/1	International Way Left Right	C2:C	12:30	210	1848:1778	273+158	48.7 : 48.7%	37.0	3.4
3/1	A2260 (West) Ahead Left	C2:B	42	520	1925	941	55.3%	1.0	0.8
3/2	A2260 (West) Ahead	C2:B	42	303	1940	948	32.0%	1.1	0.5
J3: Springhead Parkway	-	-	-	-	-	-	82.1%	-	-
1/1	A2260 (East) Left Ahead	C3:A	32	573	1944	729	78.6%	11.8	7.7
1/2+1/3	A2260 (East) Ahead Right	C3:A C3:B	32:11	531	1940:1765	699+73	68.8 : 68.8%	12.3	13.6
2/1+2/2	Springhead Pkway Right Left Ahead	C3:C	7	1	1915:1912	0+166	0.0 : 0.6%	47.7	0.0
3/1	A2260 (West) Ahead Left	C3:D	33	604	1904	736	82.1%	37.5	15.5
3/2+3/3	A2260 (West) Ahead Right	C3:D C3:E	33:11	284	1940:1965	750+0	37.9 : 0.0%	23.3	5.3
4/1	Podium Site Access Left Ahead Right	C3:F	9	159	1792	204	78.1%	75.5	5.4
C1 - A226 C2 - Int. Way C3 - Springhead			PRC for Signalled Lanes (%): 9.2 PRC for Signalled Lanes (%): 38.8 PRC for Signalled Lanes (%): 9.6 PRC Over All Lanes (%): 9.2	Total Delay for Signalled Lanes (pcuHr): 16.33 Total Delay for Signalled Lanes (pcuHr): 5.74 Total Delay for Signalled Lanes (pcuHr): 15.17 Total Delay Over All Lanes(pcuHr): 37.24	Cycle Time (s): 88 Cycle Time (s): 88 Cycle Time (s): 88				

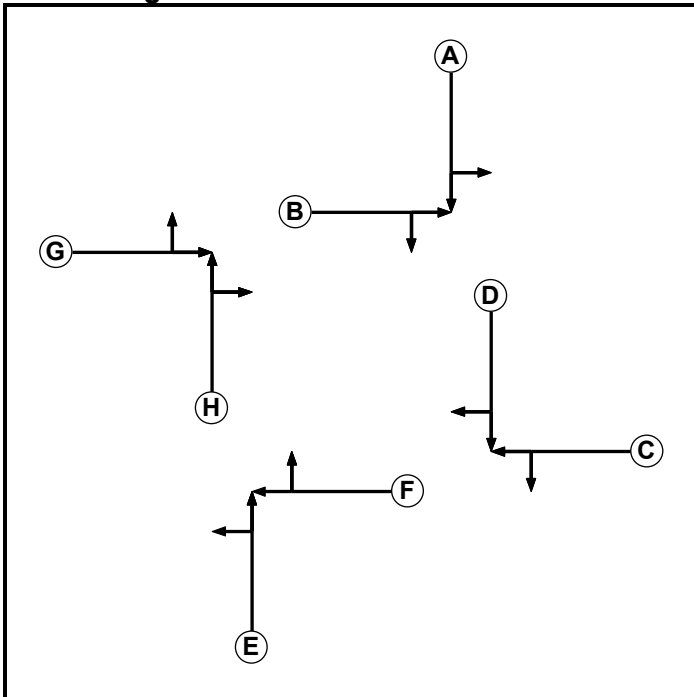
Appendix D

User and Project Details

Project:	226728 - Northfleet
Title:	A2 / A2260 Roundabouts
Design Layout Ref:	Existing Network Layout
File name:	J10A+B - A2_A2260 Rbts (Existing) v2.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Junction Layout Diagram



C1 - NW**Phase Diagram****Phase Input Data**

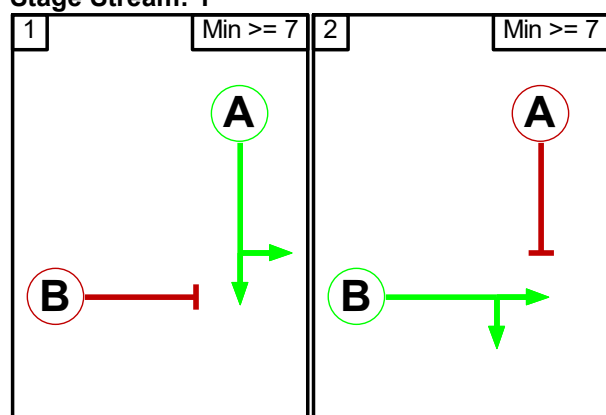
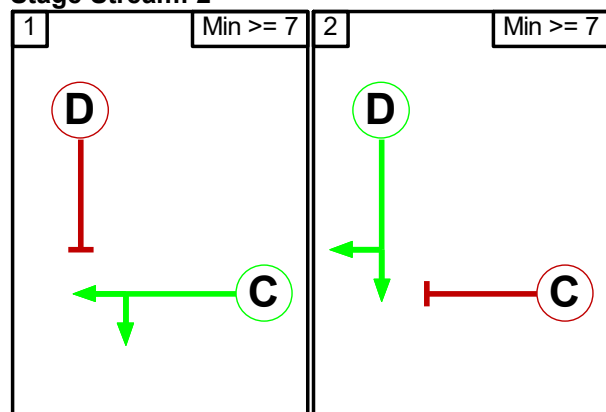
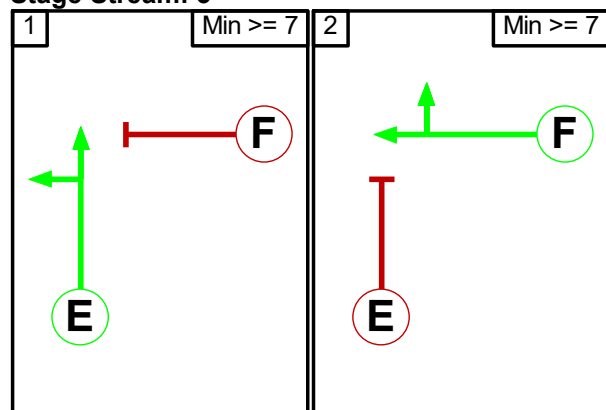
Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		-9999	7
B	Traffic	1		-9999	7
C	Traffic	2		-9999	7
D	Traffic	2		-9999	7
E	Traffic	3		-9999	7
F	Traffic	3		-9999	7
G	Traffic	4		-9999	7
H	Traffic	4		-9999	7

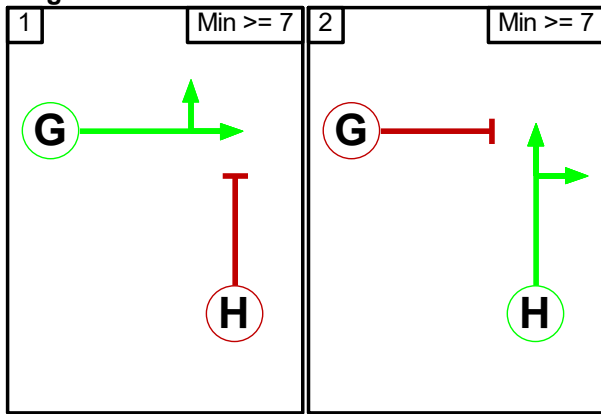
Intergreens

Inter-graphic									
	Starting Phase								
Terminating Phase		A	B	C	D	E	F	G	H
	A		7	-	-	-	-	-	-
	B	7		-	-	-	-	-	-
	C	-	-		7	-	-	-	-
	D	-	-	7		-	-	-	-
	E	-	-	-	-		7	-	-
	F	-	-	-	-	7		-	-
	G	-	-	-	-	-	-		7
	H	-	-	-	-	-	-	7	

Stage Data

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
3	1	E
3	2	F
4	1	G
4	2	H

Stage Diagrams**Stage Stream: 1****Stage Stream: 2****Stage Stream: 3**

Stage Stream: 4**Phase Delays****Stage Stream: 1**

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

Stage Stream: 2

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

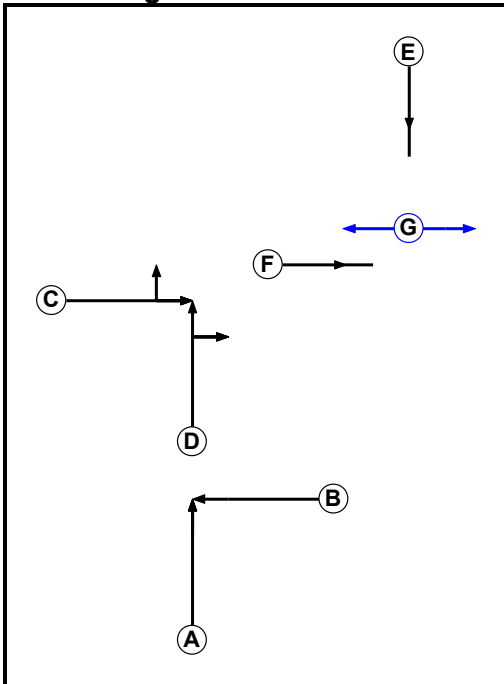
Stage Stream: 3

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

Stage Stream: 4

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

C2 - SE Phase Diagram



Phase Input Data

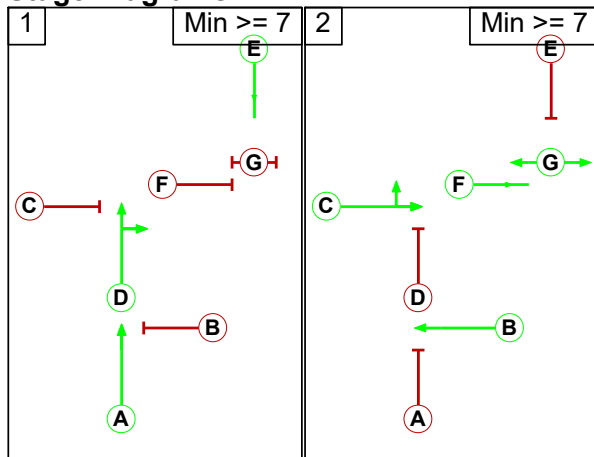
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Traffic		-9999	7
F	Traffic		-9999	7
G	Pedestrian		-9999	5

Intergreens

	Starting Phase							
		A	B	C	D	E	F	G
Terminating Phase	A		7	-	-	-	-	-
	B	7		-	-	-	-	-
	C	-	-		7	-	-	-
	D	-	-	7		-	-	-
	E	-	-	-	-		7	5
	F	-	-	-	-	7		-
	G	-	-	-	-	8	-	

Stage Data

Stage No.	Phases in Stage
1	A D E
2	B C F G

Stage Diagrams**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	6	6
2	1	B	Losing	1	1
2	1	F	Losing	6	6
2	1	G	Losing	5	5

Lane Input Data

Junction: J1: A2 / A2260 Northwest												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A2260 (N))	U	A	2	3	53.0	Geom	-	3.65	0.00	Y	Arm J1:6 Left	62.00
J1:1/2 (A2260 (N))	U	A	2	3	35.0	Geom	-	3.65	0.00	N	Arm J1:5 Ahead	65.50
											Arm J1:6 Left	65.50
J1:1/3 (A2260 (N))	U	A	2	3	53.0	Geom	-	3.65	0.00	N	Arm J1:5 Ahead	69.50
J1:2/1 (Circ (N))	U	B	2	3	3.0	Geom	-	4.50	0.00	Y	Arm J1:6 Ahead	34.50
J1:2/2 (Circ (N))	U	B	2	3	3.0	Geom	-	4.50	0.00	N	Arm J1:5 Right	30.00
											Arm J1:6 Ahead	30.00
J1:2/3 (Circ (N))	U	B	2	3	2.0	Geom	-	4.50	0.00	N	Arm J1:5 Right	25.50
J1:4/1 (A2260 (E))	U	C	2	3	23.5	Geom	-	3.65	0.00	Y	Arm J1:9 Left	44.00
J1:4/2 (A2260 (E))	U	C	2	3	3.8	Geom	-	3.25	0.00	N	Arm J1:8 Ahead	41.00
											Arm J1:9 Left	41.00
J1:4/3 (A2260 (E))	U	C	2	3	23.5	Geom	-	3.65	0.00	N	Arm J1:8 Ahead	45.00
J1:5/1 (Circ (E))	U	D	2	3	3.8	Geom	-	4.25	0.00	Y	Arm J1:9 Ahead	37.00
J1:5/2 (Circ (E))	U	D	2	3	8.2	Geom	-	4.25	0.00	N	Arm J1:8 Right	32.00
											Arm J1:9 Ahead	32.00
J1:7/1 (A2 W/B Off Slip)	U	E	2	3	139.1	Geom	-	3.00	0.00	Y	Arm J1:11 Ahead	31.75
											Arm J1:12 Left	31.75
J1:7/2 (A2 W/B Off Slip)	U	E	2	3	139.1	Geom	-	3.00	0.00	N	Arm J1:11 Ahead	36.00
J1:7/3 (A2 W/B Off Slip)	U	E	2	3	5.0	Geom	-	3.00	0.00	N	Arm J1:11 Ahead	40.00
J1:8/1 (Circ (S))	U	F	2	3	2.0	Geom	-	4.50	0.00	Y	Arm J1:11 Right	30.00
											Arm J1:12 Ahead	30.00

J1:8/2 (Circ (S))	U	F	2	3	5.4	Geom	-	4.50	0.00	N	Arm J1:11 Right	25.00
J1:10/1 (Ackers Drive)	U	G	2	3	60.0	Geom	-	3.25	0.00	Y	Arm J1:2 Ahead	30.00
											Arm J1:3 Left	22.00
J1:10/2 (Ackers Drive)	U	G	2	3	4.0	Geom	-	3.25	0.00	N	Arm J1:2 Ahead	30.00
J1:11/1 (Circ (W))	U	H	2	3	3.0	Geom	-	4.50	0.00	Y	Arm J1:3 Ahead	35.75
J1:11/2 (Circ (W))	U	H	2	3	5.0	Geom	-	4.50	0.00	N	Arm J1:3 Ahead	31.00
J1:11/3 (Circ (W))	U	H	2	3	5.0	Geom	-	4.50	0.00	N	Arm J1:2 Right	26.75
											Arm J1:3 Ahead	26.75

Junction: J2: A2 / A2260 Southeast												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (A2260 (W))	U	C	2	3	20.0	Geom	-	3.65	0.00	Y	Arm J2:5 Ahead	35.50
											Arm J2:6 Left	35.50
J2:1/2 (A2260 (W))	U	C	2	3	5.0	Geom	-	3.25	0.00	N	Arm J2:5 Ahead	31.00
J2:1/3 (A2260 (W))	U	C	2	3	20.0	Geom	-	3.65	0.00	N	Arm J2:5 Ahead	26.50
J2:2/1 (Circ (W))	U	D	2	3	3.8	Geom	-	4.50	0.00	Y	Arm J2:5 Right	35.50
J2:2/2 (Circ (W))	U	D	2	3	6.4	Geom	-	4.50	0.00	N	Arm J2:6 Ahead	35.50
											Arm J2:5 Right	31.00
J2:2/3 (Circ (W))	U	D	2	3	5.7	Geom	-	4.50	0.00	N	Arm J2:5 Right	26.50
J2:4/1 (Access (N))	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm J2:9 Ahead	75.00
J2:4/2 (Access (N))	U		2	3	5.0	Geom	-	3.65	0.00	N	Arm J2:9 Ahead	75.00
											Arm J2:10 Ahead	75.00
J2:5/1 (Circ (N))	U		2	3	2.0	Geom	-	4.35	0.00	Y	Arm J2:9 Right	35.50
J2:5/2 (Circ (N))	U		2	3	3.0	Geom	-	4.35	0.00	N	Arm J2:9 Right	31.00
J2:5/3 (Circ (N))	U		2	3	3.0	Geom	-	4.35	0.00	N	Arm J2:9 Right	26.50
											Arm J2:10 Right	26.50
J2:7/1 (A2 E/B Off Slip)	U		2	3	85.2	Geom	-	3.50	0.00	Y	Arm J2:3 Left	55.00
J2:7/2 (A2 E/B Off Slip)	U	A	2	3	85.2	Geom	-	3.65	0.00	Y	Arm J2:2 Ahead	60.00
J2:7/3 (A2 E/B Off Slip)	U	A	2	3	18.0	Geom	-	3.65	0.00	Y	Arm J2:2 Ahead	64.50
J2:8/1 (Circ (S))	U	B	2	3	13.0	Geom	-	4.50	0.00	Y	Arm J2:3 Ahead	30.50

Give-Way Lane Input Data**Junction: J1: A2 / A2260 Northwest**

There are no Opposed Lanes in this Junction

Junction: J2: A2 / A2260 Southeast

There are no Opposed Lanes in this Junction

Lane Connector Input Data

Junction: J1: A2 / A2260 Northwest				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:1/1	J1:6/1	Internal	8	N/A
J1:1/2	J1:5/1	Internal	8	N/A
J1:1/2	J1:6/2	Internal	8	N/A
J1:1/3	J1:5/2	Internal	8	N/A
J1:2/1	J1:6/1	Internal	9	N/A
J1:2/2	J1:5/1	Internal	8	N/A
J1:2/2	J1:6/2	Internal	9	N/A
J1:2/3	J1:5/2	Internal	7	N/A
J1:4/1	J1:9/1	Internal	7	N/A
J1:4/2	J1:8/1	Internal	6	N/A
J1:4/2	J1:9/2	Internal	7	N/A
J1:4/3	J1:8/2	Internal	6	N/A
J1:5/1	J1:9/1	Internal	7	N/A
J1:5/2	J1:8/1	Internal	6	N/A
J1:5/2	J1:8/2	Internal	5	N/A
J1:5/2	J1:9/2	Internal	7	N/A
J1:6/1	J2:1/1	Leaving	9	N/A
J1:6/2	J2:1/3	Leaving	9	N/A
J1:7/1	J1:11/1	Internal	6	N/A
J1:7/1	J1:12/1	Internal	5	N/A
J1:7/2	J1:11/2	Internal	6	N/A
J1:7/3	J1:11/3	Internal	6	N/A
J1:8/1	J1:11/1	Internal	6	N/A
J1:8/1	J1:12/1	Internal	5	N/A
J1:8/2	J1:11/2	Internal	5	N/A
J1:8/2	J1:11/3	Internal	5	N/A
J1:10/1	J1:2/1	Internal	5	N/A
J1:10/1	J1:3/1	Internal	5	35
J1:10/1	J1:3/2	Internal	5	35
J1:10/2	J1:2/2	Internal	5	N/A
J1:10/2	J1:2/3	Internal	5	N/A
J1:11/1	J1:3/1	Internal	5	35
J1:11/2	J1:3/2	Internal	5	35
J1:11/3	J1:2/1	Internal	5	N/A
J1:11/3	J1:2/2	Internal	4	N/A
J1:11/3	J1:2/3	Internal	4	N/A
J1:11/3	J1:3/3	Internal	5	35

J2:3/1	J1:4/1	Entering	11	N/A
J2:3/1	J1:4/3	Entering	11	N/A
J2:3/2	J1:4/1	Entering	11	N/A
J2:3/2	J1:4/3	Entering	11	N/A

Junction: J2: A2 / A2260 Southeast				
Org Lane	Dest Lane	Junction	Mean Cruise Time	Platoon Dispersion
J1:6/1	J2:1/1	Entering	9	N/A
J1:6/2	J2:1/3	Entering	9	N/A
J2:1/1	J2:5/1	Internal	5	N/A
J2:1/1	J2:6/1	Internal	5	N/A
J2:1/2	J2:5/2	Internal	5	N/A
J2:1/3	J2:5/3	Internal	5	N/A
J2:2/1	J2:5/1	Internal	5	N/A
J2:2/1	J2:6/1	Internal	5	N/A
J2:2/2	J2:5/2	Internal	5	N/A
J2:2/3	J2:5/3	Internal	4	N/A
J2:3/1	J1:4/1	Leaving	11	N/A
J2:3/1	J1:4/3	Leaving	11	N/A
J2:3/2	J1:4/1	Leaving	11	N/A
J2:3/2	J1:4/3	Leaving	11	N/A
J2:4/1	J2:9/1	Internal	6	N/A
J2:4/1	J2:9/2	Internal	6	N/A
J2:4/2	J2:9/3	Internal	6	N/A
J2:4/2	J2:10/1	Internal	6	N/A
J2:5/1	J2:9/1	Internal	5	N/A
J2:5/2	J2:9/2	Internal	5	N/A
J2:5/3	J2:9/3	Internal	5	N/A
J2:5/3	J2:10/1	Internal	5	N/A
J2:7/1	J2:3/1	Internal	4	35
J2:7/2	J2:2/1	Internal	6	N/A
J2:7/3	J2:2/2	Internal	6	N/A
J2:7/3	J2:2/3	Internal	6	N/A
J2:8/1	J2:3/2	Internal	5	35
J2:9/1	J2:11/1	Internal	5	35
J2:9/2	J2:11/2	Internal	5	35
J2:9/2	J2:12/1	Internal	5	35
J2:9/3	J2:12/2	Internal	5	35
J2:10/1	J2:8/1	Internal	8	N/A

Scenario 1: '2030 Without Dev (Without LTC), AM'

(FG5: '2030 Without Dev (Without LTC), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	0	572	0	0	0	0	572
	B	0	0	0	0	0	0	0	0
	C	1265	0	0	0	64	257	0	1586
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	34	0	1024	0	617	0	0	1675
	Tot.	1299	0	1596	0	681	257	0	3833

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	38	8
Change Point	4	49

Stage Stream: 2

Stage	1	2
Duration	20	26
Change Point	40	7

Stage Stream: 3

Stage	1	2
Duration	26	20
Change Point	13	46

Stage Stream: 4

Stage	1	2
Duration	7	39
Change Point	35	49

C2 - SE

Stage	1	2
Duration	22	12
Change Point	36	11

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	78.8%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	78.8%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	38	11	49	989	1933:2073	657+1347	48.8 : 49.6%	6.9	6.1
1/3	A2260 (N) Ahead	C1:A	38	11	49	597	2075	1349	44.3%	7.6	5.2
2/1	Circ (N) Ahead	C1:B	8	56	4	0	2065	310	0.0%	0.0	0.0
2/2	Circ (N) Right Ahead	C1:B	8	56	4	0	2205	331	0.0%	0.0	0.0
2/3	Circ (N) Right	C1:B	8	56	4	0	2205	331	0.0%	0.0	0.0
4/1+4/2	A2260 (E) Ahead Left	C1:C	20	47	7	492	1915:2007	52+700	65.4 : 65.4%	16.3	6.4
4/3	A2260 (E) Ahead	C1:C	20	47	7	566	2052	718	78.8%	17.5	8.3
5/1	Circ (E) Ahead	C1:D	26	14	40	668	1961	882	75.7%	8.3	3.2
5/2	Circ (E) Right Ahead	C1:D	26	14	40	597	2082	937	63.7%	7.6	2.8
7/1	A2 W/B Off Slip Ahead Left	C1:E	26	20	46	150	1829	823	18.2%	12.6	1.6
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	26	20	46	422	1973:1981	597+597	35.4 : 35.4%	12.5	2.4
8/1	Circ (S) Right Ahead	C1:F	20	53	13	458	1967	688	66.5%	0.1	0.1
8/2	Circ (S) Right	C1:F	20	53	13	566	2080	728	77.7%	0.0	0.0
10/1+10/2	Ackers Drive Ahead Left	C1:G	7	42	49	0	1940:2080	259+148	0.0 : 0.0%	0.0	0.0
11/1	Circ (W) Ahead	C1:H	39	56	35	608	1982	1321	46.0%	0.9	0.7
11/2	Circ (W) Ahead	C1:H	39	56	35	494	2103	1402	35.2%	1.5	1.0
11/3	Circ (W) Right Ahead	C1:H	39	56	35	494	2088	1392	35.5%	1.5	1.0
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	64.7%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	12	24	36	321	1900:1984	88+408	64.7 : 64.7%	16.9	2.2
1/3	A2260 (W) Ahead	C2:C	12	24	36	0	2120	459	0.0%	0.0	0.0
2/1	Circ (W) Right Ahead	C2:D	34	43	17	308	1981	1156	26.7%	0.0	0.0

[illegible]

Scenario 2: '2030 Without Dev (Without LTC), PM'

(FG6: '2030 Without Dev (Without LTC), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	0	374	0	0	0	0	374
	B	0	0	0	0	0	0	0	0
	C	1133	0	0	0	108	432	0	1673
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	0	0	1049	0	1097	0	0	2146
	Tot.	1133	0	1423	0	1205	432	0	4193

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	39	7
Change Point	59	45

Stage Stream: 2

Stage	1	2
Duration	23	23
Change Point	30	0

Stage Stream: 3

Stage	1	2
Duration	16	30
Change Point	13	36

Stage Stream: 4

Stage	1	2
Duration	7	39
Change Point	4	18

C2 - SE

Stage	1	2
Duration	25	9
Change Point	33	11

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	72.3%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	72.3%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	39	6	45	1071	1933:2073	634+1382	52.8 : 53.3%	6.7	6.9
1/3	A2260 (N) Ahead	C1:A	39	6	45	602	2075	1383	43.5%	7.0	5.1
2/1	Circ (N) Ahead	C1:B	7	52	59	0	2065	275	0.0%	0.0	0.0
2/2	Circ (N) Right Ahead	C1:B	7	52	59	0	2205	294	0.0%	0.0	0.0
2/3	Circ (N) Right	C1:B	7	52	59	0	2205	294	0.0%	0.0	0.0
4/1+4/2	A2260 (E) Ahead Left	C1:C	23	37	0	463	1980:2007	0+803	0.0 : 57.7%	14.0	5.9
4/3	A2260 (E) Ahead	C1:C	23	37	0	586	2052	821	71.4%	15.1	8.1
5/1	Circ (E) Ahead	C1:D	23	7	30	531	1961	784	67.7%	10.6	3.4
5/2	Circ (E) Right Ahead	C1:D	23	7	30	602	2082	833	72.3%	10.7	3.8
7/1	A2 W/B Off Slip Ahead Left	C1:E	16	20	36	72	1829	518	13.9%	20.1	1.0
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	16	20	36	302	1973:1981	432+432	35.0 : 35.0%	19.9	2.2
8/1	Circ (S) Right Ahead	C1:F	30	43	13	463	1967	1016	45.6%	0.1	0.1
8/2	Circ (S) Right	C1:F	30	43	13	586	2080	1075	54.5%	0.0	0.0
10/1+10/2	Ackers Drive Ahead Left	C1:G	7	11	18	0	1940:2080	259+148	0.0 : 0.0%	0.0	0.0
11/1	Circ (W) Ahead	C1:H	39	25	4	535	1982	1321	40.5%	2.0	1.9
11/2	Circ (W) Ahead	C1:H	39	25	4	444	2103	1402	31.7%	1.3	0.6
11/3	Circ (W) Right Ahead	C1:H	39	25	4	444	2088	1392	31.9%	1.3	0.6
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	71.1%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	9	24	33	335	1900:1984	149+322	71.1 : 71.1%	19.1	3.6
1/3	A2260 (W) Ahead	C2:C	9	24	33	205	2006	334	61.3%	18.4	2.5

Page 2											
2/1	Circ (W) Right Ahead	C2:D	37	40	17	548	1981	1255	43.7%	0.0	0.0
2/2	Circ (W) Right	C2:D	37	40	17	549	2103	1332	41.2%	0.0	0.0
2/3	Circ (W) Right	C2:D	37	40	17	0	2205	1397	0.0%	0.0	0.0
4/1+4/2	Access (N) Ahead Ahead2	-	-	-	-	0	1980:2120	623+1453	0.0 : 0.0%	0.0	0.0
5/1	Circ (N) Right	-	-	-	-	654	1967	1967	33.2%	0.0	0.0
5/2	Circ (N) Right	-	-	-	-	778	2089	2089	37.2%	0.0	0.0
5/3	Circ (N) Right Right2	-	-	-	-	205	2073	2073	9.9%	0.0	0.0
7/1	A2 E/B Off Slip Left	-	-	-	-	1049	1913	1913	54.8%	2.1	0.6
7/2+7/3	A2 E/B Off Slip Ahead	C2:A	30	41	11	1097	1932:1935	966+968	56.7 : 56.7%	11.9	6.8
8/1	Circ (S) Ahead	C2:B	16	18	34	0	2065	585	0.0%	0.0	0.0
C1 - NW Stream: 1 PRC for Signalled Lanes (%): 69.0 C1 - NW Stream: 2 PRC for Signalled Lanes (%): 24.5 C1 - NW Stream: 3 PRC for Signalled Lanes (%): 65.1 C1 - NW Stream: 4 PRC for Signalled Lanes (%): 122.3 C2 - SE PRC for Signalled Lanes (%): 26.7 PRC Over All Lanes (%): 24.5 Total Delay for Signalled Lanes (pcuHr): 3.17 Cycle Time (s): 60 Total Delay for Signalled Lanes (pcuHr): 7.61 Cycle Time (s): 60 Total Delay for Signalled Lanes (pcuHr): 2.08 Cycle Time (s): 60 Total Delay for Signalled Lanes (pcuHr): 0.63 Cycle Time (s): 60 Total Delay for Signalled Lanes (pcuHr): 6.46 Cycle Time (s): 60 Total Delay Over All Lanes(pcuHr): 20.56											

Scenario 3: '2030 Without Dev (Without LTC), SAT'

(FG7: '2030 Without Dev (Without LTC), SAT', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	0	269	0	0	0	0	269
	B	0	0	0	0	0	0	0	0
	C	827	0	0	0	69	275	0	1171
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	37	0	775	0	552	0	0	1364
	Tot.	864	0	1044	0	621	275	0	2804

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	38	8
Change Point	0	45

Stage Stream: 2

Stage	1	2
Duration	23	23
Change Point	34	4

Stage Stream: 3

Stage	1	2
Duration	23	23
Change Point	10	40

Stage Stream: 4

Stage	1	2
Duration	7	39
Change Point	30	44

C2 - SE

Stage	1	2
Duration	21	13
Change Point	34	8

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	55.6%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	55.6%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	38	7	45	769	1933:2073	679+1345	38.0 : 38.0%	6.1	4.1
1/3	A2260 (N) Ahead	C1:A	38	7	45	402	2075	1349	29.8%	6.5	3.1
2/1	Circ (N) Ahead	C1:B	8	52	0	0	2065	310	0.0%	0.0	0.0
2/2	Circ (N) Right Ahead	C1:B	8	52	0	0	2205	331	0.0%	0.0	0.0
2/3	Circ (N) Right	C1:B	8	52	0	0	2205	331	0.0%	0.0	0.0
4/1+4/2	A2260 (E) Ahead Left	C1:C	23	41	4	356	1915:2007	89+771	41.4 : 41.4%	12.7	3.7
4/3	A2260 (E) Ahead	C1:C	23	41	4	456	2052	821	55.6%	13.9	5.8
5/1	Circ (E) Ahead	C1:D	23	11	34	425	1961	784	54.2%	9.0	2.2
5/2	Circ (E) Right Ahead	C1:D	23	11	34	402	2082	833	48.3%	9.0	2.1
7/1	A2 W/B Off Slip Ahead Left	C1:E	23	17	40	41	1829	732	5.6%	13.7	0.4
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	23	17	40	228	1973:1981	547+547	20.8 : 20.8%	13.6	1.3
8/1	Circ (S) Right Ahead	C1:F	23	47	10	319	1967	787	40.5%	0.0	0.1
8/2	Circ (S) Right	C1:F	23	47	10	456	2080	832	54.8%	0.0	0.0
10/1+10/2	Ackers Drive Ahead Left	C1:G	7	37	44	0	1940:2080	259+148	0.0 : 0.0%	0.0	0.0
11/1	Circ (W) Ahead	C1:H	39	51	30	360	1982	1321	27.2%	0.4	0.2
11/2	Circ (W) Ahead	C1:H	39	51	30	342	2103	1402	24.4%	1.1	0.5
11/3	Circ (W) Right Ahead	C1:H	39	51	30	342	2088	1392	24.6%	1.1	0.5
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	50.0%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	13	21	34	258	1900:1984	76+440	50.0 : 50.0%	15.6	1.7
1/3	A2260 (W) Ahead	C2:C	13	21	34	86	2006	468	18.4%	15.2	0.7

[illegible]

Scenario 5: '2030 Adjusted (Without LTC), AM'

(FG9: '2030 Adjusted (Without LTC), AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	61	643	0	3	0	0	707
	B	56	0	89	0	13	54	0	212
	C	722	66	0	0	115	459	0	1362
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	51	67	587	0	577	0	0	1282
	Tot.	829	194	1319	0	708	513	0	3563

