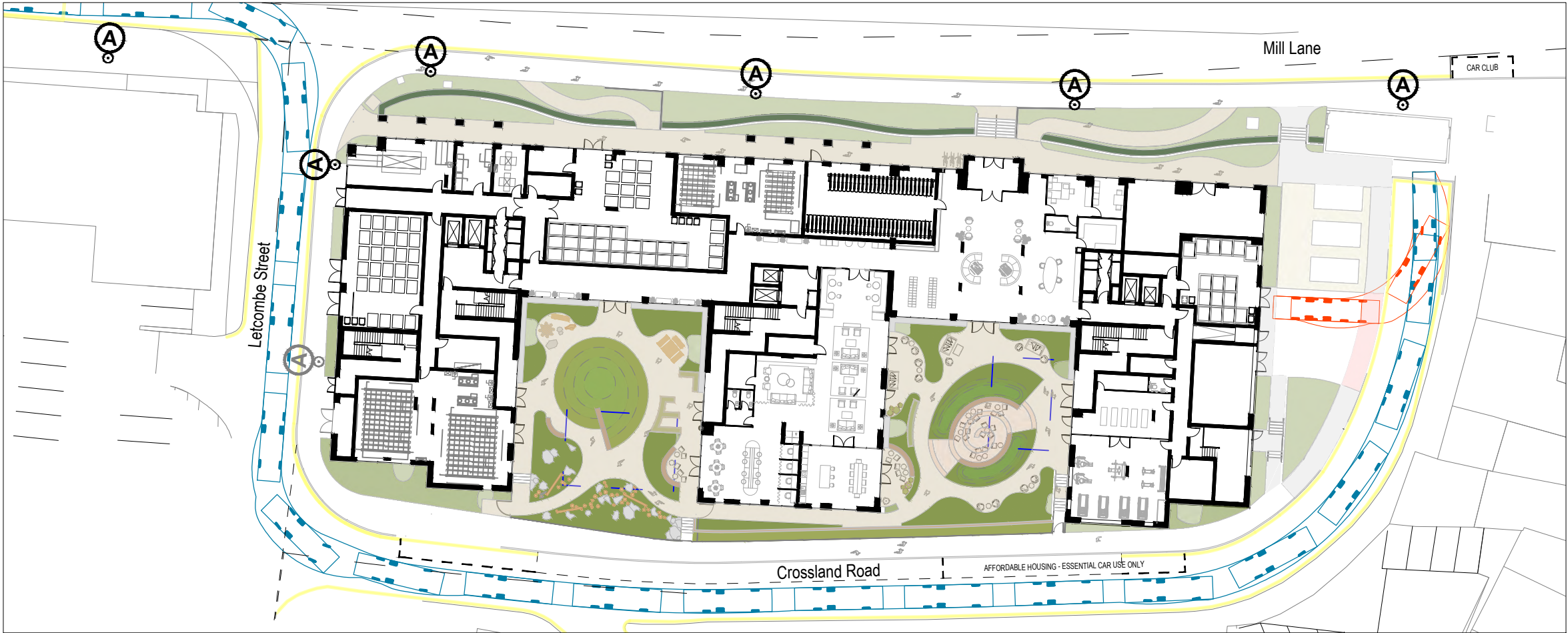


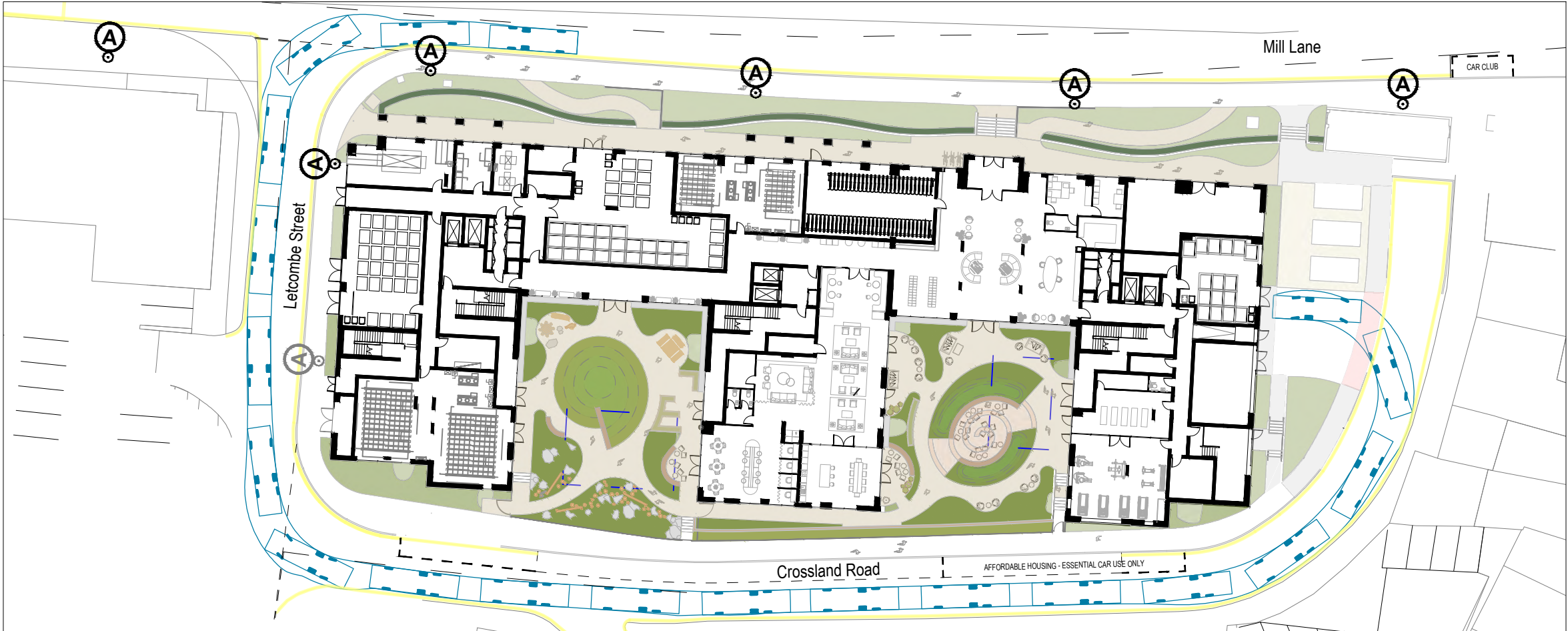
Appendix E

Swept Path Analysis





TURNING AREA - ENTRY



TURNING AREA - EXIT

NOTES

1. This drawing is to be read in conjunction with all relevant documents and specifications.

2. Dimensions are not to be scaled.

Source: Carey Jones Chapman Tolcher Drawing number 08278-CJA-ZZ-00-DR-A-0200

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KEY

8.75m refuse vehicle - forward gear

8.75m refuse vehicle - reverse gear



