Technical Note

Introduction

1.1 This Technical Note (TN) has been prepared on behalf of LPH UK 1 Ltd (Lysara) in relation to the consultation response from London Borough of Hillingdon (LBH), as Highway Authority on planning application reference 41632/APP/2025/2468.

1.2 The proposals seek to provide an Electric Vehicle (EV) charging station consisting of up to 185 commercial EV car parking spaces including accessible EV spaces alongside accompanying welfare facilities and solar canopies above the parking areas.

1.3 The charging station is proposed to come forward in two phases, with Phase 1 being the provision of 58 EV spaces with Full Planning Permission being sought. Phase 2 proposes an additional 129 EV spaces with Outline Planning Permission being sought, the introduction of which will be dictated by network power availability at the time this comes forward.

1.4 Welfare facilities include a food and beverage (F&B) drive-thru unit to primarily provide refreshments for those using the EV charging station, which would also be available to passing trade on the A4 Bath Road. The F&B unit is part of the Phase 1 development.

1.5 The proposed development takes access from the A4 Bath Road in the form of a simple left-in / left-out junction. As a point of clarification, the A4 Bath Road, in the vicinity of the site access, is currently subject to a 40 mph speed limit.

1.6 This TN responds to the comments made by LBH on 30th October 2025 to cover the following:

- Worst-case scenario modelling;
- Junction impact under future demand;
- Lack of substantive mitigation measures; and
- Pedestrian infrastructure deficiencies.

Scenario Modelling – Sensitivity Testing

1.7 LBH have commented that the Transport Assessment (TA) does not account for a worst-case operational scenario such as all 185 EV spaces being occupied and a higher trip generating F&B operator occupying the site.

1.8 In the TA, average trip rates derived from TRICS were used to estimate the trip attraction of the F&B unit. In their consultation response, LBH have said that the applicant should assess the impact of a higher-attraction use, based on 85th percentile trip attraction.

1.9 As shown in **Appendix A**, a rank order assessment in TRICS has identified the 85th percentile site, being the one with the highest vehicle trip rates of the 4 sites used in the TA. The trip rates for this site are included in **Appendix A**. along with the resulting trip attraction for the F&B unit with a GFA of 167sqm.

1.10 The same TRICS rank order assessment approach has been taken for the EV charging station and the trip rates for the 85th percentile site are included in **Appendix B** along with the resulting 85th percentile trip attraction for 185 EV spaces.

1.11 The 85th percentile vehicle trip attraction for the F&B units and the EV charging station (185 spaces) for the weekday AM and PM peak hours are summarised in **Table 1**. As in Table 6.2 of the TA, the trip attraction for the F&B unit assumes that 50% of customers will use the EV charging station to park and walk across to the F&B unit while their vehicle is charging. This assumption has been accepted by LBH.

Arm	EV Spaces		F&B Unit		Total	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
AM Peak	0	46	19	17	19	63
PM Peak	46	69	4	6	50	75

Table 1: Weekday Peak Hour Development Vehicle Movements - 85th Percentile Trip Rates

Junction Impact Assessment – Sensitivity Testing

1.12 The site access junction onto the A4 Bath Road has been tested with Junctions 11 for the year 2030, with an 85th percentile trip attraction. The Junctions 11 output, summarised in **Table 2**, is included in **Appendix C** and shows that the Ratio of Flow to Capacity (RFC) is slightly higher than reported in the TA, but still significantly within capacity. An RFC of less than 0.85 indicates that a junction will perform satisfactorily.

Arm	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Max RFC	Max Queue	Max RFC	Max Queue
Site Access	0.11	0.1	0.13	0.2
A4 Bath Road Eastbound	0	0	0	0

Table 2: Junction Modelling Results – 85th Percentile Vehicle Attraction

1.13 This TRICS assessment is believed to provide a robust assessment of trip attraction of the EV charging station. In addition, pass-by trips have not been removed from the ahead movement on the A4.

1.14 Notwithstanding this, as a sensitivity test and to provide comfort to LBH that the site access will operate satisfactorily under a potentially higher parking demand future scenario, the Junctions 11 model has been run with an additional sensitivity test whereby all of the 185 EV parking spaces turn over once during weekday peak hours (i.e. 185 arrivals and 185 departures during the AM and PM peak in addition to the 85th percentile F&B vehicle trip attraction), which is considered an unlikely scenario. This shows that the junction would operate with a maximum RFC of 0.35, which is well within design capacity (0.85).

