

Highways Technical Note

Site: Land adjacent to the B4009, Hermitage
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Date: 12 September 2023

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1.0 Introduction

- 1.1 This Technical Note is being submitted in support of a planning application for the construction of five travellers pitches on land located east of the B4009 to the north of Hermitage, near Thatcham (herein referred to as 'the site').
- 1.2 The National Planning Policy Framework (NPPF) 2023 sets out the Government's planning policies for England and how they are expected to be applied. Paragraph 111 states that "*development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*".
- 1.3 The following paragraphs demonstrate how the proposals will not create an unacceptable impact on highway safety and so should be allowed in accordance with the NPPF.

2.0 Site Context

2.1 The site lies to the eastern side of the B4009, to the north of Hermitage. The B4009 is a two-way single carriageway within the vicinity of the access road, and is subject to a 30 miles per hour speed limit. To the north the road becomes national speed limit of 60 miles per hour. The site lies 1.5km north-east of the village centre of Hermitage, although additional facilities are located close to the site. The surrounding area can be categorised as residential and agricultural; the location of the site is shown in Figure 2.1 below.

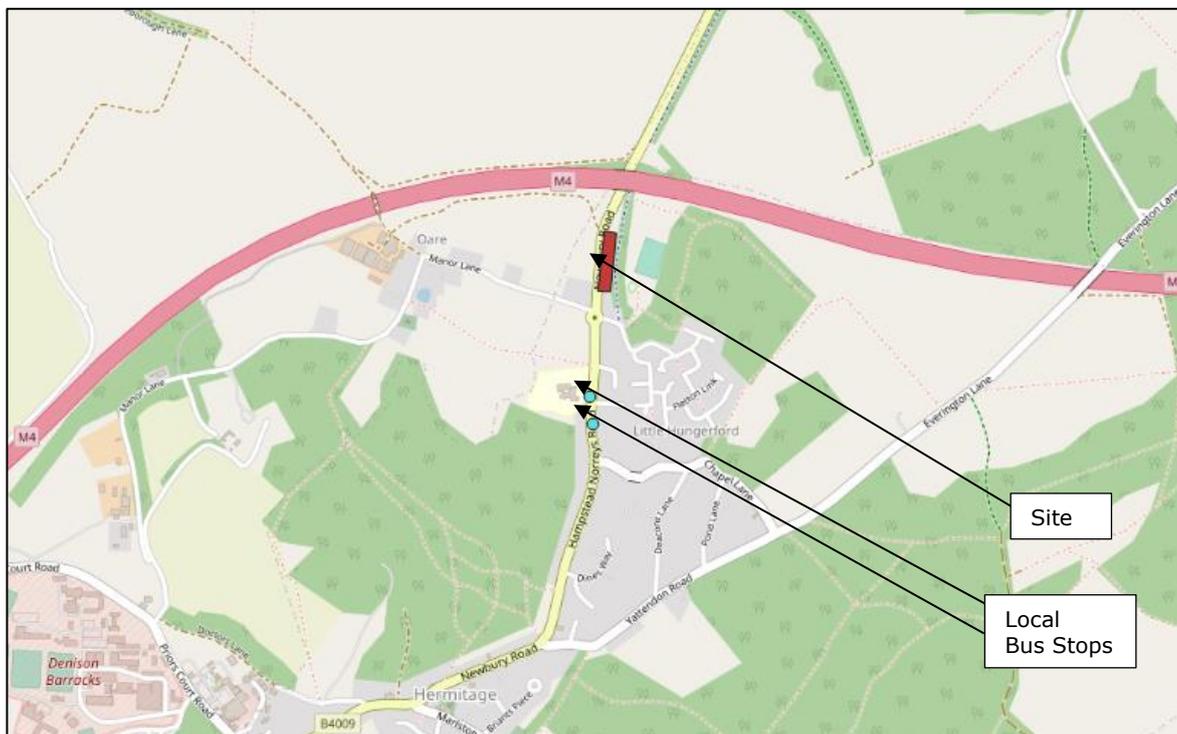


Figure 2.1 - Site Location

Accessibility

Accessibility by Foot and Cycle

2.2 There is a footpath close to the site access which ends approximately 10 metres south of the access, however due to the straightness of the B4009, pedestrians would be able to see vehicles approaching and vice versa. Footways are along local roads to bus stops and local facilities.

2.3 There are no cycle paths, however due to the low speeds and relatively flat gradient of the B4009, and the surrounding road network, it is deemed an acceptable and safe route for cyclists.

Accessibility by Bus

2.4 The closest bus stop is located approximately 170 metres south of the site along Hampstead Norreys Road, which serves the number 6 bus. The frequency of this service is highlighted in the table below.

Service Number	Route	Midweek Frequency	Saturday Frequency	Sunday Frequency
6	Newbury Station – Hermitage – Compton – East Ilsley- West Ilsley	Every 2 hours	Every 2 hours	N/A

Table 2.1 – Local Bus Services

Local Amenities

- 2.5 The site lies 1.5km north-east of the village centre of Hermitage, a 19-minute walk or 6-minute cycle, where a number of local amenities can be accessed. Further amenities can be accessed close to the south of the site. The table below outlines some of the local amenities that can be accessed.

Amenity	Distance (metres)	Walking (minutes)	Cycling (minutes)
Hermitage Village Hall	160	2	1
Local Bus Stop	170	2	1
Hermitage Primary School	260	3	1
Hermitage Post Office	1,100	13	3
Co-op Food – Hermitage	1,600	19	5
Hillier Garden Centre	2,000	24	7

Table 2.2 – Local Amenities

Summary

- 2.6 In summary, the site has a good level of accessibility by public transport and to local amenities, on foot and by cycle. The site location means that everyday local amenities can also be accessed via non-car modes of travel.

3.0 Development Proposals

- 3.1 The proposals seek planning permission for five static caravan sites within the site, alongside the provision of day rooms and touring caravans. Access will be taken off the B4009 at the current existing access. The proposed site layout is attached in **Appendix A**.

Access Arrangements

- 3.2 Vehicular and pedestrian access to the site will be via the existing access point along the B4009. ATCs were placed to the north of the access from Tuesday 20th June to Monday 26th June to capture approaching vehicle speeds. The raw survey data is attached as **Appendix B**.
- 3.3 Southbound speeds were recorded as 37.6mph, which when adjusted to account for wet weather conditions triggers a need for the use of Design Manual for Roads and Bridges (DMRB) standards. Applying the recorded speeds to the formula creates a requirement for visibility of 2.4m x 104 metres to the north. Visibility to the south extends to the roundabout junction to the south.
- 3.4 Visibility Splays are shown within **Appendix C**, which serves to demonstrate that adequate visibility can be achieved at the site access.
- 3.5 Swept path analysis has been undertaken showing a car towing a caravan in and out of the site and parking in one of the pitches. This can be seen within **Appendix D**.

Parking Provision

- 3.6 Each property will be equipped with two car parking spaces, in accordance with the West Berkshire 'Housing Site Allocations' of the site being within Zone 4.
- 3.7 Cycle Parking will be within accordance with West Berkshires 'Cycle and Motorcycle Advice and Standards for New Development'. On this basis, each plot will provide a minimum of 1 covered and protected cycle parking space.
- 3.8 As per guidance contained within the West Berkshire Parking Standards (Housing Site Allocations – 2014), all units will benefit from a fast charging unit for an electric vehicle.

Servicing and Refuse Collection

- 3.9 Refuse collection will take place on street, as currently operates for the other dwellings within the local area. Residents will wheel their rubbish to the edge of the site by the access on collection day, ensuring it does not block visibility or access or encroach on the carriageway.
- 3.10 Swept path analysis of a fire appliance has also been undertaken, which can be found in **Appendix D**. By demonstrating that a fire appliance can turn on site, it can be reasonably assumed that general deliveries can also be accommodated on site.

4.0 Trip Generation

- 4.1 This section outlines the level of trips that are likely to be generated by the proposed development. When assessing the impact of a residential development, it is generally considered that the peak traffic times are weekday mornings (08:00-09:00) and weekday evenings (17:00-18:00). It is during these periods that traffic flows associated with the development and those on the adjacent highway network are likely to be at their greatest. The information provided within this section considers these peak hours as well as the daily movements (07:00-19:00).
- 4.2 To calculate the trip attraction potential of five travellers' pitches, an assessment utilising the TRICS database has been undertaken. The TRICS category '03 Residential: Houses Privately Owned' has been used, with the following criteria:
- ▶ Sites located in England, excluding Greater London; and,
 - ▶ Sites classified as edge town and suburban areas.
- 4.3 The use of the above TRICS category is considered robust, and accounts for the lack of suitable travellers sites in the TRICS database. A summary of the peak hour total person and vehicular trip rates are provided in Table 4.1 below and the full TRICS output is included in **Appendix E**.

	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00- 18:00)		Weekday Daily Movements	
	Arr	Dep	Arr	Dep	Arr	Dep
Vehicular Trip Rates	0.240	0.392	0.360	0.224	2.766	2.751
Vehicular Trips	1	2	2	1	14	14
Person Trip Rates	0.416	0.768	0.640	0.408	5.013	5.038
Person Trips	2	4	3	2	25	25

Table 4.1 – Proposed Trip Rates

- 4.4 Table 4.1 indicates that the travellers' pitches could generate 3 two-way vehicular trips in both the morning and evening peak hours. Over an average weekday, the pitches could generate up to 28 two-way total vehicular trips. The trips outlined above would not have a detrimental impact to the highway network.

5.0 Conclusion

- 5.1 In view of the above, the proposed development is considered to be acceptable in transport terms and meets with local and national policy criteria. The assessment work undertaken has shown that there would not be any demonstrable harm arising from the proposed scheme and it will not cause any severe impacts. Therefore, there are no traffic and transport related reasons why the development should not be granted planning consent.

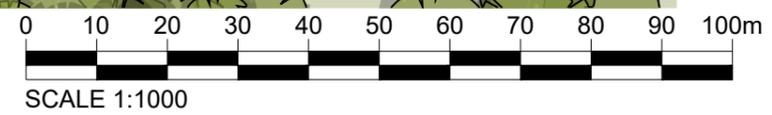
Appendix A

Site Layout Plan

Do not scale from this drawing, except for planning purposes. Any discrepancies are to be reported to WS Planning & Architecture. Refer to Structural Engineers details for structural design criteria. This drawing remains the copyright of WS Planning & Architecture.



As Proposed Site Plan



Rev	Date	Description
A	25.08.23	Amended Entrance
Surrey Office 5 Pool House Buncroft Rd Reigate RH2 7RP		London Office No.1 Croydon 12-16 Addiscombe Rd Croydon CR0 0XT
Date	August 2023	Drawn By NWM
Scale	1:1000@A3	Checked BW
Client Randolph Black		
Project Sandhill, Hermitage, Thatcham, RG18 9XU		
Title As Proposed Site Plan		
Drawing No.	J004472-DD-05	Rev. A

Appendix B

Traffic Survey Data

VEHICLE SPEED AND VOLUME SURVEY – B4009, HERMITAGE, THATCHAM RG18 9WL.

DATASETS:

Site: [Hermitage] B4009 Hermitage, on speed change sign.