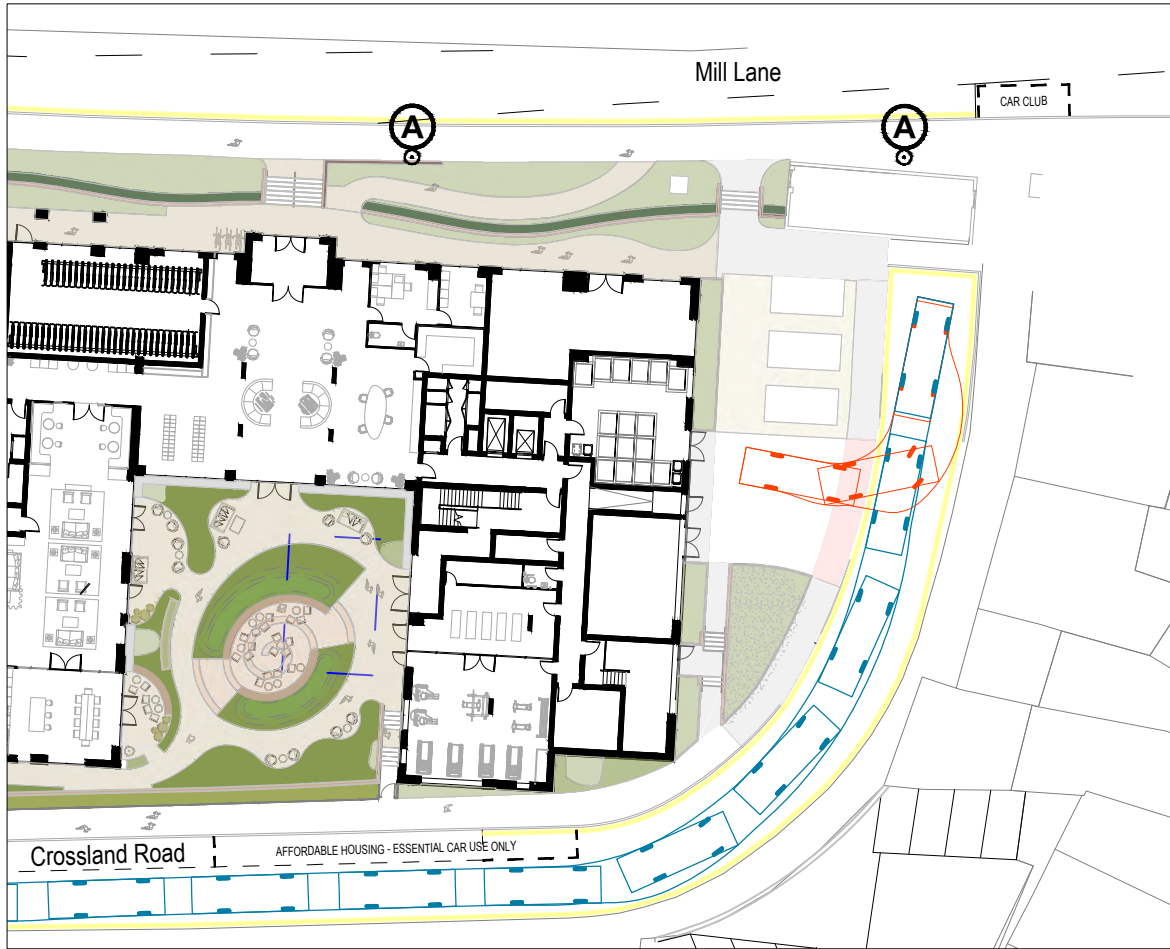
G	Parking provision revised.	15/05/2024	TH	VW
F	Crossland Road and site layout updated. Swept paths revised to suit.	01/05/24	DS	VW
E	Architects layout updated. Swept paths revised to suit.	11/04/24	AH	VW
D	Architects layout updated. Swept paths revised to suit.	14/02/24	TH	VW
C	Architects layout updated.	16/01/24	TH	VW
B	Parked vehicle removed.	07/12/23	TH	VW
A	Architects layout updated. Parked vehicle added.	07/12/23	TH	VW
Rev.	Description	Date	By	Chkd