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	39	7
Change Point	24	10

Stage Stream: 2

Stage	1	2
Duration	23	23
Change Point	57	27

Stage Stream: 3

Stage	1	2
Duration	23	23
Change Point	32	2

Stage Stream: 4

Stage	1	2
Duration	8	38
Change Point	51	6

C2 - SE

Stage	1	2
Duration	14	20
Change Point	4	31

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	54.2%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	54.2%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	39	31	10	924	1933:2073	805+1210	45.9 : 45.9%	6.0	4.6
1/3	A2260 (N) Ahead	C1:A	39	31	10	438	2075	1383	31.7%	6.1	3.3
2/1	Circ (N) Ahead	C1:B	7	17	24	31	1979	264	11.7%	12.8	0.5
2/2	Circ (N) Right Ahead	C1:B	7	17	24	82	2100	280	29.3%	13.4	1.4
2/3	Circ (N) Right	C1:B	7	17	24	13	2083	278	4.7%	12.7	0.2
4/1+4/2	A2260 (E) Ahead Left	C1:C	23	4	27	262	1915:2007	173+715	29.5 : 29.5%	11.9	2.3
4/3	A2260 (E) Ahead	C1:C	23	4	27	443	2052	821	54.0%	13.8	5.5
5/1	Circ (E) Ahead	C1:D	23	34	57	393	1961	784	50.1%	9.9	2.8
5/2	Circ (E) Right Ahead	C1:D	23	34	57	451	2082	833	54.2%	9.8	2.8
7/1	A2 W/B Off Slip Ahead Left	C1:E	23	39	2	204	1829	732	27.9%	15.6	2.5
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	23	39	2	503	1973:1981	545+548	46.0 : 46.0%	15.4	3.3
8/1	Circ (S) Right Ahead	C1:F	23	9	32	277	1967	787	35.2%	6.3	1.7
8/2	Circ (S) Right	C1:F	23	9	32	443	2080	832	53.2%	0.6	0.1
10/1+10/2	Ackers Drive Ahead Left	C1:G	8	58	6	212	1824:1981	257+209	45.5 : 45.5%	30.1	2.2
11/1	Circ (W) Ahead	C1:H	38	13	51	287	1982	1288	22.3%	1.9	0.7
11/2	Circ (W) Ahead	C1:H	38	13	51	507	2103	1367	37.1%	1.9	1.3
11/3	Circ (W) Right Ahead	C1:H	38	13	51	439	2088	1357	32.3%	2.2	1.2
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	52.3%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	20	44	4	400	1900:1984	147+618	52.3 : 52.3%	11.1	2.2
1/3	A2260 (W) Ahead	C2:C	20	44	4	244	2006	702	34.8%	11.0	2.0

[illegible]

Scenario 6: '2030 Adjusted (Without LTC), PM'

(FG10: '2030 Adjusted (Without LTC), PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	0	168	0	0	0	0	168
	B	0	0	0	0	0	0	0	0
	C	77	0	0	0	33	132	0	242
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	0	0	116	0	1059	0	0	1175
	Tot.	77	0	284	0	1092	132	0	1585

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	39	7
Change Point	19	5

Stage Stream: 2

Stage	1	2
Duration	35	11
Change Point	44	26

Stage Stream: 3

Stage	1	2
Duration	39	7
Change Point	31	17

Stage Stream: 4

Stage	1	2
Duration	7	39
Change Point	7	21

C2 - SE

Stage	1	2
Duration	27	7
Change Point	7	47

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	54.8%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	35.3%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	39	26	5	219	1933:2073	827+1186	10.9 : 10.9%	4.6	0.8
1/3	A2260 (N) Ahead	C1:A	39	26	5	23	2075	1383	1.7%	4.8	0.1
2/1	Circ (N) Ahead	C1:B	7	12	19	0	2065	275	0.0%	0.0	0.0
2/2	Circ (N) Right Ahead	C1:B	7	12	19	0	2205	294	0.0%	0.0	0.0
2/3	Circ (N) Right	C1:B	7	12	19	0	2205	294	0.0%	0.0	0.0
4/1+4/2	A2260 (E) Ahead Left	C1:C	35	51	26	18	1980:2007	0+1204	0.0 : 1.5%	5.0	0.1
4/3	A2260 (E) Ahead	C1:C	35	51	26	98	2052	1231	8.0%	5.1	0.7
5/1	Circ (E) Ahead	C1:D	11	33	44	54	1961	392	13.8%	16.4	0.4
5/2	Circ (E) Right Ahead	C1:D	11	33	44	23	2082	416	5.5%	16.4	0.2
7/1	A2 W/B Off Slip Ahead Left	C1:E	39	38	17	27	1829	1219	2.2%	5.0	0.2
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	39	38	17	141	1973:1981	981+490	9.6 : 9.6%	4.9	0.6
8/1	Circ (S) Right Ahead	C1:F	7	24	31	18	1967	262	6.9%	18.0	0.3
8/2	Circ (S) Right	C1:F	7	24	31	98	2080	277	35.3%	18.6	1.5
10/1+10/2	Ackers Drive Ahead Left	C1:G	7	14	21	0	1940:2080	259+148	0.0 : 0.0%	0.0	0.0
11/1	Circ (W) Ahead	C1:H	39	28	7	45	1982	1321	3.4%	2.0	0.1
11/2	Circ (W) Ahead	C1:H	39	28	7	143	2103	1402	10.2%	2.2	0.4
11/3	Circ (W) Right Ahead	C1:H	39	28	7	96	2088	1392	6.9%	1.6	0.2
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	54.8%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	7	0	7	90	1900:1984	71+265	26.8 : 26.8%	19.8	1.0
1/3	A2260 (W) Ahead	C2:C	7	0	7	75	2006	267	28.0%	19.8	1.1
2/1	Circ (W) Right Ahead	C2:D	39	14	53	529	1981	1321	40.1%	0.0	0.0

Scenario 7: '2030 With Dev Flows (Without LTC), SAT'

(FG11: '2030 With Dev Flows (Without LTC), SAT', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

		Destination							
Origin		A	B	C	D	E	F	G	Tot.
	A	0	0	421	0	0	0	0	421
	B	0	0	0	0	0	0	0	0
	C	930	0	0	0	92	367	0	1389
	D	0	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0
	G	37	0	863	0	554	0	0	1454
	Tot.	967	0	1284	0	646	367	0	3264

Stage Timings**C1 - NW****Stage Stream: 1**

Stage	1	2
Duration	39	7
Change Point	0	46

Stage Stream: 2

Stage	1	2
Duration	24	22
Change Point	25	56

Stage Stream: 3

Stage	1	2
Duration	23	23
Change Point	0	30

Stage Stream: 4

Stage	1	2
Duration	7	39
Change Point	20	34

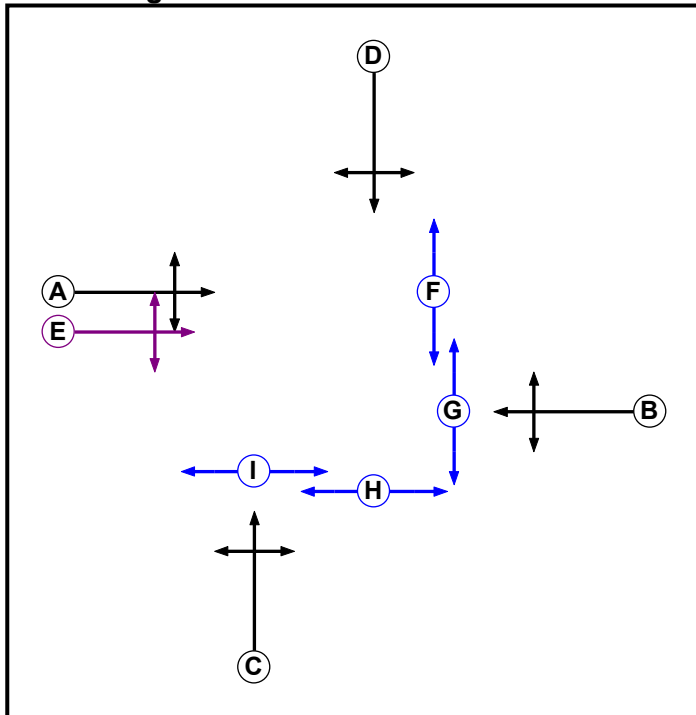
C2 - SE

Stage	1	2
Duration	18	16
Change Point	36	7

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A2 / A2260 Roundabouts	-	-	-	-	-	-	-	-	60.8%	-	-
J1: A2 / A2260 Northwest	-	-	-	-	-	-	-	-	60.8%	-	-
1/1+1/2	A2260 (N) Ahead Left	C1:A	39	7	46	916	1933:2073	754+1265	45.4 : 45.4%	6.0	4.7
1/3	A2260 (N) Ahead	C1:A	39	7	46	473	2075	1383	34.2%	6.3	3.5
2/1	Circ (N) Ahead	C1:B	7	53	0	0	2065	275	0.0%	0.0	0.0
2/2	Circ (N) Right Ahead	C1:B	7	53	0	0	2205	294	0.0%	0.0	0.0
2/3	Circ (N) Right	C1:B	7	53	0	0	2205	294	0.0%	0.0	0.0
4/1+4/2	A2260 (E) Ahead Left	C1:C	24	32	56	398	1915:2007	83+808	44.7 : 44.7%	12.3	4.2
4/3	A2260 (E) Ahead	C1:C	24	32	56	502	2052	855	58.7%	13.5	6.4
5/1	Circ (E) Ahead	C1:D	22	3	25	457	1961	752	60.8%	12.5	3.7
5/2	Circ (E) Right Ahead	C1:D	22	3	25	473	2082	798	59.3%	12.5	3.8
7/1	A2 W/B Off Slip Ahead Left	C1:E	23	7	30	93	1829	732	12.7%	14.2	1.0
7/2+7/3	A2 W/B Off Slip Ahead	C1:E	23	7	30	328	1973:1981	547+547	30.0 : 30.0%	14.1	2.0
8/1	Circ (S) Right Ahead	C1:F	23	37	0	361	1967	787	45.9%	1.2	0.2
8/2	Circ (S) Right	C1:F	23	37	0	502	2080	832	60.3%	1.2	0.3
10/1+10/2	Ackers Drive Ahead Left	C1:G	7	27	34	0	1940:2080	259+148	0.0 : 0.0%	0.0	0.0
11/1	Circ (W) Ahead	C1:H	39	41	20	454	1982	1321	34.4%	0.7	0.4
11/2	Circ (W) Ahead	C1:H	39	41	20	415	2103	1402	29.6%	1.3	0.7
11/3	Circ (W) Right Ahead	C1:H	39	41	20	415	2088	1392	29.8%	1.3	0.7
J2: A2 / A2260 Southeast	-	-	-	-	-	-	-	-	55.5%	-	-
1/1+1/2	A2260 (W) Ahead Left	C2:C	16	20	36	342	1900:1984	94+523	55.5 : 55.5%	14.1	2.2
1/3	A2260 (W) Ahead	C2:C	16	20	36	117	2006	568	20.6%	13.7	0.9

[illegible]

Phase Diagram**Phase Input Data**

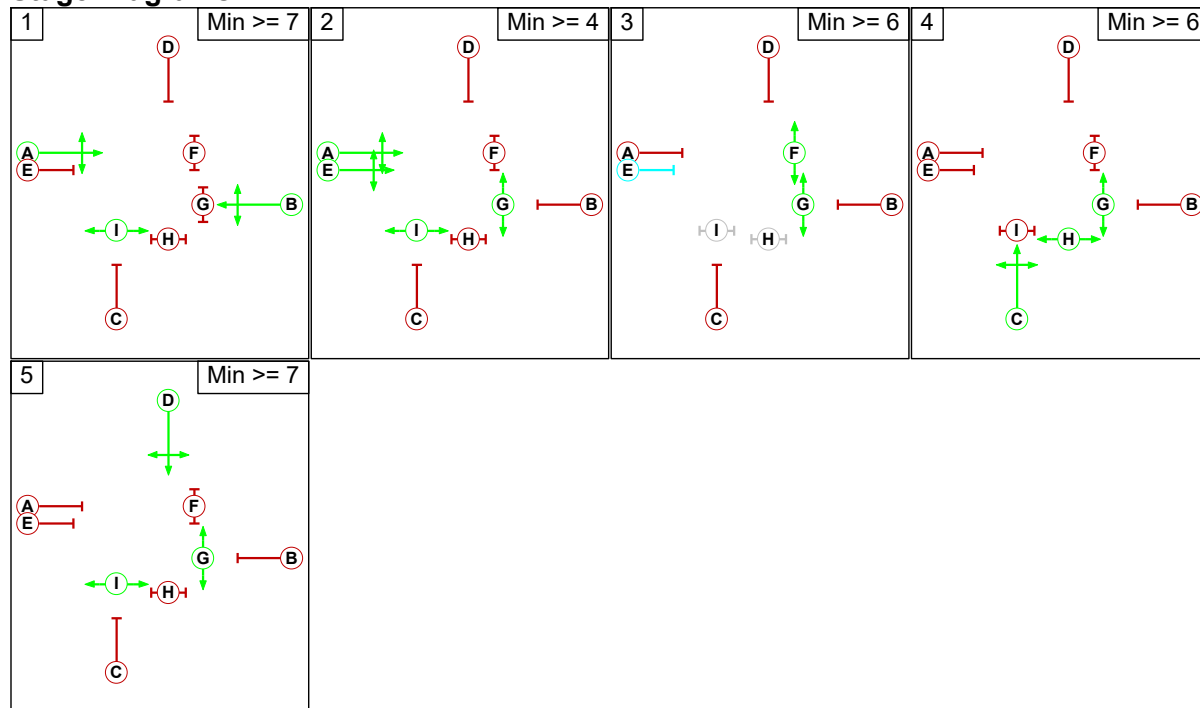
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Ind. Arrow	A	-9999	4
F	Pedestrian		-9999	6
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6
I	Pedestrian		-9999	6

Intergreens

		Starting Phase								
Terminating Phase		A	B	C	D	E	F	G	H	I
	A	-	-	5	7	-	9	-	10	-
	B	-	-	7	7	5	-	5	8	-
	C	5	5	-	6	5	9	-	-	5
	D	5	5	5	-	5	7	-	7	-
	E	-	5	5	7	-	-	-	10	-
	F	7	-	7	7	-	-	-	-	-
	G	-	7	-	-	-	-	-	-	-
	H	8	8	-	8	8	-	-	-	-
	I	-	-	8	-	-	-	-	-	-

Stage Data

Stage No.	Phases in Stage
1	A B I
2	A E G I
3	F G
4	C G H
5	D G I

Stage Diagrams**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
4	1	C	Losing	3	3
5	1	D	Losing	2	2

Lane Input Data

Junction: A226 / High Street												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A226 London Road (East))	O	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Left	13.50
											Arm 7 Ahead	50.00
											Arm 8 Right	8.00
2/1 (High Street)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Left	9.50
2/2 (High Street)	U	C	2	3	5.0	Geom	-	2.75	0.00	N	Arm 5 Right	10.00
											Arm 8 Ahead	Inf
3/1 (A226 London Road (West))	O	A E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	10.00
											Arm 8 Left	6.00
4/1 (Pilgrims Road)	U	D	2	3	60.0	Geom	-	2.75	0.00	Y	Arm 5 Left	16.50
											Arm 6 Ahead	5.00
											Arm 7 Right	10.00

Give-Way Lane Input Data

Junction: A226 / High Street											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A226 London Road (East))	8/1 (Right)	1440	0	3/1	1.09	All	3.00	1.00	0.50	3	3.00
3/1 (A226 London Road (West))	6/1 (Right)	1440	0	1/1	1.09	All	2.00	2.00	0.50	2	2.00

(FG4: '2030 Without Dev, AM', Plan 3: 'Peds Every Cycle')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	72	501	573
	C	0	101	0	306	407
	D	0	182	177	0	359
	Tot.	0	283	249	807	1339

Stage	1	3	4
Duration	27	6	11
Change Point	0	35	50

[illegible]

(FG7: '2030 Adjusted Flows (Without LTC), AM', Plan 3: 'Peds Every Cycle')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	1	0	196	265	462
	C	1	148	8	80	237
	D	0	312	104	0	416
	Tot.	2	460	308	345	1115

Stage	1	3	4
Duration	15	6	7
Change Point	0	23	38

[illegible]

Scenario 8: '2030 Adjusted Flows (Without LTC), PM'

(FG8: '2030 Adjusted Flows (Without LTC), PM', Plan 3: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	1	0	147	281	429
	C	0	126	0	65	191
	D	0	337	197	0	534
	Tot.	1	463	344	346	1154

Stage Timings

Stage	1	3	4
Duration	23	6	7
Change Point	0	31	46

Link Results

[illegible]

(FG9: '2030 With Dev Flows (Without LTC), SAT', Plan 3: 'Peds Every Cycle')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	0	0	98	332	430
	C	0	94	0	152	246
	D	0	164	180	0	344
	Tot.	0	258	278	484	1020

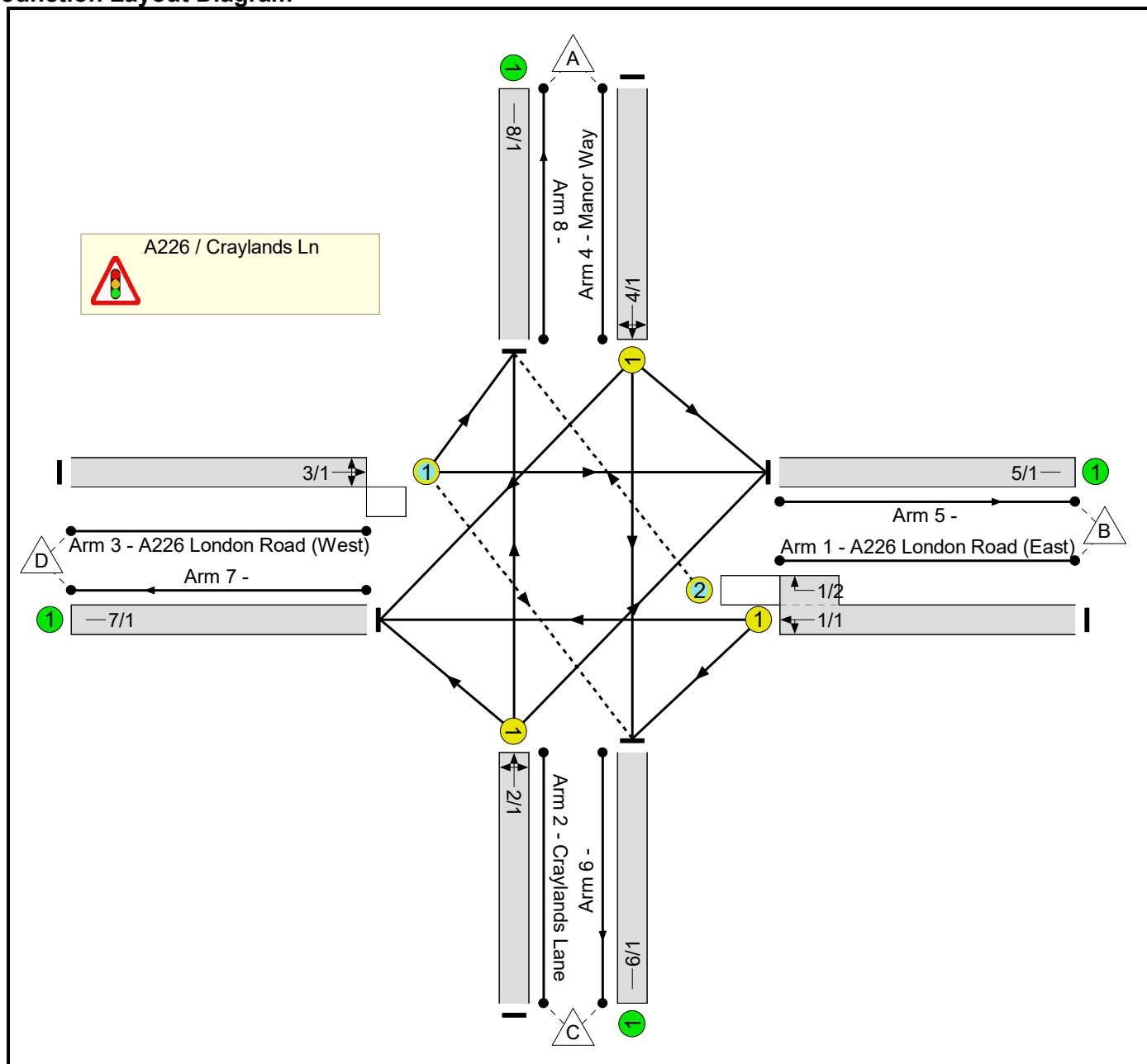
Stage	1	3	4
Duration	19	6	7
Change Point	0	27	42

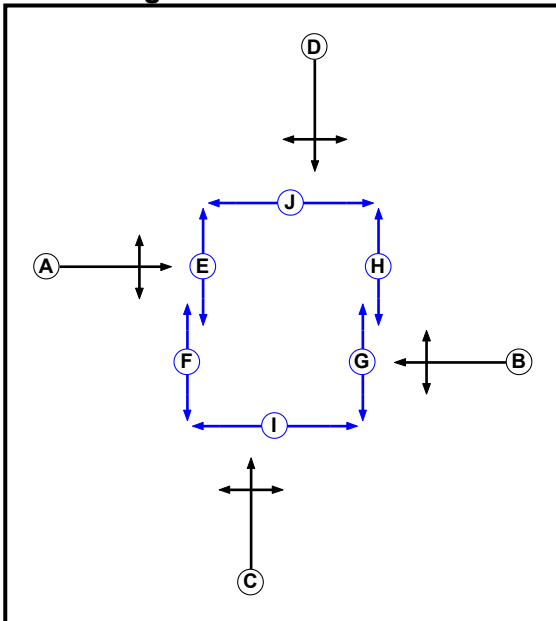
[illegible]

User and Project Details

Project:	Northfleet
Title:	A226 / Craylands Lane
Design Layout Ref:	Existing Junction Layout
File name:	J7 - A226_Craylands Lane (Existing) v2.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Junction Layout Diagram



Phase Diagram**Phase Input Data**

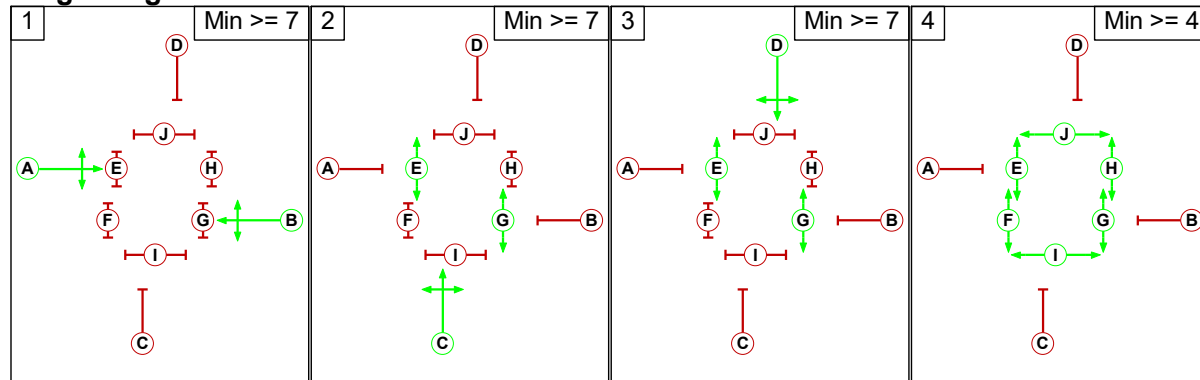
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		4	4
F	Pedestrian		4	4
G	Pedestrian		5	5
H	Pedestrian		4	4
I	Pedestrian		7	7
J	Pedestrian		7	7

Intergreens

	Starting Phase										
		A	B	C	D	E	F	G	H	I	J
Terminating Phase	A		-	5	8	5	-	-	12	9	9
	B	-		8	6	-	12	5	-	9	9
	C	5	5		8	-	8	-	12	5	9
	D	5	5	7		-	11	-	9	8	5
	E	5	-	-	-		-	-	-	-	-
	F	-	5	5	5	-		-	-	-	-
	G	-	5	-	-	-	-		-	-	-
	H	5	-	5	5	-	-	-		-	-
	I	5	5	5	5	-	-	-	-		-
	J	5	5	5	5	-	-	-	-	-	

Stage Data

Stage No.	Phases in Stage
1	A B
2	C E G
3	D E G
4	E F G H I J

Stage Diagrams**Phase Delays**

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

Lane Input Data

Junction: A226 / Craylands Ln												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A226 London Road (East))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Left	16.50
											Arm 7 Ahead	Inf
1/2 (A226 London Road (East))	O	B	2	3	3.0	Geom	-	3.00	0.00	N	Arm 8 Right	12.00
2/1 (Craylands Lane)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Right	12.00
											Arm 7 Left	13.50
											Arm 8 Ahead	Inf
3/1 (A226 London Road (West))	O	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	10.00
											Arm 8 Left	16.50
											Arm 5 Left	16.50
4/1 (Manor Way)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Right	15.00

Give-Way Lane Input Data

Junction: A226 / Craylands Ln											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (A226 London Road (East))	8/1 (Right)	1440	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	3.00	-	0.50	3	3.00
3/1 (A226 London Road (West))	6/1 (Right)	1440	0	1/1	1.09	All	2.00	2.00	0.50	2	2.00

Scenario 6: '2030 Without Dev, SAT'

(FG6: '2030 Without Dev (Without LTC), SAT', Plan 3: 'Peds Every Cycle')

Traffic Flows, Desired**Desired Flow :**

		Destination				
Origin		A	B	C	D	Tot.
	A	0	34	3	0	37
	B	38	0	0	413	451
	C	3	0	0	23	26
	D	0	282	2	0	284
	Tot.	41	316	5	436	798

Stage Timings

Stage	1	2	3	4
Duration	18	7	7	4
Change Point	0	23	38	53

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A226 / Craylands Lane	-	-	-	-	-	-	-	-	78.0%	-	-
A226 / Craylands Ln	-	-	-	-	-	-	-	-	78.0%	-	-
1/1+1/2	A226 London Road (East) Left Ahead Right	B	18	5	23	451	1980:1827	530+49	78.0 : 78.0%	36.3	9.2
2/1	Craylands Lane Right Left Ahead	C	7	31	38	26	1789	210	12.4%	36.7	0.5
3/1	A226 London Road (West) Ahead Right Left	A	18	5	23	284	1978	553	51.4%	27.4	5.0
4/1	Manor Way Left Ahead Right	D	7	46	53	37	1814	213	17.3%	37.3	0.7
C1			PRC for Signalled Lanes (%):	15.4	Total Delay for Signalled Lanes (pcuHr):		7.36	Cycle Time (s):		68	
			PRC Over All Lanes (%):	15.4	Total Delay Over All Lanes(pcuHr):		7.36				

(FG9: '2030 With Dev (Without LTC), SAT', Plan 3: 'Peds Every Cycle')

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	36	3	0	39
	B	39	0	0	445	484
	C	3	0	0	23	26
	D	0	308	2	0	310
	Tot.	42	344	5	468	859

Stage	1	2	3	4
Duration	18	7	7	4
Change Point	0	23	38	53

[illegible]

Junctions 10		
ARCADY 10 - Roundabout Module		
Version: 10.0.4.1693		
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution		

Filename: J8 - A226_A206_B255 (Existing) v2.0.j10

Path: C:\DSN\226728 - Northfleet

Report generation date: 22/10/2023 16:52:02

-
- »2022 Observed, AM
 - »2022 Observed, PM
 - »2022 Observed, SAT
 - »2030 Without Dev Flows (Without LTC), AM
 - »2030 Without Dev Flows (Without LTC), PM
 - »2030 Without Dev Flows (Without LTC), SAT
 - »2030 Adjusted Flows (Without LTC), AM
 - »2030 Adjusted Flows (Without LTC), PM
 - »2030 With Dev Flows (Without LTC), SAT

Summary of junction performance

	AM			PM			SAT		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2022 Observed									
1 - A206 (N) - LEFT TURN	0.4	6.04	0.27	0.7	7.88	0.41	0.0	0.00	0.00
2 - A206 (N) - AHEAD	0.6	3.70	0.38	2.6	8.73	0.72	0.0	0.00	0.00
3 - A226 London Road (E)	1.0	4.80	0.48	1.2	6.84	0.53	0.0	0.00	0.00
4 - B255 (S) - LEFT TURN	0.4	5.06	0.27	0.4	5.06	0.30	0.0	0.00	0.00
5 - B255 (S) - AHEAD	1.6	5.57	0.60	1.1	4.43	0.51	0.0	0.00	0.00
6 - A226 London Road (W)	0.8	4.59	0.45	0.9	4.35	0.48	0.0	0.00	0.00
2030 Without Dev Flows (Without LTC)									
1 - A206 (N) - LEFT TURN	0.3	4.20	0.21	2.3	11.99	0.70	0.3	4.26	0.24
2 - A206 (N) - AHEAD	0.8	3.58	0.45	0.4	3.08	0.30	0.3	2.50	0.22
3 - A226 London Road (E)	0.4	3.58	0.29	0.2	2.60	0.19	0.2	2.44	0.14
4 - B255 (S) - LEFT TURN	0.1	5.11	0.12	0.1	3.99	0.09	0.0	3.55	0.05
5 - B255 (S) - AHEAD	0.1	2.83	0.05	0.2	2.52	0.15	0.1	2.27	0.06
6 - A226 London Road (W)	0.2	2.48	0.16	0.2	2.32	0.19	0.1	2.01	0.10
2030 Adjusted Flows (Without LTC)									
1 - A206 (N) - LEFT TURN	0.4	6.05	0.27	0.8	8.61	0.44			
2 - A206 (N) - AHEAD	1.3	5.14	0.55	7.6	21.85	0.89			
3 - A226 London Road (E)	11.8	35.57	0.94	16.8	62.57	0.98			
4 - B255 (S) - LEFT TURN	1.0	13.33	0.50	0.8	8.80	0.43			
5 - B255 (S) - AHEAD	7.2	26.83	0.89	2.1	8.27	0.67			
6 - A226 London Road (W)	3.0	16.51	0.75	2.0	9.17	0.67			
2030 With Dev Flows (Without LTC)									
1 - A206 (N) - LEFT TURN							0.4	4.38	0.26
2 - A206 (N) - AHEAD							0.3	2.56	0.23
3 - A226 London Road (E)							0.2	2.46	0.15
4 - B255 (S) - LEFT TURN							0.1	3.62	0.05
5 - B255 (S) - AHEAD							0.1	2.31	0.07
6 - A226 London Road (W)							0.1	2.05	0.11

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

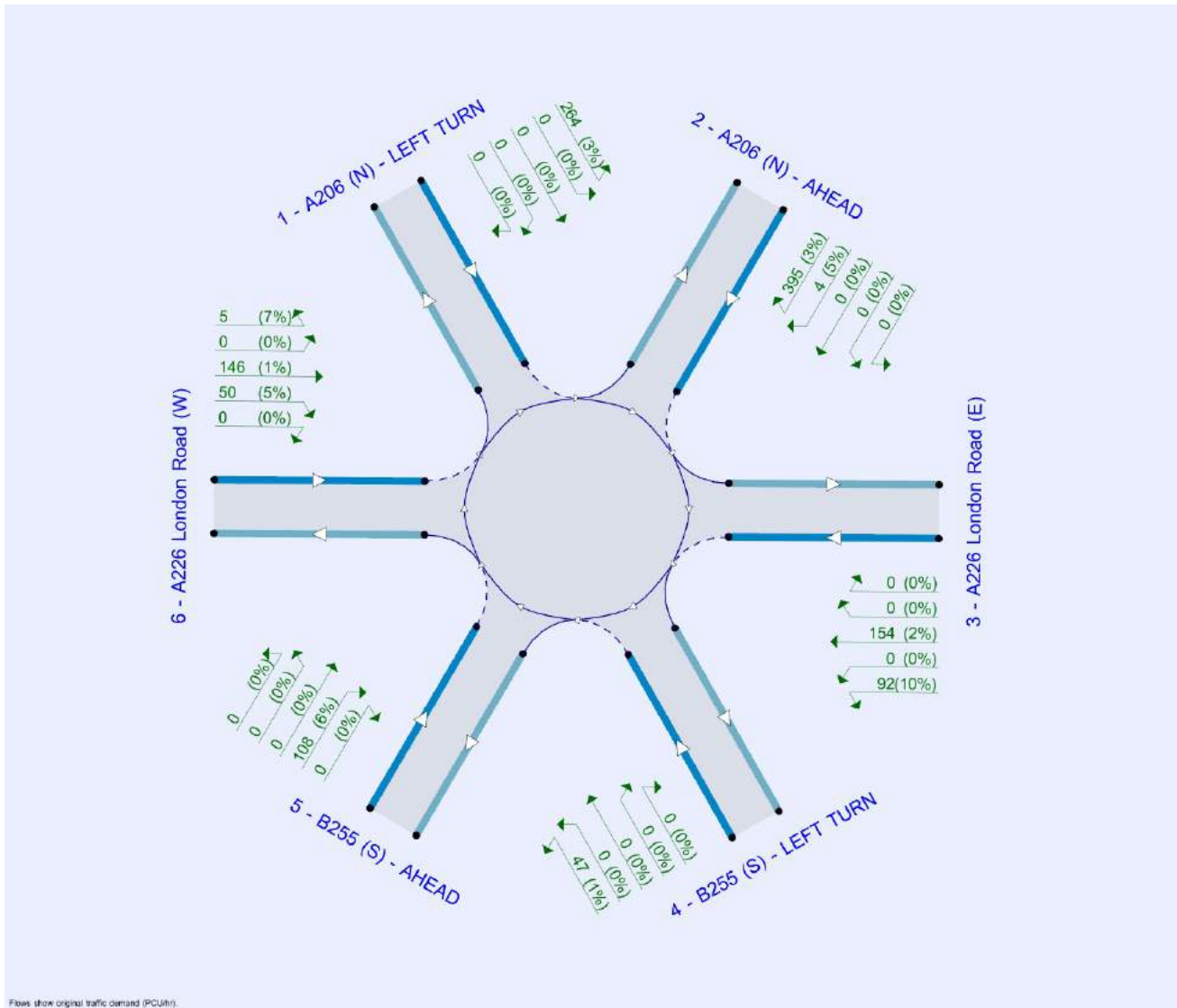
File summary

File Description

Title	Northfleet
Location	J8 - A226 / A206 / B255 Roundabout
Site number	
Date	22/10/2023
Version	
Status	Existing Junction Layout
Identifier	
Client	
Jobnumber	226728
Enumerator	David Noyce
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓
D3	2022 Observed	SAT	ONE HOUR	12:00	13:30	15	✓
D4	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D6	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓
D7	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D8	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D9	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2022 Observed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	4.89	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.89	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A206 (N) - LEFT TURN		
2	A206 (N) - AHEAD		
3	A226 London Road (E)		
4	B255 (S) - LEFT TURN		
5	B255 (S) - AHEAD		
6	A226 London Road (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A206 (N) - LEFT TURN	3.65	4.21	2.5	53.0	56.0	12.0		
2 - A206 (N) - AHEAD	7.00	7.00	0.0	82.0	56.0	43.0		
3 - A226 London Road (E)	3.50	9.75	22.8	24.0	56.0	23.0		
4 - B255 (S) - LEFT TURN	3.90	4.30	3.3	84.0	56.0	13.0		
5 - B255 (S) - AHEAD	7.20	7.20	0.0	155.0	56.0	43.0		
6 - A226 London Road (W)	6.60	9.30	6.6	20.0	56.0	23.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A206 (N) - LEFT TURN	0.535	1317
2 - A206 (N) - AHEAD	0.650	2104
3 - A226 London Road (E)	0.667	2136
4 - B255 (S) - LEFT TURN	0.550	1391
5 - B255 (S) - AHEAD	0.664	2176
6 - A226 London Road (W)	0.714	2411