Other Points

Internal Vehicles Queuing

1.15 During the pre-application process LBH said '*The greatest concern of the HA is ensuring that any queuing of vehicles onto the A4 should be designed out for highway safety reasons, given the proximity of the F&B unit near the entrance the concern relates to vehicles including large service vehicles, entering the site and others using the F&B unit car park, being fully occupied, there is the likelihood that incoming traffic could be blocked/obstructed by vehicles waiting for parking or vehicles egressing from the F&B unit, blocking traffic for queuing to occur. Therefore, the F&B unit should be located further into the site, particularly so if available to pass-by traffic, and vehicles should be able to enter the site without hinderance'*

1.16 To respond to this, the layout of the site submitted for planning has the points of access to the F&B unit and the EV parking areas located towards the rear of the site to maximise stacking space to the Bath Road junction and minimise the potential impact of any vehicles waiting for a parking space.

1.17 In terms of mitigation measures, LBH have proposed advanced signage on the A4 indicating real-time car park capacity. Lysara, the applicant, anticipate providing their own real-time signage and so would be happy to discuss this with LBH and TfL (as Highway Authority for the A4). The provision of this would allow drivers on the A4 to make an informed decision on whether to stop at the charging station based on the number of free EV parking spaces and minimise the risk of vehicles queuing for available spaces.

Vehicle Trip Distribution

1.18 Given its proximity to the A4, it is anticipated that the charging station will attract a high level of pass-by traffic, as a petrol filling station might, along with traffic that is already in the local area. Although some of the EV spaces are to be reserved for contracted parking, the majority of EV spaces will be available to the public and so it is not possible to quantify the level of attraction from Heathrow Airport, for example.

Mitigation Measures

1.19 In addition to investigating advanced signage on the A4 indicating real-time car park capacity, Lysara will consider introducing a booking system for managing traffic movements at the site. These measures can be included in the Travel Plan for the site.

Pedestrian Infrastructure

1.20 The TA identified missing tactile paving at crossing points between the site and West Drayton, as nearest town centre and rail station. The development would be willing to provide a fair and proportional sustainable transport contribution for these improvements to accord with London Plan and LBH Local Plan Policy.

Author: KC
Date: 14th November 2025

APPENDIX A: TRICS 85th Percentile Assessment – F&B Unit

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 06 - HOTEL, FOOD & DRINK

Category: J - DRIVE THROUGH COFFEE SHOP

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 day
08	**NORTH WEST**		
	MS	MERSEYSIDE	1 day
09	**NORTH**		
	CU	CUMBERLAND	2 days

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

Primary Filtering Selection:

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

Parameter:	GFA
Actual Range:	185 to 245 (units:sqm)
Range Selected by User:	185 to 245 (units:sqm)
Parking Spaces Range:	9 - 36

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 20/06/24

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

Selected survey days:

Friday	1 days
Thursday	1 days
Tuesday	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	4
Direction ATC Count	0

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

Selected Locations:

Edge of Town	2 days
Free Standing	1 days
Suburban Area	1 days

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

Selected Location Sub Categories:

Commercial Zone	1 days
Industrial Zone	1 days
No Sub Category	1 days
Out of Town	1 days

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 Vehicle Counts:

Servicing vehicles Excluded	2 days
Servicing vehicles Included	2 days

Secondary Filtering Selection:

Use Class:

Not Known	4 surveys

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:

0 - 3482

Population within 1 mile:

1,000 or Less	1 surveys
1,001 to 5,000	2 surveys
25,001 to 50,000	1 surveys

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

Population within 5 miles:

100,001 to 125,000	2 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	1 surveys

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

Car ownership within 5 miles:

1.1 to 1.5	3 surveys
1.6 to 2.0	1 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	4 surveys

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	4 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

LIST OF SITES relevant to selection parameters:

Site 1:	CU-06-J-03	**Gross floor area:**	225 sqm
Development Name:	COSTA COFFEE	**Number of seats:**	80 SEATS
Location:	CARLISLE	**Parking Spaces:**	26.00
Postcode:	CA3 0GW		
Main Location Type:	Edge of Town		
Sub Location Type:	Commercial Zone		
PTAL:	n/a		

Site 2:	CU-06-J-04	**Gross floor area:**	225 sqm
Development Name:	COSTA COFFEE	**Number of seats:**	95 SEATS
Location:	CARLISLE	**Parking Spaces:**	28.00
Postcode:	CA1 2PD		
Main Location Type:	Suburban Area		
Sub Location Type:	No Sub Category		
PTAL:	n/a		