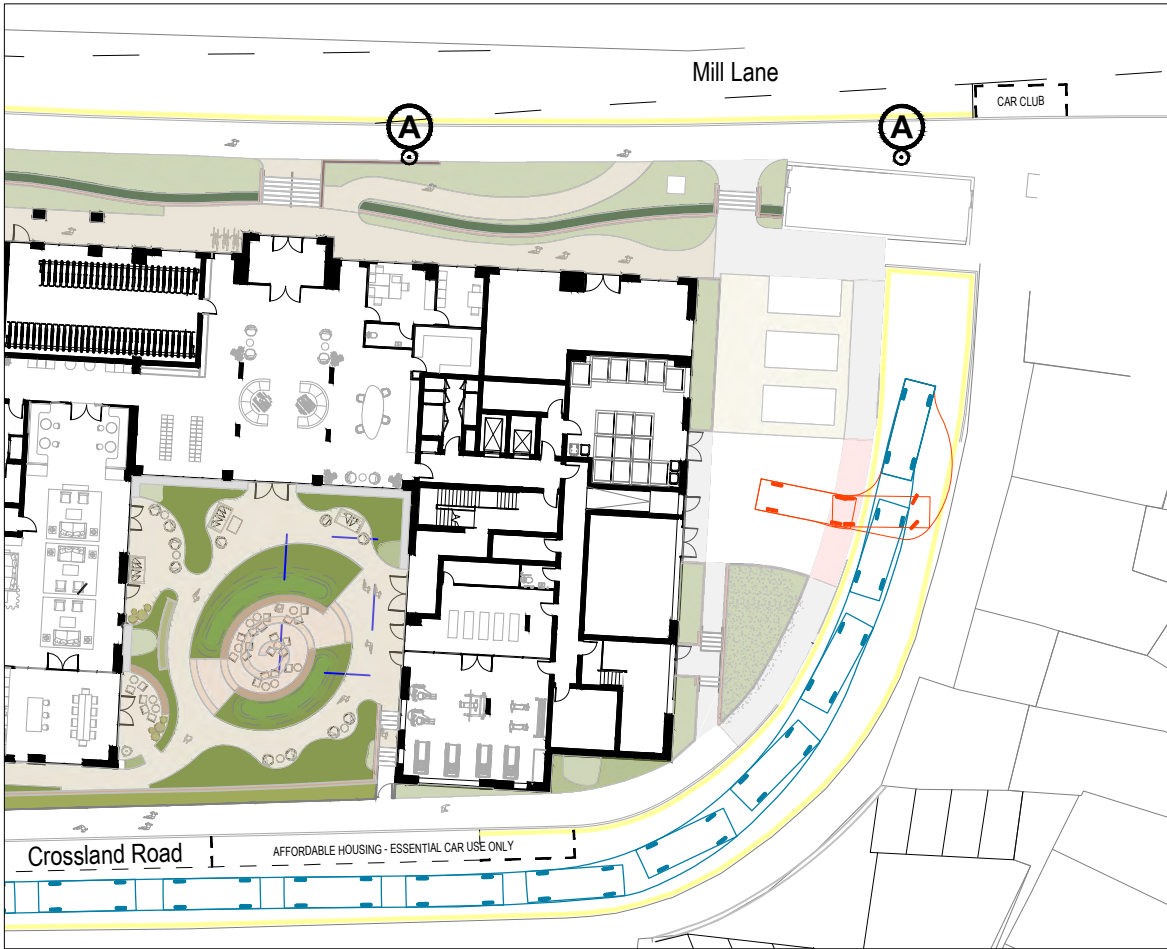
- Civil Engineering
- Structural Engineering
- Transport Planning
- Highways Engineering
- Building Surveying
- Geomatics

HertfordshireOxfordshireCambridgeshireBristol

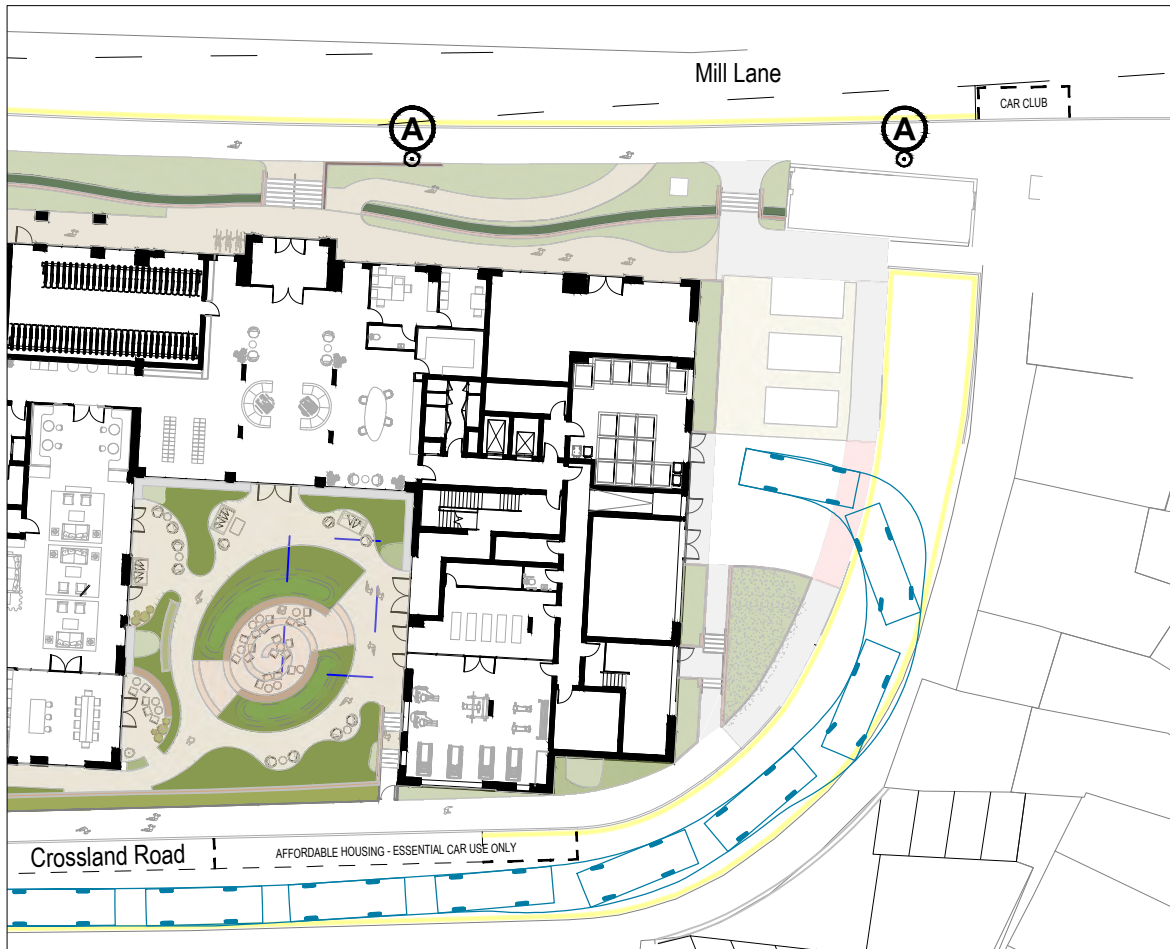
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Project :	Former John Lewis Depot, Letcombe Street, Reading (Also Known As JLP Mill Lane)		
Title :	Crossland Road Swept Path Analysis 8.75m Refuse Vehicle		
Engineer : T. Hart	Date : September 2023		
Director : J. Birch	Scale : 1:500 @ A3		
Status :	PRELIMINARY		
Drawing No.	8230634/6201		Rev G