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	233	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	573	100.000
3 - A226 London Road (E)		ONE HOUR	✓	669	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	242	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	929	100.000
6 - A226 London Road (W)		ONE HOUR	✓	603	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	233	0	0	0	0
	2 - A206 (N) - AHEAD	28	0	0	401	0	144
	3 - A226 London Road (E)	244	0	1	182	0	242
	4 - B255 (S) - LEFT TURN	0	0	0	0	242	0
	5 - B255 (S) - AHEAD	728	0	188	13	0	0
	6 - A226 London Road (W)	190	0	189	223	0	1

Vehicle Mix

Heavy Vehicle Percentages

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	17	0	0	0	0
	2 - A206 (N) - AHEAD	4	0	0	8	0	2
	3 - A226 London Road (E)	12	0	0	6	0	4
	4 - B255 (S) - LEFT TURN	0	0	0	0	2	0
	5 - B255 (S) - AHEAD	3	0	7	0	0	0
	6 - A226 London Road (W)	2	0	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.27	6.04	0.4	A	214	321
2 - A206 (N) - AHEAD	0.38	3.70	0.6	A	526	789
3 - A226 London Road (E)	0.48	4.80	1.0	A	614	921
4 - B255 (S) - LEFT TURN	0.27	5.06	0.4	A	222	333
5 - B255 (S) - AHEAD	0.60	5.57	1.6	A	852	1279
6 - A226 London Road (W)	0.45	4.59	0.8	A	553	830

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	175	44	461	1070	0.164	175	893	0.0	0.2	4.700	A
2 - A206 (N) - AHEAD	431	108	461	1804	0.239	430	175	0.0	0.3	2.781	A
3 - A226 London Road (E)	504	126	608	1731	0.291	502	284	0.0	0.4	3.139	A
4 - B255 (S) - LEFT TURN	182	46	495	1119	0.163	181	615	0.0	0.2	3.913	A
5 - B255 (S) - AHEAD	699	175	495	1847	0.379	697	181	0.0	0.6	3.240	A
6 - A226 London Road (W)	454	113	902	1768	0.257	453	290	0.0	0.4	2.798	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	209	52	552	1021	0.205	209	1068	0.2	0.3	5.187	A
2 - A206 (N) - AHEAD	515	129	552	1745	0.295	515	209	0.3	0.4	3.108	A
3 - A226 London Road (E)	601	150	727	1652	0.364	601	339	0.4	0.6	3.675	A
4 - B255 (S) - LEFT TURN	218	54	593	1065	0.204	217	736	0.2	0.3	4.329	A
5 - B255 (S) - AHEAD	835	209	593	1782	0.469	834	217	0.6	0.9	3.932	A
6 - A226 London Road (W)	542	136	1079	1641	0.330	541	348	0.4	0.5	3.348	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	257	64	676	955	0.269	256	1307	0.3	0.4	6.022	A
2 - A206 (N) - AHEAD	631	158	676	1665	0.379	630	256	0.4	0.6	3.690	A
3 - A226 London Road (E)	737	184	890	1543	0.477	735	415	0.6	1.0	4.774	A
4 - B255 (S) - LEFT TURN	266	67	725	992	0.268	266	900	0.3	0.4	5.051	A
5 - B255 (S) - AHEAD	1023	256	725	1694	0.604	1020	266	0.9	1.6	5.519	A
6 - A226 London Road (W)	664	166	1320	1469	0.452	663	425	0.5	0.8	4.560	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	257	64	677	954	0.269	257	1310	0.4	0.4	6.036	A
2 - A206 (N) - AHEAD	631	158	677	1664	0.379	631	257	0.6	0.6	3.700	A
3 - A226 London Road (E)	737	184	892	1542	0.478	737	416	1.0	1.0	4.797	A
4 - B255 (S) - LEFT TURN	266	67	727	992	0.269	266	902	0.4	0.4	5.062	A
5 - B255 (S) - AHEAD	1023	256	727	1694	0.604	1023	266	1.6	1.6	5.567	A
6 - A226 London Road (W)	664	166	1323	1467	0.453	664	426	0.8	0.8	4.587	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	209	52	554	1020	0.205	210	1073	0.4	0.3	5.204	A
2 - A206 (N) - AHEAD	515	129	554	1744	0.295	516	210	0.6	0.4	3.116	A
3 - A226 London Road (E)	601	150	729	1650	0.364	603	341	1.0	0.6	3.696	A
4 - B255 (S) - LEFT TURN	218	54	595	1064	0.204	218	738	0.4	0.3	4.342	A
5 - B255 (S) - AHEAD	835	209	595	1781	0.469	838	218	1.6	0.9	3.970	A
6 - A226 London Road (W)	542	136	1084	1638	0.331	543	349	0.8	0.5	3.371	A

09:00 - 09:15

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	175	44	464	1068	0.164	176	897	0.3	0.2	4.719	A
2 - A206 (N) - AHEAD	431	108	464	1803	0.239	432	176	0.4	0.3	2.790	A
3 - A226 London Road (E)	504	126	611	1730	0.291	504	285	0.6	0.4	3.155	A
4 - B255 (S) - LEFT TURN	182	46	498	1118	0.163	182	617	0.3	0.2	3.927	A
5 - B255 (S) - AHEAD	699	175	498	1846	0.379	701	182	0.9	0.6	3.263	A
6 - A226 London Road (W)	454	113	906	1764	0.257	455	292	0.5	0.4	2.814	A

2022 Observed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	6.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.30	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	309	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	993	100.000
3 - A226 London Road (E)		ONE HOUR	✓	563	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	275	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	802	100.000
6 - A226 London Road (W)		ONE HOUR	✓	692	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	309	0	0	0	0
	2 - A206 (N) - AHEAD	44	0	0	767	0	182
	3 - A226 London Road (E)	188	0	1	179	0	195
	4 - B255 (S) - LEFT TURN	0	0	0	0	275	0
	5 - B255 (S) - AHEAD	489	0	286	27	0	0
	6 - A226 London Road (W)	179	0	221	291	0	1

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	7	0	0	0	0
	2 - A206 (N) - AHEAD	0	0	0	2	0	1
	3 - A226 London Road (E)	7	0	0	7	0	2
	4 - B255 (S) - LEFT TURN	0	0	0	0	1	0
	5 - B255 (S) - AHEAD	4	0	5	0	0	0
	6 - A226 London Road (W)	2	0	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.41	7.88	0.7	A	284	425
2 - A206 (N) - AHEAD	0.72	8.73	2.6	A	911	1367
3 - A226 London Road (E)	0.53	6.84	1.2	A	517	775
4 - B255 (S) - LEFT TURN	0.30	5.06	0.4	A	252	379
5 - B255 (S) - AHEAD	0.51	4.43	1.1	A	736	1104
6 - A226 London Road (W)	0.48	4.35	0.9	A	635	952

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	233	58	621	984	0.236	231	675	0.0	0.3	5.107	A
2 - A206 (N) - AHEAD	748	187	621	1701	0.440	744	231	0.0	0.8	3.818	A
3 - A226 London Road (E)	424	106	984	1481	0.286	422	381	0.0	0.4	3.571	A
4 - B255 (S) - LEFT TURN	207	52	458	1139	0.182	206	948	0.0	0.2	3.893	A
5 - B255 (S) - AHEAD	604	151	458	1872	0.323	602	206	0.0	0.5	2.950	A
6 - A226 London Road (W)	521	130	777	1857	0.281	519	283	0.0	0.4	2.714	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	278	69	743	919	0.302	277	808	0.3	0.5	5.996	A
2 - A206 (N) - AHEAD	893	223	743	1621	0.551	891	277	0.8	1.2	5.001	A
3 - A226 London Road (E)	506	127	1177	1352	0.374	505	456	0.4	0.6	4.471	A
4 - B255 (S) - LEFT TURN	247	62	548	1090	0.227	247	1134	0.2	0.3	4.313	A
5 - B255 (S) - AHEAD	721	180	548	1812	0.398	720	247	0.5	0.7	3.435	A
6 - A226 London Road (W)	622	156	929	1748	0.356	621	339	0.4	0.6	3.224	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	340	85	909	830	0.410	339	989	0.5	0.7	7.828	A
2 - A206 (N) - AHEAD	1093	273	909	1513	0.722	1088	339	1.2	2.6	8.502	A
3 - A226 London Road (E)	620	155	1439	1178	0.526	618	558	0.6	1.2	6.738	A
4 - B255 (S) - LEFT TURN	303	76	670	1023	0.296	302	1386	0.3	0.4	5.043	A
5 - B255 (S) - AHEAD	883	221	670	1731	0.510	881	302	0.7	1.1	4.407	A
6 - A226 London Road (W)	762	190	1137	1600	0.476	760	414	0.6	0.9	4.323	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	340	85	911	829	0.410	340	991	0.7	0.7	7.876	A
2 - A206 (N) - AHEAD	1093	273	911	1512	0.723	1093	340	2.6	2.6	8.725	A
3 - A226 London Road (E)	620	155	1444	1174	0.528	620	559	1.2	1.2	6.836	A
4 - B255 (S) - LEFT TURN	303	76	673	1021	0.296	303	1392	0.4	0.4	5.059	A
5 - B255 (S) - AHEAD	883	221	673	1729	0.511	883	303	1.1	1.1	4.432	A
6 - A226 London Road (W)	762	190	1140	1598	0.477	762	416	0.9	0.9	4.345	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	278	69	745	918	0.303	279	811	0.7	0.5	6.040	A
2 - A206 (N) - AHEAD	893	223	745	1620	0.551	898	279	2.6	1.3	5.110	A
3 - A226 London Road (E)	506	127	1185	1346	0.376	508	458	1.2	0.6	4.531	A
4 - B255 (S) - LEFT TURN	247	62	552	1088	0.227	248	1142	0.4	0.3	4.332	A
5 - B255 (S) - AHEAD	721	180	552	1810	0.398	723	248	1.1	0.7	3.455	A
6 - A226 London Road (W)	622	156	933	1745	0.356	624	342	0.9	0.6	3.244	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	233	58	623	983	0.237	233	679	0.5	0.3	5.142	A
2 - A206 (N) - AHEAD	748	187	623	1699	0.440	749	233	1.3	0.8	3.866	A
3 - A226 London Road (E)	424	106	990	1477	0.287	425	383	0.6	0.4	3.602	A
4 - B255 (S) - LEFT TURN	207	52	461	1138	0.182	207	954	0.3	0.2	3.908	A
5 - B255 (S) - AHEAD	604	151	461	1870	0.323	605	207	0.7	0.5	2.968	A
6 - A226 London Road (W)	521	130	780	1854	0.281	522	285	0.6	0.4	2.729	A

2022 Observed, SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	0.00	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Observed	SAT	ONE HOUR	12:00	13:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	0	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	0	100.000
3 - A226 London Road (E)		ONE HOUR	✓	0	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	0	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	0	100.000
6 - A226 London Road (W)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	0	0	0	0	0
	2 - A206 (N) - AHEAD	0	0	0	0	0	0
	3 - A226 London Road (E)	0	0	0	0	0	0
	4 - B255 (S) - LEFT TURN	0	0	0	0	0	0
	5 - B255 (S) - AHEAD	0	0	0	0	0	0
	6 - A226 London Road (W)	0	0	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	0	0	0	0	0
	2 - A206 (N) - AHEAD	0	0	0	0	0	0
	3 - A226 London Road (E)	0	0	0	0	0	0
	4 - B255 (S) - LEFT TURN	0	0	0	0	0	0
	5 - B255 (S) - AHEAD	0	0	0	0	0	0
	6 - A226 London Road (W)	0	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.00	0.00	0.0	A	0	0
2 - A206 (N) - AHEAD	0.00	0.00	0.0	A	0	0
3 - A226 London Road (E)	0.00	0.00	0.0	A	0	0
4 - B255 (S) - LEFT TURN	0.00	0.00	0.0	A	0	0
5 - B255 (S) - AHEAD	0.00	0.00	0.0	A	0	0
6 - A226 London Road (W)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

13:15 - 13:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	0	0	0	1317	0.000	0	0	0.0	0.0	0.000	A
2 - A206 (N) - AHEAD	0	0	0	2104	0.000	0	0	0.0	0.0	0.000	A
3 - A226 London Road (E)	0	0	0	2136	0.000	0	0	0.0	0.0	0.000	A
4 - B255 (S) - LEFT TURN	0	0	0	1391	0.000	0	0	0.0	0.0	0.000	A
5 - B255 (S) - AHEAD	0	0	0	2176	0.000	0	0	0.0	0.0	0.000	A
6 - A226 London Road (W)	0	0	0	2411	0.000	0	0	0.0	0.0	0.000	A

2030 Without Dev Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	3.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	217	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	766	100.000
3 - A226 London Road (E)		ONE HOUR	✓	390	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	88	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	69	100.000
6 - A226 London Road (W)		ONE HOUR	✓	267	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	217	0	0	0	0
	2 - A206 (N) - AHEAD	718	0	0	33	0	15
	3 - A226 London Road (E)	0	0	0	149	0	241
	4 - B255 (S) - LEFT TURN	0	0	0	0	88	0
	5 - B255 (S) - AHEAD	0	0	69	0	0	0
	6 - A226 London Road (W)	6	0	153	108	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	3	0	0	0	0
	2 - A206 (N) - AHEAD	2	0	0	0	0	1
	3 - A226 London Road (E)	0	0	0	11	0	3
	4 - B255 (S) - LEFT TURN	0	0	0	0	0	0
	5 - B255 (S) - AHEAD	0	0	9	0	0	0
	6 - A226 London Road (W)	7	0	1	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.21	4.20	0.3	A	199	299
2 - A206 (N) - AHEAD	0.45	3.58	0.8	A	703	1054
3 - A226 London Road (E)	0.29	3.58	0.4	A	358	537
4 - B255 (S) - LEFT TURN	0.12	5.11	0.1	A	81	121
5 - B255 (S) - AHEAD	0.05	2.83	0.1	A	63	95
6 - A226 London Road (W)	0.16	2.48	0.2	A	245	368

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	163	41	248	1184	0.138	163	543	0.0	0.2	3.629	A
2 - A206 (N) - AHEAD	577	144	248	1943	0.297	575	163	0.0	0.4	2.678	A
3 - A226 London Road (E)	294	73	656	1699	0.173	293	167	0.0	0.2	2.710	A
4 - B255 (S) - LEFT TURN	66	17	731	989	0.067	66	218	0.0	0.1	3.898	A
5 - B255 (S) - AHEAD	52	13	731	1691	0.031	52	66	0.0	0.0	2.394	A
6 - A226 London Road (W)	201	50	591	1990	0.101	201	192	0.0	0.1	2.074	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	195	49	296	1158	0.168	195	650	0.2	0.2	3.850	A
2 - A206 (N) - AHEAD	689	172	296	1911	0.360	688	195	0.4	0.6	2.997	A
3 - A226 London Road (E)	351	88	785	1613	0.217	350	199	0.2	0.3	3.019	A
4 - B255 (S) - LEFT TURN	79	20	875	910	0.087	79	261	0.1	0.1	4.330	A
5 - B255 (S) - AHEAD	62	16	875	1595	0.039	62	79	0.0	0.0	2.559	A
6 - A226 London Road (W)	240	60	707	1907	0.126	240	230	0.1	0.1	2.226	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	239	60	363	1122	0.213	239	796	0.2	0.3	4.195	A
2 - A206 (N) - AHEAD	843	211	363	1868	0.452	842	239	0.6	0.8	3.573	A
3 - A226 London Road (E)	429	107	961	1496	0.287	429	244	0.3	0.4	3.571	A
4 - B255 (S) - LEFT TURN	97	24	1071	802	0.121	97	319	0.1	0.1	5.100	A
5 - B255 (S) - AHEAD	76	19	1071	1465	0.052	76	97	0.0	0.1	2.824	A
6 - A226 London Road (W)	294	73	865	1794	0.164	294	282	0.1	0.2	2.474	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	239	60	363	1122	0.213	239	797	0.3	0.3	4.197	A
2 - A206 (N) - AHEAD	843	211	363	1868	0.452	843	239	0.8	0.8	3.580	A
3 - A226 London Road (E)	429	107	962	1495	0.287	429	244	0.4	0.4	3.577	A
4 - B255 (S) - LEFT TURN	97	24	1072	802	0.121	97	319	0.1	0.1	5.107	A
5 - B255 (S) - AHEAD	76	19	1072	1464	0.052	76	97	0.1	0.1	2.826	A
6 - A226 London Road (W)	294	73	866	1793	0.164	294	282	0.2	0.2	2.475	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	195	49	297	1158	0.169	195	652	0.3	0.2	3.855	A
2 - A206 (N) - AHEAD	689	172	297	1911	0.360	690	195	0.8	0.6	3.005	A
3 - A226 London Road (E)	351	88	787	1612	0.217	351	200	0.4	0.3	3.024	A
4 - B255 (S) - LEFT TURN	79	20	877	909	0.087	79	261	0.1	0.1	4.338	A
5 - B255 (S) - AHEAD	62	16	877	1594	0.039	62	79	0.1	0.0	2.561	A
6 - A226 London Road (W)	240	60	709	1906	0.126	240	230	0.2	0.1	2.230	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	163	41	249	1184	0.138	164	546	0.2	0.2	3.637	A
2 - A206 (N) - AHEAD	577	144	249	1942	0.297	577	164	0.6	0.4	2.689	A
3 - A226 London Road (E)	294	73	659	1697	0.173	294	167	0.3	0.2	2.716	A
4 - B255 (S) - LEFT TURN	66	17	734	988	0.067	66	219	0.1	0.1	3.907	A
5 - B255 (S) - AHEAD	52	13	734	1689	0.031	52	66	0.0	0.0	2.397	A
6 - A226 London Road (W)	201	50	593	1988	0.101	201	193	0.1	0.1	2.077	A

2030 Without Dev Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	5.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.65	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	631	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	468	100.000
3 - A226 London Road (E)		ONE HOUR	✓	296	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	78	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	225	100.000
6 - A226 London Road (W)		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	631	0	0	0	0
	2 - A206 (N) - AHEAD	416	0	0	0	0	52
	3 - A226 London Road (E)	0	0	0	99	0	197
	4 - B255 (S) - LEFT TURN	0	0	0	0	78	0
	5 - B255 (S) - AHEAD	0	0	225	0	0	0
	6 - A226 London Road (W)	4	0	229	88	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	1	0	0	0	0
	2 - A206 (N) - AHEAD	3	0	0	100	0	0
	3 - A226 London Road (E)	0	0	0	2	0	1
	4 - B255 (S) - LEFT TURN	0	0	0	0	0	0
	5 - B255 (S) - AHEAD	0	0	1	0	0	0
	6 - A226 London Road (W)	7	0	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.70	11.99	2.3	B	579	869
2 - A206 (N) - AHEAD	0.30	3.08	0.4	A	429	644
3 - A226 London Road (E)	0.19	2.60	0.2	A	272	407
4 - B255 (S) - LEFT TURN	0.09	3.99	0.1	A	72	107
5 - B255 (S) - AHEAD	0.15	2.52	0.2	A	206	310
6 - A226 London Road (W)	0.19	2.32	0.2	A	295	442

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	475	119	407	1099	0.432	472	315	0.0	0.8	5.774	A
2 - A206 (N) - AHEAD	352	88	407	1839	0.192	351	472	0.0	0.2	2.482	A
3 - A226 London Road (E)	223	56	417	1858	0.120	222	341	0.0	0.1	2.230	A
4 - B255 (S) - LEFT TURN	59	15	499	1117	0.053	59	140	0.0	0.1	3.401	A
5 - B255 (S) - AHEAD	169	42	499	1845	0.092	169	59	0.0	0.1	2.170	A
6 - A226 London Road (W)	242	60	481	2068	0.117	241	187	0.0	0.1	1.978	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	567	142	487	1056	0.537	566	377	0.8	1.2	7.392	A
2 - A206 (N) - AHEAD	421	105	487	1787	0.235	420	566	0.2	0.3	2.703	A
3 - A226 London Road (E)	266	67	500	1804	0.148	266	408	0.1	0.2	2.372	A
4 - B255 (S) - LEFT TURN	70	18	597	1063	0.066	70	168	0.1	0.1	3.625	A
5 - B255 (S) - AHEAD	202	51	597	1779	0.114	202	70	0.1	0.1	2.305	A
6 - A226 London Road (W)	289	72	576	2000	0.144	288	224	0.1	0.2	2.110	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	695	174	596	997	0.697	690	462	1.2	2.2	11.679	B
2 - A206 (N) - AHEAD	515	129	596	1716	0.300	515	690	0.3	0.4	3.073	A
3 - A226 London Road (E)	326	81	612	1729	0.189	326	500	0.2	0.2	2.599	A
4 - B255 (S) - LEFT TURN	86	21	732	989	0.087	86	206	0.1	0.1	3.985	A
5 - B255 (S) - AHEAD	248	62	732	1690	0.147	248	86	0.1	0.2	2.520	A
6 - A226 London Road (W)	353	88	705	1908	0.185	353	274	0.2	0.2	2.323	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	695	174	597	997	0.697	695	462	2.2	2.3	11.993	B
2 - A206 (N) - AHEAD	515	129	597	1716	0.300	515	695	0.4	0.4	3.076	A
3 - A226 London Road (E)	326	81	612	1728	0.189	326	500	0.2	0.2	2.600	A
4 - B255 (S) - LEFT TURN	86	21	732	989	0.087	86	206	0.1	0.1	3.987	A
5 - B255 (S) - AHEAD	248	62	732	1690	0.147	248	86	0.2	0.2	2.520	A
6 - A226 London Road (W)	353	88	706	1908	0.185	353	274	0.2	0.2	2.324	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	567	142	488	1056	0.537	572	378	2.3	1.2	7.575	A
2 - A206 (N) - AHEAD	421	105	488	1787	0.235	421	572	0.4	0.3	2.706	A
3 - A226 London Road (E)	266	67	500	1803	0.148	266	408	0.2	0.2	2.375	A
4 - B255 (S) - LEFT TURN	70	18	598	1062	0.066	70	168	0.1	0.1	3.628	A
5 - B255 (S) - AHEAD	202	51	598	1779	0.114	202	70	0.2	0.1	2.306	A
6 - A226 London Road (W)	289	72	577	2000	0.144	289	224	0.2	0.2	2.113	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	475	119	408	1098	0.433	477	316	1.2	0.8	5.866	A
2 - A206 (N) - AHEAD	352	88	408	1839	0.192	353	477	0.3	0.2	2.489	A
3 - A226 London Road (E)	223	56	419	1857	0.120	223	342	0.2	0.1	2.232	A
4 - B255 (S) - LEFT TURN	59	15	501	1116	0.053	59	141	0.1	0.1	3.407	A
5 - B255 (S) - AHEAD	169	42	501	1843	0.092	170	59	0.1	0.1	2.172	A
6 - A226 London Road (W)	242	60	483	2067	0.117	242	188	0.2	0.1	1.981	A

2030 Without Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	2.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.79	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	249	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	377	100.000
3 - A226 London Road (E)		ONE HOUR	✓	239	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	46	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	104	100.000
6 - A226 London Road (W)		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	249	0	0	0	0
	2 - A206 (N) - AHEAD	373	0	0	0	0	4
	3 - A226 London Road (E)	0	0	0	92	0	147
	4 - B255 (S) - LEFT TURN	0	0	0	0	46	0
	5 - B255 (S) - AHEAD	0	0	104	0	0	0
	6 - A226 London Road (W)	5	0	137	50	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	3	0	0	0	0
	2 - A206 (N) - AHEAD	3	0	0	0	0	5
	3 - A226 London Road (E)	0	0	0	10	0	3
	4 - B255 (S) - LEFT TURN	0	0	0	0	1	0
	5 - B255 (S) - AHEAD	0	0	6	0	0	0
	6 - A226 London Road (W)	7	0	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.24	4.26	0.3	A	228	343
2 - A206 (N) - AHEAD	0.22	2.50	0.3	A	346	519
3 - A226 London Road (E)	0.14	2.44	0.2	A	219	329
4 - B255 (S) - LEFT TURN	0.05	3.55	0.0	A	42	63
5 - B255 (S) - AHEAD	0.06	2.27	0.1	A	95	143
6 - A226 London Road (W)	0.10	2.01	0.1	A	176	264

Main Results for each time segment

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	187	47	219	1200	0.156	187	284	0.0	0.2	3.659	A
2 - A206 (N) - AHEAD	284	71	219	1962	0.145	283	187	0.0	0.2	2.208	A
3 - A226 London Road (E)	180	45	321	1923	0.094	179	181	0.0	0.1	2.180	A
4 - B255 (S) - LEFT TURN	35	9	394	1175	0.029	35	107	0.0	0.0	3.188	A
5 - B255 (S) - AHEAD	78	20	394	1915	0.041	78	35	0.0	0.0	2.077	A
6 - A226 London Road (W)	145	36	358	2156	0.067	144	113	0.0	0.1	1.827	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	224	56	261	1177	0.190	224	340	0.2	0.2	3.889	A
2 - A206 (N) - AHEAD	339	85	261	1934	0.175	339	224	0.2	0.2	2.324	A
3 - A226 London Road (E)	215	54	384	1881	0.114	215	217	0.1	0.1	2.281	A
4 - B255 (S) - LEFT TURN	41	10	471	1132	0.037	41	128	0.0	0.0	3.331	A
5 - B255 (S) - AHEAD	93	23	471	1863	0.050	93	41	0.0	0.1	2.155	A
6 - A226 London Road (W)	173	43	429	2105	0.082	173	136	0.1	0.1	1.901	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	274	69	320	1145	0.239	274	416	0.2	0.3	4.254	A
2 - A206 (N) - AHEAD	415	104	320	1896	0.219	415	274	0.2	0.3	2.504	A
3 - A226 London Road (E)	263	66	470	1823	0.144	263	265	0.1	0.2	2.435	A
4 - B255 (S) - LEFT TURN	51	13	577	1074	0.047	51	156	0.0	0.0	3.551	A
5 - B255 (S) - AHEAD	115	29	577	1793	0.064	114	51	0.1	0.1	2.272	A
6 - A226 London Road (W)	211	53	525	2037	0.104	211	166	0.1	0.1	2.014	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	274	69	320	1145	0.239	274	416	0.3	0.3	4.256	A
2 - A206 (N) - AHEAD	415	104	320	1896	0.219	415	274	0.3	0.3	2.504	A
3 - A226 London Road (E)	263	66	470	1823	0.144	263	265	0.2	0.2	2.436	A
4 - B255 (S) - LEFT TURN	51	13	577	1074	0.047	51	156	0.0	0.0	3.552	A
5 - B255 (S) - AHEAD	115	29	577	1793	0.064	115	51	0.1	0.1	2.273	A
6 - A226 London Road (W)	211	53	525	2036	0.104	211	166	0.1	0.1	2.014	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	224	56	262	1177	0.190	224	340	0.3	0.2	3.895	A
2 - A206 (N) - AHEAD	339	85	262	1934	0.175	339	224	0.3	0.2	2.327	A
3 - A226 London Road (E)	215	54	384	1880	0.114	215	217	0.2	0.1	2.284	A
4 - B255 (S) - LEFT TURN	41	10	471	1132	0.037	41	128	0.0	0.0	3.333	A
5 - B255 (S) - AHEAD	93	23	471	1863	0.050	94	41	0.1	0.1	2.156	A
6 - A226 London Road (W)	173	43	429	2105	0.082	173	136	0.1	0.1	1.905	A

13:15 - 13:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	187	47	219	1199	0.156	188	285	0.2	0.2	3.664	A
2 - A206 (N) - AHEAD	284	71	219	1961	0.145	284	188	0.2	0.2	2.210	A
3 - A226 London Road (E)	180	45	322	1922	0.094	180	182	0.1	0.1	2.181	A
4 - B255 (S) - LEFT TURN	35	9	395	1174	0.029	35	107	0.0	0.0	3.192	A
5 - B255 (S) - AHEAD	78	20	395	1914	0.041	78	35	0.1	0.0	2.078	A
6 - A226 London Road (W)	145	36	359	2155	0.067	145	114	0.1	0.1	1.831	A

2030 Adjusted Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	21.32	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.32	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	229	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	821	100.000
3 - A226 London Road (E)		ONE HOUR	✓	1161	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	245	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	931	100.000
6 - A226 London Road (W)		ONE HOUR	✓	613	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	229	0	0	0	0
	2 - A206 (N) - AHEAD	275	0	0	402	0	144
	3 - A226 London Road (E)	730	0	1	177	0	253
	4 - B255 (S) - LEFT TURN	0	0	0	0	245	0
	5 - B255 (S) - AHEAD	730	0	188	13	0	0
	6 - A226 London Road (W)	189	0	205	218	0	1

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	17	0	0	0	0
	2 - A206 (N) - AHEAD	10	0	0	8	0	2
	3 - A226 London Road (E)	3	0	0	6	0	4
	4 - B255 (S) - LEFT TURN	0	0	0	0	2	0
	5 - B255 (S) - AHEAD	3	0	7	0	0	0
	6 - A226 London Road (W)	2	0	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.27	6.05	0.4	A	210	315
2 - A206 (N) - AHEAD	0.55	5.14	1.3	A	753	1130
3 - A226 London Road (E)	0.94	35.57	11.8	E	1065	1598
4 - B255 (S) - LEFT TURN	0.50	13.33	1.0	B	225	337
5 - B255 (S) - AHEAD	0.89	26.83	7.2	D	854	1281
6 - A226 London Road (W)	0.75	16.51	3.0	C	562	844

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	172	43	469	1066	0.162	172	1441	0.0	0.2	4.706	A
2 - A206 (N) - AHEAD	618	155	469	1799	0.344	616	172	0.0	0.6	3.267	A
3 - A226 London Road (E)	874	219	790	1610	0.543	869	295	0.0	1.2	5.004	A
4 - B255 (S) - LEFT TURN	184	46	1052	813	0.227	183	607	0.0	0.3	5.820	A
5 - B255 (S) - AHEAD	701	175	1052	1478	0.474	697	183	0.0	0.9	4.764	A
6 - A226 London Road (W)	461	115	1451	1376	0.335	459	298	0.0	0.5	4.011	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	206	51	561	1016	0.203	206	1724	0.2	0.3	5.194	A
2 - A206 (N) - AHEAD	738	185	561	1739	0.424	737	206	0.6	0.8	3.860	A
3 - A226 London Road (E)	1044	261	945	1507	0.693	1039	353	1.2	2.3	7.918	A
4 - B255 (S) - LEFT TURN	220	55	1258	700	0.315	220	726	0.3	0.5	7.638	A
5 - B255 (S) - AHEAD	837	209	1258	1341	0.624	834	220	0.9	1.7	7.327	A
6 - A226 London Road (W)	551	138	1735	1173	0.470	550	357	0.5	0.9	5.898	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	252	63	680	953	0.265	252	2082	0.3	0.4	6.006	A
2 - A206 (N) - AHEAD	904	226	680	1662	0.544	902	252	0.8	1.3	5.081	A
3 - A226 London Road (E)	1278	320	1155	1367	0.935	1247	428	2.3	10.1	26.288	D
4 - B255 (S) - LEFT TURN	270	67	1518	556	0.485	268	883	0.5	0.9	12.639	B
5 - B255 (S) - AHEAD	1025	256	1518	1168	0.878	1007	268	1.7	6.2	21.231	C
6 - A226 London Road (W)	675	169	2094	916	0.737	668	431	0.9	2.7	14.420	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	252	63	688	949	0.266	252	2110	0.4	0.4	6.046	A
2 - A206 (N) - AHEAD	904	226	688	1657	0.545	904	252	1.3	1.3	5.139	A
3 - A226 London Road (E)	1278	320	1159	1364	0.937	1271	433	10.1	11.8	35.574	E
4 - B255 (S) - LEFT TURN	270	67	1540	545	0.495	270	890	0.9	1.0	13.326	B
5 - B255 (S) - AHEAD	1025	256	1540	1154	0.889	1021	270	6.2	7.2	26.828	D
6 - A226 London Road (W)	675	169	2124	895	0.754	674	437	2.7	3.0	16.509	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	206	51	573	1010	0.204	206	1773	0.4	0.3	5.243	A
2 - A206 (N) - AHEAD	738	185	573	1732	0.426	740	206	1.3	0.8	3.911	A
3 - A226 London Road (E)	1044	261	952	1502	0.695	1081	361	11.8	2.4	9.627	A
4 - B255 (S) - LEFT TURN	220	55	1295	679	0.324	222	738	1.0	0.5	8.065	A
5 - B255 (S) - AHEAD	837	209	1295	1316	0.636	858	222	7.2	1.9	8.522	A
6 - A226 London Road (W)	551	138	1787	1136	0.485	559	366	3.0	1.0	6.476	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	172	43	473	1063	0.162	173	1455	0.3	0.2	4.732	A
2 - A206 (N) - AHEAD	618	155	473	1796	0.344	619	173	0.8	0.6	3.293	A
3 - A226 London Road (E)	874	219	794	1607	0.544	879	298	2.4	1.3	5.156	A
4 - B255 (S) - LEFT TURN	184	46	1061	808	0.228	185	612	0.5	0.3	5.905	A
5 - B255 (S) - AHEAD	701	175	1061	1471	0.476	705	185	1.9	1.0	4.895	A
6 - A226 London Road (W)	461	115	1465	1365	0.338	463	301	1.0	0.5	4.092	A