Site 3:	HC-06-J-02	**Gross floor area:**	215 sqm
Development Name:	STARBUCKS	**Number of seats:**	36 SEATS
Location:	NEAR BASINGSTOKE	**Parking Spaces:**	36.00
Postcode:	SO21 3BE		
Main Location Type:	Free Standing		
Sub Location Type:	Out of Town		
PTAL:	n/a		

Site 4:	MS-06-J-02	**Gross floor area:**	245 sqm
Development Name:	STARBUCKS	**Number of seats:**	55 SEATS
Location:	LIVERPOOL	**Parking Spaces:**	29.00
Postcode:	L33 7AL		
Main Location Type:	Edge of Town		
Sub Location Type:	Industrial Zone		
PTAL:	n/a		

RANK ORDER for Land Use 06 - HOTEL, FOOD & DRINK/J - DRIVE THROUGH COFFEE SHOP:
Total Vehicles
Ranking Type: **TOTALS** Time Range: 06:00-18:00 CALCULATION FACTOR: sqm GFA
15th Percentile = No. **4** HC-06-J-02 Totals: 180.465
85th Percentile = No. **1** CU-06-J-04 Totals: 346.667

Median Values		Mean Values	
Arrivals:	105.714	Arrivals:	126.431
Departures:	106.122	Departures:	125.756
Totals:	211.837	Totals:	252.187

Rank	Site-Ref	Description	Town/City	GFA	Day	Date	Trip Rate (Sorted by totals)		
							Arrivals	Departures	Totals
1	**CU-06-J-04**	**COSTA COFFEE**	**CARLISLE**	**225**	**Fri**	**06/21/24**	**173.778**	**172.889**	**346.667**
2	CU-06-J-03	COSTA COFFEE	CARLISLE	225	Thu	06/20/24	136.000	133.778	269.778
3	MS-06-J-02	STARBUCKS	LIVERPOOL	245	Wed	05/01/24	105.714	106.122	211.837
4	**HC-06-J-02**	**STARBUCKS**	**NEAR BASINGSTOKE**	**215**	**Tue**	**05/16/23**	**90.233**	**90.233**	**180.465**

Filtering Summary:

Land Use: 06/J HOTEL, FOOD & DRINK/DRIVE THROUGH COFFEE SHOP

Selected Trip Rate Calculation Parameter Range: 185 - 245 sqm GFA

Actual Trip Rate Calculation Parameter Range: 185 - 245 sqm GFA

Date Range: Minimum: 01/01/2016 Maximum: 20/06/2024

Parking Spaces Range: All Surveys Selected

Population Within 500m Range: All Surveys Selected

Days of the week selected:

Friday	1

Main Location Types selected:

Suburban Area	1

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	1

Population <1 Mile ranges selected:

25,001 to 50,000	1

Population <5 Mile ranges selected:

100,001 to 125,000	1

Car Ownership <5 Mile ranges selected:

1.1 to 1.5	1

PTAL Rating:

No PTAL Present	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 06 - HOTEL, FOOD & DRINK

Category: J - DRIVE THROUGH COFFEE SHOP

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

09	**NORTH**		
	CU	CUMBERLAND	1 day

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:	GFA
Actual Range:	185 to 245 (units:sqm)
Range Selected by User:	185 to 245 (units:sqm)
Parking Spaces Range:	9 - 36

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 20/06/24

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

Selected survey days:

Friday	1 days

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

Selected survey types:

Manual count	1
Direction ATC Count	0

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

Selected Locations:

Suburban Area	1 days

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

Selected Location Sub Categories:

No Sub Category	1 days

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 Vehicle Counts:

Servicing vehicles Excluded	1 days

Secondary Filtering Selection:

Use Class:

Not Known	1 surveys

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:

0 - 3482

Population within 1 mile:

25,001 to 50,000	1 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys

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

Car ownership within 5 miles:

1.1 to 1.5	1 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	1 surveys

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	1 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

LIST OF SITES relevant to selection parameters:

Site 1:	CU-06-J-04	**Gross floor area:**	225 sqm
Development Name:	COSTA COFFEE	**Number of seats:**	95 SEATS
Location:	CARLISLE	**Parking Spaces:**	28.00
Postcode:	CA1 2PD	**Survey Date:**	21/06/2024
Main Location Type:	Suburban Area	**Survey Day:**	Friday
Sub Location Type:	No Sub Category		
PTAL:	n/a		