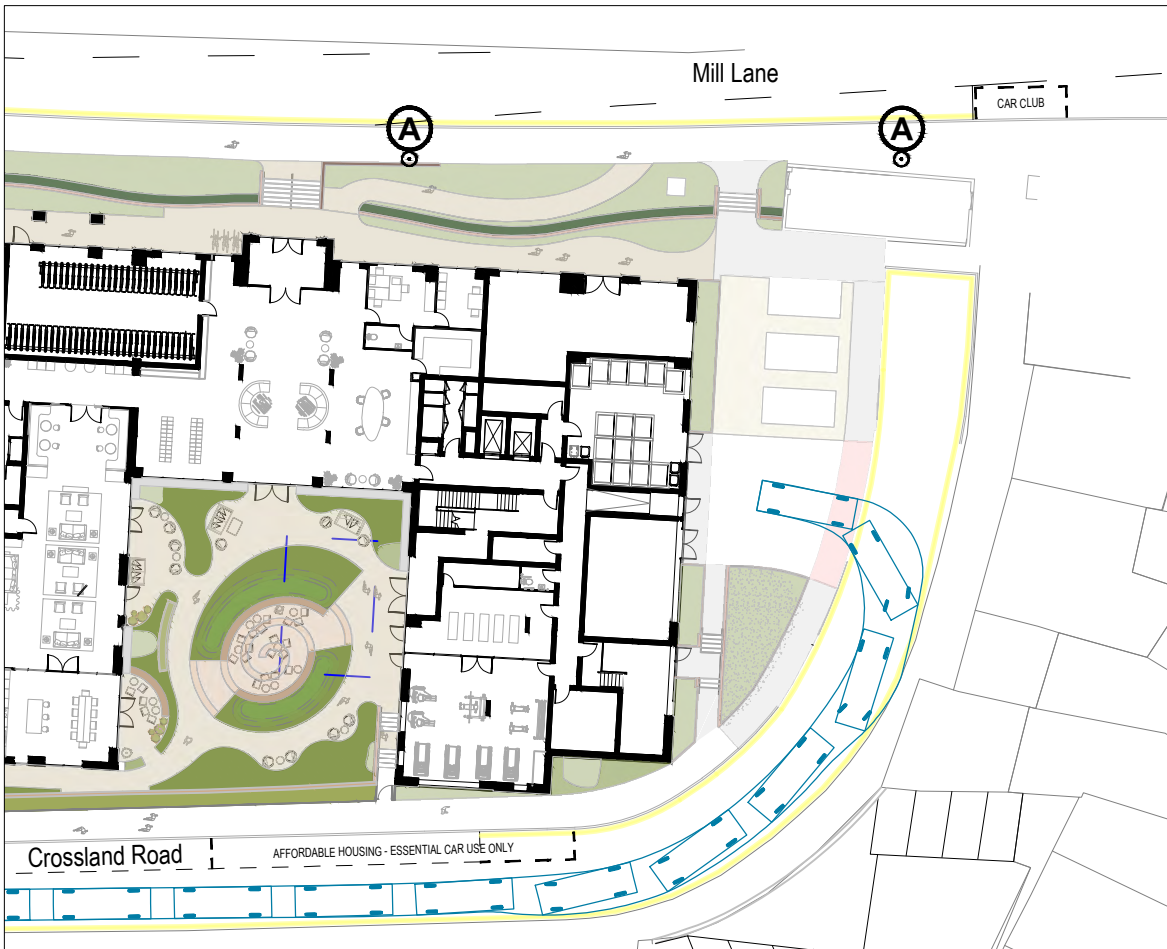
FIRE TENDER - ENTRY



HOME DELIVERY VEHICLE - ENTRY



FIRE TENDER - EXIT



HOME DELIVERY VEHICLE - ENTRY

NOTES

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KEY

7.7m fire tender - forward gear

7.7m fire tender - reverse gear

Home delivery vehicle - forward gear

Home delivery vehicle - reverse gear

F	Parking provision revised.	15/05/2024	TH	VW
E	Crossland Road and site layout updated. Swept paths revised to suit.	01/05/24	DS	VW
D	Architects layout updated.	11/04/24	AH	VW
C	Architects layout updated.	16/01/24	TH	VW
B	Parked vehicle removed.	07/12/23	TH	VW
A	Architects layout updated. Parked vehicle added.	07/12/23	TH	VW
Rev.	Description	Date	By	Chkd