2030 Adjusted Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	23.71	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.71	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	322	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	1197	100.000
3 - A226 London Road (E)		ONE HOUR	✓	900	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	288	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	840	100.000
6 - A226 London Road (W)		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	322	0	0	0	0
	2 - A206 (N) - AHEAD	198	0	0	809	0	190
	3 - A226 London Road (E)	511	0	1	182	0	206
	4 - B255 (S) - LEFT TURN	0	0	0	0	288	0
	5 - B255 (S) - AHEAD	511	0	299	30	0	0
	6 - A226 London Road (W)	188	0	238	305	0	1

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	7	0	0	0	0
	2 - A206 (N) - AHEAD	7	0	0	2	0	1
	3 - A226 London Road (E)	4	0	0	7	0	2
	4 - B255 (S) - LEFT TURN	0	0	0	0	1	0
	5 - B255 (S) - AHEAD	4	0	5	0	0	0
	6 - A226 London Road (W)	2	0	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.44	8.61	0.8	A	295	443
2 - A206 (N) - AHEAD	0.89	21.85	7.6	C	1098	1648
3 - A226 London Road (E)	0.98	62.57	16.8	F	826	1239
4 - B255 (S) - LEFT TURN	0.43	8.80	0.8	A	264	396
5 - B255 (S) - AHEAD	0.67	8.27	2.1	A	771	1156
6 - A226 London Road (W)	0.67	9.17	2.0	A	672	1008

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	242	61	655	966	0.251	241	1055	0.0	0.4	5.305	A
2 - A206 (N) - AHEAD	901	225	655	1678	0.537	896	241	0.0	1.2	4.699	A
3 - A226 London Road (E)	678	169	1148	1371	0.494	674	403	0.0	1.0	5.343	A
4 - B255 (S) - LEFT TURN	217	54	829	936	0.232	216	993	0.0	0.3	5.041	A
5 - B255 (S) - AHEAD	632	158	829	1626	0.389	630	216	0.0	0.7	3.757	A
6 - A226 London Road (W)	551	138	1161	1582	0.348	549	297	0.0	0.5	3.508	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	289	72	784	897	0.323	289	1262	0.4	0.5	6.328	A
2 - A206 (N) - AHEAD	1076	269	784	1594	0.675	1072	289	1.2	2.1	7.030	A
3 - A226 London Road (E)	809	202	1374	1221	0.663	805	483	1.0	2.0	8.963	A
4 - B255 (S) - LEFT TURN	259	65	991	847	0.306	258	1188	0.3	0.4	6.177	A
5 - B255 (S) - AHEAD	755	189	991	1518	0.497	754	258	0.7	1.0	4.899	A
6 - A226 London Road (W)	658	165	1389	1420	0.464	657	355	0.5	0.9	4.754	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	355	89	958	804	0.441	353	1521	0.5	0.8	8.519	A
2 - A206 (N) - AHEAD	1318	329	958	1482	0.889	1298	353	2.1	6.9	18.484	C
3 - A226 London Road (E)	991	248	1667	1026	0.966	951	590	2.0	12.0	38.301	E
4 - B255 (S) - LEFT TURN	317	79	1180	742	0.427	316	1437	0.4	0.7	8.504	A
5 - B255 (S) - AHEAD	925	231	1180	1392	0.664	921	316	1.0	2.0	7.894	A
6 - A226 London Road (W)	806	201	1677	1215	0.664	802	425	0.9	1.9	8.710	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	355	89	962	802	0.442	354	1539	0.8	0.8	8.611	A
2 - A206 (N) - AHEAD	1318	329	962	1479	0.891	1315	354	6.9	7.6	21.849	C
3 - A226 London Road (E)	991	248	1685	1013	0.978	972	592	12.0	16.8	62.571	F
4 - B255 (S) - LEFT TURN	317	79	1203	730	0.434	317	1454	0.7	0.8	8.800	A
5 - B255 (S) - AHEAD	925	231	1203	1377	0.672	925	317	2.0	2.1	8.274	A
6 - A226 London Road (W)	806	201	1695	1201	0.671	806	432	1.9	2.0	9.167	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	289	72	791	893	0.324	291	1306	0.8	0.5	6.406	A
2 - A206 (N) - AHEAD	1076	269	791	1590	0.677	1098	291	7.6	2.2	7.810	A
3 - A226 London Road (E)	809	202	1402	1202	0.673	867	487	16.8	2.2	13.124	B
4 - B255 (S) - LEFT TURN	259	65	1049	815	0.318	260	1220	0.8	0.5	6.567	A
5 - B255 (S) - AHEAD	755	189	1049	1480	0.510	759	260	2.1	1.1	5.235	A
6 - A226 London Road (W)	658	165	1434	1388	0.474	662	374	2.0	0.9	5.041	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	242	61	660	964	0.252	243	1065	0.5	0.4	5.352	A
2 - A206 (N) - AHEAD	901	225	660	1675	0.538	905	243	2.2	1.2	4.821	A
3 - A226 London Road (E)	678	169	1159	1364	0.497	682	406	2.2	1.0	5.533	A
4 - B255 (S) - LEFT TURN	217	54	838	930	0.233	217	1003	0.5	0.3	5.107	A
5 - B255 (S) - AHEAD	632	158	838	1619	0.391	634	217	1.1	0.7	3.813	A
6 - A226 London Road (W)	551	138	1172	1575	0.350	553	301	0.9	0.5	3.561	A

2030 With Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J8 - A226 / A206 / B255 Roundabout	Standard Roundabout		1, 2, 3, 4, 5, 6	2.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.86	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A206 (N) - LEFT TURN		ONE HOUR	✓	264	100.000
2 - A206 (N) - AHEAD		ONE HOUR	✓	399	100.000
3 - A226 London Road (E)		ONE HOUR	✓	246	100.000
4 - B255 (S) - LEFT TURN		ONE HOUR	✓	47	100.000
5 - B255 (S) - AHEAD		ONE HOUR	✓	108	100.000
6 - A226 London Road (W)		ONE HOUR	✓	201	100.000

Origin-Destination Data

Demand (PCU/hr)

	To						
		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
From	1 - A206 (N) - LEFT TURN	0	264	0	0	0	0
	2 - A206 (N) - AHEAD	395	0	0	0	0	4
	3 - A226 London Road (E)	0	0	0	92	0	154
	4 - B255 (S) - LEFT TURN	0	0	0	0	47	0
	5 - B255 (S) - AHEAD	0	0	108	0	0	0
	6 - A226 London Road (W)	5	0	146	50	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To						
From		1 - A206 (N) - LEFT TURN	2 - A206 (N) - AHEAD	3 - A226 London Road (E)	4 - B255 (S) - LEFT TURN	5 - B255 (S) - AHEAD	6 - A226 London Road (W)
	1 - A206 (N) - LEFT TURN	0	3	0	0	0	0
	2 - A206 (N) - AHEAD	3	0	0	0	0	5
	3 - A226 London Road (E)	0	0	0	10	0	2
	4 - B255 (S) - LEFT TURN	0	0	0	0	1	0
	5 - B255 (S) - AHEAD	0	0	6	0	0	0
	6 - A226 London Road (W)	7	0	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A206 (N) - LEFT TURN	0.26	4.38	0.4	A	242	363
2 - A206 (N) - AHEAD	0.23	2.56	0.3	A	366	549
3 - A226 London Road (E)	0.15	2.46	0.2	A	226	339
4 - B255 (S) - LEFT TURN	0.05	3.62	0.1	A	43	65
5 - B255 (S) - AHEAD	0.07	2.31	0.1	A	99	149
6 - A226 London Road (W)	0.11	2.05	0.1	A	184	277

Main Results for each time segment

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	199	50	228	1194	0.166	198	300	0.0	0.2	3.717	A
2 - A206 (N) - AHEAD	300	75	228	1955	0.154	300	198	0.0	0.2	2.238	A
3 - A226 London Road (E)	185	46	337	1912	0.097	185	191	0.0	0.1	2.185	A
4 - B255 (S) - LEFT TURN	35	9	415	1163	0.030	35	107	0.0	0.0	3.224	A
5 - B255 (S) - AHEAD	81	20	415	1900	0.043	81	35	0.0	0.0	2.097	A
6 - A226 London Road (W)	151	38	378	2142	0.071	151	119	0.0	0.1	1.845	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	237	59	273	1170	0.203	237	359	0.2	0.3	3.971	A
2 - A206 (N) - AHEAD	359	90	273	1926	0.186	358	237	0.2	0.2	2.365	A
3 - A226 London Road (E)	221	55	403	1868	0.118	221	228	0.1	0.1	2.292	A
4 - B255 (S) - LEFT TURN	42	11	497	1118	0.038	42	128	0.0	0.0	3.379	A
5 - B255 (S) - AHEAD	97	24	497	1846	0.053	97	42	0.0	0.1	2.181	A
6 - A226 London Road (W)	181	45	452	2089	0.087	181	142	0.1	0.1	1.926	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	291	73	335	1138	0.256	290	440	0.3	0.4	4.374	A
2 - A206 (N) - AHEAD	439	110	335	1886	0.233	439	290	0.2	0.3	2.562	A
3 - A226 London Road (E)	271	68	494	1807	0.150	271	280	0.1	0.2	2.456	A
4 - B255 (S) - LEFT TURN	52	13	608	1057	0.049	52	156	0.0	0.1	3.617	A
5 - B255 (S) - AHEAD	119	30	608	1772	0.067	119	52	0.1	0.1	2.307	A
6 - A226 London Road (W)	221	55	553	2016	0.110	221	174	0.1	0.1	2.047	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	291	73	335	1138	0.256	291	440	0.4	0.4	4.378	A
2 - A206 (N) - AHEAD	439	110	335	1886	0.233	439	291	0.3	0.3	2.562	A
3 - A226 London Road (E)	271	68	494	1807	0.150	271	280	0.2	0.2	2.456	A
4 - B255 (S) - LEFT TURN	52	13	609	1056	0.049	52	156	0.1	0.1	3.617	A
5 - B255 (S) - AHEAD	119	30	609	1772	0.067	119	52	0.1	0.1	2.308	A
6 - A226 London Road (W)	221	55	554	2016	0.110	221	174	0.1	0.1	2.047	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	237	59	273	1170	0.203	238	360	0.4	0.3	3.978	A
2 - A206 (N) - AHEAD	359	90	273	1926	0.186	359	238	0.3	0.2	2.368	A
3 - A226 London Road (E)	221	55	404	1867	0.118	221	228	0.2	0.1	2.293	A
4 - B255 (S) - LEFT TURN	42	11	498	1118	0.038	42	128	0.1	0.0	3.383	A
5 - B255 (S) - AHEAD	97	24	498	1846	0.053	97	42	0.1	0.1	2.183	A
6 - A226 London Road (W)	181	45	453	2088	0.087	181	142	0.1	0.1	1.927	A

13:15 - 13:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A206 (N) - LEFT TURN	199	50	229	1194	0.166	199	301	0.3	0.2	3.725	A
2 - A206 (N) - AHEAD	300	75	229	1955	0.154	301	199	0.2	0.2	2.241	A
3 - A226 London Road (E)	185	46	338	1911	0.097	185	191	0.1	0.1	2.188	A
4 - B255 (S) - LEFT TURN	35	9	417	1162	0.030	35	107	0.0	0.0	3.228	A
5 - B255 (S) - AHEAD	81	20	417	1899	0.043	81	35	0.1	0.0	2.100	A
6 - A226 London Road (W)	151	38	379	2141	0.071	151	119	0.1	0.1	1.849	A

Junctions 10			
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Filename: J9 - A206_Station Road (Existing) v2.0.j10

Path: C:\DSN\226728 - Northfleet

Report generation date: 23/10/2023 13:14:07

- »AM - 2022 Observed, AM
- »AM - 2030 Without Dev Flows (Without LTC), AM
- »AM - 2030 Adjusted Flows (Without LTC), AM
- »PM - 2022 Observed, PM
- »PM - 2030 Without Dev Flows (Without LTC), PM
- »PM - 2030 Adjusted Flows (Without LTC), PM
- »Sat - 2022 Observed, SAT
- »Sat - 2030 Without Dev Flows (Without LTC), SAT
- »Sat - 2030 With Dev Flows (Without LTC), SAT

Summary of junction performance

	AM		
	Queue (PCU)	Delay (s)	RFC
AM - 2022 Observed			
1 - B255 Station Road (N)	0.2	3.58	0.14
2 - Station Approach (E)	0.1	4.69	0.06
3 - A206 St Clements Way (S)	1.5	3.86	0.59
4 - A206 Crossways Boulevard (W)	0.3	1.78	0.23
AM - 2030 Without Dev Flows (Without LTC)			
1 - B255 Station Road (N)	0.1	2.58	0.09
2 - Station Approach (E)	0.0	0.00	0.00
3 - A206 St Clements Way (S)	0.5	2.33	0.34
4 - A206 Crossways Boulevard (W)	0.1	1.27	0.09
AM - 2030 Adjusted Flows (Without LTC)			
1 - B255 Station Road (N)	0.2	3.57	0.14
2 - Station Approach (E)	0.1	4.68	0.06
3 - A206 St Clements Way (S)	1.6	3.96	0.60
4 - A206 Crossways Boulevard (W)	0.3	1.78	0.23

	PM		
	Queue (PCU)	Delay (s)	RFC
PM - 2022 Observed			
1 - B255 Station Road (N)	0.2	5.16	0.17
2 - Station Approach (E)	0.2	7.14	0.10
3 - A206 St Clements Way (S)	0.7	2.78	0.41
4 - A206 Crossways Boulevard (W)	0.9	2.28	0.45
PM - 2030 Without Dev Flows (Without LTC)			

1 - B255 Station Road (N)	0.1	3.15	0.05
2 - Station Approach (E)	0.0	0.00	0.00
3 - A206 St Clements Way (S)	0.3	1.99	0.20
4 - A206 Crossways Boulevard (W)	0.3	1.53	0.26
PM - 2030 Adjusted Flows (Without LTC)			
1 - B255 Station Road (N)	0.2	5.56	0.19
2 - Station Approach (E)	0.2	7.70	0.11
3 - A206 St Clements Way (S)	0.8	2.88	0.43
4 - A206 Crossways Boulevard (W)	0.9	2.38	0.48

	SAT		
	Queue (PCU)	Delay (s)	RFC
Sat - 2022 Observed			
1 - B255 Station Road (N)	0.0	0.00	0.00
2 - Station Approach (E)	0.0	0.00	0.00
3 - A206 St Clements Way (S)	0.0	0.00	0.00
4 - A206 Crossways Boulevard (W)	0.0	0.00	0.00
Sat - 2030 Without Dev Flows (Without LTC)			
1 - B255 Station Road (N)	0.0	2.53	0.03
2 - Station Approach (E)	0.0	0.00	0.00
3 - A206 St Clements Way (S)	0.2	1.91	0.18
4 - A206 Crossways Boulevard (W)	0.1	1.29	0.10
Sat - 2030 With Dev Flows (Without LTC)			
1 - B255 Station Road (N)	0.0	2.55	0.03
2 - Station Approach (E)	0.0	0.00	0.00
3 - A206 St Clements Way (S)	0.2	1.92	0.19
4 - A206 Crossways Boulevard (W)	0.1	1.30	0.11

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

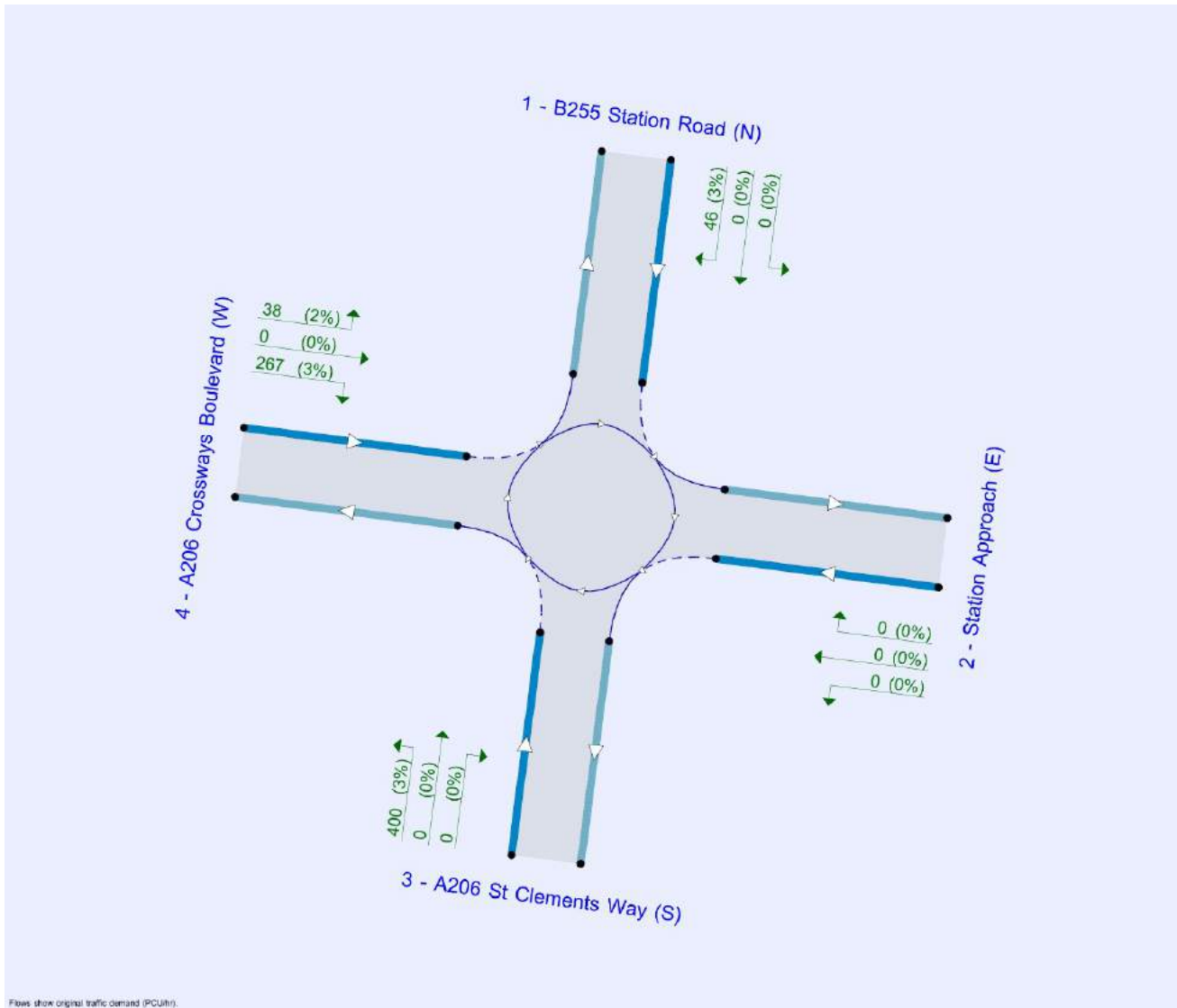
File summary

File Description

Title	Northfleet
Location	J9 - A206 / Station Road / Station Approach Roundabout
Site number	
Date	22/10/2023
Version	
Status	Existing Junction Layout
Identifier	
Client	
Jobnumber	226728
Enumerator	David Noyce
Description	A206 (South) - Arm C - Intercept Adjustments used to account for unequal lane usage of third lane (used by right turners and u-turners). No info for SAT available so average of AM and PM used.

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓
D3	2022 Observed	SAT	ONE HOUR	11:45	13:15	15	✓
D4	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D6	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓
D7	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D8	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D9	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

AM - 2022 Observed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	D1,D4,D7	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	3.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.25	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-642
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2450
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Observed	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	153	100.000
2 - Station Approach (E)		ONE HOUR	✓	55	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	1258	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	608	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	2	4	99	48
	2 - Station Approach (E)	1	0	36	18
	3 - A206 St Clements Way (S)	68	37	143	1010
	4 - A206 Crossways Boulevard (W)	31	15	542	20

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	1	0
	2 - Station Approach (E)	0	0	29	50
	3 - A206 St Clements Way (S)	1	37	1	5
	4 - A206 Crossways Boulevard (W)	3	50	12	18

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.14	3.58	0.2	A	140	211
2 - Station Approach (E)	0.06	4.69	0.1	A	50	76
3 - A206 St Clements Way (S)	0.59	3.86	1.5	A	1154	1732
4 - A206 Crossways Boulevard (W)	0.23	1.78	0.3	A	558	837

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	115	29	569	1339	0.086	115	77	0.0	0.1	2.959	A
2 - Station Approach (E)	41	10	642	1276	0.032	41	42	0.0	0.0	3.919	A
3 - A206 St Clements Way (S)	947	237	67	2392	0.396	944	616	0.0	0.7	2.607	A
4 - A206 Crossways Boulevard (W)	458	114	188	3016	0.152	457	823	0.0	0.2	1.580	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	138	34	680	1272	0.108	137	92	0.1	0.1	3.193	A
2 - Station Approach (E)	49	12	767	1199	0.041	49	50	0.0	0.1	4.211	A
3 - A206 St Clements Way (S)	1131	283	80	2381	0.475	1130	737	0.7	0.9	3.020	A
4 - A206 Crossways Boulevard (W)	547	137	225	2982	0.183	546	984	0.2	0.3	1.660	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	168	42	833	1180	0.143	168	112	0.1	0.2	3.582	A
2 - Station Approach (E)	61	15	940	1092	0.055	60	62	0.1	0.1	4.691	A
3 - A206 St Clements Way (S)	1385	346	98	2365	0.586	1383	902	0.9	1.5	3.841	A
4 - A206 Crossways Boulevard (W)	669	167	276	2937	0.228	669	1205	0.3	0.3	1.783	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	168	42	833	1179	0.143	168	112	0.2	0.2	3.583	A
2 - Station Approach (E)	61	15	940	1092	0.055	61	62	0.1	0.1	4.693	A
3 - A206 St Clements Way (S)	1385	346	98	2365	0.586	1385	903	1.5	1.5	3.858	A
4 - A206 Crossways Boulevard (W)	669	167	276	2936	0.228	669	1207	0.3	0.3	1.783	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	138	34	681	1271	0.108	138	92	0.2	0.1	3.195	A
2 - Station Approach (E)	49	12	768	1198	0.041	50	50	0.1	0.1	4.216	A
3 - A206 St Clements Way (S)	1131	283	80	2380	0.475	1133	738	1.5	1.0	3.037	A
4 - A206 Crossways Boulevard (W)	547	137	226	2982	0.183	547	987	0.3	0.3	1.661	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	115	29	570	1338	0.086	115	77	0.1	0.1	2.961	A
2 - Station Approach (E)	41	10	643	1275	0.032	41	42	0.1	0.0	3.924	A
3 - A206 St Clements Way (S)	947	237	67	2392	0.396	948	618	1.0	0.7	2.620	A
4 - A206 Crossways Boulevard (W)	458	114	189	3015	0.152	458	826	0.3	0.2	1.584	A

AM - 2030 Without Dev Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	D1,D4,D7	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	2.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.11	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-642
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2450
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 Without Dev Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	123	100.000
2 - Station Approach (E)		ONE HOUR	✓	0	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	724	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	45	78
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	724
	4 - A206 Crossways Boulevard (W)	30	0	220	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	1
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	2
	4 - A206 Crossways Boulevard (W)	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.09	2.58	0.1	A	113	169
2 - Station Approach (E)	0.00	0.00	0.0	A	0	0
3 - A206 St Clements Way (S)	0.34	2.33	0.5	A	664	997
4 - A206 Crossways Boulevard (W)	0.09	1.27	0.1	A	229	344

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	93	23	165	1583	0.058	92	23	0.0	0.1	2.429	A
2 - Station Approach (E)	0	0	258	1513	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	545	136	59	2399	0.227	544	199	0.0	0.3	1.978	A
4 - A206 Crossways Boulevard (W)	188	47	0	3186	0.059	188	602	0.0	0.1	1.233	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	111	28	198	1564	0.071	111	27	0.1	0.1	2.492	A
2 - Station Approach (E)	0	0	308	1482	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	651	163	70	2389	0.272	651	238	0.3	0.4	2.112	A
4 - A206 Crossways Boulevard (W)	225	56	0	3186	0.071	225	721	0.1	0.1	1.248	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	135	34	242	1537	0.088	135	33	0.1	0.1	2.584	A
2 - Station Approach (E)	0	0	378	1439	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	797	199	86	2376	0.336	797	292	0.4	0.5	2.326	A
4 - A206 Crossways Boulevard (W)	275	69	0	3186	0.086	275	882	0.1	0.1	1.270	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	135	34	242	1537	0.088	135	33	0.1	0.1	2.584	A
2 - Station Approach (E)	0	0	378	1439	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	797	199	86	2375	0.336	797	292	0.5	0.5	2.326	A
4 - A206 Crossways Boulevard (W)	275	69	0	3186	0.086	275	883	0.1	0.1	1.270	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	111	28	198	1564	0.071	111	27	0.1	0.1	2.492	A
2 - Station Approach (E)	0	0	308	1482	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	651	163	70	2389	0.272	651	238	0.5	0.4	2.115	A
4 - A206 Crossways Boulevard (W)	225	56	0	3186	0.071	225	722	0.1	0.1	1.248	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	93	23	166	1583	0.058	93	23	0.1	0.1	2.432	A
2 - Station Approach (E)	0	0	258	1513	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	545	136	59	2399	0.227	545	200	0.4	0.3	1.982	A
4 - A206 Crossways Boulevard (W)	188	47	0	3186	0.059	188	604	0.1	0.1	1.235	A

AM - 2030 Adjusted Flows (Without LTC), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	AM	✓	✓	D1,D4,D7	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	3.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.33	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-642
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2450
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	154	100.000
2 - Station Approach (E)		ONE HOUR	✓	55	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	1290	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	601	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	2	4	102	46
	2 - Station Approach (E)	1	0	36	18
	3 - A206 St Clements Way (S)	68	37	144	1041
	4 - A206 Crossways Boulevard (W)	31	15	535	20

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	1	0
	2 - Station Approach (E)	0	0	29	50
	3 - A206 St Clements Way (S)	1	37	1	4
	4 - A206 Crossways Boulevard (W)	3	50	12	18

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.14	3.57	0.2	A	141	212
2 - Station Approach (E)	0.06	4.68	0.1	A	50	76
3 - A206 St Clements Way (S)	0.60	3.96	1.6	A	1184	1776
4 - A206 Crossways Boulevard (W)	0.23	1.78	0.3	A	551	827

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	116	29	564	1342	0.086	116	77	0.0	0.1	2.954	A
2 - Station Approach (E)	41	10	638	1279	0.032	41	42	0.0	0.0	3.911	A
3 - A206 St Clements Way (S)	971	243	65	2393	0.406	968	614	0.0	0.7	2.627	A
4 - A206 Crossways Boulevard (W)	452	113	189	3015	0.150	452	844	0.0	0.2	1.578	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	138	35	675	1275	0.109	138	92	0.1	0.1	3.187	A
2 - Station Approach (E)	49	12	763	1201	0.041	49	50	0.0	0.1	4.201	A
3 - A206 St Clements Way (S)	1160	290	78	2382	0.487	1159	734	0.7	1.0	3.063	A
4 - A206 Crossways Boulevard (W)	540	135	226	2982	0.181	540	1010	0.2	0.2	1.656	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	170	42	826	1184	0.143	169	112	0.1	0.2	3.572	A
2 - Station Approach (E)	61	15	934	1096	0.055	60	62	0.1	0.1	4.675	A
3 - A206 St Clements Way (S)	1420	355	96	2367	0.600	1418	899	1.0	1.5	3.944	A
4 - A206 Crossways Boulevard (W)	662	165	277	2936	0.225	661	1237	0.2	0.3	1.778	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	170	42	827	1183	0.143	170	112	0.2	0.2	3.574	A
2 - Station Approach (E)	61	15	935	1095	0.055	61	62	0.1	0.1	4.677	A
3 - A206 St Clements Way (S)	1420	355	96	2367	0.600	1420	900	1.5	1.6	3.963	A
4 - A206 Crossways Boulevard (W)	662	165	277	2935	0.225	662	1239	0.3	0.3	1.778	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	138	35	676	1275	0.109	139	92	0.2	0.1	3.189	A
2 - Station Approach (E)	49	12	764	1201	0.041	50	50	0.1	0.1	4.206	A
3 - A206 St Clements Way (S)	1160	290	78	2382	0.487	1162	735	1.6	1.0	3.082	A
4 - A206 Crossways Boulevard (W)	540	135	227	2981	0.181	541	1013	0.3	0.2	1.657	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	116	29	566	1341	0.086	116	77	0.1	0.1	2.957	A
2 - Station Approach (E)	41	10	640	1277	0.032	41	42	0.1	0.0	3.917	A
3 - A206 St Clements Way (S)	971	243	66	2393	0.406	972	615	1.0	0.7	2.644	A
4 - A206 Crossways Boulevard (W)	452	113	190	3015	0.150	453	848	0.2	0.2	1.578	A

PM - 2022 Observed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	D2,D5,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	2.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.78	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-712
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2380
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Observed	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	129	100.000
2 - Station Approach (E)		ONE HOUR	✓	69	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	867	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	1228	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	6	82	41
	2 - Station Approach (E)	2	0	49	18
	3 - A206 St Clements Way (S)	111	38	64	654
	4 - A206 Crossways Boulevard (W)	63	26	1127	12

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	0
	2 - Station Approach (E)	0	0	36	50
	3 - A206 St Clements Way (S)	2	41	0	4
	4 - A206 Crossways Boulevard (W)	0	30	2	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.17	5.16	0.2	A	118	178
2 - Station Approach (E)	0.10	7.14	0.2	A	63	95
3 - A206 St Clements Way (S)	0.41	2.78	0.7	A	796	1193
4 - A206 Crossways Boulevard (W)	0.45	2.28	0.9	A	1127	1690

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	97	24	952	1107	0.088	97	132	0.0	0.1	3.562	A
2 - Station Approach (E)	52	13	996	1057	0.049	52	53	0.0	0.1	4.936	A
3 - A206 St Clements Way (S)	653	163	55	2332	0.280	651	993	0.0	0.4	2.238	A
4 - A206 Crossways Boulevard (W)	925	231	161	3040	0.304	923	544	0.0	0.4	1.742	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	116	29	1138	995	0.117	116	158	0.1	0.1	4.096	A
2 - Station Approach (E)	62	16	1191	937	0.066	62	63	0.1	0.1	5.675	A
3 - A206 St Clements Way (S)	779	195	66	2323	0.336	779	1188	0.4	0.5	2.439	A
4 - A206 Crossways Boulevard (W)	1104	276	193	3012	0.367	1103	651	0.4	0.6	1.935	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	142	36	1394	840	0.169	142	194	0.1	0.2	5.152	A
2 - Station Approach (E)	76	19	1459	772	0.098	76	77	0.1	0.1	7.132	A
3 - A206 St Clements Way (S)	955	239	80	2310	0.413	954	1454	0.5	0.7	2.775	A
4 - A206 Crossways Boulevard (W)	1352	338	237	2972	0.455	1351	797	0.6	0.9	2.277	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	142	36	1395	839	0.169	142	194	0.2	0.2	5.161	A
2 - Station Approach (E)	76	19	1460	771	0.099	76	77	0.1	0.2	7.143	A
3 - A206 St Clements Way (S)	955	239	80	2310	0.413	955	1456	0.7	0.7	2.777	A
4 - A206 Crossways Boulevard (W)	1352	338	237	2972	0.455	1352	798	0.9	0.9	2.279	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	116	29	1140	994	0.117	116	158	0.2	0.1	4.104	A
2 - Station Approach (E)	62	16	1193	936	0.066	62	63	0.2	0.1	5.688	A
3 - A206 St Clements Way (S)	779	195	66	2323	0.336	780	1190	0.7	0.5	2.444	A
4 - A206 Crossways Boulevard (W)	1104	276	193	3011	0.367	1105	653	0.9	0.6	1.938	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	97	24	954	1106	0.088	97	133	0.1	0.1	3.571	A
2 - Station Approach (E)	52	13	999	1056	0.049	52	53	0.1	0.1	4.947	A
3 - A206 St Clements Way (S)	653	163	55	2332	0.280	653	996	0.5	0.4	2.245	A
4 - A206 Crossways Boulevard (W)	925	231	162	3040	0.304	925	546	0.6	0.4	1.748	A

PM - 2030 Without Dev Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	D2,D5,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	1.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.77	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-712
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2380
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 Without Dev Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	57	100.000
2 - Station Approach (E)		ONE HOUR	✓	0	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	420	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	745	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	57
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	420
	4 - A206 Crossways Boulevard (W)	63	0	682	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	2
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	3
	4 - A206 Crossways Boulevard (W)	0	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.05	3.15	0.1	A	52	78
2 - Station Approach (E)	0.00	0.00	0.0	A	0	0
3 - A206 St Clements Way (S)	0.20	1.99	0.3	A	385	578
4 - A206 Crossways Boulevard (W)	0.26	1.53	0.3	A	684	1025