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
CU-06-J-03	20-06-2024	Not 85%ile
HC-06-J-02	16-05-2023	Not 85%ile
MS-06-J-02	01-05-2024	Not 85%ile

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/J - DRIVE THROUGH COFFEE SHOP

Total Vehicles

Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
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	**1**	**225**	**3.111**	**2.667**	**5.778**
07:00-08:00	**1**	**225**	**12.889**	**11.111**	**24.000**
08:00-09:00	**1**	**225**	**22.222**	**20.889**	**43.111**
09:00-10:00	**1**	**225**	**15.556**	**12.444**	**28.000**
10:00-11:00	**1**	**225**	**15.111**	**14.667**	**29.778**
11:00-12:00	**1**	**225**	**19.111**	**16.000**	**35.111**
12:00-13:00	**1**	**225**	**21.333**	**25.778**	**47.111**
13:00-14:00	**1**	**225**	**12.000**	**12.444**	**24.444**
14:00-15:00	**1**	**225**	**21.778**	**22.667**	**44.445**
15:00-16:00	**1**	**225**	**16.444**	**16.000**	**32.444**
16:00-17:00	**1**	**225**	**9.333**	**10.667**	**20.000**
17:00-18:00	**1**	**225**	**4.889**	**7.556**	**12.445**
18:00-19:00	**1**	**225**	**2.667**	**3.556**	**6.223**
19:00-20:00	**1**	**225**	**2.667**	**2.222**	**4.889**
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**179.111**	**178.668**	**357.779**

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

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

Parameter Summary:

Trip rate parameter range selected:	185 - 245 (units: sqm)
Survey date date range:	21/06/2024 - 21/06/2024
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

Site Name:	LNCPHeathrow	
Calculation Factor:	100	sqm
GFA:	167	sqm

Development Scenario:	Proposed Development - Drive Through Coffee Shop
Trip Rate for:	TOTAL VEHICLES 50% Linked Trips

	ARRIVALS			DEPARTURES			TOTALS			TRIPS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	Arr.	Dep.
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	1	225	3.111	1	225	2.667	1	225	5.778	3	2
07:00-08:00	1	225	12.889	1	225	11.111	1	225	24.000	11	9
08:00-09:00	1	225	22.222	1	225	20.889	1	225	43.111	19	17
09:00-10:00	1	225	15.556	1	225	12.444	1	225	28.000	13	10
10:00-11:00	1	225	15.111	1	225	14.667	1	225	29.778	13	12
11:00-12:00	1	225	19.111	1	225	16.000	1	225	35.111	16	13
12:00-13:00	1	225	21.333	1	225	25.778	1	225	47.111	18	22
13:00-14:00	1	225	12.000	1	225	12.444	1	225	24.444	10	10
14:00-15:00	1	225	21.778	1	225	22.667	1	225	44.445	18	19
15:00-16:00	1	225	16.444	1	225	16.000	1	225	32.444	14	13
16:00-17:00	1	225	9.333	1	225	10.667	1	225	20.000	8	9
17:00-18:00	1	225	4.889	1	225	7.556	1	225	12.445	4	6
18:00-19:00	1	225	2.667	1	225	3.556	1	225	6.223	2	3
19:00-20:00	1	225	2.667	1	225	2.222	1	225	4.889	2	2
20:00-21:00											
21:00-22:00											
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			179.111			178.668			357.779	150	149

APPENDIX B: TRICS 85th Percentile Assessment – EV Charging Station

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 13 - PETROL FILLING STATIONS

Category: C - ELECTRIC VEHICLE CHARGING STATION

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	EX	ESSEX	1 day
05	**EAST MIDLANDS**		
	NN	NORTH NORTHAMPTONSHIRE	1 day
06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 day

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:	BAYS
Actual Range:	2 to 8 (units:BAYS)
Range Selected by User:	8 to 8 (units:BAYS)
Parking Spaces Range:	0 - 0

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 28/06/24

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

Selected survey days:

Monday	1 days
Thursday	1 days
Tuesday	1 days

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

Selected survey types:

Manual count	3
Direction ATC Count	0

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

Selected Locations:

Edge of Town	1 days
Edge of Town Centre	1 days
Suburban Area	1 days

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

Selected Location Sub Categories:

No Sub Category	1 days
Residential Zone	2 days

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 Vehicle Counts:

Servicing vehicles Excluded	3 days

Secondary Filtering Selection:

Use Class:

Sui Generis	3 surveys

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:

0 - 0

Population within 1 mile:

25,001 to 50,000	3 surveys

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

Population within 5 miles:

250,001 to 500,000	1 surveys
500,001 or More	1 surveys
75,001 to 100,000	1 surveys

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	1 surveys
1.1 to 1.5	2 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	3 surveys

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	3 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

LIST OF SITES relevant to selection parameters:

Site 1:	EX-13-C-01	**Site area:**	0.01 hect
Development Name:	BP PULSE	**Charging bays:**	8 BAYS
Location:	BRAINTREE		
Postcode:	CM7 3QL		
Main Location Type:	Edge of Town Centre		
Sub Location Type:	Residential Zone		
PTAL:	n/a		

Site 2:	NN-13-C-01	**Site area:**	0.01 hect
Development Name:	ECONETIQ	**Charging bays:**	8 BAYS
Location:	CORBY		
Postcode:	NN17 5GT		
Main Location Type:	Edge of Town		
Sub Location Type:	Residential Zone		
PTAL:	n/a		

Site 3:	WM-13-C-01	**Site area:**	0.02 hect
Development Name:	MFG	**Charging bays:**	8 BAYS
Location:	BIRMINGHAM		
Postcode:	B19 3TZ		
Main Location Type:	Suburban Area		
Sub Location Type:	No Sub Category		
PTAL:	n/a		

RANK ORDER for Land Use 13 - PETROL FILLING STATIONS/C - ELECTRIC VEHICLE CHARGING STATION:
Total Vehicles
Ranking Type: **TOTALS** Time Range: 07:00-21:00 CALCULATION FACTOR: BAYS BAYS
15th Percentile = No. **3** EX-13-C-01 Totals: 1.625
85th Percentile = No. **1** WM-13-C-01 Totals: 5.750

Median Values		Mean Values	
Arrivals:	2.25	Arrivals:	2.000
Departures:	2.375	Departures:	2.000
Totals:	4.625	Totals:	4.000

Rank	Site-Ref	Description	Town/City	BAYS	Day	Date	Trip Rate (Sorted by totals)		
							Arrivals	Departures	Totals
1	**WM-13-C-01**	**MFG**	**BIRMINGHAM**	**8**	**Tue**	**06/06/23**	**2.875**	**2.875**	**5.750**
2	NN-13-C-01	ECONETIQ	CORBY	8	Thu	04/18/24	2.250	2.375	4.625
3	**EX-13-C-01**	**BP PULSE**	**BRAINTREE**	**8**	**Mon**	**03/25/24**	**0.875**	**0.750**	**1.625**

Audit Code: 090c539f-8b49-41d3-b577-e849d6d09a51

Filtering Summary:

Land Use: 13/C PETROL FILLING STATIONS/ELECTRIC VEHICLE CHARGING STATION

Selected Trip Rate Calculation Parameter Range: 8 - 8 BAYS

Actual Trip Rate Calculation Parameter Range: 2 - 8 BAYS

Date Range: Minimum: 01/01/2016 Maximum: 28/06/2024

Parking Spaces Range: All Surveys Selected

Population Within 500m Range: 4622 4622

Days of the week selected:

Tuesday	1

Main Location Types selected:

Suburban Area	1

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	1

Population <1 Mile ranges selected:

25,001 to 50,000	1

Population <5 Mile ranges selected:

500,001 or More	1

Car Ownership <5 Mile ranges selected:

0.6 to 1.0	1

PTAL Rating:

No PTAL Present	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 13 - PETROL FILLING STATIONS

Category: C - ELECTRIC VEHICLE CHARGING STATION

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 day

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:	BAYS
Actual Range:	2 to 8 (units:BAYS)
Range Selected by User:	8 to 8 (units:BAYS)
Parking Spaces Range:	0 - 0

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 28/06/24

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

Selected survey days:

Tuesday	1 days

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

Selected survey types:

Manual count	1
Direction ATC Count	0

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

Selected Locations:

Suburban Area	1 days

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

Selected Location Sub Categories:

No Sub Category	1 days

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 Vehicle Counts:

Servicing vehicles Excluded	1 days

Secondary Filtering Selection:

Use Class:

Sui Generis	1 surveys

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:

1706 - 5275

Population within 1 mile:

25,001 to 50,000	1 surveys

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

Population within 5 miles:

500,001 or More	1 surveys

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	1 surveys

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.