Survey > Plan > Engineer

Civil Engineering

Structural Engineering

Transport Planning

Highways Engineering

Building Surveying

Geomatics

Hertfordshire

Oxfordshire

Cambridgeshire

Bristol

Client :
John Lewis Partnership BTR LtdProject :
Former John Lewis Depot,
Letcombe Street, Reading
(Also Known As JLP Mill Lane)Title :
Crossland Road
Swept Path Analysis
Fire Tender and Home Delivery Vehicle

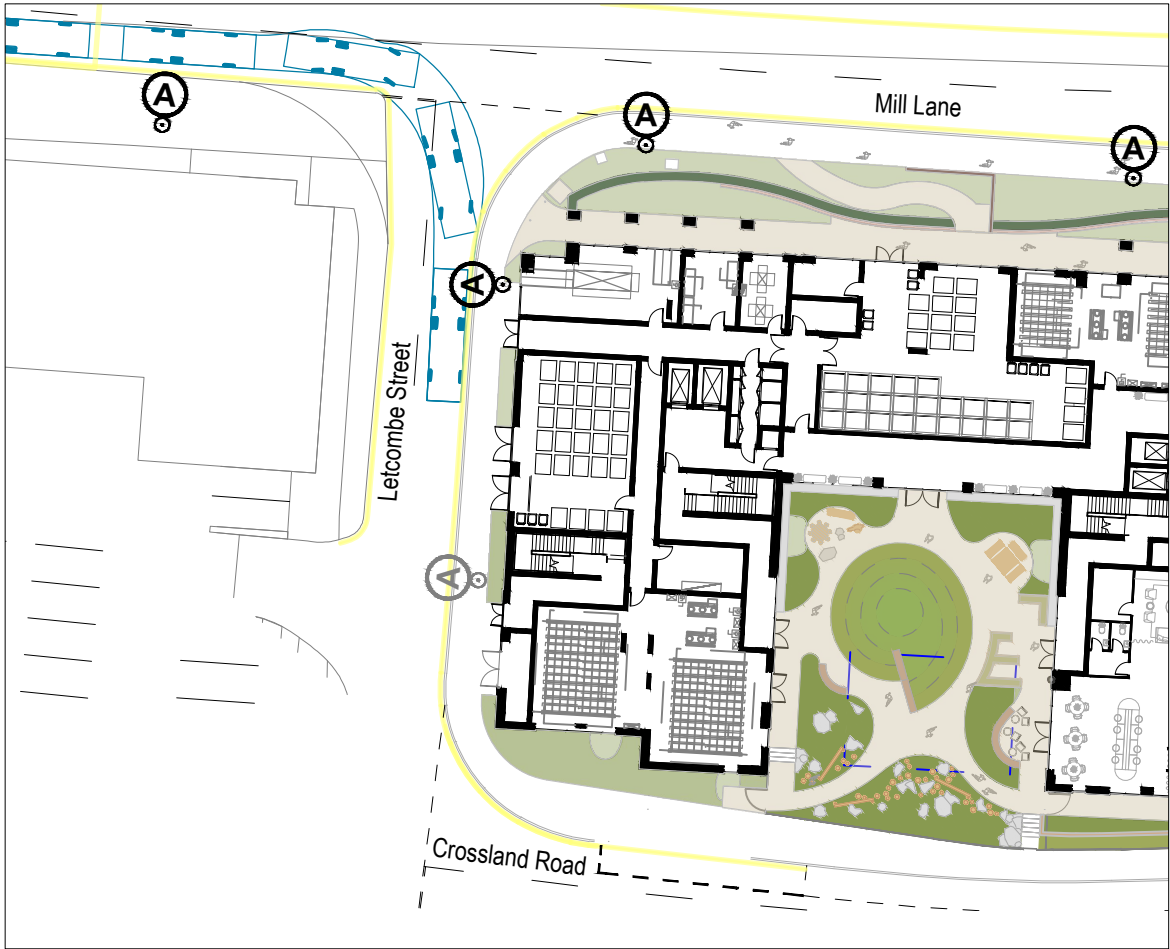
Engineer : T. Hart Date : September 2023