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	43	11	513	1373	0.031	43	47	0.0	0.0	2.759	A
2 - Station Approach (E)	0	0	555	1329	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	316	79	43	2343	0.135	316	513	0.0	0.2	1.828	A
4 - A206 Crossways Boulevard (W)	561	140	0	3186	0.176	560	358	0.0	0.2	1.383	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	613	1313	0.039	51	57	0.0	0.0	2.910	A
2 - Station Approach (E)	0	0	664	1262	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	378	94	51	2336	0.162	377	613	0.2	0.2	1.892	A
4 - A206 Crossways Boulevard (W)	670	167	0	3186	0.210	670	429	0.2	0.3	1.442	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	63	16	751	1229	0.051	63	69	0.0	0.1	3.147	A
2 - Station Approach (E)	0	0	813	1170	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	462	116	63	2326	0.199	462	751	0.2	0.3	1.989	A
4 - A206 Crossways Boulevard (W)	820	205	0	3186	0.257	820	525	0.3	0.3	1.534	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	63	16	751	1229	0.051	63	69	0.1	0.1	3.147	A
2 - Station Approach (E)	0	0	814	1170	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	462	116	63	2326	0.199	462	751	0.3	0.3	1.989	A
4 - A206 Crossways Boulevard (W)	820	205	0	3186	0.257	820	525	0.3	0.3	1.534	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	613	1312	0.039	51	57	0.1	0.0	2.913	A
2 - Station Approach (E)	0	0	665	1262	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	378	94	51	2335	0.162	378	613	0.3	0.2	1.893	A
4 - A206 Crossways Boulevard (W)	670	167	0	3186	0.210	670	429	0.3	0.3	1.443	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	43	11	514	1373	0.031	43	47	0.0	0.0	2.763	A
2 - Station Approach (E)	0	0	557	1329	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	316	79	43	2343	0.135	316	514	0.2	0.2	1.829	A
4 - A206 Crossways Boulevard (W)	561	140	0	3186	0.176	561	359	0.3	0.2	1.385	A

PM - 2030 Adjusted Flows (Without LTC), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	PM	✓	✓	D2,D5,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	2.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.91	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Low lane usage in offside lane	-712
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2380
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	135	100.000
2 - Station Approach (E)		ONE HOUR	✓	73	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	908	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	1287	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	6	86	43
	2 - Station Approach (E)	2	0	52	19
	3 - A206 St Clements Way (S)	113	40	66	689
	4 - A206 Crossways Boulevard (W)	61	28	1185	13

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	0
	2 - Station Approach (E)	0	0	36	50
	3 - A206 St Clements Way (S)	2	41	0	4
	4 - A206 Crossways Boulevard (W)	0	30	2	33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.19	5.56	0.2	A	124	186
2 - Station Approach (E)	0.11	7.70	0.2	A	67	100
3 - A206 St Clements Way (S)	0.43	2.88	0.8	A	833	1250
4 - A206 Crossways Boulevard (W)	0.48	2.38	0.9	A	1181	1771

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	102	25	1001	1078	0.094	101	132	0.0	0.1	3.683	A
2 - Station Approach (E)	55	14	1046	1026	0.054	55	56	0.0	0.1	5.111	A
3 - A206 St Clements Way (S)	684	171	58	2330	0.293	682	1043	0.0	0.4	2.284	A
4 - A206 Crossways Boulevard (W)	969	242	166	3036	0.319	967	574	0.0	0.5	1.783	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	121	30	1197	959	0.127	121	158	0.1	0.1	4.295	A
2 - Station Approach (E)	66	16	1251	900	0.073	66	66	0.1	0.1	5.955	A
3 - A206 St Clements Way (S)	816	204	69	2320	0.352	816	1248	0.4	0.6	2.504	A
4 - A206 Crossways Boulevard (W)	1157	289	199	3007	0.385	1156	686	0.5	0.6	1.996	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	149	37	1465	797	0.187	148	194	0.1	0.2	5.548	A
2 - Station Approach (E)	80	20	1532	726	0.111	80	81	0.1	0.2	7.688	A
3 - A206 St Clements Way (S)	1000	250	85	2307	0.433	999	1528	0.6	0.8	2.879	A
4 - A206 Crossways Boulevard (W)	1417	354	243	2967	0.478	1416	840	0.6	0.9	2.382	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	149	37	1467	796	0.187	149	194	0.2	0.2	5.559	A
2 - Station Approach (E)	80	20	1534	725	0.111	80	81	0.2	0.2	7.701	A
3 - A206 St Clements Way (S)	1000	250	85	2306	0.433	1000	1529	0.8	0.8	2.882	A
4 - A206 Crossways Boulevard (W)	1417	354	243	2966	0.478	1417	841	0.9	0.9	2.384	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	121	30	1199	958	0.127	122	158	0.2	0.1	4.306	A
2 - Station Approach (E)	66	16	1254	898	0.073	66	67	0.2	0.1	5.969	A
3 - A206 St Clements Way (S)	816	204	69	2320	0.352	817	1250	0.8	0.6	2.508	A
4 - A206 Crossways Boulevard (W)	1157	289	199	3006	0.385	1158	688	0.9	0.6	2.001	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	102	25	1003	1076	0.094	102	133	0.1	0.1	3.693	A
2 - Station Approach (E)	55	14	1050	1024	0.054	55	56	0.1	0.1	5.127	A
3 - A206 St Clements Way (S)	684	171	58	2330	0.293	684	1047	0.6	0.4	2.289	A
4 - A206 Crossways Boulevard (W)	969	242	167	3036	0.319	970	576	0.6	0.5	1.787	A

Sat - 2022 Observed, SAT

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Sat	✓	✓	D3,D6,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	0.00	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	F

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Average of AM and PM	-677
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2415
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Observed	SAT	ONE HOUR	11:45	13:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	0	100.000
2 - Station Approach (E)		ONE HOUR	✓	0	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	0	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	0
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	0
	4 - A206 Crossways Boulevard (W)	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	0
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	0
	4 - A206 Crossways Boulevard (W)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.00	0.00	0.0	A	0	0
2 - Station Approach (E)	0.00	0.00	0.0	A	0	0
3 - A206 St Clements Way (S)	0.00	0.00	0.0	A	0	0
4 - A206 Crossways Boulevard (W)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	0	0	0	1683	0.000	0	0	0.0	0.0	0.000	A
2 - Station Approach (E)	0	0	0	1672	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	0	0	0	2415	0.000	0	0	0.0	0.0	0.000	A
4 - A206 Crossways Boulevard (W)	0	0	0	3186	0.000	0	0	0.0	0.0	0.000	A

Sat - 2030 Without Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Sat	✓	✓	D3,D6,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	1.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.70	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Average of AM and PM	-677
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2415
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030 Without Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	46	100.000
2 - Station Approach (E)		ONE HOUR	✓	0	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	379	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	46
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	379
	4 - A206 Crossways Boulevard (W)	38	0	253	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	3
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	4
	4 - A206 Crossways Boulevard (W)	2	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.03	2.53	0.0	A	42	63
2 - Station Approach (E)	0.00	0.00	0.0	A	0	0
3 - A206 St Clements Way (S)	0.18	1.91	0.2	A	348	522
4 - A206 Crossways Boulevard (W)	0.10	1.29	0.1	A	267	401

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	35	9	190	1568	0.022	35	29	0.0	0.0	2.417	A
2 - Station Approach (E)	0	0	225	1534	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	285	71	35	2385	0.120	285	190	0.0	0.1	1.782	A
4 - A206 Crossways Boulevard (W)	219	55	0	3186	0.069	219	319	0.0	0.1	1.247	A

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	41	10	227	1546	0.027	41	34	0.0	0.0	2.464	A
2 - Station Approach (E)	0	0	269	1507	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	341	85	41	2379	0.143	341	227	0.1	0.2	1.835	A
4 - A206 Crossways Boulevard (W)	262	65	0	3186	0.082	262	382	0.1	0.1	1.265	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	278	1515	0.033	51	42	0.0	0.0	2.531	A
2 - Station Approach (E)	0	0	329	1469	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	417	104	51	2371	0.176	417	278	0.2	0.2	1.915	A
4 - A206 Crossways Boulevard (W)	320	80	0	3186	0.101	320	468	0.1	0.1	1.291	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	279	1515	0.033	51	42	0.0	0.0	2.531	A
2 - Station Approach (E)	0	0	329	1469	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	417	104	51	2371	0.176	417	279	0.2	0.2	1.915	A
4 - A206 Crossways Boulevard (W)	320	80	0	3186	0.101	320	468	0.1	0.1	1.291	A

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	41	10	228	1546	0.027	41	34	0.0	0.0	2.466	A
2 - Station Approach (E)	0	0	269	1506	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	341	85	41	2379	0.143	341	228	0.2	0.2	1.839	A
4 - A206 Crossways Boulevard (W)	262	65	0	3186	0.082	262	382	0.1	0.1	1.267	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	35	9	191	1568	0.022	35	29	0.0	0.0	2.417	A
2 - Station Approach (E)	0	0	225	1533	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	285	71	35	2385	0.120	285	191	0.2	0.1	1.782	A
4 - A206 Crossways Boulevard (W)	219	55	0	3186	0.069	219	320	0.1	0.1	1.247	A

Sat - 2030 With Dev Flows (Without LTC), SAT

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Sat	✓	✓	D3,D6,D9	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J9 - A206 / Station Road / Station Approach Roundabout	Standard Roundabout		1, 2, 3, 4	1.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.71	A

Arms

Arms

Arm	Name	Description	No give-way line
1	B255 Station Road (N)		
2	Station Approach (E)		
3	A206 St Clements Way (S)		
4	A206 Crossways Boulevard (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - B255 Station Road (N)	3.40	6.70	20.1	12.0	50.0	21.0		
2 - Station Approach (E)	3.00	6.50	20.4	26.0	50.0	19.0		
3 - A206 St Clements Way (S)	9.70	10.90	5.1	20.0	50.0	35.0		
4 - A206 Crossways Boulevard (W)	9.00	10.40	11.9	24.0	50.0	18.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - B255 Station Road (N)	None		
2 - Station Approach (E)	None		
3 - A206 St Clements Way (S)	Direct	Average of AM and PM	-677
4 - A206 Crossways Boulevard (W)	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B255 Station Road (N)	0.605	1683
2 - Station Approach (E)	0.618	1672
3 - A206 St Clements Way (S)	0.867	2415
4 - A206 Crossways Boulevard (W)	0.904	3186

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	11:45	13:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - B255 Station Road (N)		ONE HOUR	✓	46	100.000
2 - Station Approach (E)		ONE HOUR	✓	0	100.000
3 - A206 St Clements Way (S)		ONE HOUR	✓	400	100.000
4 - A206 Crossways Boulevard (W)		ONE HOUR	✓	305	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	46
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	400
	4 - A206 Crossways Boulevard (W)	38	0	267	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - B255 Station Road (N)	2 - Station Approach (E)	3 - A206 St Clements Way (S)	4 - A206 Crossways Boulevard (W)
	1 - B255 Station Road (N)	0	0	0	3
	2 - Station Approach (E)	0	0	0	0
	3 - A206 St Clements Way (S)	0	0	0	3
	4 - A206 Crossways Boulevard (W)	2	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - B255 Station Road (N)	0.03	2.55	0.0	A	42	63
2 - Station Approach (E)	0.00	0.00	0.0	A	0	0
3 - A206 St Clements Way (S)	0.19	1.92	0.2	A	367	551
4 - A206 Crossways Boulevard (W)	0.11	1.30	0.1	A	280	420

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	35	9	201	1562	0.022	35	29	0.0	0.0	2.427	A
2 - Station Approach (E)	0	0	235	1527	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	301	75	35	2385	0.126	301	201	0.0	0.1	1.778	A
4 - A206 Crossways Boulevard (W)	230	57	0	3186	0.072	229	335	0.0	0.1	1.252	A

12:00 - 12:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	41	10	240	1538	0.027	41	34	0.0	0.0	2.476	A
2 - Station Approach (E)	0	0	281	1499	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	360	90	41	2379	0.151	359	240	0.1	0.2	1.835	A
4 - A206 Crossways Boulevard (W)	274	69	0	3186	0.086	274	401	0.1	0.1	1.271	A

12:15 - 12:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	294	1506	0.034	51	42	0.0	0.0	2.548	A
2 - Station Approach (E)	0	0	345	1460	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	440	110	51	2371	0.186	440	294	0.2	0.2	1.920	A
4 - A206 Crossways Boulevard (W)	336	84	0	3186	0.105	336	491	0.1	0.1	1.298	A

12:30 - 12:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	51	13	294	1506	0.034	51	42	0.0	0.0	2.548	A
2 - Station Approach (E)	0	0	345	1460	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	440	110	51	2371	0.186	440	294	0.2	0.2	1.920	A
4 - A206 Crossways Boulevard (W)	336	84	0	3186	0.105	336	491	0.1	0.1	1.298	A

12:45 - 13:00

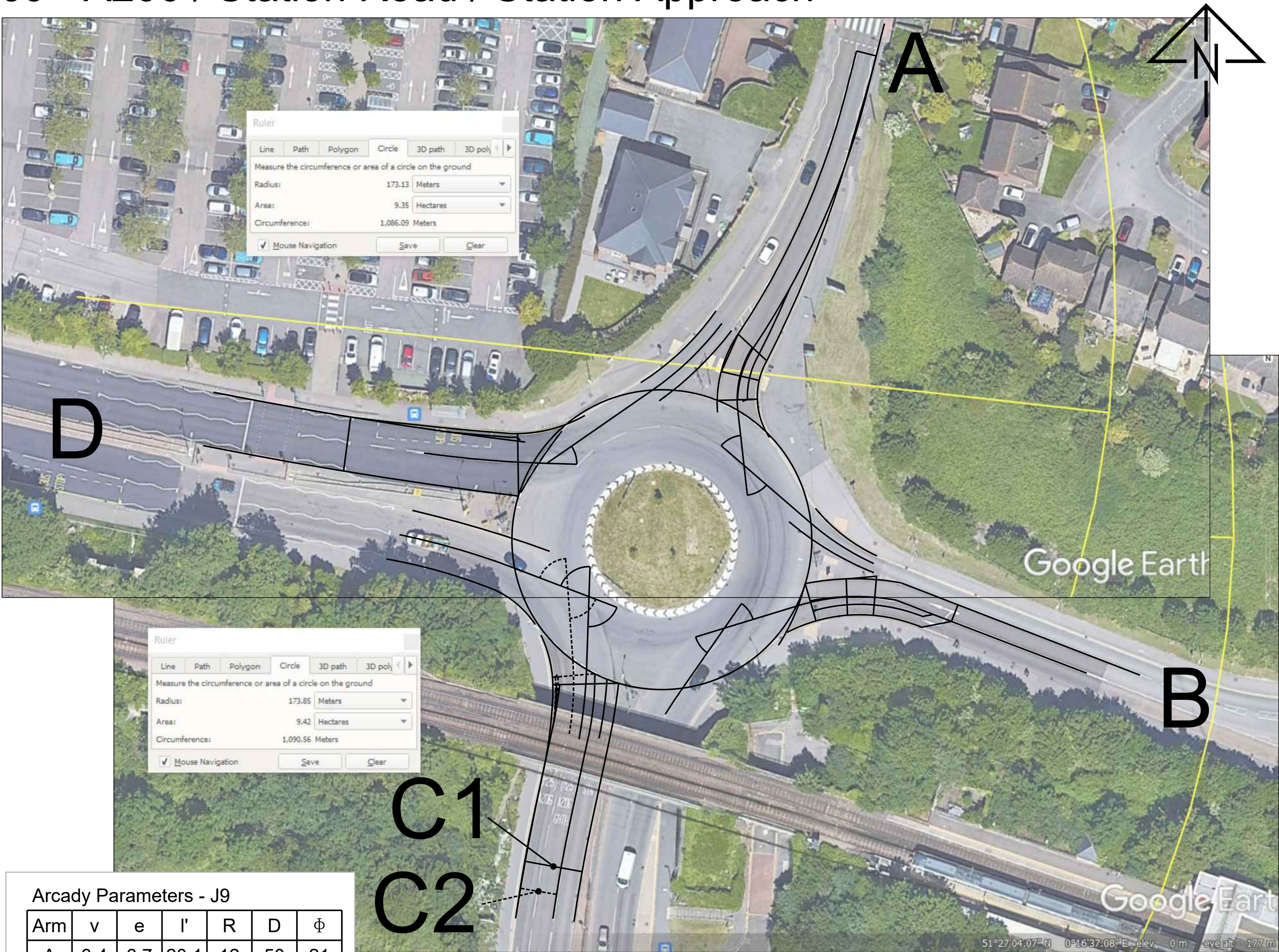
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	41	10	240	1538	0.027	41	34	0.0	0.0	2.476	A
2 - Station Approach (E)	0	0	281	1499	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	360	90	41	2379	0.151	360	240	0.2	0.2	1.838	A
4 - A206 Crossways Boulevard (W)	274	69	0	3186	0.086	274	401	0.1	0.1	1.271	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - B255 Station Road (N)	35	9	201	1562	0.022	35	29	0.0	0.0	2.429	A
2 - Station Approach (E)	0	0	236	1527	0.000	0	0	0.0	0.0	0.000	A
3 - A206 St Clements Way (S)	301	75	35	2385	0.126	301	201	0.2	0.1	1.778	A
4 - A206 Crossways Boulevard (W)	230	57	0	3186	0.072	230	336	0.1	0.1	1.254	A

Appendix E

J9 - A206 / Station Road / Station Approach



Arcady Parameters - J9

Arm	v	e	l'	R	D	Φ
A	3.4	6.7	20.1	12	50	21
B	3.0	6.5	20.4	26	50	19
C1	9.7	10.9	5.1	20	50	35
C2	6.1	7.05	7.9	47	50	32
D	9.0	10.4	11.9	24	50	18

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

REV	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:
Landmarque Property Group

PROJECT:
NORTHFLEET CENTRAL
GRAVESHAM

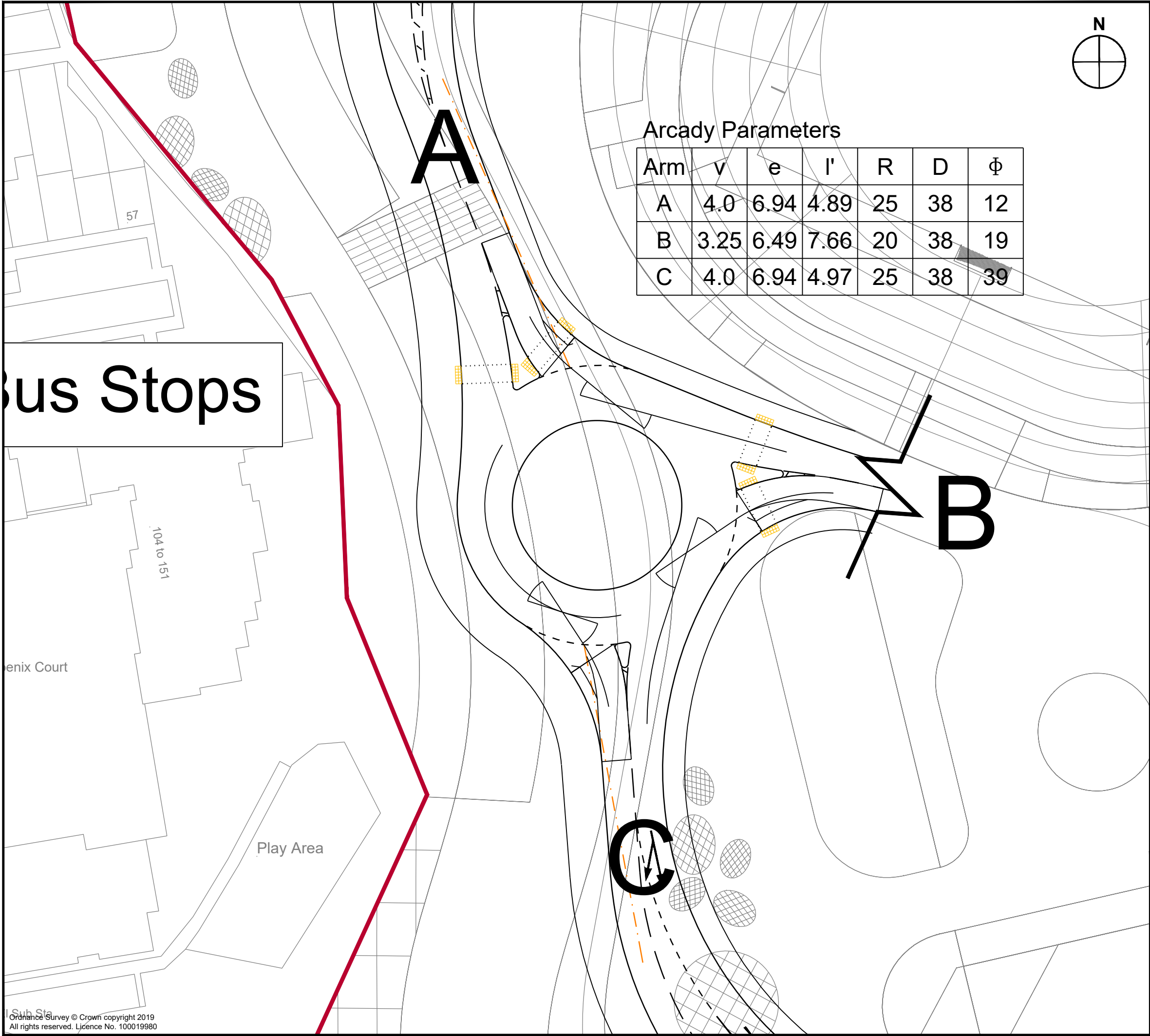
DRAWING TITLE:
Arcady Parameters:
A206 / Station Road / Station
Approach Roundabout

SCALES:
1:500 at A2

DRAWN: DSN	CHECKED:	DATE: 21.10.2023
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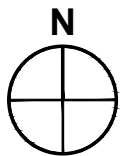


DRAWING NUMBER: 226728 / ARC / 05
REVISION: .



Arcady Parameters

Arm	v	e	l'	R	D	Φ
A	4.0	6.94	4.89	25	38	12
B	3.25	6.49	7.66	20	38	19
C	4.0	6.94	4.97	25	38	39



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility on approach (MfS 30mph)

REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:
Landmarque Property Group

PROJECT:
Northfleet Central
Gravesham

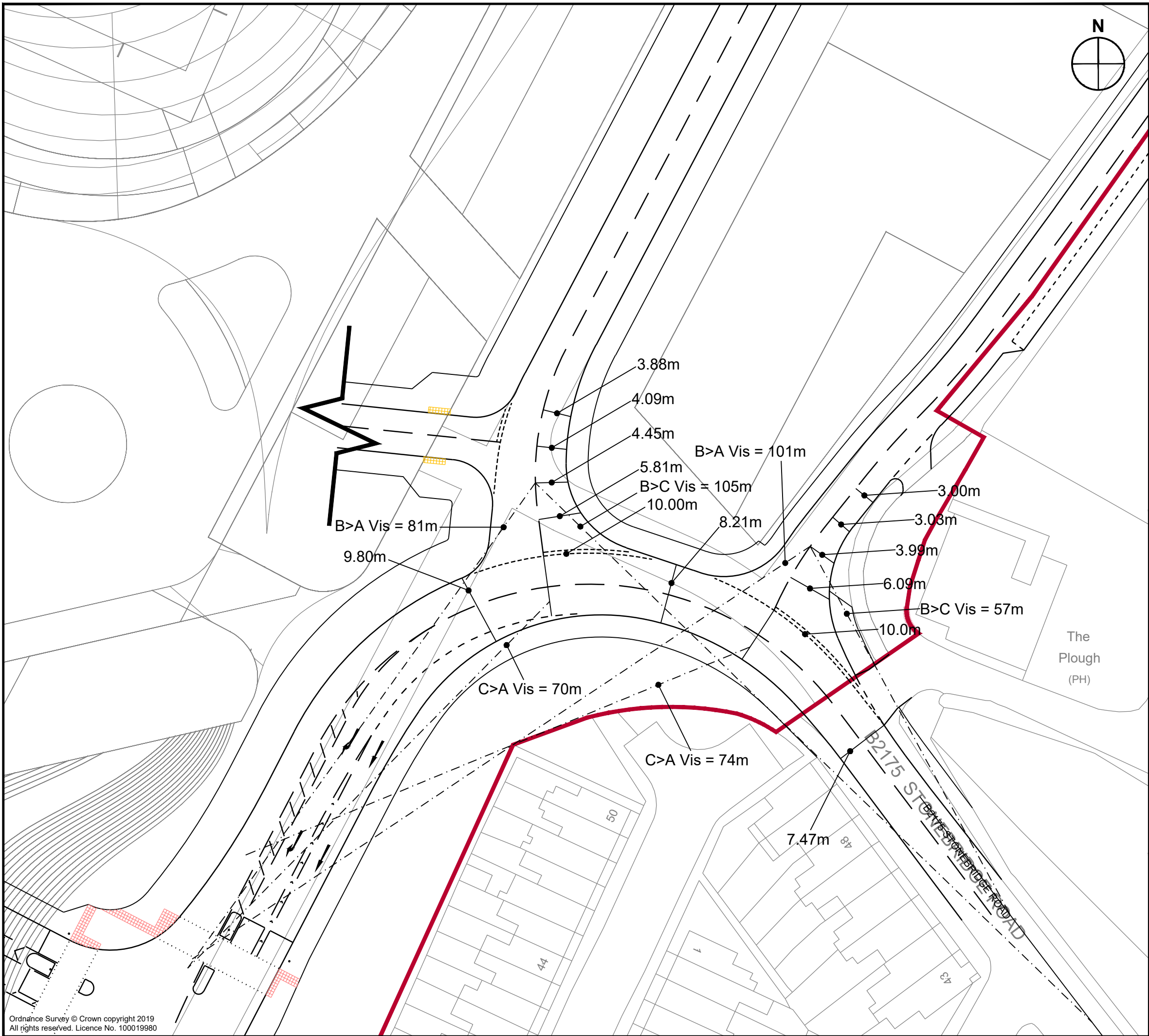
DRAWING TITLE:
Site Access Plans
Roundabout

SCALES:
1:500 at A3

DRAWN: JM	CHECKED: RS	DATE: 24.05.2023
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DRAWING NUMBER: 226728/PD102	REVISION: .
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.



A	Dimensions added	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Site Access Plans
Junction 2B -
Picady Measurements**

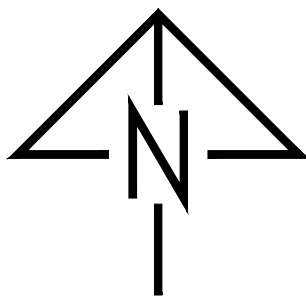
SCALES:
1:500 at A3

DRAWN: DSN	CHECKED: .	DATE: 23.10.2023
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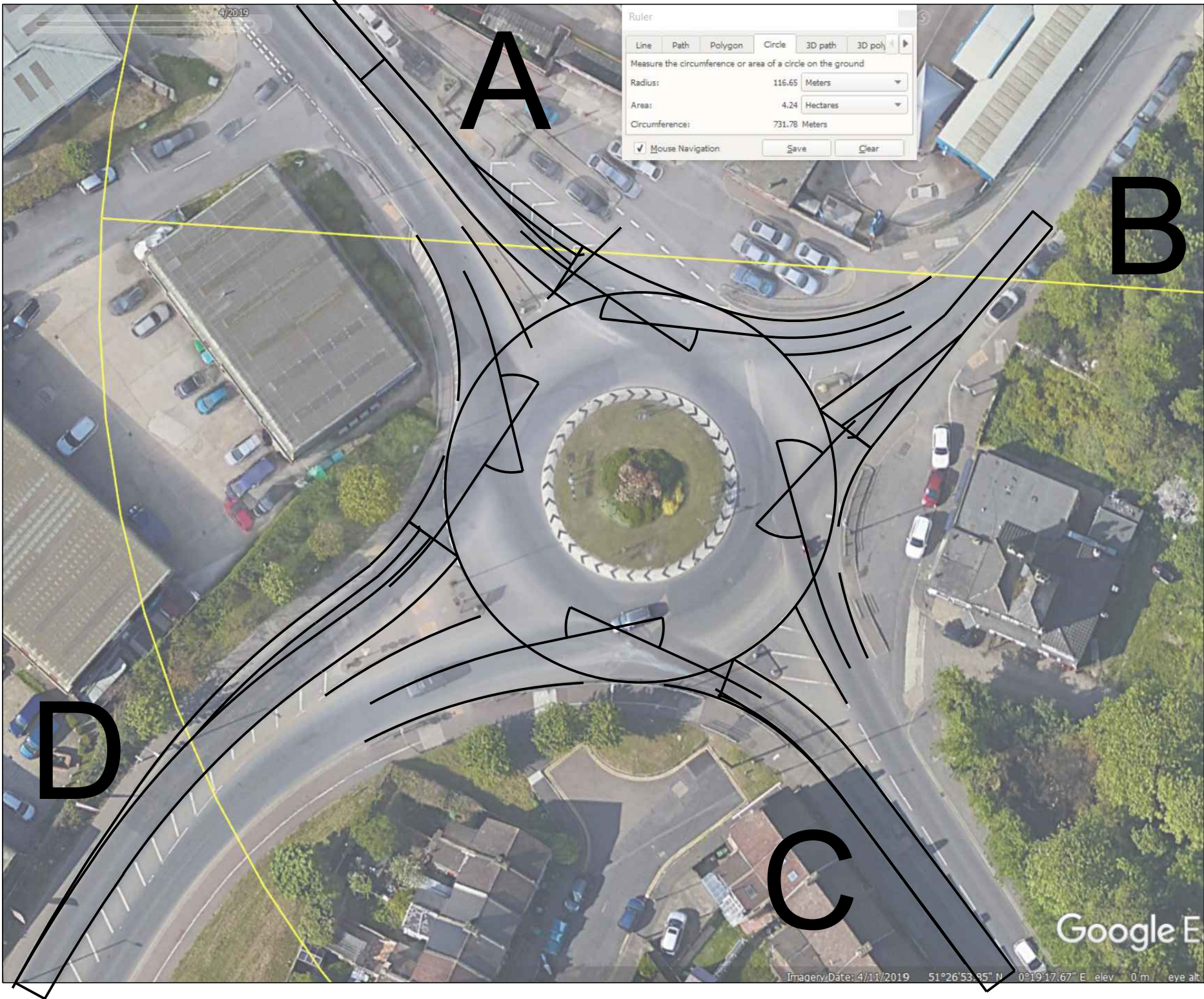


DRAWING NUMBER: 226728/PIC/01	REVISION: .
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



J2 - A226 / B2175 / Grove Road



Arcady Parameters - J2

Arm	v	e	l'	R	D	ϕ
A	3.35	5.8	9.5	50	40	14
B	2.65	6.5	6.8	18	40	29
C	3.6	4.3	2.2	24	40	18
D	3.5	6.2	31.2	28	40	23

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REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:
Landmarque Property Group

PROJECT:
NORTHFLEET CENTRAL
GRAVESHAM

DRAWING TITLE:
Arcady Parameters:
A226 / B2175 / Grove Road
Roundabout

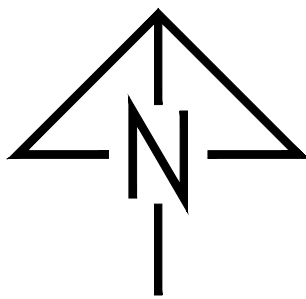
SCALES:
1:500 at A2

DRAWN:	DSN	CHECKED:	DATE:	21.10.2023
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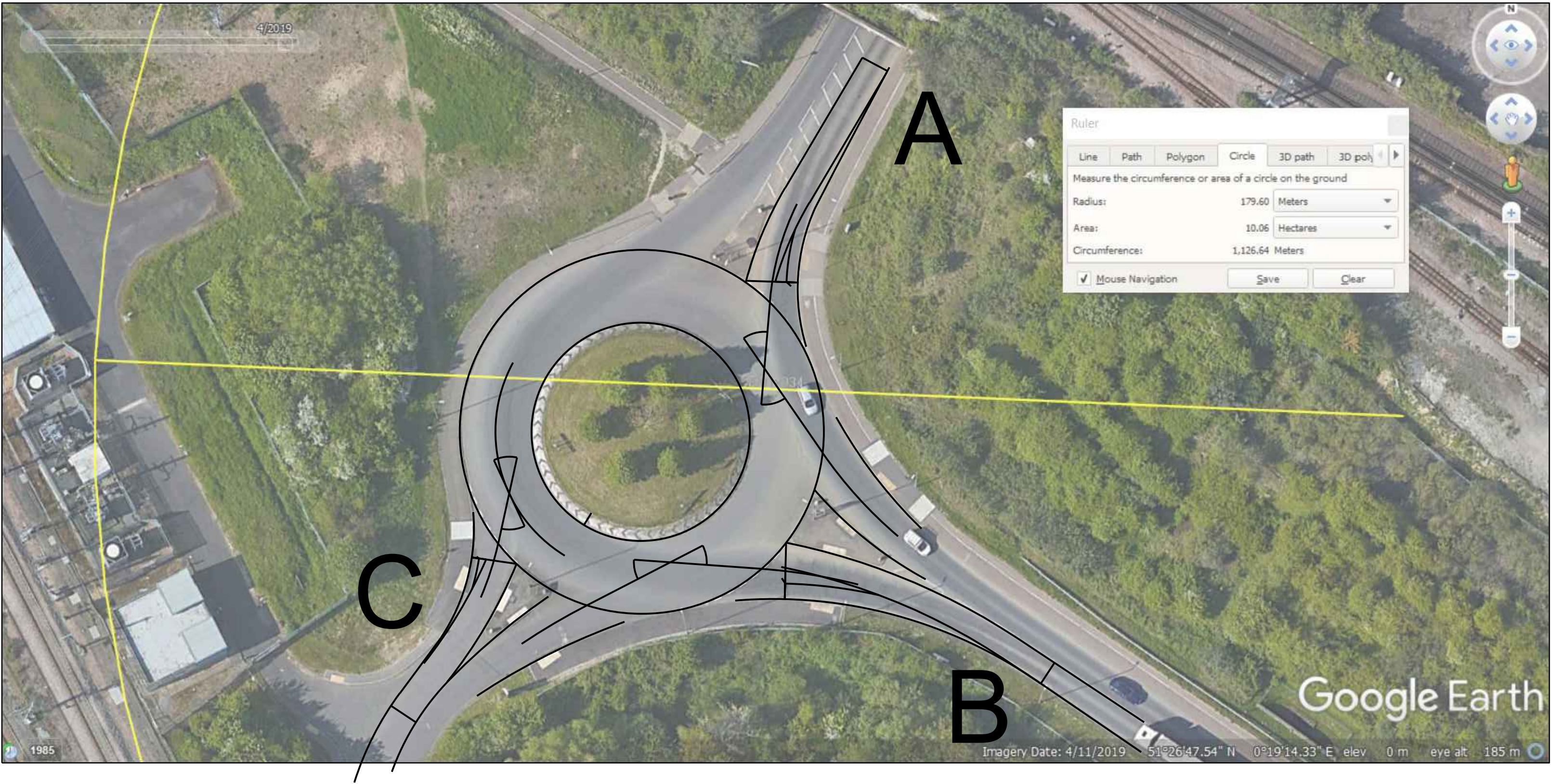