Direction: 7 - North bound A>B, South bound B>A. Lane: 0

Survey Duration: 00:00 20 June 2023 => 00:00 27 June 2023

File: Hermitage27Jun2023.EC0 (Plus)

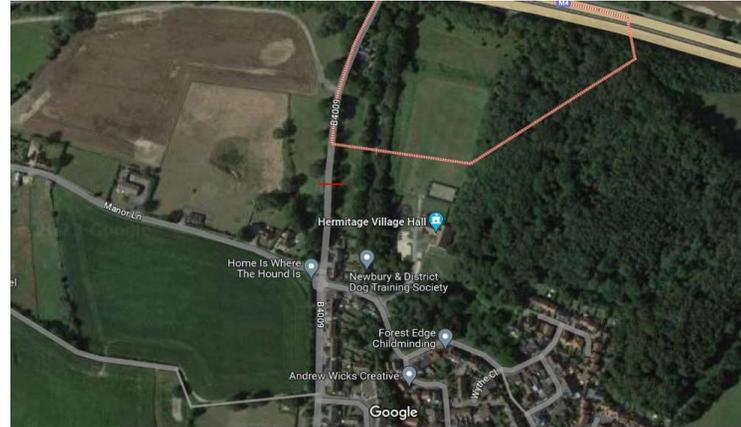
Algorithm: Advanced.

PROFILE:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Speed range: 0 - 80 mph.

Units: Non-Metric (ft, mi, f/s, mph, lb, ton).



DEFINITIONS / ABBREVIATIONS*

Time - Time period commencing. (1-hour summaries given).

Total - Total number of vehicles counted in time period.

RunTot - Running or cumulative total of vehicles over survey period.

Vbin

30 (eg) - Number of vehicles between 30 and 35 mph (30.0 – 34.9).

35

Mean - Mean speed.

Vmin - Minimum speed.

Vmax - Maximum speed.

n> PSL 30 - Number of vehicles exceeding Posted Speed Limit (30 mph).

%> PSL 30 - Percentage of vehicles exceeding Posted Speed Limit (30 mph).

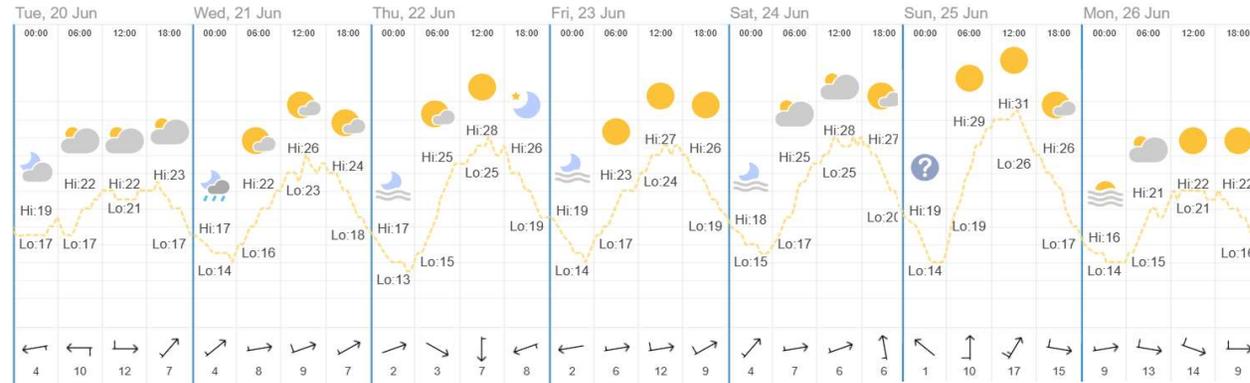
Vpp 85 - 85th percentile speed.

*Not all definitions may be used in a single report.

VEHICLE CLASSES

- 1 **Bicycle**
- 2 **Motor Cycle**
- 3 **Car / Van** (cars and vans - without trailer).
- 4 **Car / Van (T)** (cars and vans towing trailer).
- 5 **R2 / Bus** (HGV / bus 2-axle rigid).
- 6 **R3 / Bus** (HGV / bus 3-axle rigid).
- 7 **R4** (HGV 4-axle rigid).
- 8 **A3** (HGV 3-axle articulated).
- 9 **A4** (HGV 4-axle articulated).
- 10 **A5** (HGV 5-axle articulated).
- 11 **A6** (HGV 6-axle articulated).
- 12 **A6 [2]** (HGV 6-axle articulated comprising two trailers).
- 13 **A7 [2]** (HGV 7 + axle articulated comprising two trailers).

[Seven Day Weather Report](#)



Benchmark Data Collection

Tue 20 Time	June Total	2023 RunTot	Northbound																Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85					
			Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin											
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80										
0000	4	4	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	27	38.8	44.7	3	75	-				
0100	1	5	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	28.1	28.1	28.1	0	0	-				
0200	1	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	27	27	27	0	0	-				
0300	1	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	38.2	38.2	38.2	1	100	-				
0400	2	9	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	34.3	40.8	47.3	2	100	-				
0500	12	21	0	0	0	0	0	0	1	5	2	2	1	0	1	0	0	0	0	25.4	37.2	58	11	91.7	41.4				
0600	45	66	0	0	1	1	9	10	15	7	1	1	0	0	0	0	0	0	0	14.4	29.6	45.1	24	53.3	35.6				
0700	101	167	0	0	0	0	11	31	38	13	7	1	0	0	0	0	0	0	0	21.4	31.2	45.5	59	58.4	36.7				
0800	180	347	0	0	0	0	22	61	73	21	2	1	0	0	0	0	0	0	0	20.9	30.4	45.7	97	53.9	34.7				
0900	143	490	0	0	0	2	18	56	50	14	3	0	0	0	0	0	0	0	0	17.1	29.8	44.3	67	46.9	34				
1000	98	588	0	0	0	1	16	41	30	10	0	0	0	0	0	0	0	0	0	15.1	29.1	39.4	40	40.8	33.8				
1100	88	676	0	0	0	0	13	27	29	16	3	0	0	0	0	0	0	0	0	20.1	30.7	40.5	48	54.5	37.6				
1200	82	758	0	0	0	1	8	27	23	16	7	0	0	0	0	0	0	0	0	16.7	31.6	43.2	46	56.1	37.1				
1300	93	851	0	0	0	2	9	35	29	16	2	0	0	0	0	0	0	0	0	17.9	30.6	43.3	47	50.5	35.3				
1400	145	996	0	0	0	5	28	51	47	12	1	1	0	0	0	0	0	0	0	16.4	28.8	49.1	61	42.1	33.3				
1500	162	1158	0	0	0	1	13	55	58	25	10	0	0	0	0	0	0	0	0	17.7	31.4	44.9	93	57.4	37.1				
1600	145	1303	0	0	0	1	4	41	56	36	7	0	0	0	0	0	0	0	0	17	32.5	44.2	99	68.3	37.1				
1700	150	1453	0	0	0	3	6	43	66	26	4	2	0	0	0	0	0	0	0	19.5	31.6	46.9	98	65.3	36				
1800	104	1557	0	0	0	3	10	39	30	15	6	1	0	0	0	0	0	0	0	16.1	30.8	46.7	52	50	36.7				
1900	65	1622	0	0	0	2	3	25	20	13	0	2	0	0	0	0	0	0	0	15.3	31.1	48.9	35	53.8	35.8				
2000	41	1663	0	1	0	0	5	10	16	6	3	0	0	0	0	0	0	0	0	9.6	30.5	43.7	25	61	35.8				
2100	30	1693	0	0	0	1	0	6	15	6	0	2	0	0	0	0	0	0	0	18.8	32.7	46.1	23	76.7	36.2				
2200	26	1719	0	0	0	0	1	7	9	2	6	0	1	0	0	0	0	0	0	24.2	33.9	50.1	18	69.2	40.7				
2300	5	1724	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	27.5	30.2	32	3	60	-				
07-19	1491	1724	0	0	0	19	158	507	529	220	52	6	0	0	0	0	0	0	0	15.1	30.7	49.1	807	54.1	35.8				
06-22	1672	1724	0	1	1	23	175	558	595	252	56	11	0	0	0	0	0	0	0	9.6	30.7	49.1	914	54.7	35.8				
06-00	1703	1724	0	1	1	23	176	567	607	254	62	11	1	0	0	0	0	0	0	9.6	30.8	50.1	935	54.9	35.8				
00-00	1724	1724	0	1	1	23	176	571	613	257	67	13	1	1	0	0	0	0	0	9.6	30.8	58	952	55.2	36				

Benchmark Data Collection

Wed 21	June	2023	Northbound															Vmin	Mean	Vmax	>PSL	>PSL%	Vpp	
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	1	1725	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	38.2	38.2	38.2	1	100	-
0100	2	1727	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	30.7	32.4	34.2	2	100	-
0200	0	1727	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0300	2	1729	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	37.2	38.5	39.9	2	100	-
0400	3	1732	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	31.5	39.6	44.5	3	100	-
0500	11	1743	0	0	0	0	0	1	3	4	2	1	0	0	0	0	0	0	27.3	36.7	48.3	10	90.9	40.3
0600	42	1785	0	0	0	2	0	9	15	6	3	6	0	1	0	0	0	0	16.1	34.8	55.4	31	73.8	45
0700	106	1891	0	0	1	1	10	19	38	21	13	3	0	0	0	0	0	0	14.4	32.7	49.7	75	70.8	39.4
0800	179	2070	0	0	0	2	11	48	80	33	4	1	0	0	0	0	0	0	17.3	31.8	45.8	118	65.9	36.7
0900	127	2197	0	0	1	4	23	32	44	20	2	1	0	0	0	0	0	0	10.6	29.8	45.1	67	52.8	35.3
1000	107	2304	0	0	1	2	9	42	31	14	4	4	0	0	0	0	0	0	13.4	30.6	46.7	53	49.5	36.2
1100	72	2376	0	0	0	1	13	21	21	7	9	0	0	0	0	0	0	0	19.2	30.7	43.4	37	51.4	37.1
1200	109	2485	0	0	1	1	11	35	40	16	4	1	0	0	0	0	0	0	12.8	30.6	45.9	61	56	35.3
1300	102	2587	0	0	0	2	14	37	38	10	0	1	0	0	0	0	0	0	19.2	29.7	46.4	49	48	34
1400	169	2756	0	0	1	2	28	63	52	21	2	0	0	0	0	0	0	0	14.5	29.3	44.2	75	44.4	34.7
1500	172	2928	0	0	0	6	36	66	52	11	1	0	0	0	0	0	0	0	16.2	28.5	44.4	64	37.2	33.1
1600	156	3084	0	0	0	3	23	49	57	14	10	0	0	0	0	0	0	0	15.4	30.3	43.3	81	51.9	35.1
1700	143	3227	0	0	0	0	7	43	60	25	8	0	0	0	0	0	0	0	21.6	31.9	44	93	65	36.7
1800	98	3325	0	0	1	3	8	21	41	20	3	0	1	0	0	0	0	0	14.9	31.2	53.9	65	66.3	36.2
1900	74	3399	0	0	0	2	1	21	33	14	1	0	2	0	0	0	0	0	16.6	31.9	51.6	50	67.6	36.7
2000	67	3466	0	0	0	2	2	20	26	13	3	1	0	0	0	0	0	0	17.1	32.3	46.2	43	64.2	38
2100	29	3495	0	0	0	0	3	6	7	11	2	0	0	0	0	0	0	0	23	32.9	44.5	20	69	38.7
2200	27	3522	0	0	0	0	0	9	6	10	0	1	0	1	0	0	0	0	25.1	33.9	59.5	18	66.7	38.5
2300	10	3532	0	0	0	0	1	2	1	6	0	0	0	0	0	0	0	0	22.9	33.4	39.3	7	70	-
07-19	1540	3532	0	0	6	27	193	476	554	212	60	11	1	0	0	0	0	0	10.6	30.5	53.9	838	54.4	35.6
06-22	1752	3532	0	0	6	33	199	532	635	256	69	18	3	1	0	0	0	0	10.6	30.8	55.4	982	56.1	36
06-00	1789	3532	0	0	6	33	200	543	642	272	69	19	3	2	0	0	0	0	10.6	30.9	59.5	1007	56.3	36.2
00-00	1808	3532	0	0	6	33	200	544	648	279	73	20	3	2	0	0	0	0	10.6	30.9	59.5	1025	56.7	36.2