Director : J. Birch Scale : 1:500 @ A3

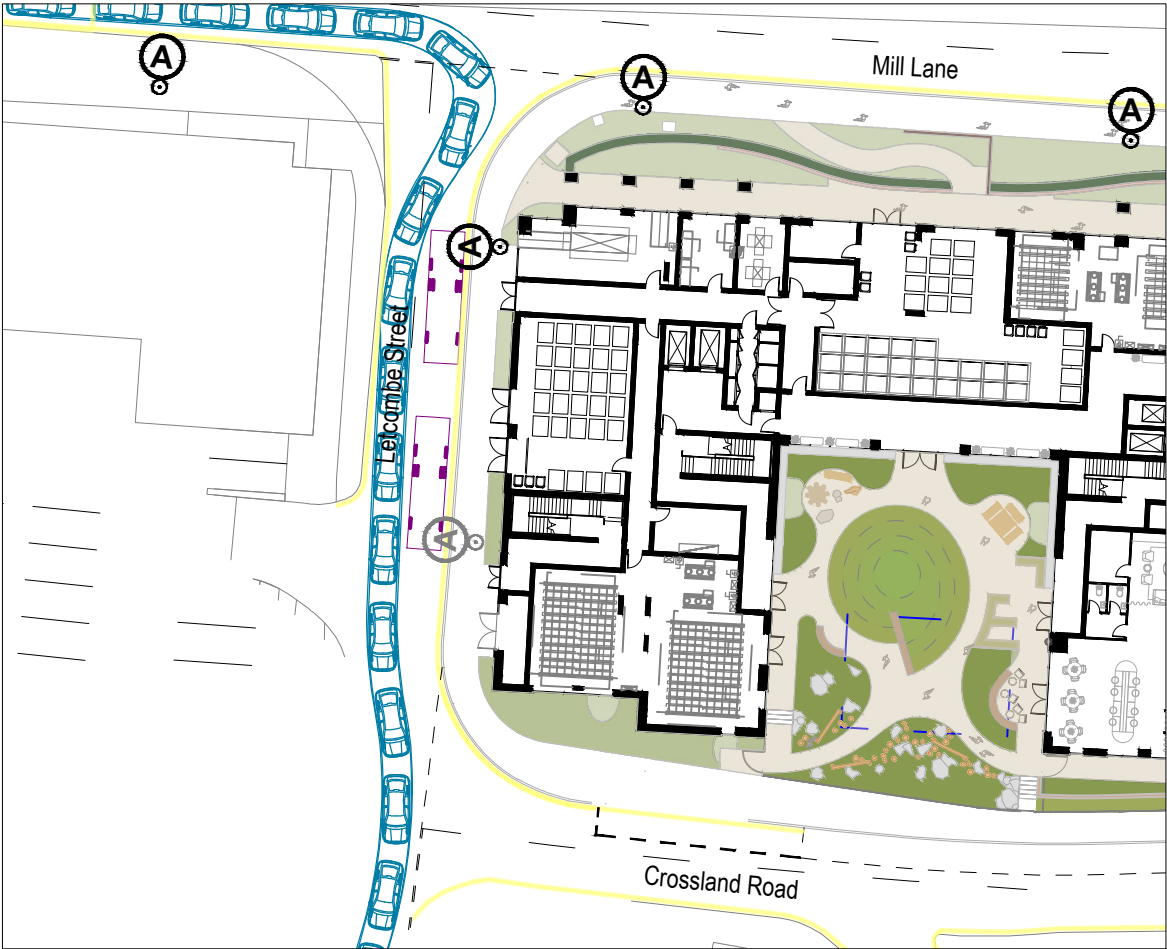
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PRELIMINARY