DRAWING NUMBER:	226728 / ARC / 01	REVISION:	.
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



J3 - A226 / Ebbsfleet International Car Park



Arcady Parameters - J3

Arm	v	e	l'	R	D	Φ
A	3.9	7.1	7.3	27	50	20
B	3.4	7.75	13.0	64	50	16
C	4.0	6.2	4.4	27	50	37

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
NORTHFLEET CENTRAL
GRAVESHAM

DRAWING TITLE:
Arcady Parameters:
A226 / Ebbsfleet International
Car Park C Roundabout

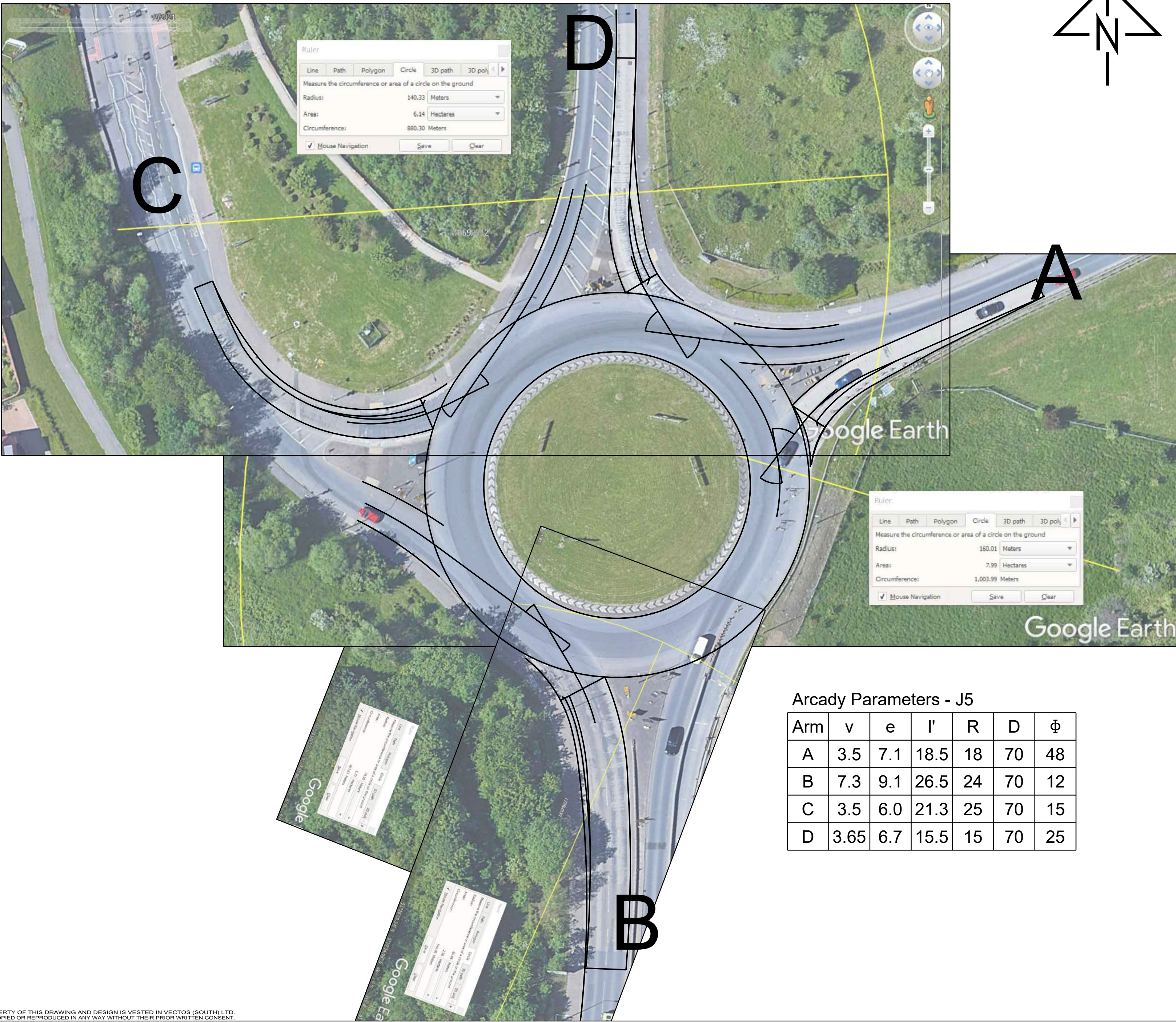
SCALES:
1:500 at A2

DRAWN: DSN CHECKED: DATE: 21.10.2023



DRAWING NUMBER:
226728 / ARC / 02 REVISION: .

J5 - A2260 / B259 / International Way



Arcady Parameters - J5

Arm	v	e	l'	R	D	Φ
A	3.5	7.1	18.5	18	70	48
B	7.3	9.1	26.5	24	70	12
C	3.5	6.0	21.3	25	70	15
D	3.65	6.7	15.5	15	70	25

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

REV

DETAILS

DRAWN

CHECKED

DATE

CLIENT:

Landmarque Property Group

PROJECT:

NORTHFLEET CENTRAL GRAVESHAM

DRAWING TITLE:

Arcady Parameters:
A2260 / B259 / International
Way Roundabout

SCALES:

1:500 at A2

DRAWN: DSN

CHECKED:

DATE: 21.10.2023



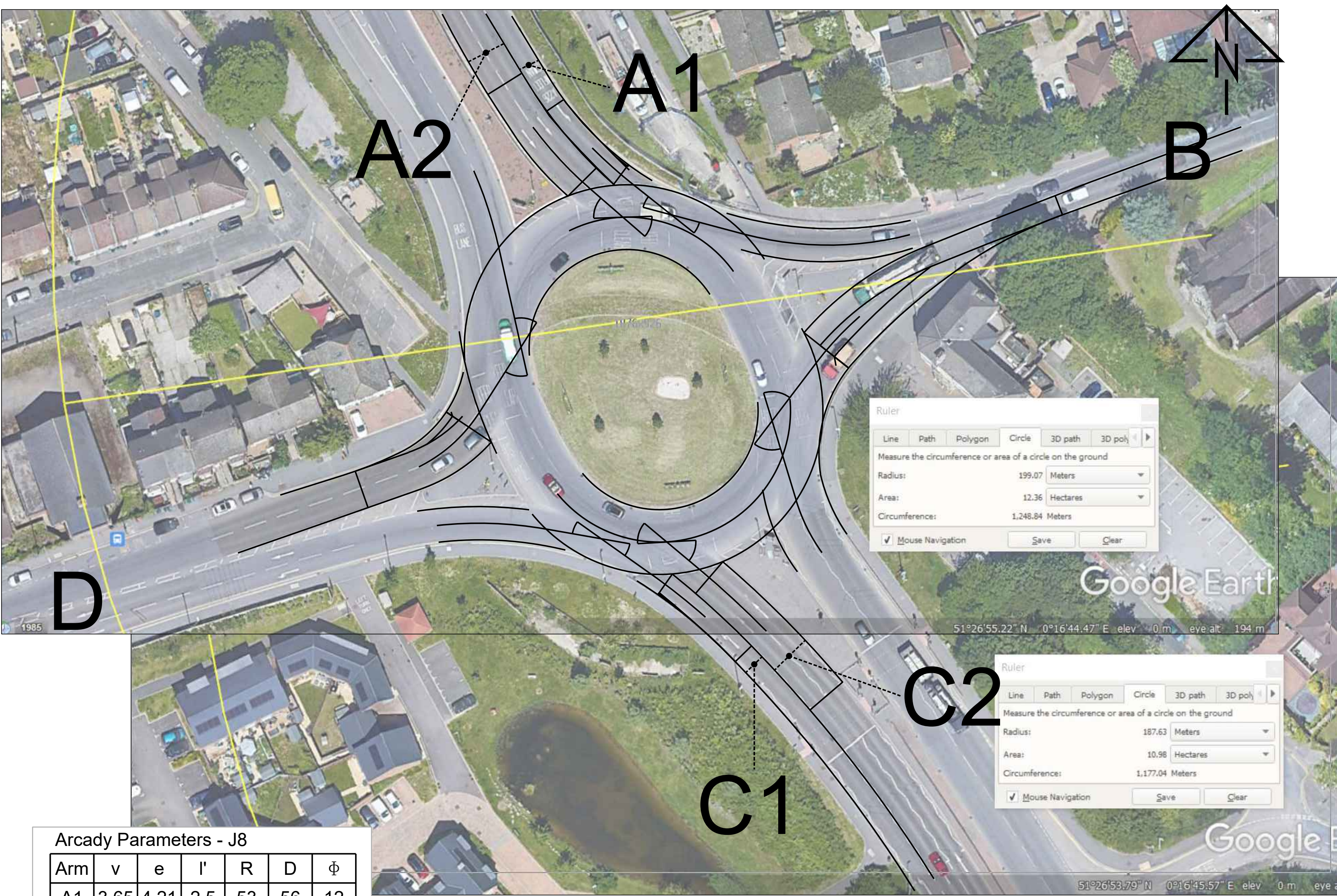
DRAWING NUMBER:

226728 / ARC / 03

REVISION:

J8 - A226 / A206 / B255 / London Road

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



Arcady Parameters - J8

Arm	v	e	l'	R	D	Φ
A1	3.65	4.21	2.5	53	56	12
A2	7.0	7.0	0	82	56	43
B	3.5	9.75	22.8	24	56	23
C1	3.9	4.3	3.3	84	56	13
C2	7.3	7.2	0	155	56	43
D	6.6	9.3	6.6	20	56	23

REV	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:
Landmarque Property Group

PROJECT:
NORTHFLEET CENTRAL
GRAVESHAM

DRAWING TITLE:
Arcady Parameters:
A226 / A206 / B255 / London
Road Roundabout

SCALES:
1:500 at A2

DRAWN: DSN
CHECKED:
DATE: 21.10.2023



DRAWING NUMBER:
226728 / ARC / 04
REVISION:
.

Appendix F

STAGE 1 ROAD SAFETY AUDIT

Landmarque Property Group

Northfleet Harbourside

13th October 2023

Report control

Document: Stage 1 RSA

Project: Northfleet Harbourside

Job number: X:\Projects\220000\226728 - Northfleet Central, Gravesham\WORD\RSA\R01-PW-Northfleet Harbourside FINAL 231013.docx

Document checking

Primary Author: Patrick West Initialled: PW

Contributor: Asa John Plant Initialled: AJP

Review by: Asa John Plant Initialled: AJP

Issue	Date	Status	Checked for issue
1	23/05/2023	FINAL	AJP
1	13/10/2023	2 nd Issue	AJP

Contents

1 Introduction 1

2 Matters Arising from the Audit 3

3 Audit Team Statement..... 5

Appendices

- Appendix A – Site Location Plan
- Appendix B – Documents Submitted for Audit
- Appendix C – Problem Location Plan

1 Introduction

- 1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on Friday, 13th October 2023. The audit was carried out on behalf of SLR. The overseeing organisation and project sponsor is Kent County Council.
- 1.2 An RSA brief was prepared by Rory Spiller of Vectos South part of SLR on 17th April 2023 and was subsequently accepted by the Audit Team on the same day. Following this, an updated set of plans have been submitted to the Audit Team which forms the basis of this audit.
- 1.3 This RSA team was as follows:
- PATRICK WEST BA (Hons), MCIHT, MSoRSA, HE Approved Cert. Comp.
Audit Team Leader
Associate Director
Vectos part of SLR
- ASA JOHN PLANT MCIHT, MSoRSA, HE Approved Cert. Comp.
Audit Team Member
Director
Vectos part of SLR
- 1.4 A site visit was undertaken on Wednesday the 3rd of May 2023 between the hours of 1100 and 1200. The weather was fine, overcast and the road surface dry. At the time of the site visit moderate levels of traffic and low non-motorised users were observed. Following the receipt of the updated set of plans, it has been considered that a new site visit is not necessary.
- 1.5 A site location plan can be found at **Appendix A** of this report.
- 1.6 The terms of reference of the RSA are as described in the Design Manual for Roads and Bridges (DMRB) Standard, GG119 RSA.
- 1.7 The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.8 The scheme subject to Stage 1 RSA relates to the proposed realignment of the A226 carriageway and associated site access junctions surrounding the site.
- 1.9 A list of the documents and drawings submitted for this Stage 1 RSA can be found at **Appendix B**.
- 1.10 A submitted design drawing has been annotated to show the locations of any problems identified during this Stage 1 RSA. These plans can be found at **Appendix C**.

- 1.11 Whilst recommendations have been made within this report, there may be equally satisfactory alternatives. The Audit Team will be pleased to consider alternatives if required.

Departures from Standards

- 1.12 The Audit Team were not informed of any departures from standards.

2 Matters Arising from the Audit

Drawing No. 226728/PD15 Rev. A

2.1 Problem

Location: General - Proposed signalised junctions.

Summary: Signalised crossings are not proposed on the proposed signalised junctions, which could lead to pedestrians crossing injudiciously and being struck by oncoming traffic.

Signalised crossings are proposed on some arms of the proposed signalised junctions, however there are multiple instances where they are missing. If signalised crossings are not provided on all arms of the signalised junctions, when considering desire lines, pedestrians are likely to cross where it is not safe to do so and could be struck by oncoming vehicles.

Recommendation: It is recommended that signalised crossings are provided on desire lines of each junction.

2.2 Problem

Location: Bus stops on Galley Hill Road.

Summary: Bus stops are close together and if buses depart simultaneously, they could create a pinchpoint for overtaking vehicles, particularly for two-wheeled vehicles.

The eastbound and westbound bus stops on Galley Hill Road are located close together. This creates a pinchpoint for overtaking vehicles and particularly for vulnerable road users such as cyclists. If a cyclist was to overtake a stationary bus just as both buses departed their stop, this would limit the space available to the cyclist who could be struck by either bus.

Recommendation: It is recommended that the bus stops are relocated further apart from each other so that two-wheeled vehicles overtaking stationary buses are not affected if buses depart simultaneously.

2.3 Problem

Location: Flexible bus route.

Summary: Two-way bus movements cannot be accommodated within the carriageway and this could lead to head on collisions.

The swept path analysis of flexible buses travelling both northbound and southbound show that when travelling around corners with tight radii the bus is required to overrun the majority of the opposite side of the carriageway for a significant length. This could result in head on collisions between buses and/or other traffic.

Recommendation: It is recommended that the alignment of the road is amended to facilitate two-way bus movements.

3 Audit Team Statement

3.1 We certify that this Audit has been carried out in accordance with the requirements of GG119.

Road Safety Audit Team Leader

Name: Patrick West

Signed:



Position: Associate Director

Organisation: Vectos part of SLR

Date: 13th October 2023

Road Safety Audit Team Member

Name: Asa John Plant

Signed:



Position: Director

Organisation: Vectos part of SLR

Date: 13th October 2023

Appendix A



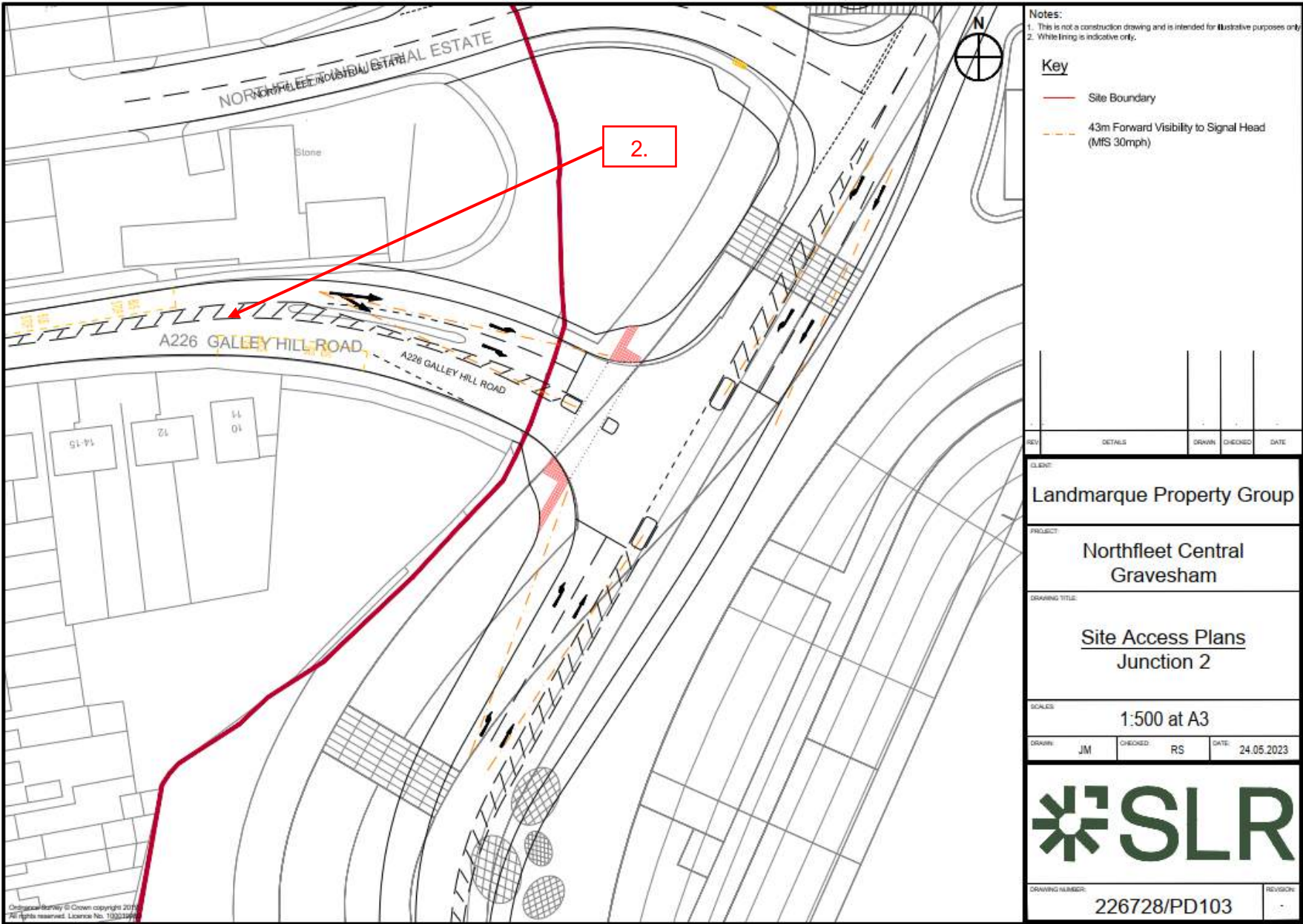
Appendix B

List of included documents and drawings:	
Documents (inc. title, date and revision number):	Stage 1 RSA Brief Highway Boundary Data
Drawings	226728_PD07_Rev A - Typical Cross Sections 226728_PD100 - Site Access Plan 226728_PD100_AT01 - SPA_Galley Hill_16.5m Artic 226728_PD100_AT02 - SPA_Fast Track_Elec Bus 226728_PD100_AT03 - SPA_Fast Track_18m Bus 226728_PD100_AT04 - SPA_Stadium_Refuse_Entry 226728_PD100_AT05 - SPA_Stadium_Refuse_Exit 226728_PD101 - Site Access Plans_Junction 1 226728_PD101_AT01 - SPA_Junc1_16.5m Artic 226728_PD102 - Site Access Plans_Roundabout 226728_PD103 - Site Access Plans_Junction 2 226728_PD103_AT01 - SPA_Junc2_16.5m Artic 226728_PD104 - Site Access Plans_Junction 3&4 226728_PD104_AT01 - SPA_Junc3_16.5m Artic 226728_PD104_AT02 - SPA_Junc4_Refuse 226728_PD105 - Site Access Plans_Junction 5&6 226728_PD105_AT01 - SPA_Junc6_16.5m Artic 226728_PD106 - Site Access Plans_Junction 7 8 & 9 226728_PD106_AT01 - SPA_Junc7_Panel Van

Tick all that are included and provide reasons for those that are not included:			
Site Location Plan	☒	Scale layout plans	☒
Departures and relaxations from standards	☐	Construction/ typical details	☐
Previous RSA reports	☐	Previous RSA response reports and evidence of agreed actions	☐
Collision data and collision data analysis	☒	Road traffic collision plot	☒
Traffic signal staging	☐	Traffic counts	☐
Speed surveys	☐	Pedestrian, cyclist and horse-riding desire lines and volumes	☐

Walking, cycling and horse-riding assessment and reviews	☐	Items outside the scope of the RSA/ strategic decisions	☐
Other factors that may impact on road safety	☐	Design speeds/ speed limits	☐
Design standards used	☐	Adjacent land uses	☒

Appendix C





Contact London

Network Building,
97 Tottenham Court Road,
London W1T 4TP.
Tel: 020 7580 7373

Bristol

5th Floor, 4 Colston Avenue,
Bristol BS1 4ST
Tel: 0117 203 5240

Cardiff

Helmont House, Churchill Way,
Cardiff CF10 2HE
Tel: 029 2072 0860

Exeter

6 Victory House,
Dean Clarke Gardens,
Exeter EX2 4AA
Tel: 01392 422 315

Birmingham

Great Charles Street,
Birmingham B3 3JY
Tel: 0121 2895 624

Manchester

Oxford Place, 61 Oxford Street,
Manchester M1 6EQ.
Tel: 0161 228 1008

Leeds

7 Park Row, Leeds LS1 5HD
Tel: 0113 512 0293

Bonn

Stockenstrasse 5, 53113,
Bonn, Germany
Tel: +49 176 8609 1360
www.vectos.eu

Registered Office

Vectos (South) Limited

Network Building,

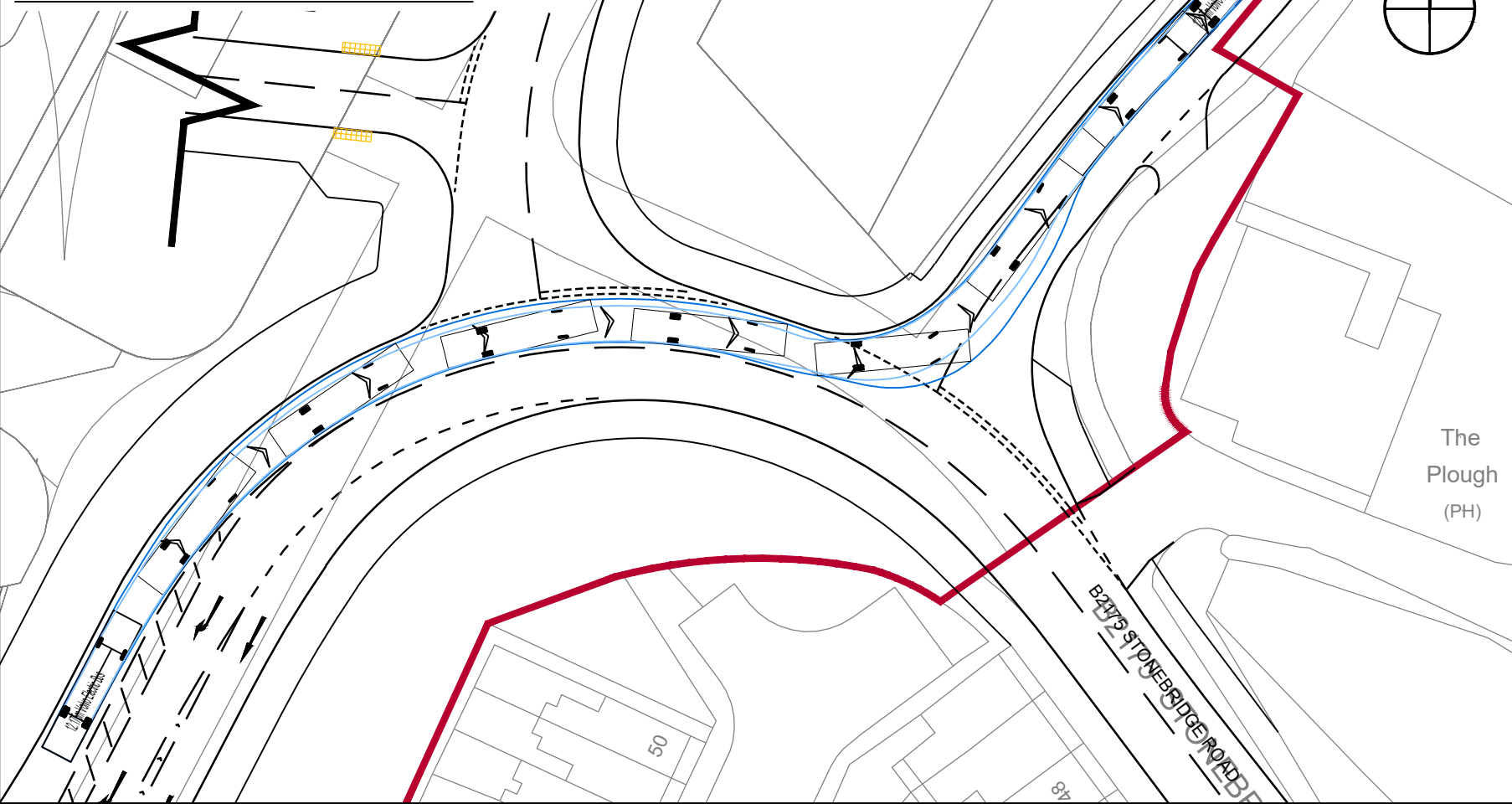
97 Tottenham Court Road,

London W1T 4TP

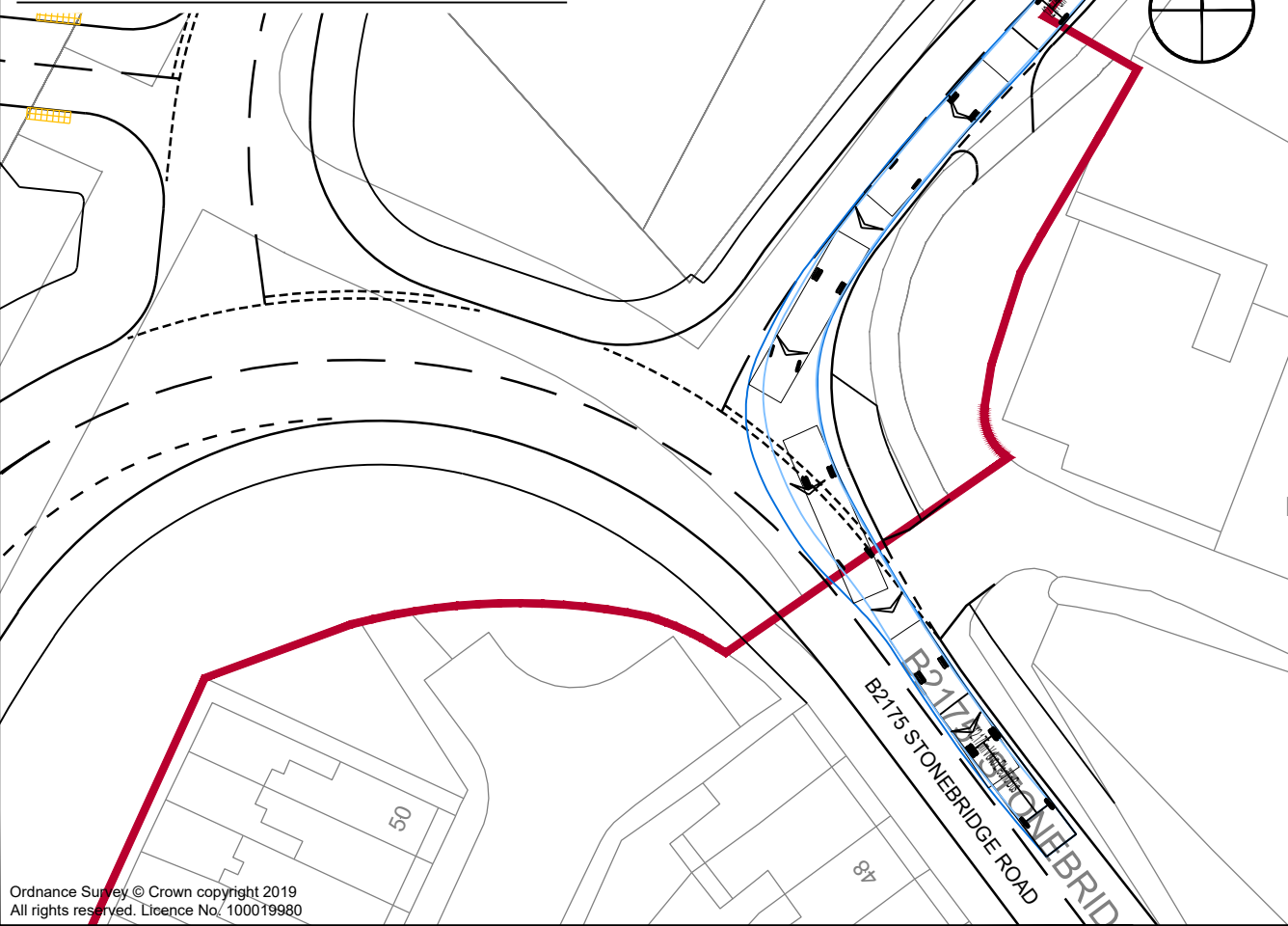
Company no. 7591661

Appendix G

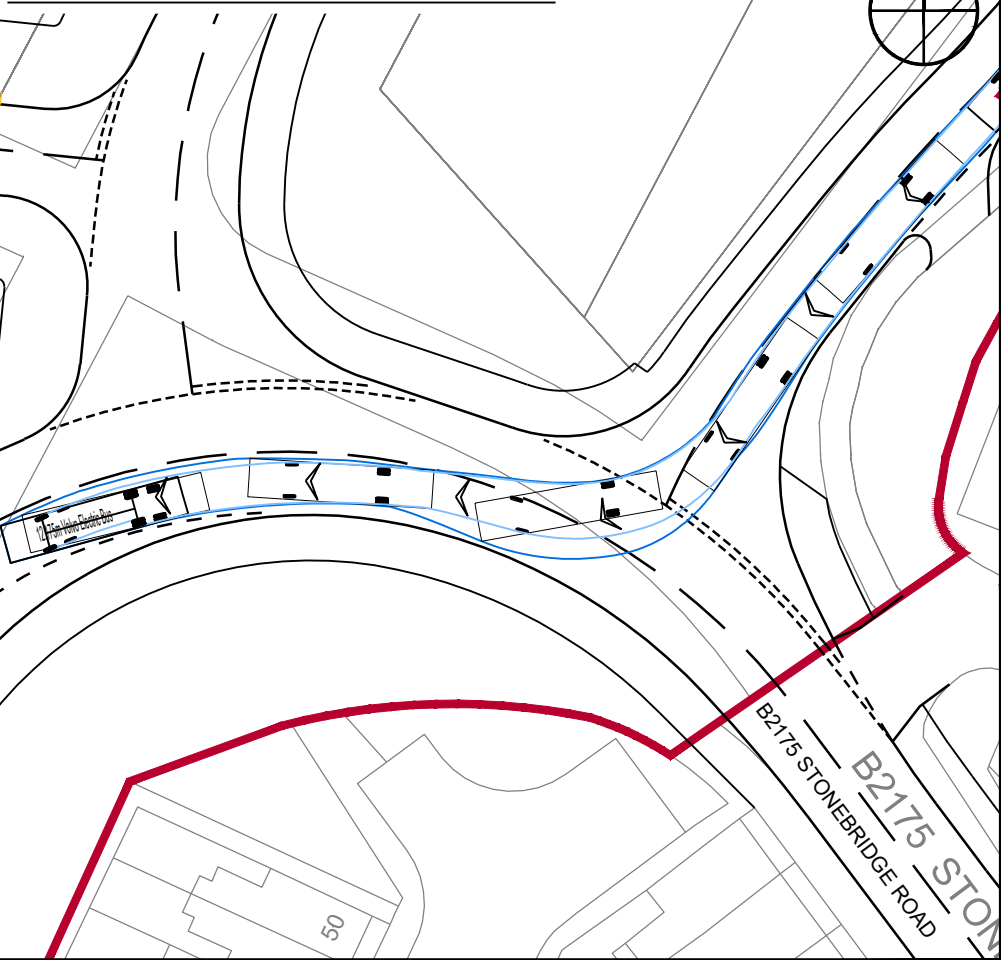
18M ARTICULATED BUS TRAVELING
FROM WEST TO GROVE ROAD