Benchmark Data Collection

Thu 22 Time	June Total	2023 RunTot	Northbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 30 35 40 45 50 55 60 65 70 75 80	Vbin 35 40 45 50 55 60 65 70 75 80	Vbin 40 45 50 55 60 65 70 75 80	Vbin 45 50 55 60 65 70 75 80	Vbin 50 55 60 65 70 75 80	Vbin 55 60 65 70 75 80	Vbin 60 65 70 75 80	Vbin 65 70 75 80	Vbin 70 75 80						
0000	3	3535	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	28.1	33.4	38.8	2	66.7	-
0100	2	3537	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	35.6	40.6	45.6	2	100	-
0200	0	3537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0300	1	3538	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	22.9	22.9	22.9	0	0	-
0400	8	3546	0	0	0	0	0	3	1	1	3	0	0	0	0	0	0	25	34.2	43.2	5	62.5	-
0500	12	3558	0	0	0	2	0	1	2	5	1	0	1	0	0	0	0	18.6	33.4	50.8	9	75	36.9
0600	54	3612	0	0	0	2	0	10	21	9	11	0	1	0	0	0	0	15	34.5	56.3	42	77.8	40.9
0700	110	3722	0	0	0	1	8	15	47	32	6	0	1	0	0	0	0	17.2	33	50.2	86	78.2	37.4
0800	203	3925	0	0	1	5	23	66	61	35	10	2	0	0	0	0	0	13.3	30.8	46.6	108	53.2	36.5
0900	155	4080	0	0	0	2	16	49	60	22	6	0	0	0	0	0	0	16.8	30.6	41.9	88	56.8	35.3
1000	131	4211	0	0	0	4	11	49	39	21	3	3	1	0	0	0	0	17.6	30.9	50.9	67	51.1	35.3
1100	130	4341	0	1	0	3	22	48	36	15	4	1	0	0	0	0	0	8.5	29.5	47.7	56	43.1	34.9
1200	118	4459	0	0	1	0	19	47	35	14	2	0	0	0	0	0	0	11.5	29.5	43.5	51	43.2	34.2
1300	151	4610	0	0	0	4	30	45	51	18	2	1	0	0	0	0	0	17.2	29.2	48.5	72	47.7	34
1400	148	4758	0	0	0	1	14	44	46	35	7	1	0	0	0	0	0	19.6	31.7	46.3	89	60.1	37.4
1500	214	4972	0	0	18	16	40	68	58	11	2	1	0	0	0	0	0	10.2	26.6	47.5	72	33.6	32.7
1600	239	5211	0	0	1	14	26	67	84	39	6	2	0	0	0	0	0	12.9	30.3	47.7	131	54.8	35.6
1700	205	5416	0	0	0	0	21	61	77	35	11	0	0	0	0	0	0	22.3	31.4	43.8	123	60	36.5
1800	144	5560	0	0	0	1	10	47	60	22	4	0	0	0	0	0	0	15.8	31.2	43.9	86	59.7	35.3
1900	66	5626	0	0	1	1	3	16	23	19	2	0	1	0	0	0	0	11.7	32.3	50.8	45	68.2	37.4
2000	87	5713	0	0	1	0	18	31	25	11	1	0	0	0	0	0	0	13.5	29.1	40.4	37	42.5	34
2100	39	5752	0	0	0	0	3	8	12	9	5	1	1	0	0	0	0	23.6	34	51.7	28	71.8	40.5
2200	16	5768	0	0	0	0	0	2	9	3	1	1	0	0	0	0	0	27.9	34.3	45.1	14	87.5	38.7
2300	17	5785	0	0	0	1	7	4	3	1	0	1	0	0	0	0	0	23.9	32.6	50.3	9	52.9	39.1
07-19	1948	5785	0	1	21	51	240	606	654	299	63	11	2	0	0	0	0	8.5	30.3	50.9	1029	52.8	35.8
06-22	2194	5785	0	1	23	54	264	671	735	347	82	12	4	1	0	0	0	8.5	30.4	56.3	1181	53.8	35.8
06-00	2227	5785	0	1	23	54	265	680	748	353	84	13	5	1	0	0	0	8.5	30.5	56.3	1204	54.1	35.8
00-00	2253	5785	0	1	23	56	266	685	752	361	88	14	6	1	0	0	0	8.5	30.5	56.3	1222	54.2	36

Benchmark Data Collection

Fri 23 Time	June Total	2023 RunTot	Northbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0	Vbin 5	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70						
0000	4	5789	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	31.7	38.5	41.6	4	100	-
0100	0	5789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0200	4	5793	0	0	0	0	0	0	0	3	1	0	0	0	0	0	36.8	38.9	40.2	4	100	-	
0300	1	5794	0	0	0	0	0	0	0	0	1	0	0	0	0	0	44.5	44.5	44.5	1	100	-	
0400	3	5797	0	0	0	0	0	0	1	0	2	0	0	0	0	0	33.8	40	43.6	3	100	-	
0500	12	5809	0	0	0	0	0	3	3	3	2	1	0	0	0	0	25	35.1	45.8	9	75	41.8	
0600	36	5845	0	0	0	0	0	9	9	14	4	0	0	0	0	0	25.1	34.4	44.1	27	75	39.6	
0700	99	5944	0	0	0	6	0	23	20	34	11	5	0	0	0	0	15.8	33.8	47.7	70	70.7	39.8	
0800	188	6132	0	0	0	5	21	64	65	31	2	0	0	0	0	0	15.7	30.2	43.3	98	52.1	35.3	
0900	122	6254	0	0	0	0	9	48	45	18	2	0	0	0	0	0	22.3	30.8	43.6	65	53.3	34.9	
1000	92	6346	0	0	1	0	18	28	33	10	2	0	0	0	0	0	14.1	29.8	41.6	45	48.9	34.7	
1100	118	6464	0	0	0	6	15	40	42	10	3	2	0	0	0	0	17.2	29.6	49.5	57	48.3	34.7	
1200	109	6573	0	0	0	3	12	41	31	19	3	0	0	0	0	0	16.1	30.2	43	53	48.6	35.8	
1300	137	6710	0	0	0	3	13	50	53	14	3	1	0	0	0	0	18.3	30.4	45.8	71	51.8	34.2	
1400	148	6858	0	0	2	8	15	47	47	19	10	0	0	0	0	0	14.1	30	44.1	76	51.4	36	
1500	185	7043	0	0	0	10	10	54	85	21	5	0	0	0	0	0	17	30.3	44.6	111	60	34.7	
1600	167	7210	0	0	0	0	8	46	80	24	8	0	1	0	0	0	23.4	31.8	51.2	113	67.7	36	
1700	167	7377	0	0	2	2	13	46	73	27	3	1	0	0	0	0	10.9	31	46.1	104	62.3	35.6	
1800	145	7522	0	0	0	0	7	35	67	29	5	2	0	0	0	0	21.5	32.4	46.8	103	71	36	
1900	59	7581	0	0	1	1	6	16	14	17	3	1	0	0	0	0	11.6	31.6	45.1	35	59.3	36.5	
2000	54	7635	0	0	0	0	1	10	25	9	6	2	1	0	0	0	24.9	34.2	52.9	43	79.6	40.7	
2100	37	7672	0	0	0	0	2	11	13	9	0	1	0	1	0	0	21.4	32.9	57.7	24	64.9	37.6	
2200	25	7697	0	0	0	0	1	5	12	4	3	0	0	0	0	0	24.2	33.1	43.2	19	76	37.4	
2300	12	7709	0	0	0	0	2	4	3	2	1	0	0	0	0	0	20.7	30.8	44.5	6	50	35.1	
07-19	1677	7709	0	0	5	43	141	522	641	256	57	11	1	0	0	0	10.9	30.8	51.2	966	57.6	35.8	
06-22	1863	7709	0	0	6	44	150	568	702	305	70	15	2	1	0	0	10.9	31.1	57.7	1095	58.8	36	
06-00	1900	7709	0	0	6	44	153	577	717	311	74	15	2	1	0	0	10.9	31.1	57.7	1120	58.9	36	
00-00	1924	7709	0	0	6	44	153	580	722	318	82	16	2	1	0	0	10.9	31.2	57.7	1141	59.3	36.2	

Benchmark Data Collection

Sat 24 Time	June Total	2023 RunTot	Northbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0	Vbin 5	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70						
0000	5	7714	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	25.8	32.8	40.7	3	60	-
0100	6	7720	0	0	0	0	0	4	1	0	1	0	0	0	0	0	26.6	31.3	44.7	2	33.3	-	
0200	3	7723	0	0	0	0	0	1	1	0	1	0	0	0	0	0	27.5	34.1	44.6	2	66.7	-	
0300	1	7724	0	0	0	0	0	0	0	1	0	0	0	0	0	0	38.6	38.6	38.6	1	100	-	
0400	4	7728	0	0	0	0	0	1	1	1	0	1	0	0	0	0	25.8	35.3	45.7	3	75	-	
0500	6	7734	0	0	0	0	0	1	0	2	1	1	1	0	0	0	27.9	40	52.8	5	83.3	-	
0600	15	7749	0	0	0	1	0	1	5	5	3	0	0	0	0	0	15.4	34.3	41.4	13	86.7	40	
0700	48	7797	0	0	0	1	2	5	30	4	4	2	0	0	0	0	16.3	33	49.1	40	83.3	37.6	
0800	74	7871	0	0	0	1	6	18	24	16	8	1	0	0	0	0	17.4	32.7	46.8	49	66.2	38	
0900	131	8002	0	0	4	2	5	47	43	26	3	1	0	0	0	0	13.3	30.7	49.8	73	55.7	36.9	
1000	132	8134	0	0	1	4	24	42	38	20	3	0	0	0	0	0	14.4	29.5	42.8	61	46.2	35.1	
1100	135	8269	0	0	4	3	10	54	47	11	6	0	0	0	0	0	11.3	29.7	43.4	64	47.4	34.4	
1200	118	8387	0	0	2	4	10	44	37	17	4	0	0	0	0	0	13.9	30	41.2	58	49.2	35.8	
1300	109	8496	0	0	0	2	9	42	30	21	4	1	0	0	0	0	17.3	31.1	45.2	56	51.4	36.2	
1400	108	8604	0	0	0	3	2	41	37	20	5	0	0	0	0	0	15.8	31.6	44.7	62	57.4	36.9	
1500	107	8711	0	0	1	3	14	43	35	9	1	1	0	0	0	0	14.2	29.3	48.7	46	43	34.2	
1600	99	8810	0	0	2	1	10	30	32	22	2	0	0	0	0	0	10.4	30.7	41.7	56	56.6	36.5	
1700	83	8893	0	0	0	1	3	26	26	25	0	2	0	0	0	0	17.9	32.3	47.5	53	63.9	37.4	
1800	72	8965	0	0	1	0	5	18	22	22	3	1	0	0	0	0	13.4	32.4	46.1	48	66.7	37.1	
1900	55	9020	0	0	1	1	1	8	22	15	6	1	0	0	0	0	12.3	33.4	45.5	44	80	39.8	
2000	41	9061	0	0	0	0	0	15	17	5	3	0	1	0	0	0	25.8	32	50.2	26	63.4	36	
2100	26	9087	0	0	0	1	4	5	11	3	2	0	0	0	0	0	19.7	30.9	43.7	16	61.5	36	
2200	19	9106	0	0	0	0	1	10	6	2	0	0	0	0	0	0	20.9	29.5	35.9	8	42.1	33.1	
2300	23	9129	0	0	0	0	4	6	8	4	1	0	0	0	0	0	23.5	30.9	40.4	13	56.5	35.3	
07-19	1216	9129	0	0	15	25	100	410	401	213	43	9	0	0	0	0	10.4	30.8	49.8	666	54.8	36.5	
06-22	1353	9129	0	0	16	28	105	439	456	241	57	10	1	0	0	0	10.4	31	50.2	765	56.5	36.5	
06-00	1395	9129	0	0	16	28	110	455	470	247	58	10	1	0	0	0	10.4	31	50.2	786	56.3	36.5	
00-00	1420	9129	0	0	16	28	110	464	474	252	62	12	2	0	0	0	10.4	31	52.8	802	56.5	36.5	