Drawing No. 8230634/6202

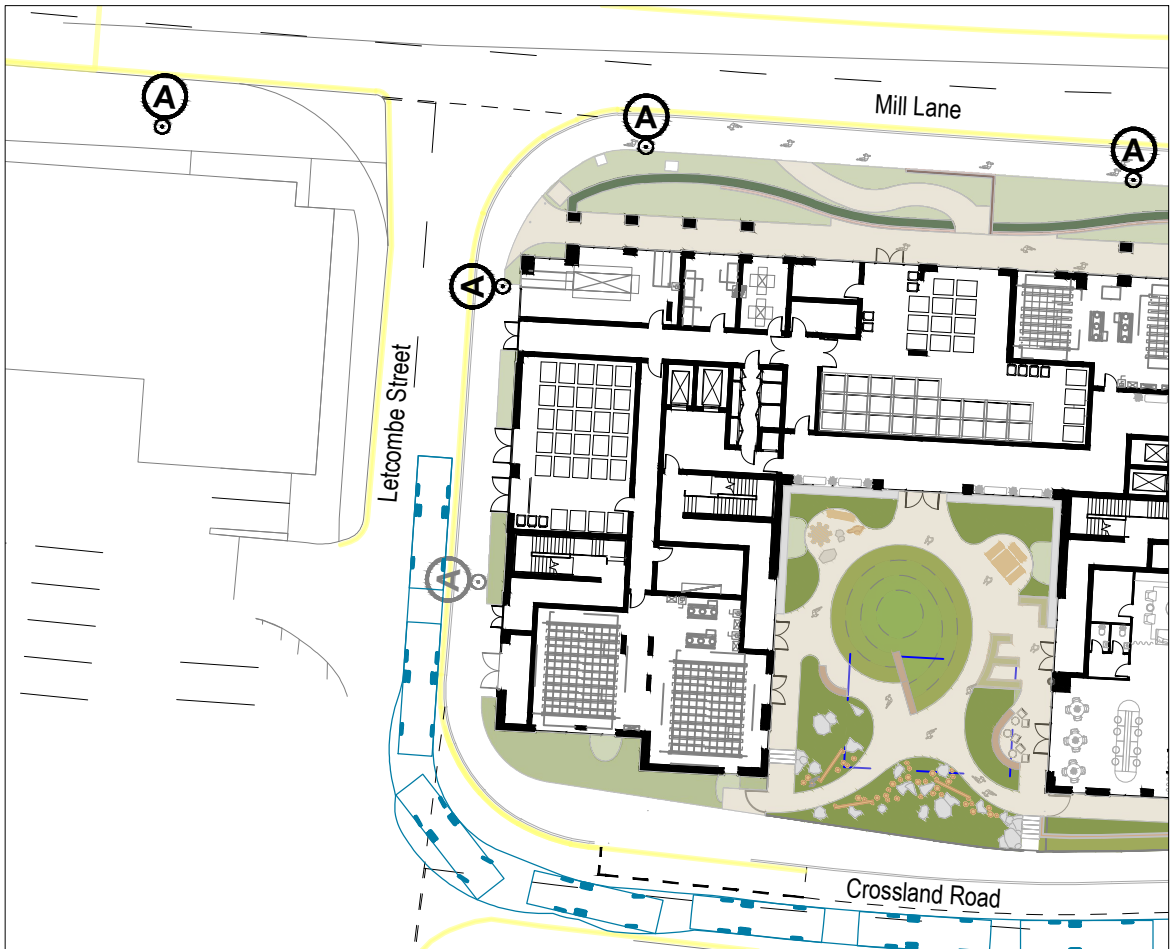
Rev
F



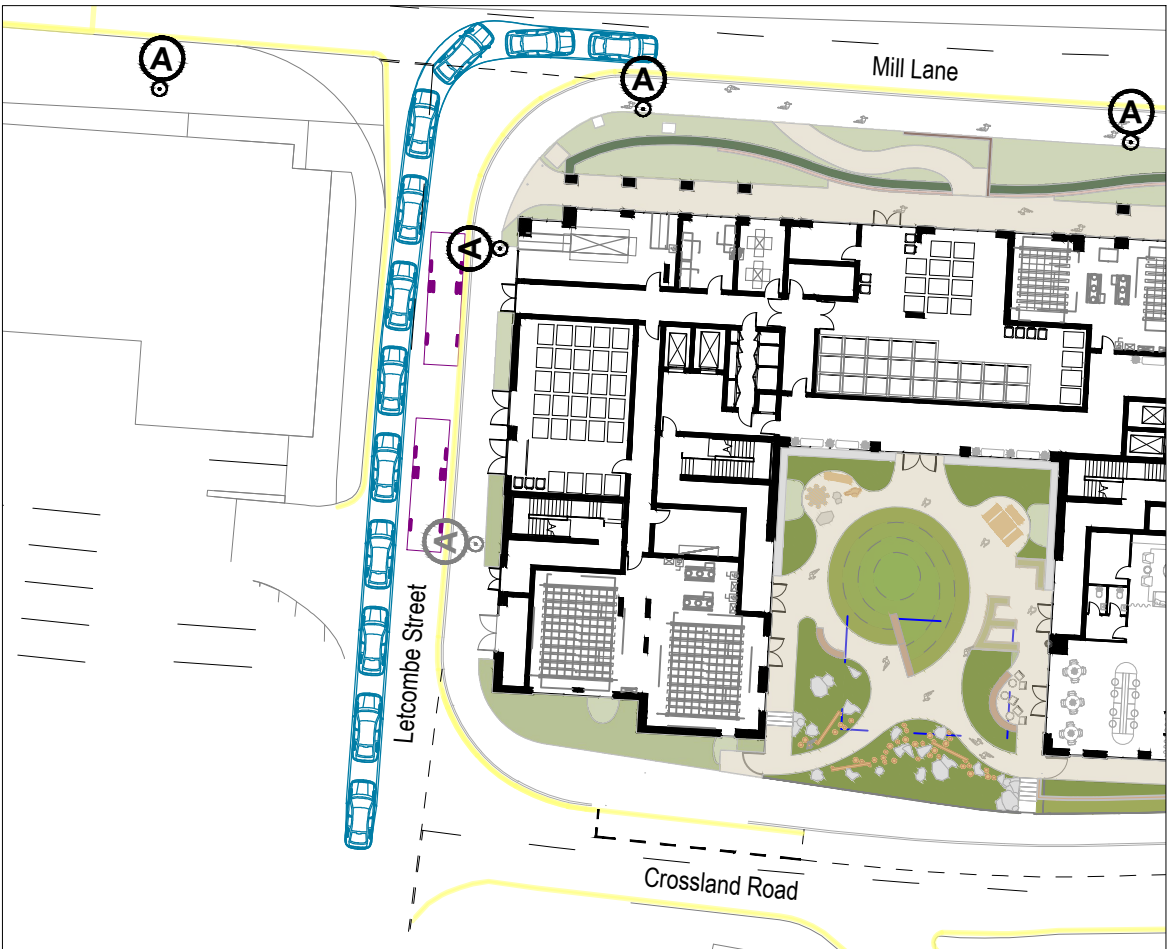
REFUSE VEHICLE - ARRIVAL



REFUSE VEHICLE - PARKED & CAR PASSING SOUTHBOUND



REFUSE VEHICLE - DEPARTURE



REFUSE VEHICLE - PARKED & CAR PASSING NORTHBOUND

NOTES

1. This drawing is to be read in conjunction with all relevant documents and specifications.

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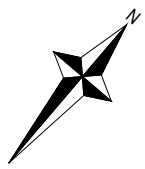
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KEY

8.75m refuse vehicle - forward gear

8.75m refuse vehicle - reverse gear

Car - forward gear



E	Crossland Road and site layout updated. Swept paths revised to suit.	01/05/24	DS	VW
D	Architects layout updated. Swept paths revised to suit.	11/04/24	TH	VW
C	Architects layout updated. Swept paths revised to suit.	14/02/24	TH	VW
B	Architects layout updated.	16/01/24	TH	VW
A	Architect Layout updated.	07/12/23	TH	VW
Rev.	Description	Date	By	Chkd



Survey > Plan > Engineer

Civil Engineering

Structural Engineering

Transport Planning

Highways Engineering

Building Surveying

Geomatics

Hertfordshire

Oxfordshire

Cambridgeshire

Bristol

Client :

John Lewis Partnership BTR Ltd

Project :

Former John Lewis Depot,
Letcombe Street, Reading
(Also Known As JLP Mill Lane)

Title :

Letcombe Street
Swept Path Analysis
8.75m Refuse Vehicle

Engineer : T. Hart

Date : September 2023

Director : J. Birch

Scale : 1:500 @ A3

Status :

PRELIMINARY

Drawing No.