18M ARTICULATED BUS TRAVELING
FROM GROVE ROAD TO SOUTH

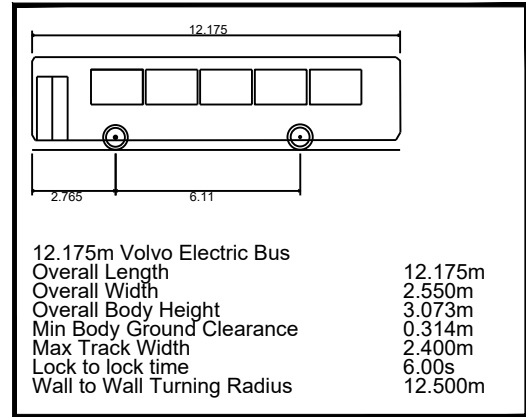


18M ARTICULATED BUS TRAVELING
FROM GROVE ROAD TO WEST



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Vehicle Profile



REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

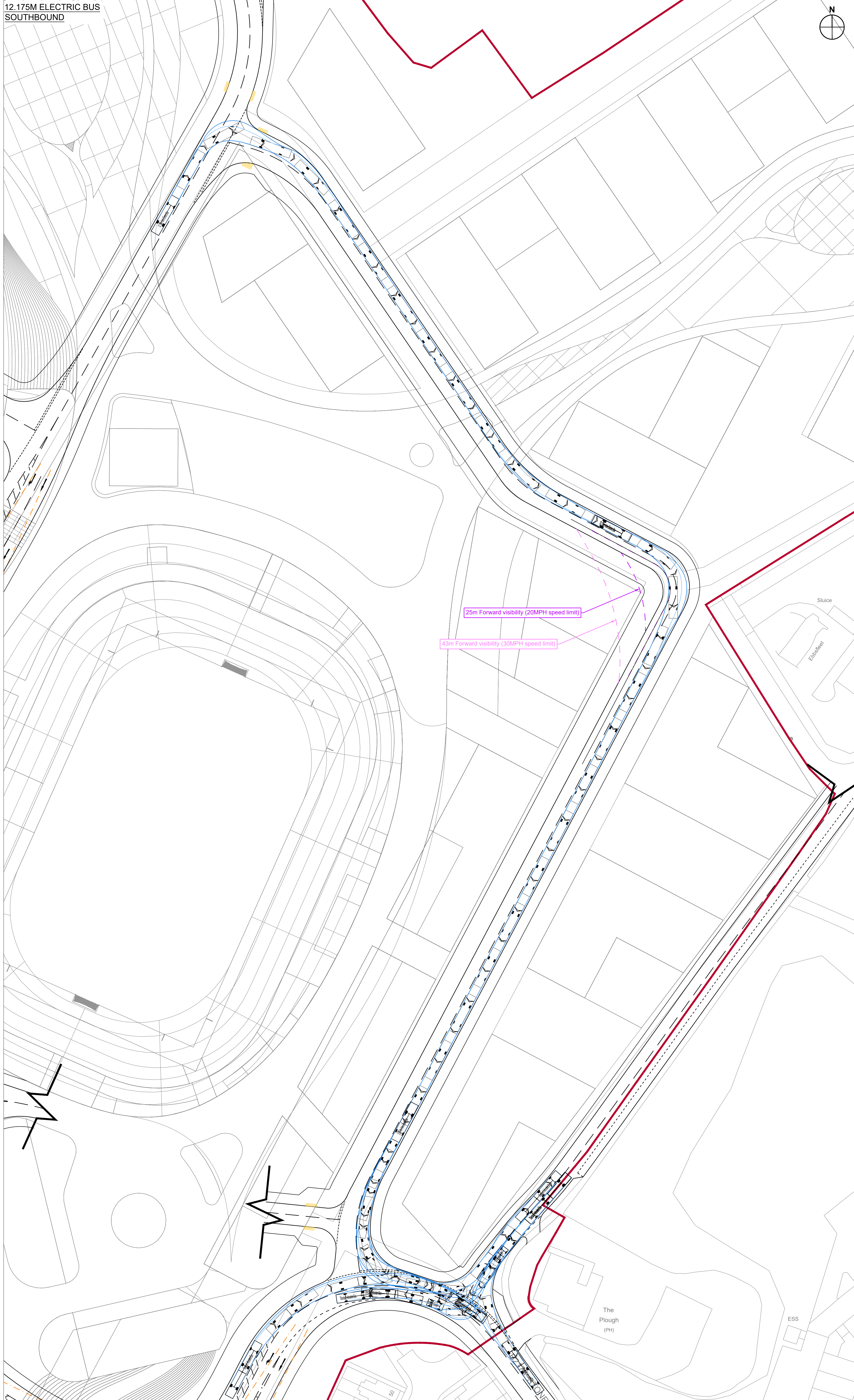
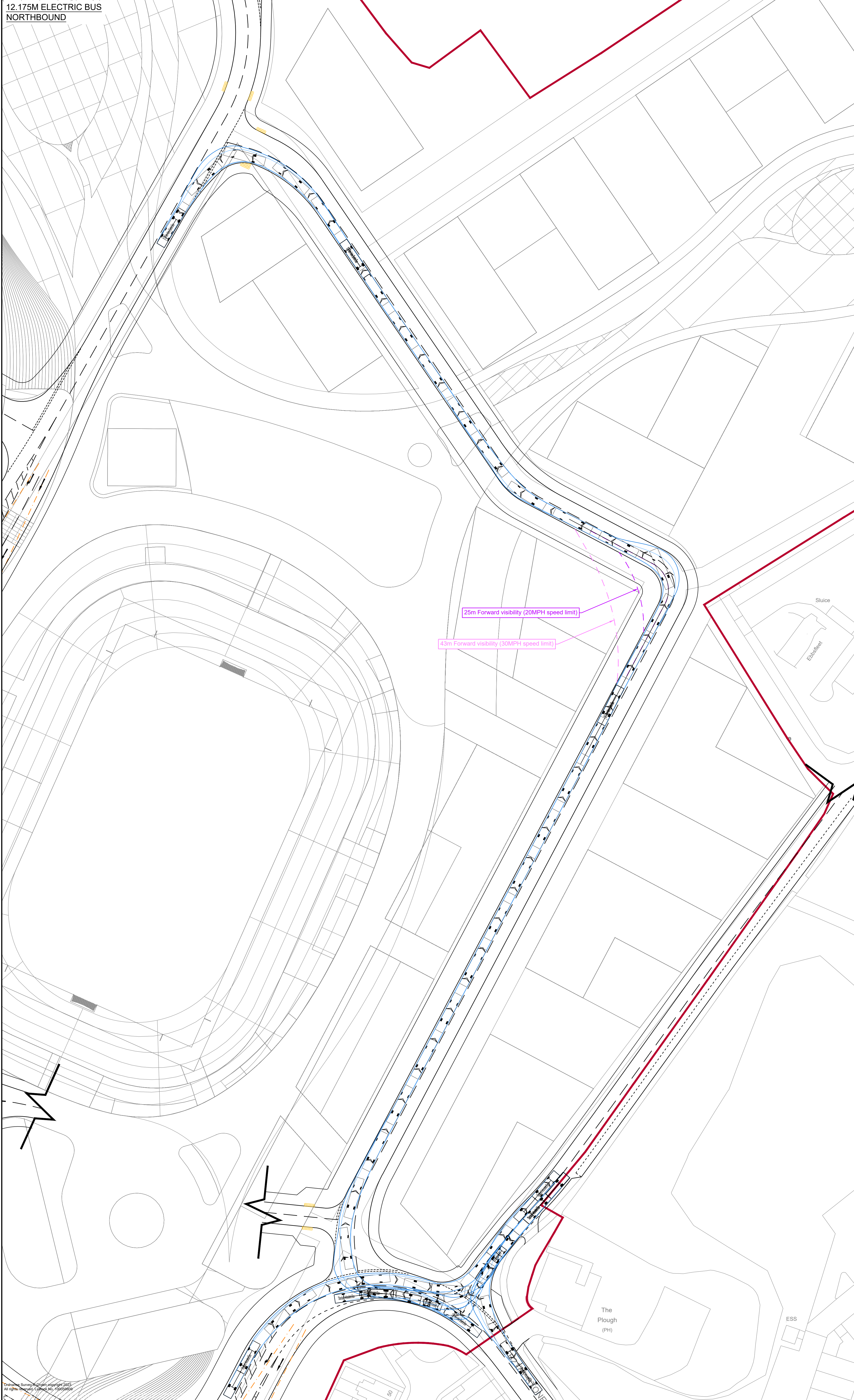
DRAWING TITLE:
**Swept Path Analysis
Junction 7
Electric Bus**

SCALES:
1:500 at A3

DRAWN: NS	CHECKED: JM	DATE: 18.10.2023
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DRAWING NUMBER: 226728/PD106/AT03	REVISION: .
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Notes:

- This is not a construction drawing and is intended for illustrative purposes only.
- White lining is indicative only.

Vehicle Profile

12.175m Volvo Electric Bus

Overall Length	12.175m
Overall Width	2.500m
Overall Body Height	3.114m
Min Body Ground Clearance	0.114m
Max Track Width	2.400m
Lock to Lock Time	6.50s
Wall to Wall Turning Radius	12.500m

A	Forward visibility added	NS	RS	24.10.2023
REV	DETAILS	DRAWN	CHECKED	DATE

STATUS:

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central Gravesham

DRAWING TITLE:

Swept Path Analysis
Fast Track
Electric Bus

SCALES:

1:500 at A0

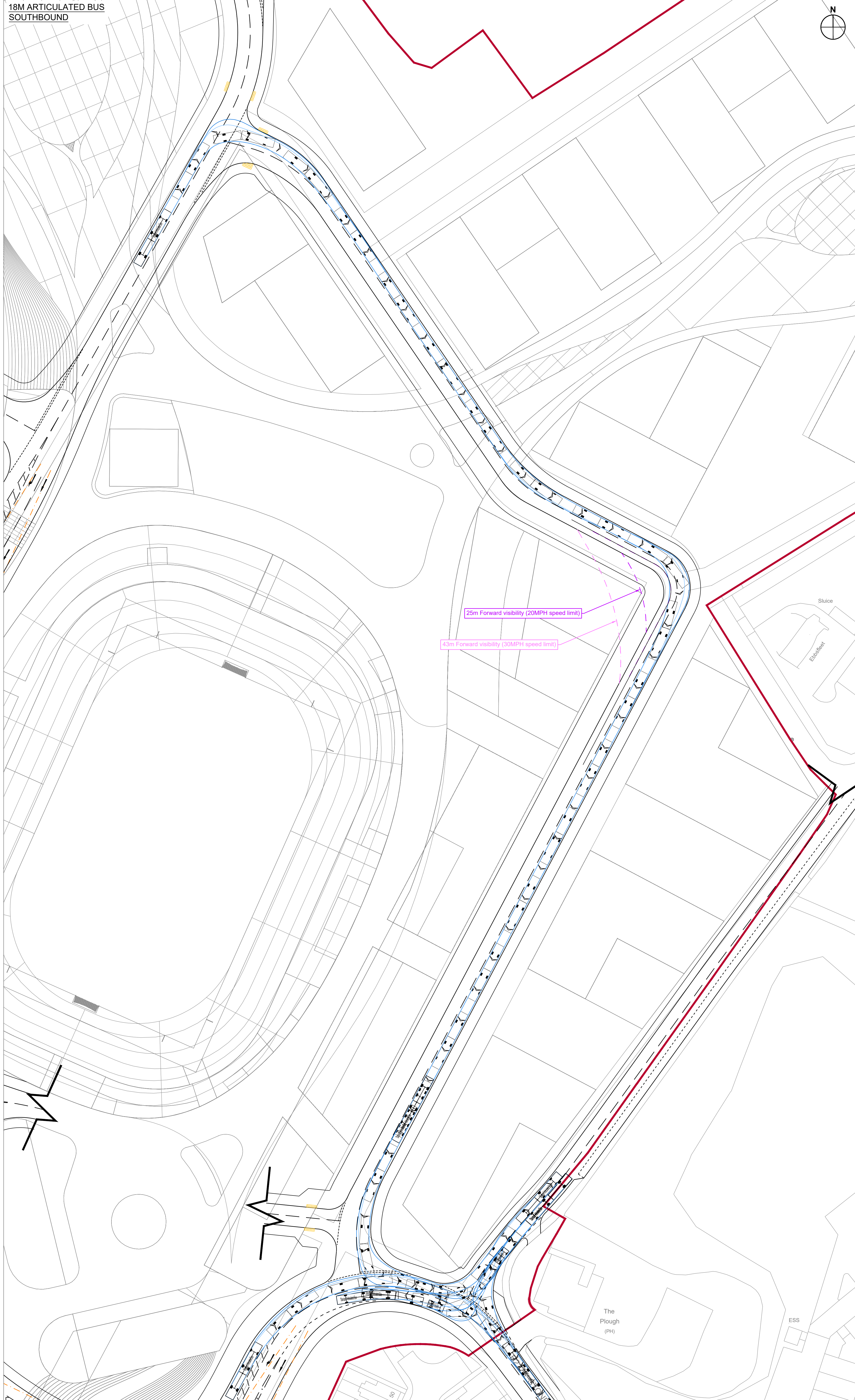
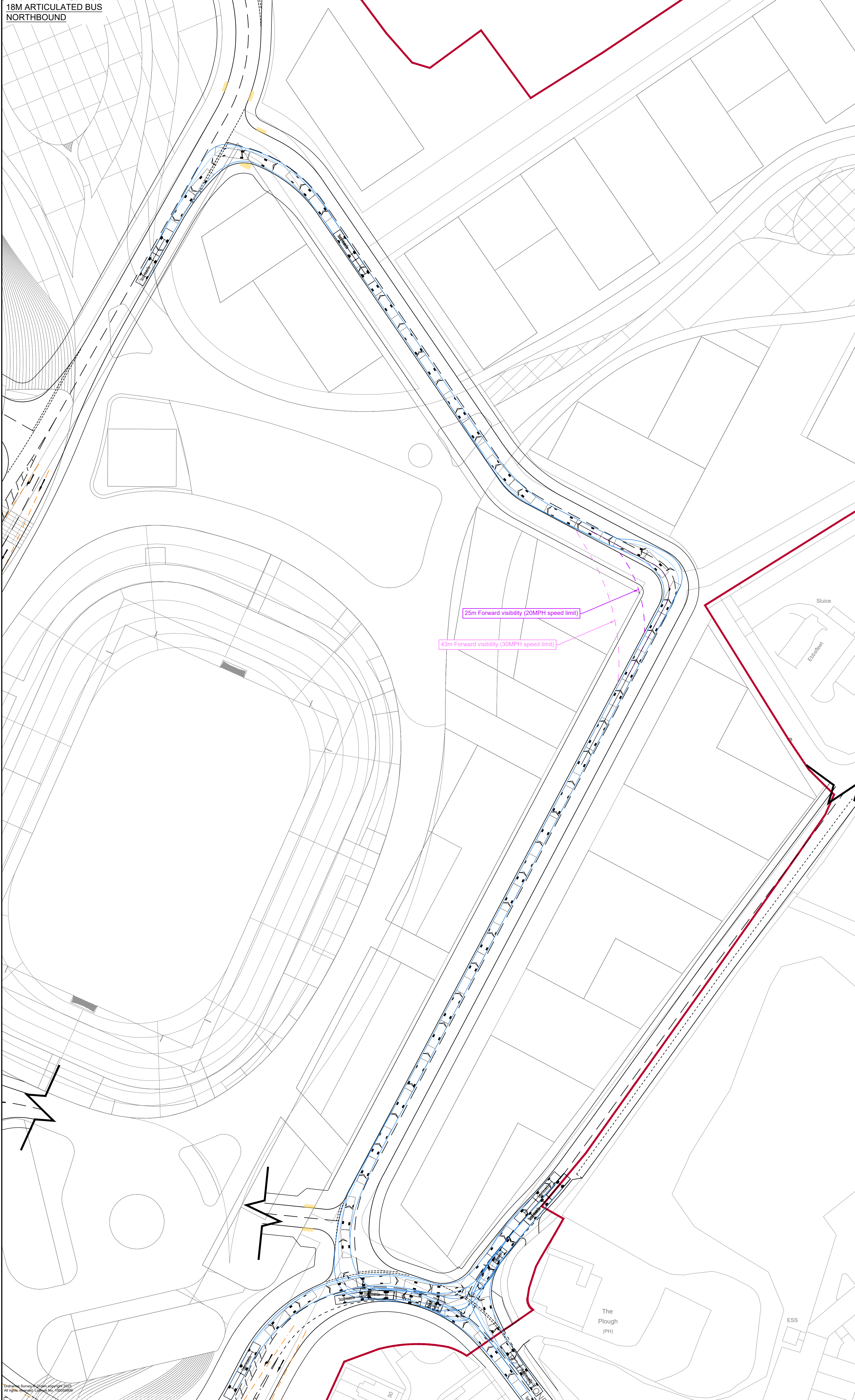
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DRAWING NUMBER:

226728/PD100/AT02

REVISION:

A



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Vehicle Profile

Standard Articulated Bus	18,000m
Overall length	2,500m
Overall width	2,714m
Overall body height	2,514m
Max body ground clearance	2,800m
Max track width	4.05s
Lock to lock time	11,400m
Wall to Wall Turning Radius	

A	Forward visibility added	NS	RS	24.10.2023
REV	DETAILS	DRAWN	CHECKED	DATE

STATUS:

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Fast Track
18m Articulated Bus

SCALES:

1:500 at A0

DRAWN: NS

CHECKED: JM

DATE: 23.08.2023

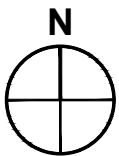
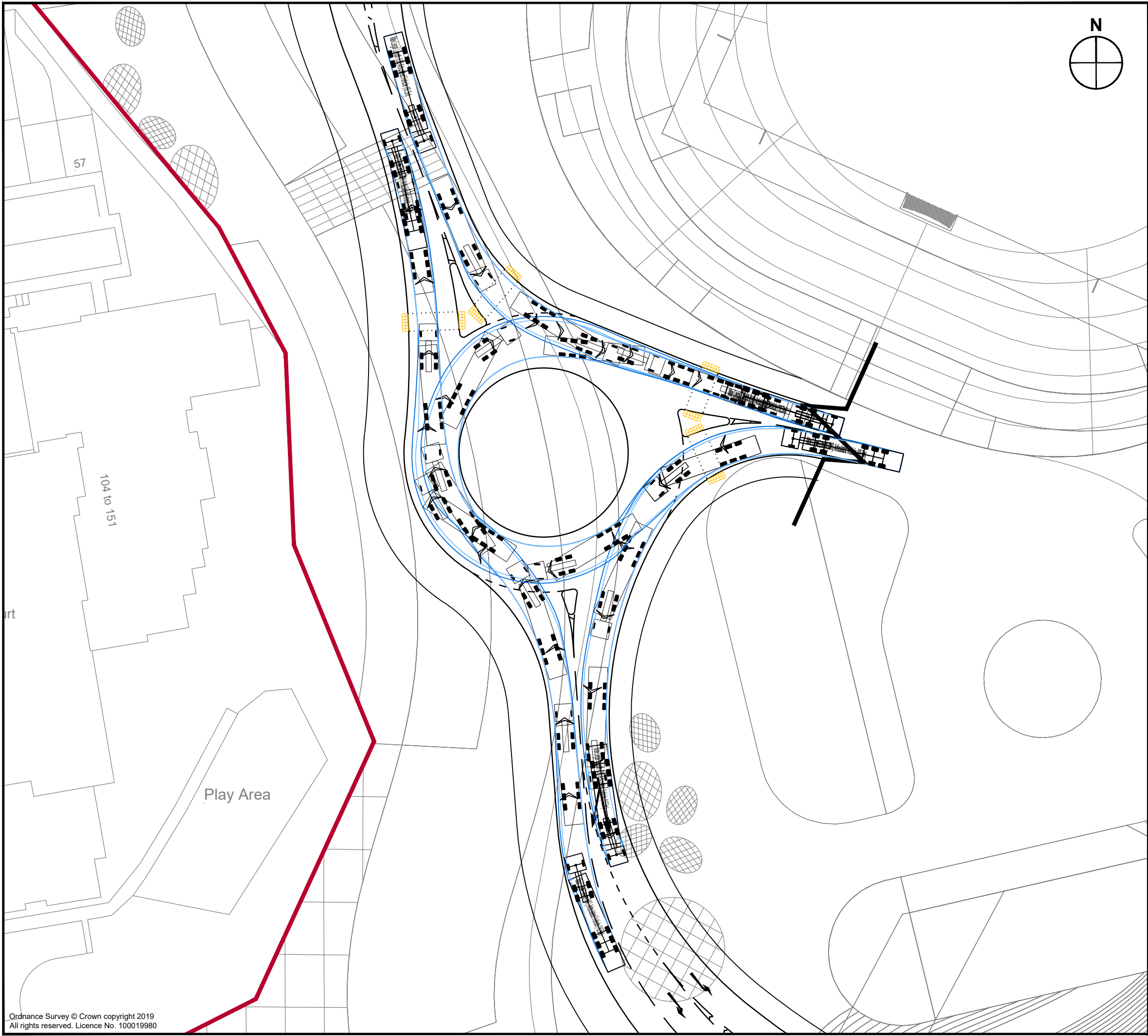
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DRAWING NUMBER:

226728/PD100/AT03

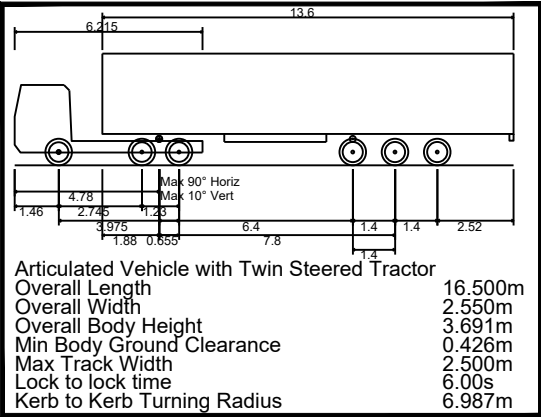
REVISION:

A



- Notes:
- 1. This is not a construction drawing and is intended for illustrative purposes only
 - 2. White lining is indicative only.

Vehicle Profile



REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Stadium
16.5m Articulated vehicle
In & Out

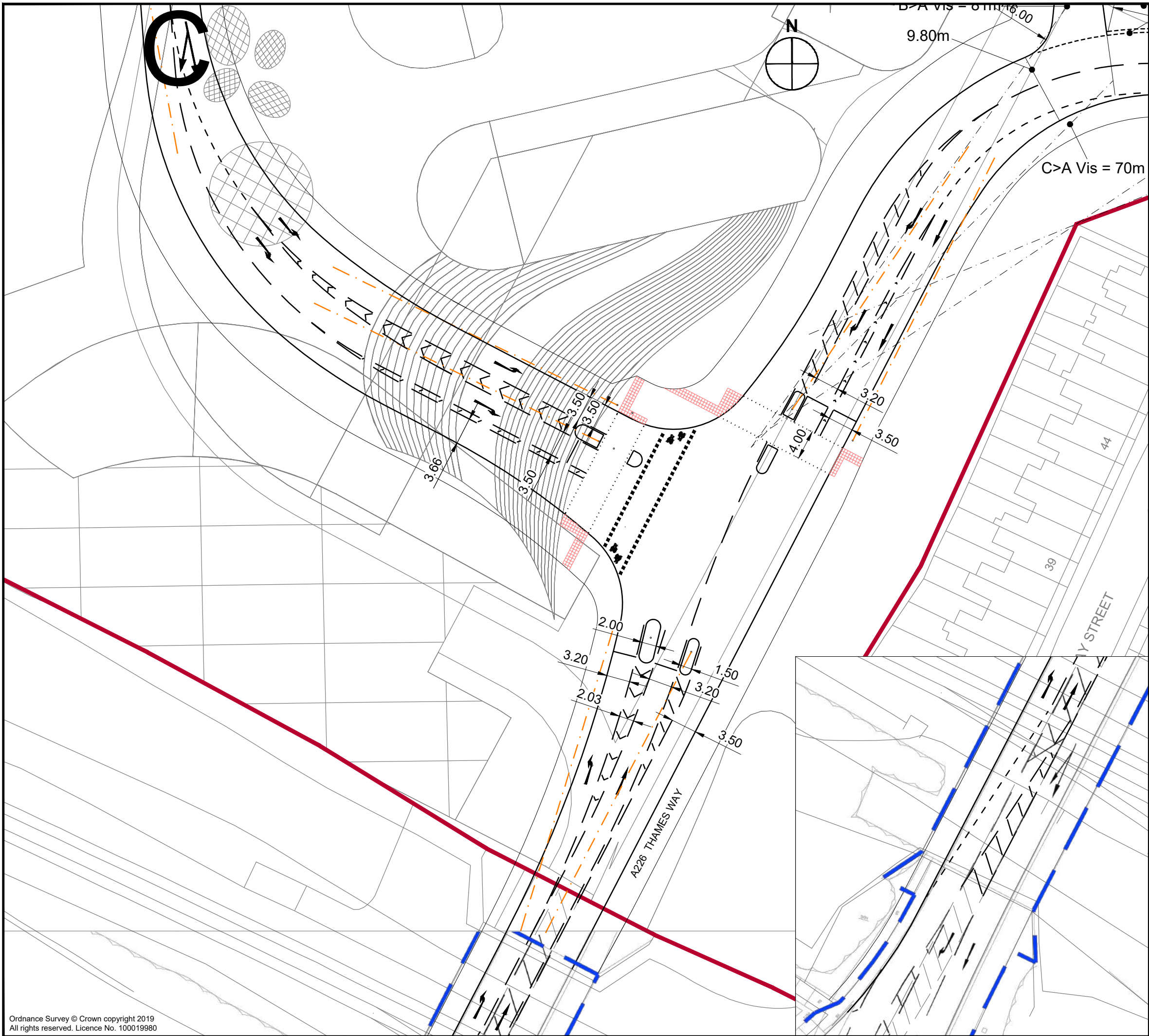
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1:500 at A3

DRAWN:	NS	CHECKED:	RS	DATE:	24.10.2023
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DRAWING NUMBER:	226728/PD100/AT06	REVISION:	.
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Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility to Signal Head (MfS 30mph)

REV.	A	Dimensions added	NS	RS	18.10.2023
		DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
Northfleet Central Gravesham

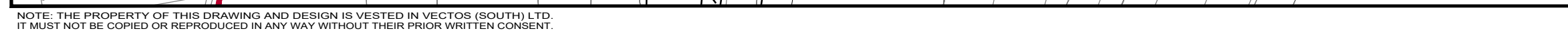
DRAWING TITLE:
Site Access Plans Junction 1

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
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DRAWING NUMBER:	226728/PD101	REVISION:	A
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1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- - - 43m Forward Visibility to Signal Head
(MfS 30mph)

A	Dimensions added	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central Gravesham

DRAWING TITLE:

Site Access Plans

Junction 2

SCALES:

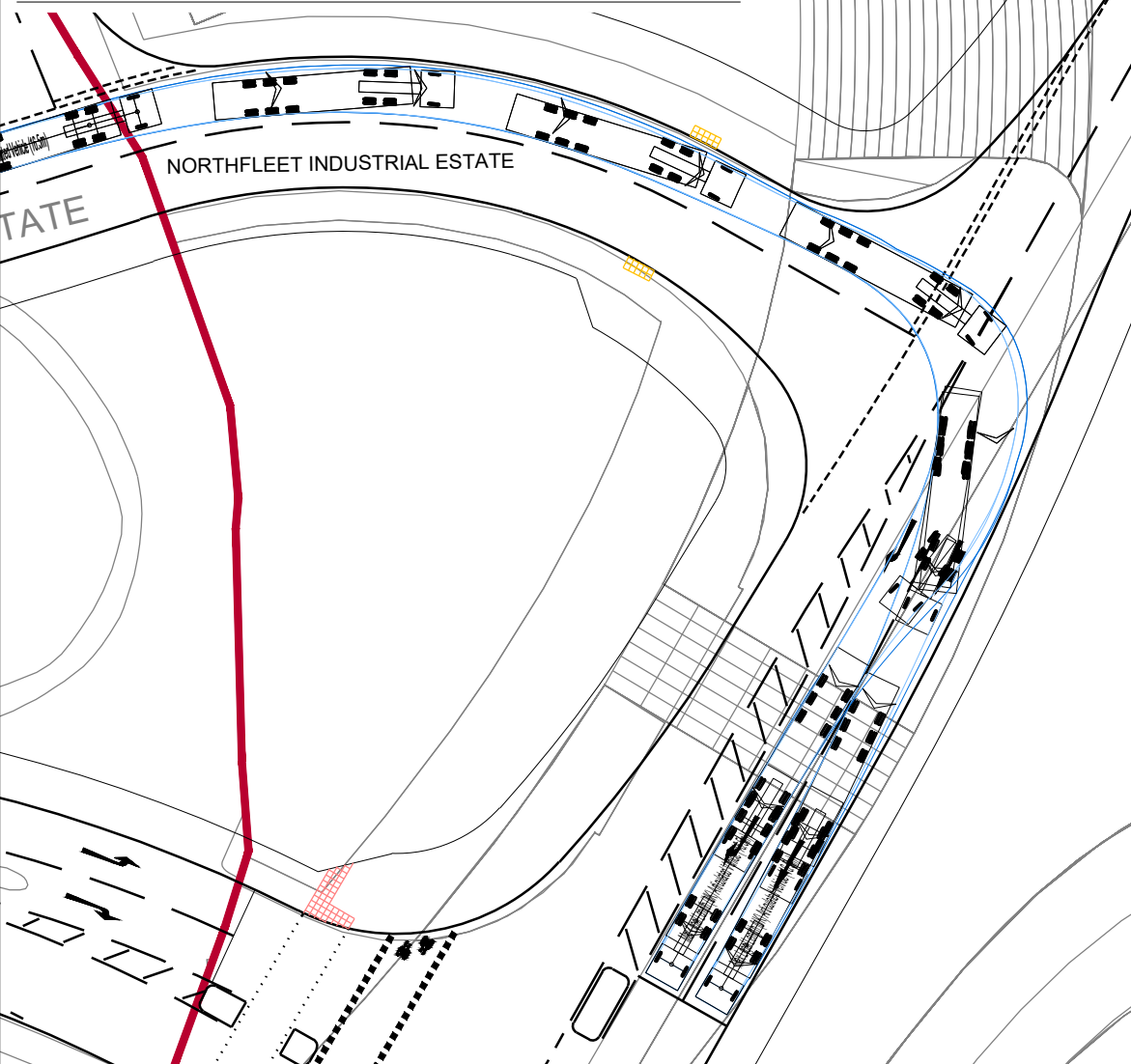
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DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
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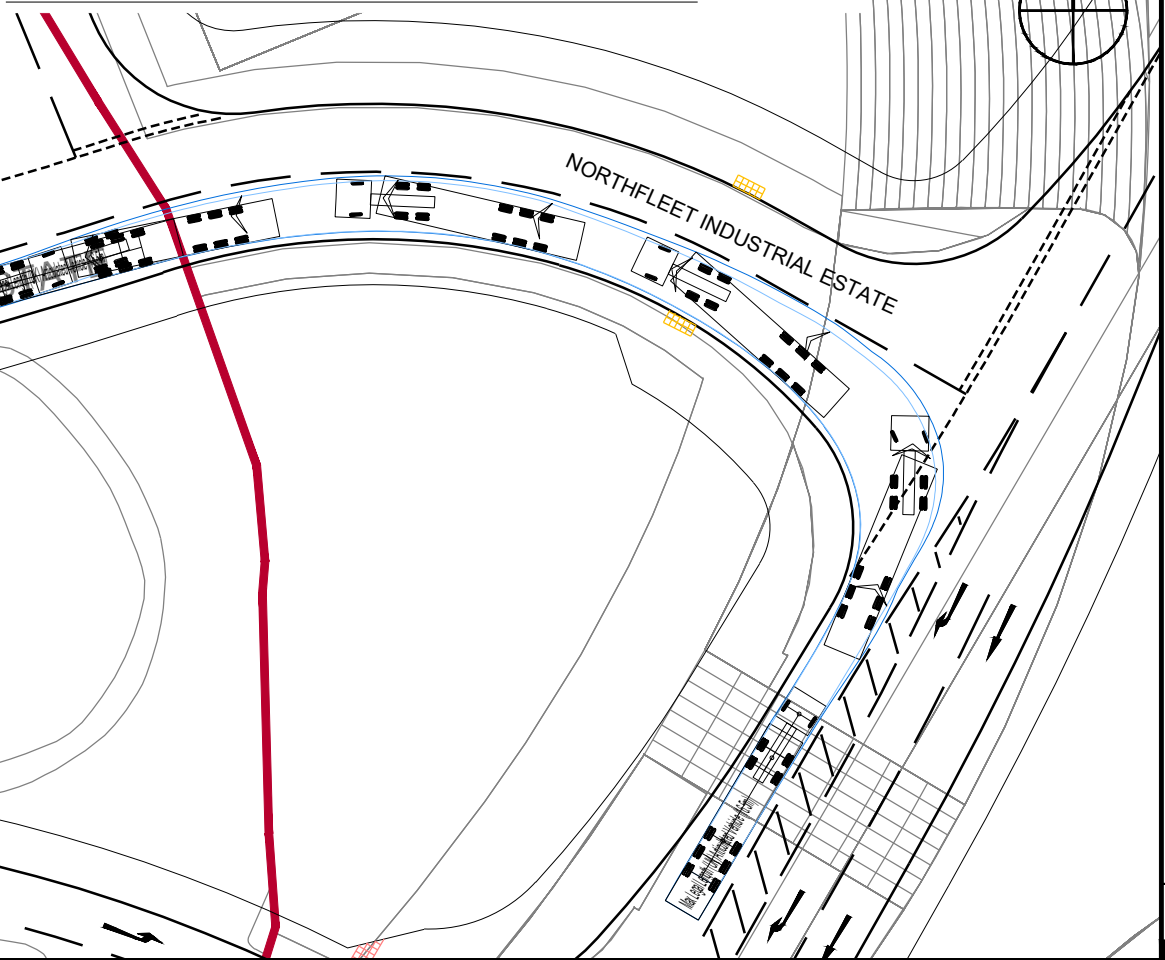