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	1 surveys

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	1 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

No

LIST OF SITES relevant to selection parameters:

Site 1:	WM-13-C-01	**Site area:**	0.02 hect
Development Name:	MFG	**Charging bays:**	8 BAYS
Location:	BIRMINGHAM	**Survey Date:**	06/06/2023
Postcode:	B19 3TZ	**Survey Day:**	Tuesday
Main Location Type:	Suburban Area		
Sub Location Type:	No Sub Category		
PTAL:	n/a		

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
EX-13-C-01	25-03-2024	Not 85%ile
NN-13-C-01	18-04-2024	Not 85%ile

TRIP RATE for Land Use 13 - PETROL FILLING STATIONS/C - ELECTRIC VEHICLE CHARGING STATION

Total Vehicles

Calculation factor: 1 BAYS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. BAYS	Arrivals	Departures	Totals
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	**1**	**8**	**0.000**	**0.000**	**0.000**
07:00-08:00	**1**	**8**	**0.375**	**0.125**	**0.500**
08:00-09:00	**1**	**8**	**0.000**	**0.250**	**0.250**
09:00-10:00	**1**	**8**	**0.500**	**0.125**	**0.625**
10:00-11:00	**1**	**8**	**0.125**	**0.250**	**0.375**
11:00-12:00	**1**	**8**	**0.125**	**0.250**	**0.375**
12:00-13:00	**1**	**8**	**0.000**	**0.125**	**0.125**
13:00-14:00	**1**	**8**	**0.250**	**0.125**	**0.375**
14:00-15:00	**1**	**8**	**0.375**	**0.375**	**0.750**
15:00-16:00	**1**	**8**	**0.250**	**0.125**	**0.375**
16:00-17:00	**1**	**8**	**0.250**	**0.250**	**0.500**
17:00-18:00	**1**	**8**	**0.250**	**0.375**	**0.625**
18:00-19:00	**1**	**8**	**0.250**	**0.250**	**0.500**
19:00-20:00	**1**	**8**	**0.125**	**0.125**	**0.250**
20:00-21:00	**1**	**8**	**0.000**	**0.125**	**0.125**
21:00-22:00	**1**	**8**	**0.000**	**0.000**	**0.000**
22:00-23:00					
23:00-00:00					
Total Rates:			**2.875**	**2.875**	**5.750**

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

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

Parameter Summary:

Trip rate parameter range selected:	8 - 8 (units: BAYS)
Survey date date range:	06/06/2023 - 06/06/2023
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

Site Name:	LNCPHeathrow	
Calculation Factor:	1	Bay
EV Bays	185	Bays

Development Scenario:	Proposed Development - EV Charging Station
Trip Rate for:	TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS			TRIPS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	Arr.	Dep.
Time Range	Days	Bays	Rate	Days	Bays	Rate	Days	Bays	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	1	8	0.000	1	8	0.000	1	8	0.000	0	0
07:00-08:00	1	8	0.375	1	8	0.125	1	8	0.500	69	23
08:00-09:00	1	8	0.000	1	8	0.250	1	8	0.250	0	46
09:00-10:00	1	8	0.500	1	8	0.125	1	8	0.625	93	23
10:00-11:00	1	8	0.125	1	8	0.250	1	8	0.375	23	46
11:00-12:00	1	8	0.125	1	8	0.250	1	8	0.375	23	46
12:00-13:00	1	8	0.000	1	8	0.125	1	8	0.125	0	23
13:00-14:00	1	8	0.250	1	8	0.125	1	8	0.375	46	23
14:00-15:00	1	8	0.375	1	8	0.375	1	8	0.750	69	69
15:00-16:00	1	8	0.250	1	8	0.125	1	8	0.375	46	23
16:00-17:00	1	8	0.250	1	8	0.250	1	8	0.500	46	46
17:00-18:00	1	8	0.250	1	8	0.375	1	8	0.625	46	69
18:00-19:00	1	8	0.250	1	8	0.250	1	8	0.500	46	46
19:00-20:00	1	8	0.125	1	8	0.125	1	8	0.250	23	23
20:00-21:00	1	8	0.000	1	8	0.125	1	8	0.125	0	23
21:00-22:00	1	8	0.000	1	8	0.000	1	8	0.000	0	0
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			2.875			2.875			5.750	532	532