Benchmark Data Collection

Sun 25 Time	June Total	2023 RunTot	Northbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 30 35 40 45 50 55 60 65 70 75 80	Vbin 35 40 45 50 55 60 65 70 75 80	Vbin 40 45 50 55 60 65 70 75 80	Vbin 45 50 55 60 65 70 75 80	Vbin 50 55 60 65 70 75 80	Vbin 55 60 65 70 75 80	Vbin 60 65 70 75 80	Vbin 65 70 75 80	Vbin 70 75 80						
0000	19	9148	0	0	0	0	2	7	3	3	1	0	0	0	0	0	0	24.7	33.3	47.3	10	52.6	40.9
0100	4	9152	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	28.6	32.4	36.6	3	75	-
0200	3	9155	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	24.7	30.6	38.5	1	33.3	-
0300	1	9156	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	31.2	31.2	31.2	1	100	-
0400	3	9159	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	36.8	39.2	43.7	3	100	-
0500	6	9165	0	0	0	0	1	3	1	1	0	0	0	0	0	0	0	24.5	29	38.1	2	33.3	-
0600	14	9179	0	0	0	0	1	6	6	1	0	0	0	0	0	0	0	27.8	34.5	40	13	92.9	38.9
0700	22	9201	0	0	0	1	5	5	10	0	1	0	0	0	0	0	0	24.6	33.6	47.4	16	72.7	36.9
0800	48	9249	0	1	2	2	5	5	16	12	5	0	0	0	0	0	0	7.8	31.4	41.5	33	68.8	38.5
0900	81	9330	0	0	2	0	4	28	30	14	3	0	0	0	0	0	0	10.7	31.2	44.9	47	58	36
1000	123	9453	0	0	3	7	21	34	36	19	3	0	0	0	0	0	0	12.9	29.1	40.4	58	47.2	35.3
1100	115	9568	0	0	0	1	5	41	43	22	2	0	1	0	0	0	0	16.9	31.4	50.4	68	59.1	36
1200	114	9682	0	0	2	4	12	30	37	24	5	0	0	0	0	0	0	11.4	30.7	44.3	66	57.9	36.7
1300	91	9773	0	1	2	2	12	34	29	4	6	1	0	0	0	0	0	9.8	29.4	46.9	40	44	34.4
1400	90	9863	0	0	2	3	7	21	34	19	4	0	0	0	0	0	0	11.6	31.3	42.8	57	63.3	36.7
1500	98	9961	0	0	1	1	8	35	34	14	3	2	0	0	0	0	0	13.4	30.8	45.4	53	54.1	35.6
1600	97	10058	0	0	1	5	12	31	30	15	3	0	0	0	0	0	0	13	29.7	42.9	48	49.5	35.3
1700	93	10151	0	0	0	0	4	36	34	12	4	2	1	0	0	0	0	20.1	32	50.4	53	57	35.6
1800	71	10222	0	0	1	0	5	19	27	12	5	2	0	0	0	0	0	12.5	32.1	47.9	46	64.8	37.6
1900	49	10271	0	0	0	0	2	16	16	13	1	1	0	0	0	0	0	23.9	32.3	49	31	63.3	37.4
2000	53	10324	0	0	0	1	3	11	19	12	5	2	0	0	0	0	0	19.7	33.2	47	38	71.7	39.8
2100	34	10358	0	0	0	0	2	5	14	7	4	2	0	0	0	0	0	21.3	34.5	49.8	27	79.4	41.6
2200	10	10368	0	0	0	0	2	3	2	1	2	0	0	0	0	0	0	21.1	31	43.3	5	50	-
2300	2	10370	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	33.6	34.8	36	2	100	-
07-19	1043	10370	0	2	16	25	96	319	355	177	43	8	2	0	0	0	0	7.8	30.8	50.4	585	56.1	36.5
06-22	1193	10370	0	2	16	26	103	352	410	215	54	13	2	0	0	0	0	7.8	31.1	50.4	694	58.2	36.7
06-00	1205	10370	0	2	16	26	105	355	413	217	56	13	2	0	0	0	0	7.8	31.1	50.4	701	58.2	36.7
00-00	1241	10370	0	2	16	26	109	367	420	225	60	14	2	0	0	0	0	7.8	31.2	50.4	721	58.1	36.9

Benchmark Data Collection

Mon 26	June	2023	Northbound														Vmin	Mean	Vmax	>PSL	>PSL%	Vpp		
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	3	10373	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	34.7	38.4	42.9	3	100	-	
0100	4	10377	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	14.4	31.6	47.5	2	50	-	
0200	1	10378	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	24.5	24.5	24.5	0	0	-	
0300	1	10379	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	40.3	40.3	40.3	1	100	-	
0400	3	10382	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	30.8	42.7	53.6	3	100	-	
0500	16	10398	0	0	0	0	1	3	4	6	2	0	0	0	0	0	0	24.5	34.1	41.2	12	75	39.6	
0600	40	10438	0	0	0	0	4	11	10	8	4	3	0	0	0	0	0	23.2	33.4	48.7	25	62.5	40	
0700	110	10548	0	1	0	1	9	24	36	26	11	2	0	0	0	0	0	7.9	32.7	47.3	75	68.2	38.9	
0800	162	10710	0	0	1	5	8	47	79	18	3	0	1	0	0	0	0	13	31	51.1	101	62.3	34.7	
0900	121	10831	0	0	0	5	11	37	38	25	4	0	1	0	0	0	0	15.6	31.2	51.1	68	56.2	36.9	
1000	92	10923	0	0	2	0	9	35	29	13	3	1	0	0	0	0	0	10.7	30.1	45.1	46	50	35.8	
1100	100	11023	0	0	0	3	17	47	22	9	2	0	0	0	0	0	0	16.7	28.6	44.5	33	33	33.3	
1200	105	11128	0	0	2	1	7	35	36	20	4	0	0	0	0	0	0	14.3	30.8	44.5	60	57.1	36	
1300	73	11201	0	1	0	4	4	22	27	11	4	0	0	0	0	0	0	8.9	30.7	43.4	42	57.5	35.8	
1400	109	11310	0	0	0	3	13	34	39	14	4	2	0	0	0	0	0	16.9	30.3	47	59	54.1	35.3	
1500	158	11468	0	0	0	6	19	46	58	26	3	0	0	0	0	0	0	18.5	30.4	44.7	87	55.1	35.3	
1600	149	11617	0	0	0	1	12	41	61	29	4	1	0	0	0	0	0	19.9	31.5	48.6	95	63.8	36	
1700	160	11777	0	0	1	5	13	35	45	52	8	0	1	0	0	0	0	10.6	32.3	51.1	106	66.3	38.5	
1800	101	11878	0	0	1	0	4	29	38	21	5	3	0	0	0	0	0	15	32.4	47.6	67	66.3	37.8	
1900	67	11945	0	0	0	1	5	13	28	13	5	2	0	0	0	0	0	17.9	32.8	45.3	48	71.6	37.1	
2000	37	11982	0	0	1	1	4	10	10	9	1	1	0	0	0	0	0	14.1	31.2	47	21	56.8	36.9	
2100	27	12009	0	0	0	0	1	6	12	6	2	0	0	0	0	0	0	20.4	32.8	44.5	20	74.1	37.1	
2200	22	12031	0	0	0	0	2	12	6	2	0	0	0	0	0	0	0	21.1	29.6	39.9	8	36.4	32.9	
2300	4	12035	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	26	31.3	39.3	2	50	-	
07-19	1440	12035	0	2	7	34	126	432	508	264	55	9	3	0	0	0	0	7.9	31.1	51.1	839	58.3	36.5	
06-22	1611	12035	0	2	8	36	140	472	568	300	67	15	3	0	0	0	0	7.9	31.2	51.1	953	59.2	36.7	
06-00	1637	12035	0	2	8	36	142	486	575	303	67	15	3	0	0	0	0	7.9	31.2	51.1	963	58.8	36.7	
00-00	1665	12035	0	2	9	36	144	490	582	310	72	16	4	0	0	0	0	7.9	31.3	53.6	984	59.1	36.7	
Summary			Northbound														Vmin	Mean	Vmax	>PSL	>PSL%	Vpp		
	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85	
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
	12035	12035	0	6	77	246	1158	3701	4211	2002	504	105	20	5	0	0	0	7.8	31	59.5	6847	56.9	36.2	