DRAWING NUMBER:	226728/PD103	REVISION:	A
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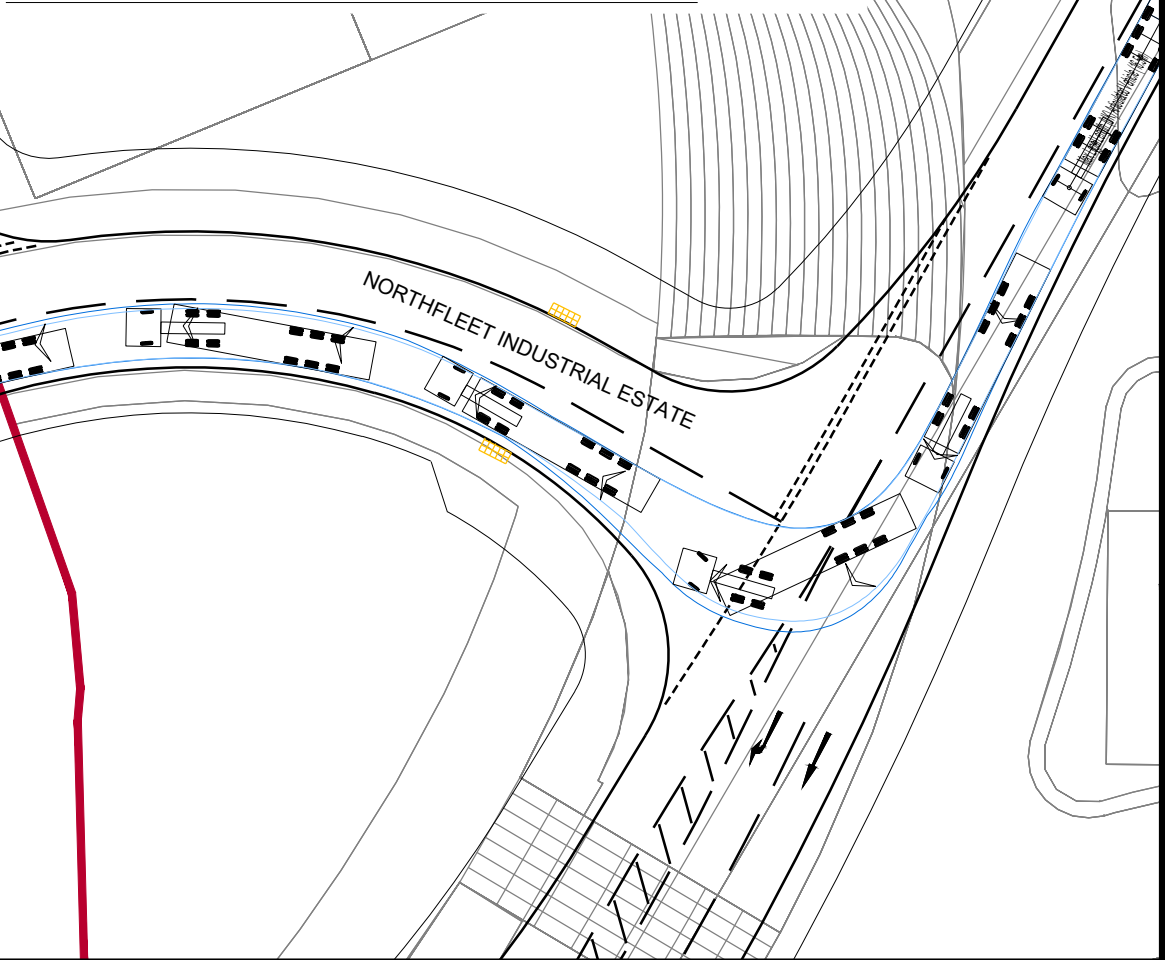
16.5M ARTICULATED TRAVELING SOUTH
FROM NORTHFLEET INDUSTRIAL ESTATE



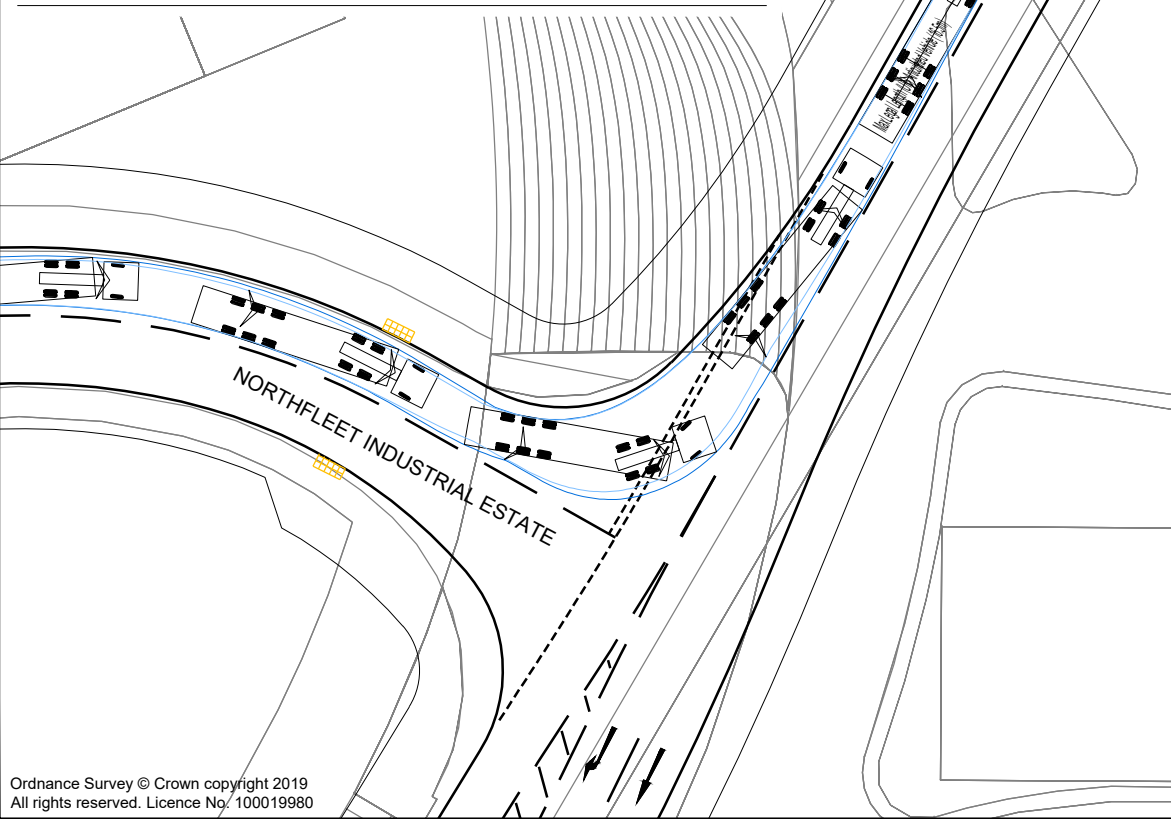
16.5M ARTICULATED TRAVELING FROM SOUTH
TO NORTHFLEET INDUSTRIAL ESTATE



16.5M ARTICULATED TRAVELING FROM NORTH
TO NORTHFLEET INDUSTRIAL ESTATE

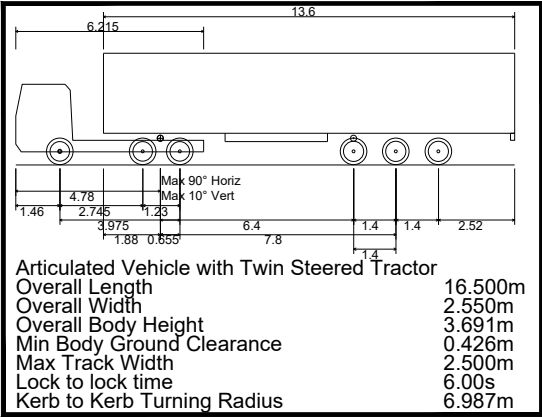


16.5M ARTICULATED TRAVELING NORTH
FROM NORTHFLEET INDUSTRIAL ESTATE



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Vehicle Profile



A J3 north west kerb radii amended NS RS 18.10.2023

REV. DETAILS DRAWN CHECKED DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Junction 3
16.5m Articulated Vehicle

SCALES:

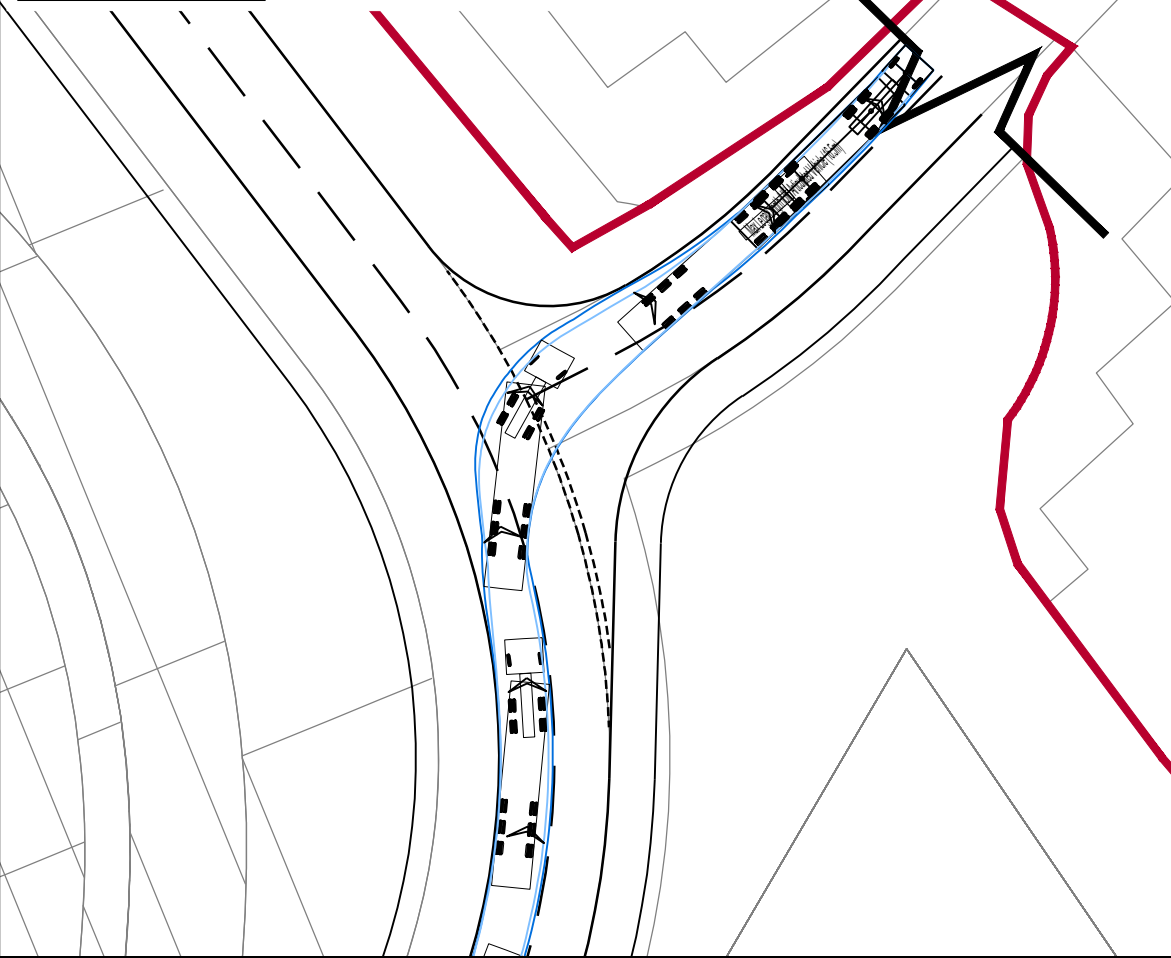
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DRAWN: NS CHECKED: JM DATE: 24.08.2023

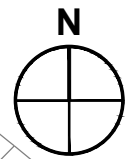
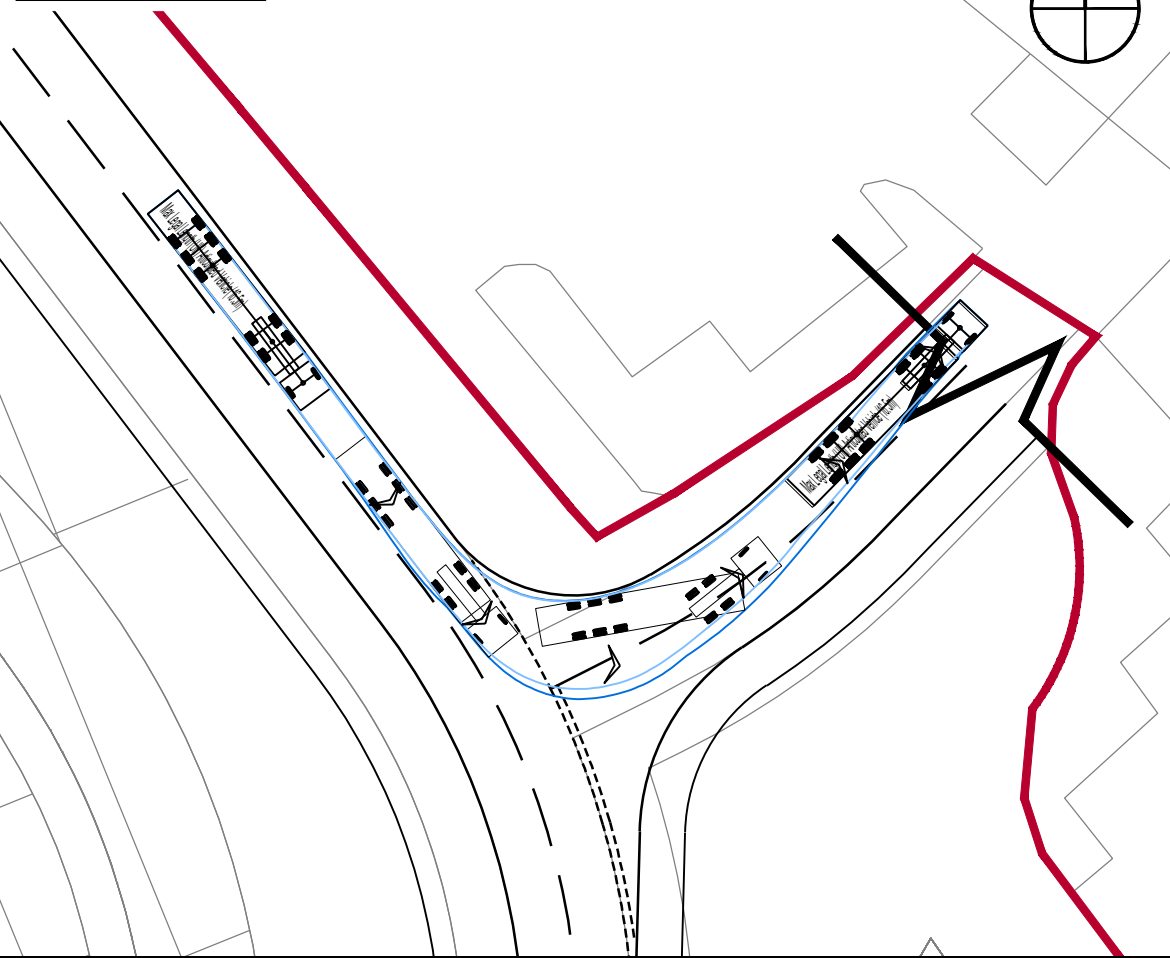


DRAWING NUMBER: 226728/PD104/AT01 REVISION: A

16.5M ARTICULATED TRAVELING EAST
FROM SOUTH

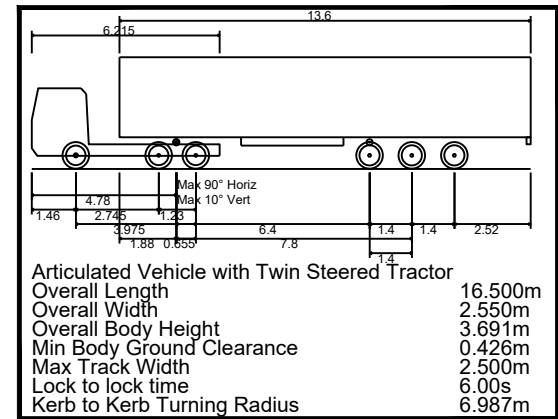


16.5M ARTICULATED TRAVELING EAST
FROM NORTH



- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
 2. White lining is indicative only.

Vehicle Profile



A J6 south east kerb radii amended NS RS 18.10.2023

REV. DETAILS DRAWN CHECKED DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Junction 6
16.5m Articulated Vehicle

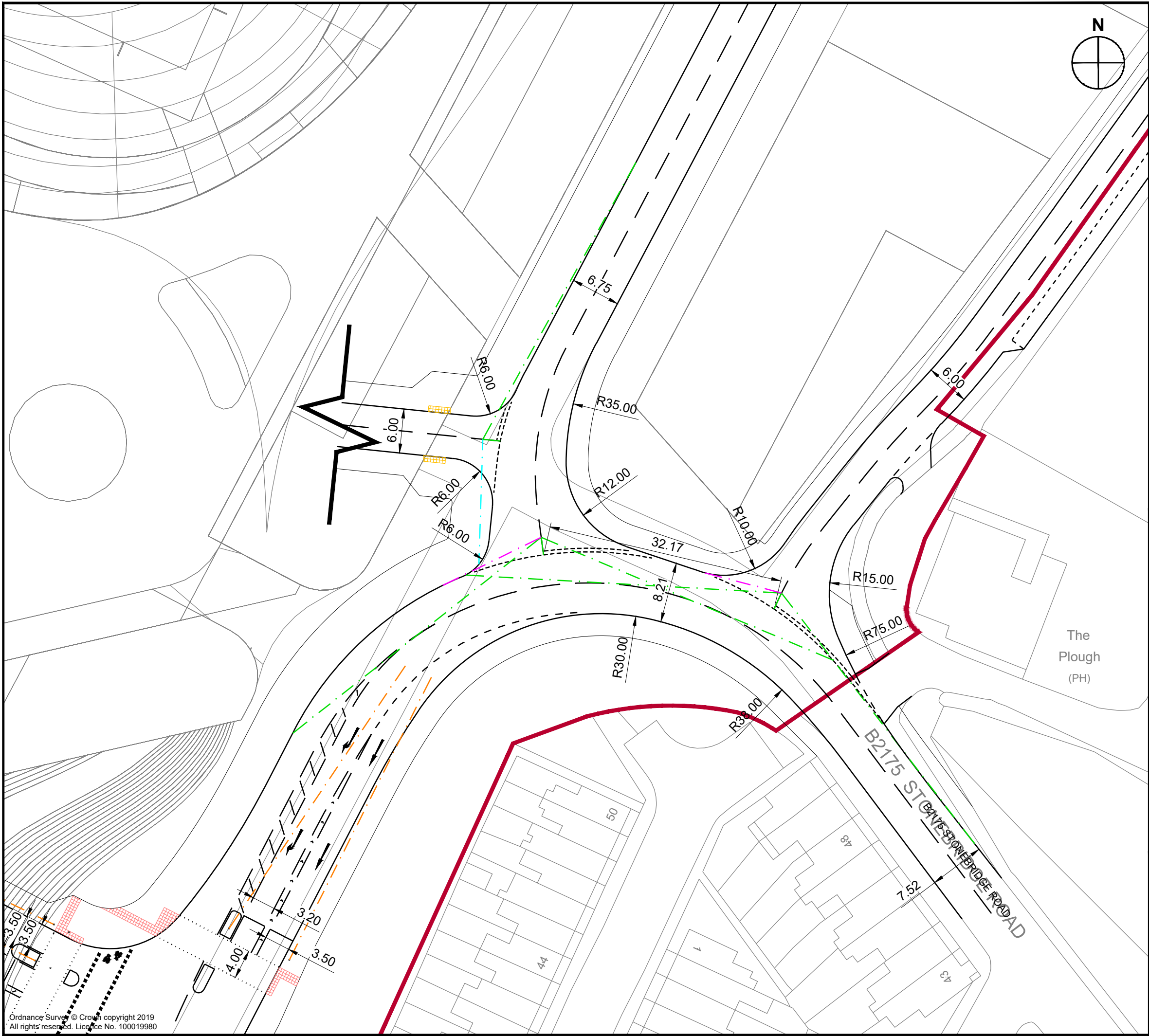
SCALES:

1:500 at A3

DRAWN: NS CHECKED: JM DATE: 24.08.2023



DRAWING NUMBER: 226728/PD105/AT01 REVISION: A



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Visibility splay 2.4m x 17m (MfS 15mph)
- Tangential visibility

REV.	A	Dimensions added	NS	RS	18.10.2023
		DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Site Access Plans
Junction 7, 8 & 9**

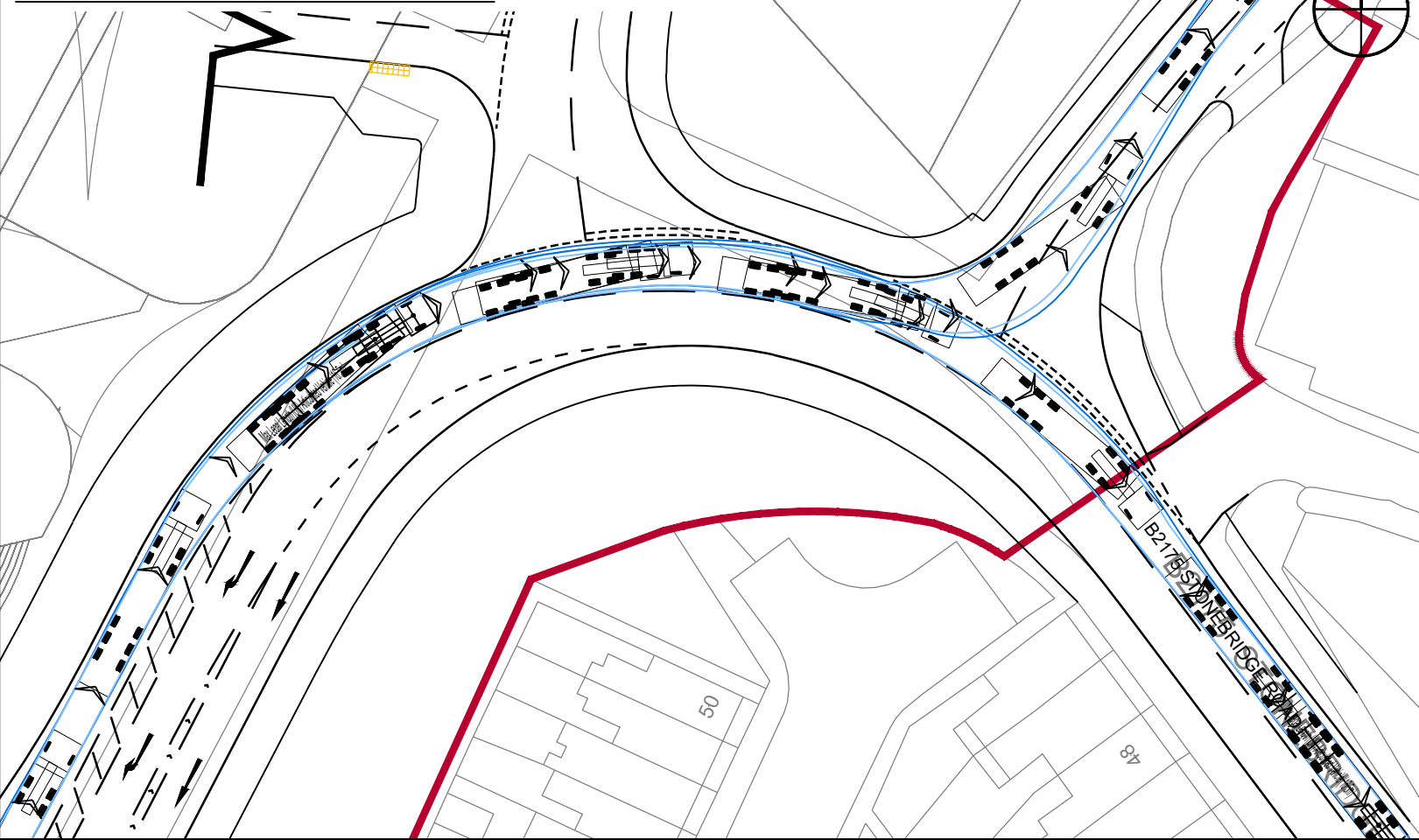
SCALES:
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DRAWN:	JM	CHECKED:	RS	DATE:	23.08.2023
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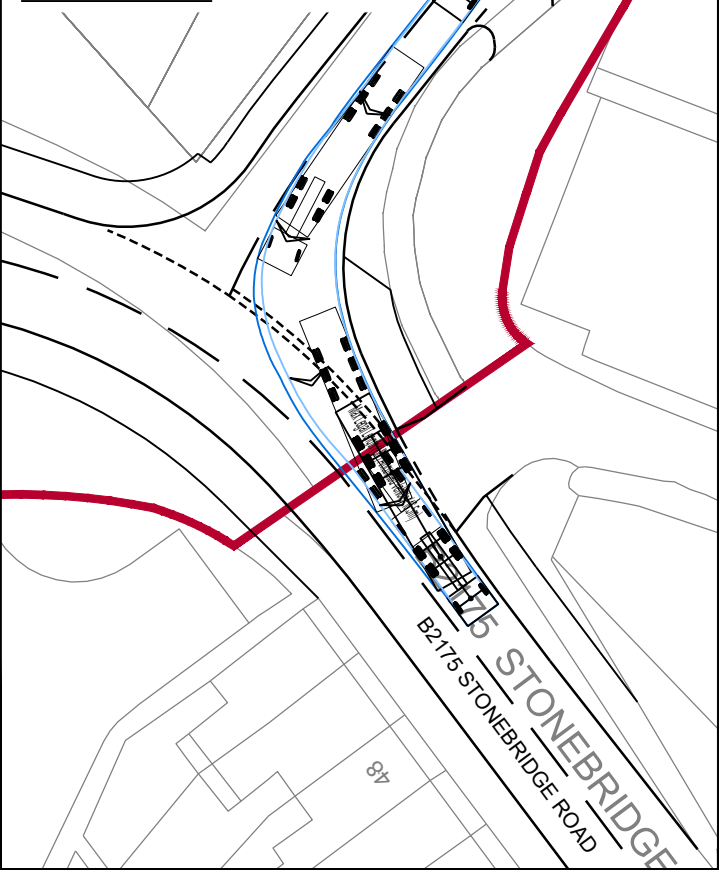


DRAWING NUMBER:	226728/PD106	REVISION:	A
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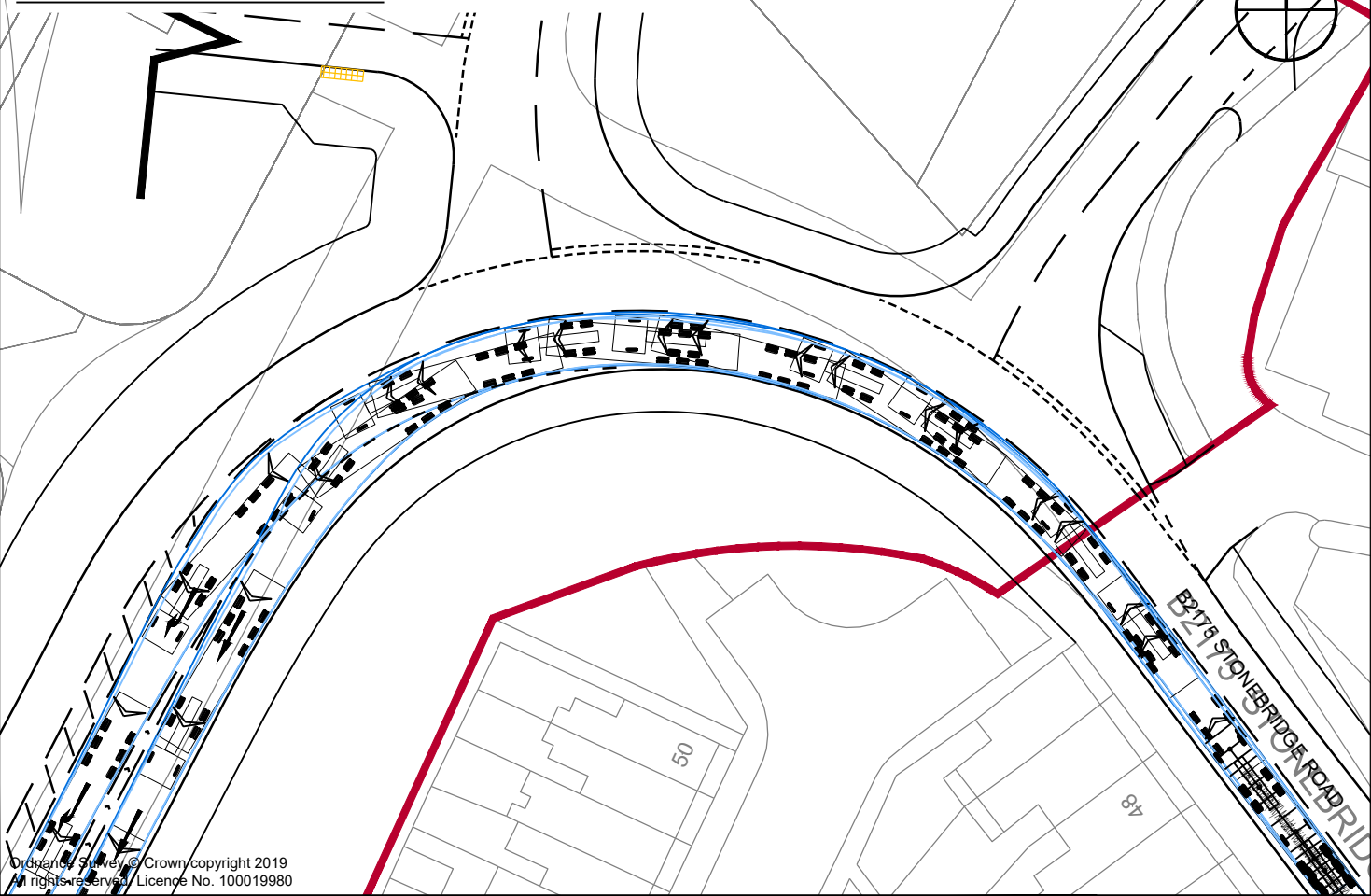
16.5M ARTICULATED VEHICLE TRAVELING
FROM WEST TO GROVE ROAD



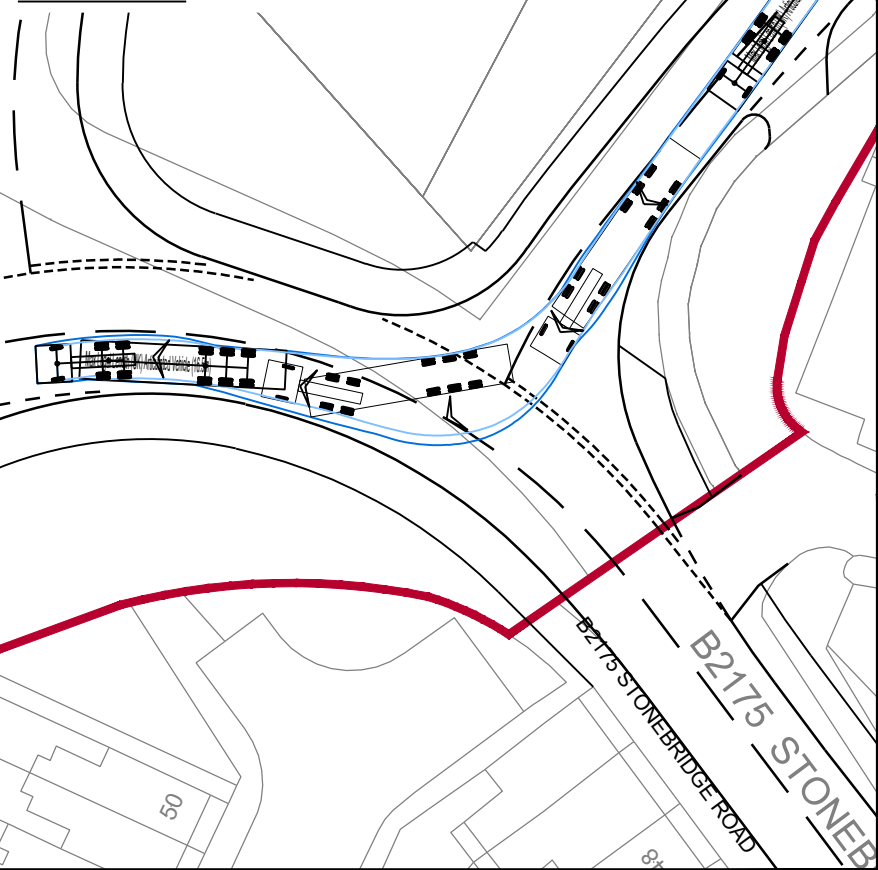
16.5M ARTICULATED
VEHICLE TRAVELING
FROM GROVE ROAD
TO SOUTH



16.5M ARTICULATED VEHICLE TRAVELING
FROM EAST TO WEST

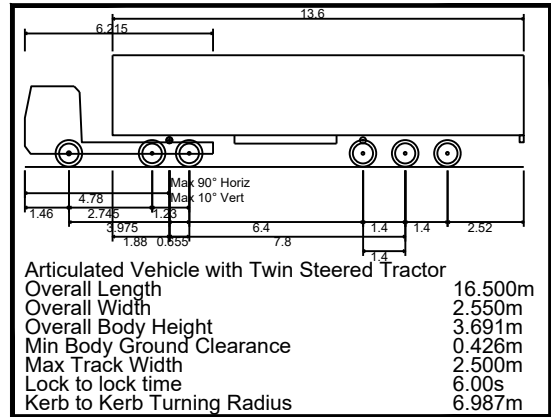


16.5M ARTICULATED
VEHICLE TRAVELING
FROM GROVE ROAD
TO WEST



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Vehicle Profile



REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Junction 7
16.m Articulated Vehicle

SCALES:

1:500 at A3

DRAWN:	NS	CHECKED:	JM	DATE:	18.10.2023
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DRAWING NUMBER:	226728/PD106/AT02	REVISION:	.
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