APPENDIX C: Junction Impact Assessment – Sensitivity Testing

Junctions 11

PICADY 11 - Priority Intersection Module

Filename: 2025-11-12 A4-Site Access (sensitivity test).j11
Path: H:_Planning Woking\Current Jobs\LNCPHeathrow\Analysis\Picady
Report generation date: 12/11/2025 09:40:48

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2030 - + Development											
Stream B-AC	D1	0.1	6.04	0.08	A	245 %	D2	0.1	6.54	0.12	A	182 %
Stream C-AB		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]
	2030 - + Development [85th%ile sites]											
Stream B-AC	D3	0.1	6.25	0.11	A	215 %	D4	0.2	6.64	0.13	A	173 %
Stream C-AB		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]
	2030 - + Development [all 185 EV bays occupied]											
Stream B-AC	D5	0.5	8.85	0.35	A	79 %	D6	0.5	8.95	0.34	A	77 %
Stream C-AB		0.0	0.00	0.00	A	[Stream B-AC]		0.0	0.00	0.00	A	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	05/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MAYERBROWN2K\kchaney
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	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

PICADY short flare model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
PICADY 4.1		✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030	+ Development	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15
D2	2030	+ Development	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15
D3	2030	+ Development [85th%ile sites]	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15
D4	2030	+ Development [85th%ile sites]	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15
D5	2030	+ Development [all 185 EV bays occupied]	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15
D6	2030	+ Development [all 185 EV bays occupied]	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

D1 - 2030 | + Development | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		0.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	245	Stream B-AC	0.40	A

Arms

Arms

Arm	Name	Description	Arm type
A	A4 Bath Road Eastbound		Major
B	Site Access		Minor
C	A4 Bath Road Westbound		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.35	✓	0.00			✓	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.89	250	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	712	0.128	0.323	0.203	0.461
B-C	798	0.087	0.219	-	-
C-B	574	0.188	0.188	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030	+ Development	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	567	100.000
B		✓	46	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	24	543
	B	0	0	46
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	6.04	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	35	0.00	694	0.050	34	0.1	5.455	A
C-AB	0	0.00	483	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	18	0.00			18			
A-C	467	0.00			467			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	0.00	674	0.061	41	0.1	5.689	A
C-AB	0	0.00	465	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	22	0.00			22			
A-C	558	0.00			558			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	0.00	646	0.078	51	0.1	6.044	A
C-AB	0	0.00	440	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	26	0.00			26			
A-C	683	0.00			683			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	0.00	646	0.078	51	0.1	6.044	A
C-AB	0	0.00	440	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	26	0.00			26			
A-C	683	0.00			683			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	0.00	674	0.061	41	0.1	5.690	A
C-AB	0	0.00	465	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	22	0.00			22			
A-C	558	0.00			558			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	35	0.00	694	0.050	35	0.1	5.458	A
C-AB	0	0.00	483	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	18	0.00			18			
A-C	467	0.00			467			

D2 - 2030 | + Development | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		0.53	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	182	Stream B-AC	0.53	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030	+ Development	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	695	100.000
B		✓	67	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	66	629
	B	0	0	67
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	6.54	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	0.00	679	0.074	50	0.1	5.719	A
C-AB	0	0.00	466	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	50	0.00			50			
A-C	523	0.00			523			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	0.00	656	0.092	60	0.1	6.039	A
C-AB	0	0.00	445	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	59	0.00			59			
A-C	624	0.00			624			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	0.00	624	0.118	74	0.1	6.535	A
C-AB	0	0.00	416	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	73	0.00			73			
A-C	765	0.00			765			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	0.00	624	0.118	74	0.1	6.538	A
C-AB	0	0.00	416	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	73	0.00			73			
A-C	765	0.00			765			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	0.00	656	0.092	60	0.1	6.042	A
C-AB	0	0.00	445	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	59	0.00			59			
A-C	624	0.00			624			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	0.00	679	0.074	51	0.1	5.727	A
C-AB	0	0.00	466	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	50	0.00			50			
A-C	523	0.00			523			