Benchmark Data Collection

Tue 20 Time	June Total	2023 RunTot	Southbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85	
			Vbin 0	Vbin 5	Vbin 10	Vbin 15	Vbin 20	Vbin 25	Vbin 30	Vbin 35	Vbin 40	Vbin 45	Vbin 50	Vbin 55	Vbin 60	Vbin 65	Vbin 70							Vbin 75
0000	3	3	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	31.4	38.1	43.2	3	100	-
0100	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0200	2	5	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	24.4	29.1	33.7	1	50	-
0300	5	10	0	0	0	0	0	0	2	2	0	1	0	0	0	0	0	0	32	38.2	49.8	5	100	-
0400	1	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	34.4	34.4	34.4	1	100	-
0500	10	21	0	0	0	0	0	1	4	3	2	0	0	0	0	0	0	0	28.8	35.2	42.3	9	90	-
0600	32	53	0	0	0	0	2	6	15	7	2	0	0	0	0	0	0	0	22.6	32.3	42.6	24	75	37.8
0700	116	169	0	0	0	0	3	29	45	34	5	0	0	0	0	0	0	0	21.8	33	44.8	84	72.4	37.1
0800	230	399	0	0	0	1	13	61	105	41	8	0	1	0	0	0	0	0	18.1	32	51.5	155	67.4	35.8
0900	125	524	0	0	0	0	3	32	51	33	6	0	0	0	0	0	0	0	22.7	32.6	43.8	90	72	36.5
1000	81	605	0	0	0	1	6	27	29	16	2	0	0	0	0	0	0	0	19.2	31.3	44.8	47	58	36.2
1100	80	685	0	0	0	1	0	31	33	9	6	0	0	0	0	0	0	0	20	31.7	43.1	48	60	36
1200	99	784	0	0	0	0	6	32	27	25	8	1	0	0	0	0	0	0	21	32.5	46.4	61	61.6	37.8
1300	86	870	0	0	0	0	3	16	43	19	4	1	0	0	0	0	0	0	22	32.9	45.6	67	77.9	37.6
1400	133	1003	0	0	0	1	8	21	50	41	10	2	0	0	0	0	0	0	19	33.4	48.3	103	77.4	37.8
1500	136	1139	0	0	0	0	4	44	50	29	6	3	0	0	0	0	0	0	21.8	32.6	47.9	88	64.7	36.9
1600	109	1248	0	0	0	0	0	24	47	29	8	1	0	0	0	0	0	0	25.9	33.6	49.3	85	78	37.4
1700	142	1390	0	0	0	1	3	23	51	50	10	3	1	0	0	0	0	0	17.4	34.4	53.6	115	81	38.7
1800	122	1512	0	0	0	1	5	21	44	41	9	1	0	0	0	0	0	0	16.4	33.6	47.4	95	77.9	38.7
1900	83	1595	0	0	0	0	1	14	37	23	7	1	0	0	0	0	0	0	24.8	34	45.4	68	81.9	39.1
2000	41	1636	0	0	0	0	2	10	13	11	3	1	1	0	0	0	0	0	23.7	33.8	52.3	29	70.7	38.7
2100	31	1667	0	0	0	1	0	4	16	8	1	1	0	0	0	0	0	0	17.5	33.2	45.5	26	83.9	37.4
2200	18	1685	0	0	0	0	0	1	8	6	2	1	0	0	0	0	0	0	29.7	36.3	46.3	17	94.4	38.9
2300	13	1698	0	0	0	0	2	1	3	3	4	0	0	0	0	0	0	0	23.8	34.8	41.2	10	76.9	40.7
07-19	1459	1698	0	0	0	6	54	361	575	367	82	12	2	0	0	0	0	0	16.4	32.8	53.6	1038	71.1	37.4
06-22	1646	1698	0	0	0	7	59	395	656	416	95	15	3	0	0	0	0	0	16.4	32.9	53.6	1185	72	37.6
06-00	1677	1698	0	0	0	7	61	397	667	425	101	16	3	0	0	0	0	0	16.4	33	53.6	1212	72.3	37.6
00-00	1698	1698	0	0	0	7	62	398	676	431	104	17	3	0	0	0	0	0	16.4	33	53.6	1231	72.5	37.6

Benchmark Data Collection

Wed 21	June	2023	Southbound															Vmin	Mean	Vmax	>PSL	>PSL%	Vpp		
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	30	30	85		
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	4	1702	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	34.6	37.3	41.6	4	100	-
0100	3	1705	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	32	40.1	50.1	3	100	-
0200	1	1706	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	31.8	31.8	31.8	1	100	-
0300	2	1708	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	39.4	41.3	43.1	2	100	-
0400	0	1708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0500	10	1718	0	0	1	0	1	0	2	4	2	0	0	0	0	0	0	0	0	11.1	33.5	42.5	8	80	-
0600	32	1750	0	0	0	0	0	4	11	9	5	3	0	0	0	0	0	0	0	26.4	35.9	47.8	28	87.5	40.9
0700	125	1875	0	0	1	0	1	33	48	37	4	1	0	0	0	0	0	0	0	14.6	33	45.4	90	72	37.8
0800	213	2088	0	0	0	1	8	50	103	37	11	3	0	0	0	0	0	0	0	18.7	32.4	47.9	154	72.3	36.9
0900	113	2201	0	0	0	2	6	36	38	27	3	0	1	0	0	0	0	0	0	19.1	31.8	52.3	69	61.1	36.5
1000	84	2285	0	0	2	1	4	20	38	17	2	0	0	0	0	0	0	0	0	12.2	31.3	40.3	57	67.9	35.6
1100	88	2373	0	0	0	0	5	23	41	15	3	1	0	0	0	0	0	0	0	21.3	32.2	46.6	60	68.2	36.9
1200	113	2486	0	0	0	3	4	26	57	16	6	1	0	0	0	0	0	0	0	15.8	32	49.9	80	70.8	36.2
1300	89	2575	0	0	1	1	1	34	30	15	3	4	0	0	0	0	0	0	0	12.3	31.9	49.7	52	58.4	36.2
1400	153	2728	0	0	0	0	3	28	75	34	11	2	0	0	0	0	0	0	0	21.3	33.3	47.9	122	79.7	36.9
1500	124	2852	0	0	0	0	5	25	57	27	8	2	0	0	0	0	0	0	0	20.8	32.8	47.4	94	75.8	38
1600	125	2977	0	0	1	1	7	24	52	34	4	2	0	0	0	0	0	0	0	14.4	32.5	46.5	92	73.6	37.1
1700	143	3120	0	0	0	0	4	31	61	38	7	2	0	0	0	0	0	0	0	20.2	33.1	46.4	108	75.5	36.9
1800	135	3255	0	0	1	0	2	27	65	29	9	1	1	0	0	0	0	0	0	13.7	33.3	54.3	105	77.8	37.1
1900	69	3324	0	0	0	0	0	12	23	28	6	0	0	0	0	0	0	0	0	26.7	34.3	42.3	57	82.6	38.9
2000	38	3362	0	0	0	0	2	3	14	13	5	1	0	0	0	0	0	0	0	21.4	35.1	46.7	33	86.8	38.9
2100	36	3398	0	0	0	0	1	3	9	11	8	2	2	0	0	0	0	0	0	24.3	37.4	54.4	32	88.9	43.8
2200	19	3417	0	0	0	0	1	0	8	7	3	0	0	0	0	0	0	0	0	21.8	35.3	43.7	18	94.7	39.6
2300	8	3425	0	0	0	0	1	2	3	2	0	0	0	0	0	0	0	0	0	24.7	31.4	38.1	5	62.5	-
07-19	1505	3425	0	0	6	9	50	357	665	326	71	19	2	0	0	0	0	0	0	12.2	32.6	54.3	1083	72	36.9
06-22	1680	3425	0	0	6	9	53	379	722	387	95	25	4	0	0	0	0	0	0	12.2	32.9	54.4	1233	73.4	37.4
06-00	1707	3425	0	0	6	9	55	381	733	396	98	25	4	0	0	0	0	0	0	12.2	32.9	54.4	1256	73.6	37.4
00-00	1727	3425	0	0	7	9	56	381	738	404	102	25	5	0	0	0	0	0	0	11.1	32.9	54.4	1274	73.8	37.4

Benchmark Data Collection

Thu 22 Time	June Total	2023 RunTot	Southbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 30 35 40 45 50 55 60 65 70 75 80	Vbin 35 40 45 50 55 60 65 70 75 80	Vbin 40 45 50 55 60 65 70 75 80	Vbin 45 50 55 60 65 70 75 80	Vbin 50 55 60 65 70 75 80	Vbin 55 60 65 70 75 80	Vbin 60 65 70 75 80	Vbin 65 70 75 80	Vbin 70 75 80						
0000	4	3429	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	38.7	41.8	44.4	4	100	-
0100	3	3432	0	0	0	0	0	0	2	0	0	1	0	0	0	0	31.5	37.5	46.2	3	100	-	
0200	2	3434	0	0	0	0	0	0	1	0	1	0	0	0	0	0	32	36.7	41.3	2	100	-	
0300	2	3436	0	0	0	0	0	0	0	0	2	0	0	0	0	0	40	41.1	42.1	2	100	-	
0400	0	3436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-	
0500	13	3449	0	0	0	0	0	2	4	6	1	0	0	0	0	0	28.7	35.5	41	11	84.6	38	
0600	26	3475	0	0	0	2	0	6	7	6	5	0	0	0	0	0	17.3	33	44.1	18	69.2	40.5	
0700	122	3597	0	0	0	0	3	21	50	37	10	1	0	0	0	0	21.4	33.9	49.2	98	80.3	37.6	
0800	183	3780	0	0	0	0	8	46	77	40	9	1	2	0	0	0	20.7	32.7	52.2	129	70.5	36.5	
0900	122	3902	0	0	0	1	3	30	64	23	1	0	0	0	0	0	17.3	32	43.3	88	72.1	35.8	
1000	91	3993	0	0	0	0	3	17	50	20	1	0	0	0	0	0	22.6	32.6	40.3	71	78	36.2	
1100	103	4096	0	0	1	1	7	20	52	17	4	1	0	0	0	0	13.8	32.2	45.1	74	71.8	37.6	
1200	110	4206	0	0	2	0	4	27	46	23	8	0	0	0	0	0	12.7	32.3	43.4	77	70	36.9	
1300	135	4341	0	0	1	0	3	38	63	25	4	1	0	0	0	0	14.5	32	46.8	93	68.9	35.8	
1400	137	4478	0	0	0	0	6	31	62	29	8	1	0	0	0	0	22.5	32.7	45.9	100	73	37.4	
1500	142	4620	0	0	0	0	1	33	64	38	3	3	0	0	0	0	23.2	33	49.1	108	76.1	36.7	
1600	142	4762	0	0	0	0	2	28	63	40	6	3	0	0	0	0	23.3	33.4	47.7	112	78.9	37.6	
1700	184	4946	0	0	0	0	0	38	80	47	17	1	0	0	1	0	25.6	34	61.5	146	79.3	38	
1800	119	5065	0	0	0	0	1	20	50	40	8	0	0	0	0	0	24.9	33.9	43	98	82.4	37.6	
1900	117	5182	0	0	0	1	2	20	47	32	13	1	1	0	0	0	15.6	34.3	51.8	94	80.3	38.9	
2000	33	5215	0	0	0	0	0	4	13	13	2	1	0	0	0	0	27.3	35.7	49.9	29	87.9	39.1	
2100	36	5251	0	0	0	0	0	8	16	10	0	2	0	0	0	0	25.4	33.2	47.9	28	77.8	37.1	
2200	32	5283	0	0	0	0	2	3	10	12	5	0	0	0	0	0	20.2	34.9	44.6	27	84.4	39.8	
2300	16	5299	0	0	0	0	1	2	6	5	1	0	0	0	0	0	23.7	34.7	50.3	13	81.3	38.9	
07-19	1590	5299	0	0	4	2	41	349	721	379	79	12	2	0	1	0	12.7	32.9	61.5	1194	75.1	37.1	
06-22	1802	5299	0	0	4	5	43	387	804	440	99	16	3	0	1	0	12.7	33.1	61.5	1363	75.6	37.4	
06-00	1850	5299	0	0	4	5	46	392	820	457	105	16	4	0	1	0	12.7	33.1	61.5	1403	75.8	37.4	
00-00	1874	5299	0	0	4	5	46	394	827	464	112	17	4	0	1	0	12.7	33.2	61.5	1425	76	37.6	

Benchmark Data Collection

Fri 23 Time	June Total	2023 RunTot	Southbound															Vmin	Mean	Vmax	>PSL 30	>PSL% 30	Vpp 85
			Vbin 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 15 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 20 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 25 30 35 40 45 50 55 60 65 70 75 80	Vbin 30 35 40 45 50 55 60 65 70 75 80	Vbin 35 40 45 50 55 60 65 70 75 80	Vbin 40 45 50 55 60 65 70 75 80	Vbin 45 50 55 60 65 70 75 80	Vbin 50 55 60 65 70 75 80	Vbin 55 60 65 70 75 80	Vbin 60 65 70 75 80	Vbin 65 70 75 80	Vbin 70 75 80						
0000	4	5303	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	29.3	36.8	44.3	3	75	-
0100	3	5306	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	35.3	38.7	44.8	3	100	-
0200	1	5307	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	31.7	31.7	31.7	1	100	-
0300	2	5309	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	34.5	40	45.6	2	100	-
0400	0	5309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0500	5	5314	0	0	0	0	0	0	3	1	0	0	1	0	0	0	0	33.2	38.2	52.8	5	100	-
0600	37	5351	0	0	0	0	0	5	13	9	9	1	0	0	0	0	0	25.6	35.6	45.5	32	86.5	42.5
0700	113	5464	0	0	0	0	2	8	54	40	7	2	0	0	0	0	0	22.3	34.3	47.8	103	91.2	37.8
0800	169	5633	0	0	0	0	8	45	82	26	6	2	0	0	0	0	0	21.6	31.9	45.4	116	68.6	35.6
0900	79	5712	0	0	1	0	5	24	34	10	4	1	0	0	0	0	0	14	31.5	45	49	62	35.8
1000	79	5791	0	0	0	0	4	22	33	13	6	1	0	0	0	0	0	22.3	32.3	45.3	53	67.1	36.9
1100	101	5892	0	0	0	0	4	32	49	12	4	0	0	0	0	0	0	20.1	31.6	45	65	64.4	34.9
1200	123	6015	0	0	0	0	6	23	65	26	3	0	0	0	0	0	0	21.3	32.4	41.7	94	76.4	36
1300	117	6132	0	0	0	0	3	36	47	26	5	0	0	0	0	0	0	22	32.3	42.2	78	66.7	36
1400	125	6257	0	0	1	0	11	39	47	23	3	0	1	0	0	0	0	14.7	31.5	52	74	59.2	35.6
1500	160	6417	0	0	0	2	10	33	72	36	5	1	0	0	1	0	0	17.5	32.2	60.8	115	71.9	36.5
1600	142	6559	0	0	3	2	2	26	61	40	5	3	0	0	0	0	0	11.6	32.8	49.6	109	76.8	37.4
1700	146	6705	0	0	0	3	10	26	59	32	16	0	0	0	0	0	0	15.5	32.7	44.5	107	73.3	37.8
1800	119	6824	0	0	0	0	3	18	55	29	10	2	1	1	0	0	0	24.2	34.3	56.2	98	82.4	38.5
1900	82	6906	0	0	0	0	3	5	34	25	12	2	1	0	0	0	0	22.4	35	51.2	74	90.2	40.5
2000	71	6977	0	0	1	0	0	7	27	27	7	2	0	0	0	0	0	10.5	34.8	48.1	63	88.7	39.1
2100	25	7002	0	0	0	0	3	2	10	9	1	0	0	0	0	0	0	21.2	32.7	41.2	20	80	36.7
2200	34	7036	0	0	0	0	0	6	13	11	2	2	0	0	0	0	0	26.9	34.7	47.8	28	82.4	38.3
2300	24	7060	0	0	0	0	0	3	11	9	1	0	0	0	0	0	0	28.9	34.3	41.5	21	87.5	37.6
07-19	1473	7060	0	0	5	7	68	332	658	313	74	12	2	1	1	0	0	11.6	32.5	60.8	1061	72	36.7
06-22	1688	7060	0	0	6	7	74	351	742	383	103	17	3	1	1	0	0	10.5	32.8	60.8	1250	74.1	37.1
06-00	1746	7060	0	0	6	7	74	360	766	403	106	19	3	1	1	0	0	10.5	32.8	60.8	1299	74.4	37.4
00-00	1761	7060	0	0	6	7	74	361	772	407	108	20	4	1	1	0	0	10.5	32.9	60.8	1313	74.6	37.4

Benchmark Data Collection

Sat 24	June	2023	Southbound																Vmin	Mean	Vmax	>PSL	>PSL%	Vpp	
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85	
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	7	7067	0	0	0	0	0	2	1	2	2	0	0	0	0	0	0	0	28.5	35.1	42.3	5	71.4	-	
0100	5	7072	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	32.7	37.7	41.8	5	100	-	
0200	4	7076	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	29.4	34.5	44.1	3	75	-	
0300	1	7077	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	35.6	35.6	35.6	1	100	-	
0400	2	7079	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	36.7	38.4	40.2	2	100	-	
0500	5	7084	0	0	0	0	0	0	3	1	0	0	0	1	0	0	0	0	30	37.3	56.5	5	100	-	
0600	17	7101	0	0	0	0	2	1	2	7	3	2	0	0	0	0	0	0	20.3	36.8	49.8	14	82.4	43.4	
0700	31	7132	0	0	0	0	0	4	12	14	1	0	0	0	0	0	0	0	25.6	34.2	40.3	27	87.1	37.1	
0800	59	7191	0	0	0	0	2	11	27	14	4	1	0	0	0	0	0	0	23.2	33.5	47.8	46	78	38.5	
0900	89	7280	0	0	0	0	2	21	37	22	6	0	1	0	0	0	0	0	20.9	33.1	54.1	66	74.2	36.7	
1000	128	7408	0	0	1	3	7	37	47	27	4	2	0	0	0	0	0	0	12.6	31.4	45.9	80	62.5	36.7	
1100	124	7532	0	0	0	1	0	28	54	28	10	2	0	0	1	0	0	0	17.1	33.6	60.9	95	76.6	38.3	
1200	134	7666	0	0	2	2	4	26	65	28	3	4	0	0	0	0	0	0	12.5	32.5	48.4	100	74.6	36.7	
1300	109	7775	0	0	2	0	4	23	50	26	2	2	0	0	0	0	0	0	14.1	32.2	46.5	80	73.4	36.9	
1400	98	7873	0	0	1	0	3	23	45	16	9	0	1	0	0	0	0	0	11.8	32.7	52.1	71	72.4	38	
1500	104	7977	0	0	0	0	2	26	42	29	3	1	1	0	0	0	0	0	23.2	33.2	52.9	76	73.1	37.1	
1600	109	8086	0	0	1	2	1	17	46	34	6	1	1	0	0	0	0	0	10.4	33.4	51.3	88	80.7	37.8	
1700	88	8174	0	0	1	0	2	16	32	27	9	1	0	0	0	0	0	0	11	33.7	45.1	69	78.4	38.7	
1800	68	8242	0	0	2	0	0	18	24	22	2	0	0	0	0	0	0	0	11.5	32.7	41.6	48	70.6	38	
1900	54	8296	0	0	0	0	0	13	17	17	4	2	0	1	0	0	0	0	26.2	34.7	59.3	41	75.9	39.1	
2000	43	8339	0	0	0	0	0	10	15	10	5	3	0	0	0	0	0	0	25.2	34.9	46.9	33	76.7	40.3	
2100	29	8368	0	0	0	0	0	11	12	3	3	0	0	0	0	0	0	0	25.4	32.2	42	18	62.1	37.6	
2200	29	8397	0	0	0	0	1	12	6	8	2	0	0	0	0	0	0	0	24.7	32	42.4	16	55.2	36.9	
2300	21	8418	0	0	0	0	1	3	13	3	0	1	0	0	0	0	0	0	24.2	32.9	46.2	17	81	36	
07-19	1141	8418	0	0	10	8	27	250	481	287	59	14	4	0	1	0	0	0	10.4	32.9	60.9	846	74.1	37.4	
06-22	1284	8418	0	0	10	8	29	285	527	324	74	21	4	1	1	0	0	0	10.4	33.1	60.9	952	74.1	37.8	
06-00	1334	8418	0	0	10	8	31	300	546	335	76	22	4	1	1	0	0	0	10.4	33	60.9	985	73.8	37.8	
00-00	1358	8418	0	0	10	8	31	303	553	342	82	22	4	2	1	0	0	0	10.4	33.1	60.9	1006	74.1	37.8	

Benchmark Data Collection

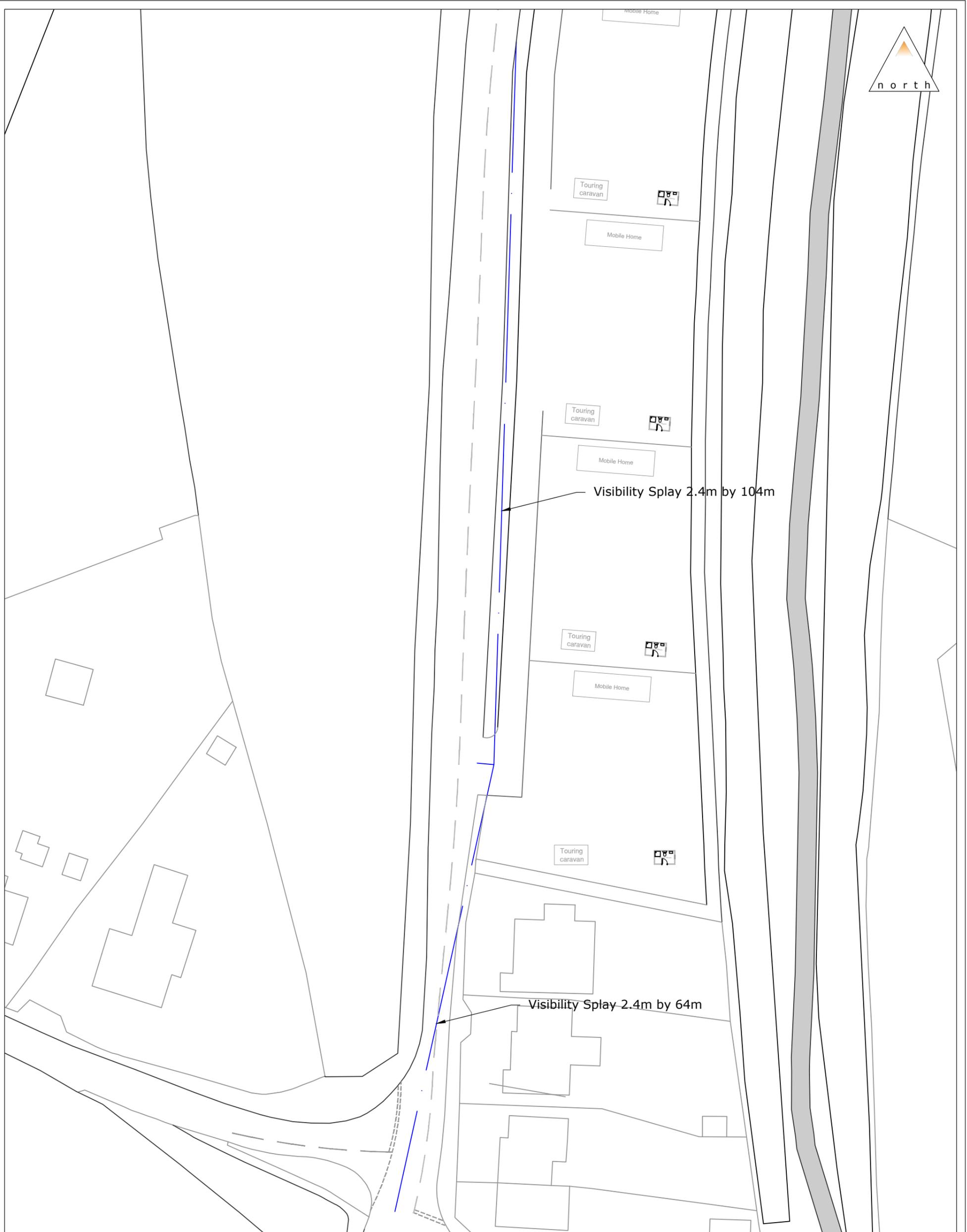
Sun 25	June	2023	Southbound															Vmin	Mean	Vmax	>PSL	>PSL%	Vpp	
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	13	8431	0	0	0	0	0	3	6	4	0	0	0	0	0	0	0	0	27.6	33.4	39.7	10	76.9	36.5
0100	4	8435	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	33.8	34.6	35.6	4	100	-
0200	1	8436	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	33.7	33.7	33.7	1	100	-
0300	4	8440	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	30.4	32.2	35.6	4	100	-
0400	1	8441	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	28.8	28.8	28.8	0	0	-
0500	2	8443	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	33.8	35	36.2	2	100	-
0600	7	8450	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	33	36.2	40.4	7	100	-
0700	19	8469	0	0	0	1	2	2	3	9	1	1	0	0	0	0	0	0	17.6	33.6	47.2	14	73.7	39.1
0800	41	8510	0	0	3	3	4	6	11	9	4	1	0	0	0	0	0	0	14.2	30.6	46	25	61	39.6
0900	64	8574	0	1	3	1	1	20	16	16	4	1	1	0	0	0	0	0	7.4	31.7	54.4	38	59.4	36.9
1000	84	8658	0	0	2	1	6	26	30	16	3	0	0	0	0	0	0	0	13.4	31	41.8	49	58.3	35.8
1100	109	8767	0	0	0	0	5	23	35	33	11	2	0	0	0	0	0	0	20.4	33.9	48.3	81	74.3	39.1
1200	115	8882	0	0	0	1	2	30	49	21	9	3	0	0	0	0	0	0	17.5	32.9	48.3	82	71.3	37.8
1300	105	8987	0	0	0	0	2	27	43	28	4	1	0	0	0	0	0	0	23.6	33	45.8	76	72.4	36.9
1400	111	9098	0	0	1	2	4	20	46	30	6	2	0	0	0	0	0	0	11.5	32.8	49.6	84	75.7	37.6
1500	98	9196	0	0	0	0	0	17	34	37	7	2	1	0	0	0	0	0	25.4	34.8	52.3	81	82.7	38.5
1600	86	9282	0	0	1	1	1	16	37	23	5	2	0	0	0	0	0	0	14.2	33.3	46.4	67	77.9	38
1700	82	9364	0	0	0	2	2	12	32	26	6	1	1	0	0	0	0	0	17.1	34	54.9	66	80.5	38.9
1800	77	9441	0	0	0	0	0	12	36	21	7	1	0	0	0	0	0	0	26.2	34.3	45.3	65	84.4	38.3
1900	56	9497	0	0	0	0	2	10	25	17	2	0	0	0	0	0	0	0	23.5	33.1	40.9	44	78.6	36.9
2000	37	9534	0	0	0	0	2	5	13	11	6	0	0	0	0	0	0	0	23.4	34.4	42.8	30	81.1	36.9
2100	24	9558	0	0	0	0	0	5	11	5	1	2	0	0	0	0	0	0	26.9	34.3	49.3	19	79.2	38.9
2200	16	9574	0	0	0	0	1	0	7	3	3	1	0	1	0	0	0	0	24.3	37.4	59.9	15	93.8	42.1
2300	7	9581	0	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	27.8	37	42.7	6	85.7	-
07-19	991	9581	0	1	10	12	29	211	372	269	67	17	3	0	0	0	0	0	7.4	33.1	54.9	728	73.5	38
06-22	1115	9581	0	1	10	12	33	231	424	305	77	19	3	0	0	0	0	0	7.4	33.2	54.9	828	74.3	38
06-00	1138	9581	0	1	10	12	34	232	431	311	83	20	3	1	0	0	0	0	7.4	33.3	59.9	849	74.6	38.3
00-00	1163	9581	0	1	10	12	34	236	445	318	83	20	3	1	0	0	0	0	7.4	33.3	59.9	870	74.8	38.3