D3 - 2030 | + Development [85th%ile sites] | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		0.57	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	215	Stream B-AC	0.57	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030	+ Development [85th%ile sites]	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	562	100.000
B		✓	64	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	19	543
	B	0	0	64
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	6.25	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	0.00	695	0.069	48	0.1	5.564	A
C-AB	0	0.00	483	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	14	0.00			14			
A-C	467	0.00			467			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	58	0.00	674	0.085	57	0.1	5.835	A
C-AB	0	0.00	466	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	17	0.00			17			
A-C	558	0.00			558			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	0.00	647	0.109	70	0.1	6.245	A
C-AB	0	0.00	441	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	21	0.00			21			
A-C	683	0.00			683			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	0.00	647	0.109	70	0.1	6.247	A
C-AB	0	0.00	441	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	21	0.00			21			
A-C	683	0.00			683			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	58	0.00	674	0.085	58	0.1	5.837	A
C-AB	0	0.00	466	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	17	0.00			17			
A-C	558	0.00			558			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	0.00	695	0.069	48	0.1	5.570	A
C-AB	0	0.00	483	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	14	0.00			14			
A-C	467	0.00			467			

D4 - 2030 | + Development [85th%ile sites] | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		0.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	173	Stream B-AC	0.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030	+ Development [85th%ile sites]	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	679	100.000
B		✓	76	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	50	629
	B	0	0	76
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	6.64	0.2	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	0.00	680	0.084	57	0.1	5.772	A
C-AB	0	0.00	468	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	38	0.00			38			
A-C	523	0.00			523			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	0.00	657	0.104	68	0.1	6.109	A
C-AB	0	0.00	448	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	45	0.00			45			
A-C	624	0.00			624			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	0.00	626	0.134	84	0.2	6.636	A
C-AB	0	0.00	420	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	55	0.00			55			
A-C	765	0.00			765			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	0.00	626	0.134	84	0.2	6.639	A
C-AB	0	0.00	420	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	55	0.00			55			
A-C	765	0.00			765			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	0.00	657	0.104	68	0.1	6.115	A
C-AB	0	0.00	448	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	45	0.00			45			
A-C	624	0.00			624			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	0.00	680	0.084	57	0.1	5.780	A
C-AB	0	0.00	468	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	38	0.00			38			
A-C	523	0.00			523			

D5 - 2030 | + Development [all 185 EV bays occupied] | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		1.74	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	79	Stream B-AC	1.74	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030	+ Development [all 185 EV bays occupied]	AM	A4 Eastbound with bus lane excluded.	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	747	100.000
B		✓	202	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	204	543
	B	0	0	202
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.35	8.85	0.5	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	152	0.00	682	0.223	151	0.3	6.760	A
C-AB	0	0.00	457	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	154	0.00			154			
A-C	467	0.00			467			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	0.00	660	0.275	181	0.4	7.519	A
C-AB	0	0.00	434	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	183	0.00			183			
A-C	558	0.00			558			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	222	0.00	629	0.354	222	0.5	8.826	A
C-AB	0	0.00	403	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	225	0.00			225			
A-C	683	0.00			683			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	222	0.00	629	0.354	222	0.5	8.854	A
C-AB	0	0.00	403	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	225	0.00			225			
A-C	683	0.00			683			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	0.00	660	0.275	182	0.4	7.544	A
C-AB	0	0.00	434	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	183	0.00			183			
A-C	558	0.00			558			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	152	0.00	682	0.223	152	0.3	6.796	A
C-AB	0	0.00	457	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	154	0.00			154			
A-C	467	0.00			467			

D6 - 2030 | + Development [all 185 EV bays occupied] | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	NCP Heathrow Access	T-Junction	Entry Only	Two-way	Exit Only		1.59	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	77	Stream B-AC	1.59	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030	+ Development [all 185 EV bays occupied]	PM	A4 Eastbound with bus lane excluded.	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	818	100.000
B		✓	191	100.000
C		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	189	629
	B	0	0	191
	C	0	0	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.34	8.95	0.5	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	0.00	671	0.214	143	0.3	6.797	A
C-AB	0	0.00	449	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	142	0.00			142			
A-C	523	0.00			523			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	0.00	647	0.266	171	0.4	7.570	A
C-AB	0	0.00	424	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	170	0.00			170			
A-C	624	0.00			624			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	0.00	613	0.343	210	0.5	8.920	A
C-AB	0	0.00	391	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	208	0.00			208			
A-C	765	0.00			765			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	0.00	613	0.343	210	0.5	8.948	A
C-AB	0	0.00	391	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	208	0.00			208			
A-C	765	0.00			765			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	172	0.00	647	0.266	172	0.4	7.598	A
C-AB	0	0.00	424	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	170	0.00			170			
A-C	624	0.00			624			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	0.00	671	0.214	144	0.3	6.833	A
C-AB	0	0.00	449	0.000	0	0.0	0.000	A
C-A	0	0.00			0			
A-B	142	0.00			142			
A-C	523	0.00			523			