Benchmark Data Collection

Mon 26	June	2023	Southbound														Vmin	Mean	Vmax	>PSL	>PSL%	Vpp		
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	4	9585	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	26.3	38.3	55.7	3	75	-
0100	1	9586	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	47.4	47.4	47.4	1	100	-
0200	2	9588	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	29.1	30.4	31.7	1	50	-
0300	4	9592	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	26.9	33.2	47.8	2	50	-
0400	1	9593	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	36.2	36.2	36.2	1	100	-
0500	14	9607	0	0	0	0	0	1	8	2	2	1	0	0	0	0	0	0	28.4	35.5	46	13	92.9	41.2
0600	38	9645	0	0	0	0	0	6	21	7	4	0	0	0	0	0	0	0	26.5	33.5	43	32	84.2	37.8
0700	101	9746	0	0	0	0	1	21	43	30	5	1	0	0	0	0	0	0	23.9	33.6	45.8	79	78.2	37.1
0800	177	9923	0	1	0	2	7	32	84	42	7	2	0	0	0	0	0	0	7.6	32.6	46.4	135	76.3	36.5
0900	102	10025	0	0	0	0	5	27	38	27	3	2	0	0	0	0	0	0	20.2	32.8	46.2	70	68.6	37.1
1000	79	10104	0	0	0	0	5	24	25	17	6	2	0	0	0	0	0	0	22.2	32.7	48.3	50	63.3	37.4
1100	105	10209	0	0	0	2	4	23	41	28	5	2	0	0	0	0	0	0	18.5	32.9	48.7	76	72.4	38.3
1200	109	10318	0	0	0	0	6	35	41	25	2	0	0	0	0	0	0	0	20.1	31.7	40.1	68	62.4	36.5
1300	74	10392	0	0	0	0	5	24	29	13	2	1	0	0	0	0	0	0	21	31.6	49.4	45	60.8	35.3
1400	112	10504	0	0	0	1	4	29	49	23	4	1	1	0	0	0	0	0	18.3	32.5	52	78	69.6	37.6
1500	121	10625	0	0	1	0	8	25	50	28	7	2	0	0	0	0	0	0	13.3	32.6	49.1	87	71.9	38
1600	121	10746	0	0	0	0	0	20	54	35	9	2	1	0	0	0	0	0	26.5	34.3	54.5	101	83.5	38.3
1700	146	10892	0	0	0	1	2	19	62	44	14	3	1	0	0	0	0	0	15.7	34.6	51.2	124	84.9	39.4
1800	118	11010	0	0	0	1	5	16	49	38	8	1	0	0	0	0	0	0	15.4	33.6	48.5	96	81.4	37.6
1900	77	11087	0	0	0	0	1	15	32	23	5	1	0	0	0	0	0	0	24.5	33.6	47.8	61	79.2	37.4
2000	56	11143	0	0	0	0	1	10	24	14	7	0	0	0	0	0	0	0	23.6	33.9	44.6	45	80.4	38.7
2100	27	11170	0	0	0	0	0	6	11	7	3	0	0	0	0	0	0	0	26	33.9	43.9	21	77.8	39.1
2200	17	11187	0	0	0	1	1	4	6	3	2	0	0	0	0	0	0	0	15.9	31.7	41.6	11	64.7	36
2300	11	11198	0	0	0	0	0	7	2	1	0	0	1	0	0	0	0	0	30.4	36.9	59.1	11	100	39.1
07-19	1365	11198	0	1	1	7	52	295	565	350	72	19	3	0	0	0	0	0	7.6	33	54.5	1009	73.9	37.6
06-22	1563	11198	0	1	1	7	54	332	653	401	91	20	3	0	0	0	0	0	7.6	33.1	54.5	1168	74.7	37.6
06-00	1591	11198	0	1	1	8	55	336	666	406	94	20	3	1	0	0	0	0	7.6	33.1	59.1	1190	74.8	37.6
00-00	1617	11198	0	1	1	8	55	341	677	410	96	23	3	2	0	0	0	0	7.6	33.2	59.1	1211	74.9	37.8
Summary			Southbound														Vmin	Mean	Vmax	>PSL	>PSL%	Vpp		
	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin				30	30	85
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
	11198	11198	0	2	38	56	358	2414	4688	2776	687	144	26	6	3	0	0	0	7.4	33.1	61.5	8330	74.4	37.6

Appendix C

Visibility Splays at the Site Access



C:\Users\glester\Motion\StaffSite - Wsthat 2305055\Drawings\2305055-TK01, TK02 And 01.dwg



84 North Street
 Guildford
 Surrey
 GU1 4AU
 T: 01483 531 300

Golden Cross House
 8 Duncannon Street
 London
 WC2N 4JF
 T: 020 8065 5208

www.motion.co.uk

Project:
 Land to the east of the B4009

Title:
 Visibility Splay

Scale: 1:500 (@ A3)

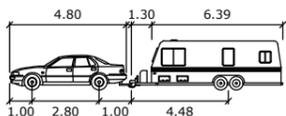
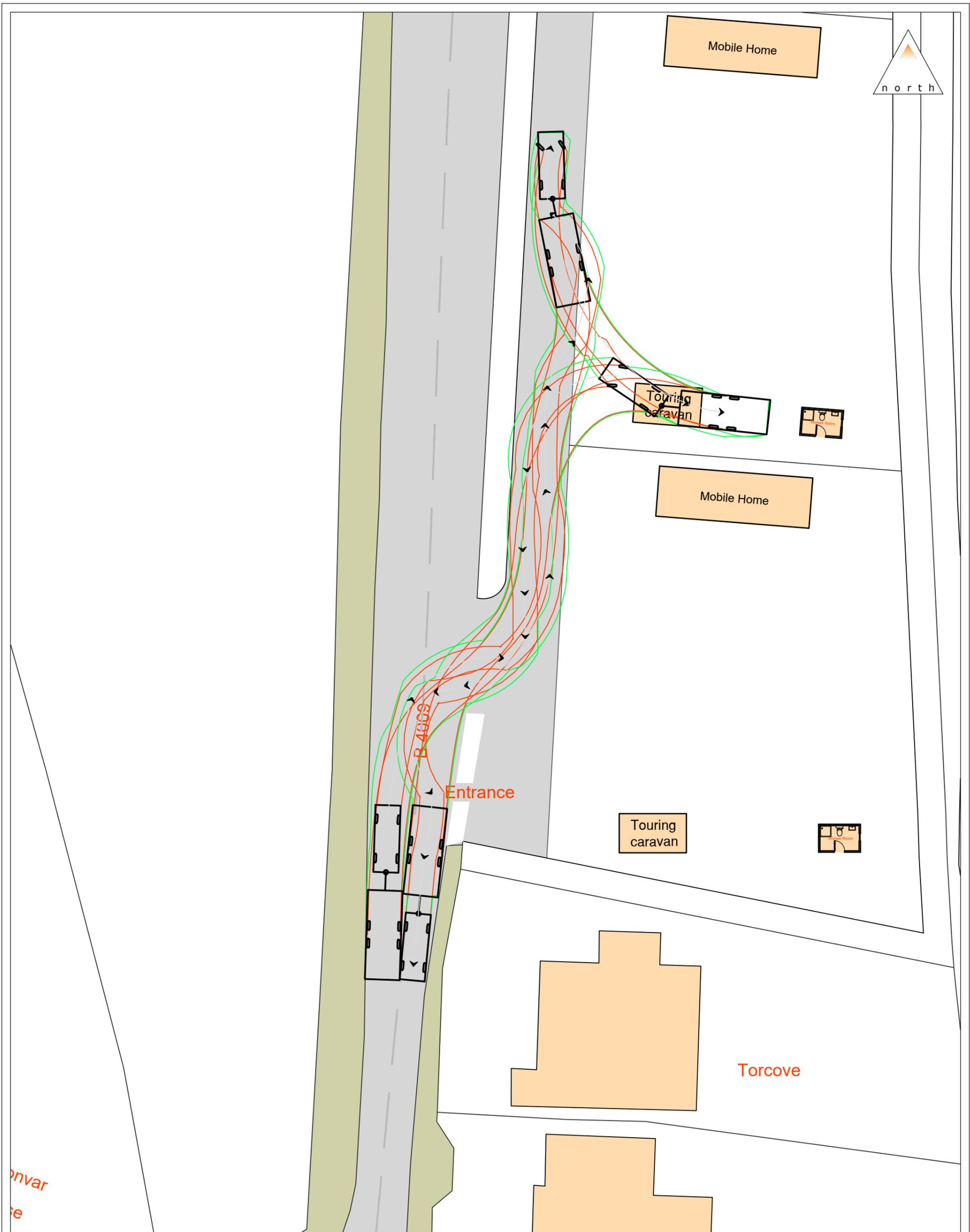
Notes:

Drawing:
 2305055-01

Revision:
 A

Appendix D

Swept Path Analysis



CARAVANE

	metres
Car Width	: 1.80
Trailer Width	: 2.48
Car Track	: 1.75
Trailer Track	: 2.33
Lock to Lock Time	: 6.0
Steering Angle	: 35.9
Articulating Angle	: 70.0



84 North Street
 Guildford
 Surrey
 GU1 4AU
 T: 01483 531 300

Golden Cross House
 8 Duncannon Street
 London
 WC2N 4JF
 T: 020 8065 5208

www.motion.co.uk

Project:
 Land to the east of the B4009

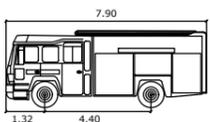
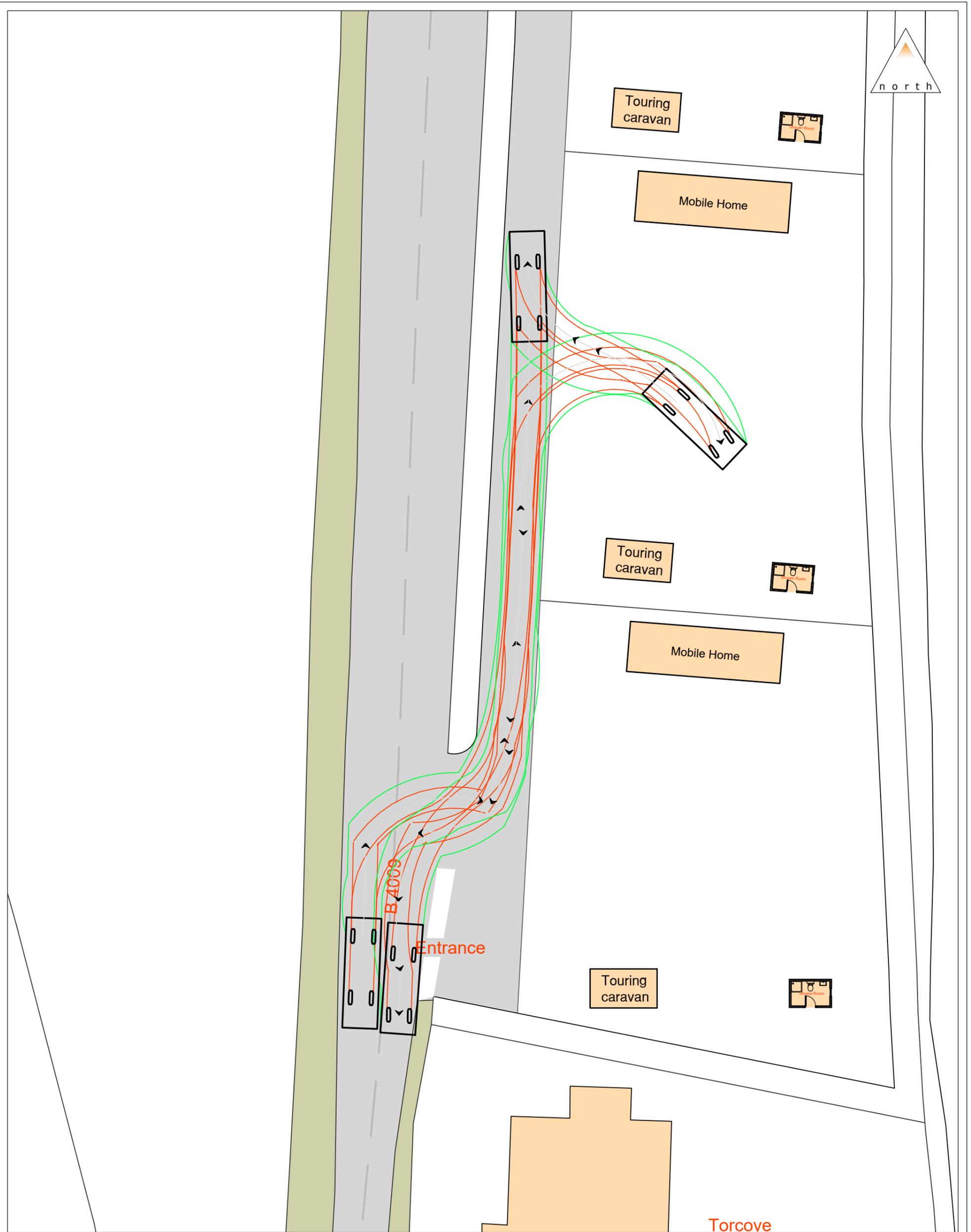
Title:
 Swept Path Analysis
 Car towing a Caravan

Scale: 1:250 (@ A3)

Notes:

Drawing:
 2305055-TK01

Revision:



Pumping Appliance
 meters
 Width : 2.50 Lock to Lock Time : 6.0
 Track : 1.75 Steering Angle : 34.3



84 North Street Golden Cross House
 Guildford 8 Duncannon Street
 Surrey London
 GU1 4AU WC2N 4JF
 T: 01483 531 300 T: 020 8065 5208

www.motion.co.uk

Project:
 Land to the east of the B4009

Title:
 Swept Path Analysis
 Fire Appliance

Scale: 1:250 (@ A3)

Notes:

Drawing:
 2305055-TK02

Revision:

Appendix E

TRICS Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON EN ENFIELD	1 days
02	SOUTH EAST HF HERTFORDSHIRE KC KENT MW MEDWAY	1 days 1 days 1 days
04	EAST ANGLIA NF NORFOLK SF SUFFOLK	1 days 1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE NY NORTH YORKSHIRE	1 days
10	WALES VG VALE OF GLAMORGAN	1 days
15	GREATER DUBLIN DL DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND) DN DONEGAL	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 6 to 19 (units:)
 Range Selected by User: 4 to 20 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 14/09/22

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	7 days

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

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	8

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

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	6 days - Selected

Secondary Filtering selection:

Use Class:

C3	10 days
----	---------

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,000 or Less	1 days
25,001 to 50,000	2 days
50,001 to 75,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	5 days

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

Travel Plan:

Yes	3 days
No	7 days

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

PTAL Rating:

No PTAL Present	9 days
1a (Low) Very poor	1 days

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

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

LIST OF SITES relevant to selection parameters

1	DL-03-A-11 GRACE PARK ROAD DUBLIN WHITEHALL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 19 <i>Survey date: WEDNESDAY 19/05/21</i>	SEMI -DETACHED HOUSES	DUBLIN	<i>Survey Type: MANUAL</i>
2	DN-03-A-06 GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Total No of Dwellings: 6 <i>Survey date: WEDNESDAY 10/10/18</i>	DETACHED HOUSING	DONEGAL	<i>Survey Type: MANUAL</i>
3	EN-03-A-02 DUCHY ROAD HADLEY WOOD Edge of Town Residential Zone Total No of Dwellings: 9 <i>Survey date: WEDNESDAY 14/09/22</i>	DETACHED HOUSES	ENFIELD	<i>Survey Type: MANUAL</i>
4	HF-03-A-04 HOLMSIDE RISE WATFORD SOUTH OXHEY Edge of Town Residential Zone Total No of Dwellings: 8 <i>Survey date: TUESDAY 08/06/21</i>	TERRACED HOUSES	HERTFORDSHIRE	<i>Survey Type: MANUAL</i>
5	KC-03-A-09 WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone Total No of Dwellings: 14 <i>Survey date: WEDNESDAY 09/06/21</i>	MIXED HOUSES & FLATS	KENT	<i>Survey Type: MANUAL</i>
6	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM Edge of Town Residential Zone Total No of Dwellings: 19 <i>Survey date: MONDAY 06/06/22</i>	MIXED HOUSES	MEDWAY	<i>Survey Type: MANUAL</i>
7	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i>	DETACHED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
8	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>	TERRACED HOUSES	NORTH YORKSHIRE	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:	18	
	<i>Survey date: WEDNESDAY</i>	<i>09/09/15</i>	<i>Survey Type: MANUAL</i>
10	VG-03-A-01 ARTHUR STREET BARRY	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
	Edge of Town Residential Zone Total No of Dwellings:	12	
	<i>Survey date: MONDAY</i>	<i>08/05/17</i>	<i>Survey Type: MANUAL</i>

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.83

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13	0.120	10	13	0.272	10	13	0.392
08:00 - 09:00	10	13	0.240	10	13	0.392	10	13	0.632
09:00 - 10:00	10	13	0.096	10	13	0.152	10	13	0.248
10:00 - 11:00	10	13	0.176	10	13	0.208	10	13	0.384
11:00 - 12:00	10	13	0.168	10	13	0.160	10	13	0.328
12:00 - 13:00	10	13	0.232	10	13	0.248	10	13	0.480
13:00 - 14:00	10	13	0.280	10	13	0.272	10	13	0.552
14:00 - 15:00	10	13	0.160	10	13	0.184	10	13	0.344
15:00 - 16:00	10	13	0.224	10	13	0.152	10	13	0.376
16:00 - 17:00	10	13	0.248	10	13	0.192	10	13	0.440
17:00 - 18:00	10	13	0.360	10	13	0.224	10	13	0.584
18:00 - 19:00	10	13	0.240	10	13	0.184	10	13	0.424
19:00 - 20:00	1	9	0.111	1	9	0.111	1	9	0.222
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.766			2.751			5.517

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

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

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Parameter summary

Trip rate parameter range selected: 6 - 19 (units:)
 Survey date date range: 01/01/15 - 14/09/22
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.83

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13	0.224	10	13	0.496	10	13	0.720
08:00 - 09:00	10	13	0.416	10	13	0.768	10	13	1.184
09:00 - 10:00	10	13	0.160	10	13	0.328	10	13	0.488
10:00 - 11:00	10	13	0.272	10	13	0.344	10	13	0.616
11:00 - 12:00	10	13	0.280	10	13	0.272	10	13	0.552
12:00 - 13:00	10	13	0.344	10	13	0.384	10	13	0.728
13:00 - 14:00	10	13	0.480	10	13	0.568	10	13	1.048
14:00 - 15:00	10	13	0.360	10	13	0.368	10	13	0.728
15:00 - 16:00	10	13	0.600	10	13	0.304	10	13	0.904
16:00 - 17:00	10	13	0.472	10	13	0.248	10	13	0.720
17:00 - 18:00	10	13	0.640	10	13	0.408	10	13	1.048
18:00 - 19:00	10	13	0.432	10	13	0.328	10	13	0.760
19:00 - 20:00	1	9	0.222	1	9	0.222	1	9	0.444
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.013			5.038			10.051

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

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