8230634/6203

Rev

E

Appendix F

DFL Technical Report (20 May 2024)





• LIGHTING DESIGN • ELECTRICAL • SMART CITIES •
ENERGY REDUCTION • LIGHTING IMPACT

FORMER JOHN LEWIS DEPOT, LETCOMBE STREET, READING

TECHNICAL REPORT

DFL-UK

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PROJECT NUMBER: 3339		DOCUMENT REF: 3339-DFL-ELG-XX-RP-EO-13001			
P04	S3 – Watermark removal	FW	AL	AL	20/05/2024
P03	S3 – For Approval	FW	AL	AL	27/03/2024
P02	S3 – For Approval	FW	AL	AL	25/03/2024
P01	S3 – For Approval	FW	RC	AL	15/03/2024
Revision	Purpose Description	Originated	Checked	Approved	Date

Designs for Lighting (DFL) are a business built on the successfully collaborating with our clients. We have over 20 years proven experience in our industry, listening to the challenges our clients face, developing the best solutions and being innovators in our specialism. Our role is to find the most effective and sustainable outcome to enhance and support your projects. We proudly work with recognised industry bodies to promote and shape the future of the industry and ensure our staff are trained to exceed the required competency levels of our industries. Above all, we ensure each project delivers against our values.



Quality



Knowledgeable



Dependable



Clear Advice

Table of Contents

1. Introduction	5
2. Legislative Frameworks and Local Policies	7
2.2. Relevant Local Policies	8
3. British Standards and Guidance	9
3.1. Relevant British Standards	9
3.2. Guidance Notes for the Reduction of Obtrusive Light (GN01:2021).....	9
3.3. Professional Lighting Guidance - The Application of Conflict Areas on the Highway (PLG02:2021).....	9
4. Desktop Study	10
4.1. Existing Lighting Scenario	10
4.2. Environmental Zone Classification	10
5. Feasibility Options.....	14
5.1. Brief	14
5.2. Lighting scenario 1 – relocation of the west high mast (no additional lighting).....	15
Lighting scenario 2 – removal of the west high mast (replaced with localised lighting).	15
5.3. 15	
5.4. Lighting scenario 3 – both high masts removed (replaced with localised lighting)	15
6. Preferred Design	17
6.1. Brief	17
6.2. Proposed column locations.....	19
6.3. Summary of lighting results	21
6.4. Energy.....	21
6.5. Summary of results	21
7. Scope of Mitigation	22
7.1. Mitigation of lighting to reduce obtrusive light.	22
8. Conclusion.....	23
8.1. General.....	23
APPENDIX 1 – 3D MODEL	24

Table of Figures

Figure 1 - Proposed Development Site.....	6
Figure 2 - CPRE Nightblight Map	11
Figure 3 – existing high mast locations adjacent to the proposed building.....	14
Figure 4 - 3D Model of Proposed Development.....	18
Figure 5 – Proposed and existing columns locations.	20
Figure 6 - Existing lighting – view 1 - spill review.....	24
Figure 7 – Lighting scenario 1 – view 1 - spill review.	25
Figure 8 – Lighting scenario 2 – spill review.....	25
Figure 9 – Lighting scenario 3 – spill review.....	26
Figure 10 – Lighting design - view 1.	26
Figure 11 – Lighting design – view 2.....	27
Figure 12 – Lighting design – view 3.....	27
Figure 13 – Lighting design – view 4.....	28
Figure 14 – Lighting design – view 5 - spill review.....	28
Figure 15 - Existing lighting – view 5 - spill review.	29

Table of Tables

Table 1: C lighting classes based on road surface illuminance.....	10
Table 2: Environmental Zone Descriptions.....	12
Table 3: Obtrusive Light Criteria.....	12
Table 4: Maximum values of vertical illuminance on premises	13
Table 5: Lighting levels on proposed building	16
Table 6: Luminaire Performance Requirements.....	19
Table 7: Lighting levels on streets	21
Table 8: Proposed units consumed power.	21

1. INTRODUCTION

- 1.1.1. This document has been written by DFL (Designs for Lighting Ltd), a lighting design consultancy specialising in Lighting Impact Assessments, obtrusive light mitigation, and detailed lighting design.
- 1.1.2. This technical report has been commissioned to assess the viability of amending the existing high-mast lighting for the A329, between London Road and Bridge Street (including Mill Lane), Reading.
- 1.1.3. The report will also investigate the potential lighting impact of the proposed lighting amendments on the proposed residential development to the south of Mill Lane.
- 1.1.4. The site is located on the edge of the town centre in Central Reading within close proximity of key local services and facilities including The Oracle shopping centre and car park opposite, the Premier Inn hotel adjacent to the west and Reading railway station located approximately 1km to the north.

The site itself is bound by Mill Lane and the A329 to the north, Letcombe Street to the south-west and Crossland Road to the south-east, from which the Site is accessed. The site currently comprises the existing JLP warehouse building with associated car parking and servicing areas to the north-east and south-west of the building. The approximate location can be seen in **Figure 1**.

- 1.1.5. The Proposed Development is for the demolition of the existing building and redevelopment of the site comprising erection of a new building for up to 215 build to rent residential dwellings (Use Class C3) together with flexible commercial / community space (Use Class E/F1/F2), residents' facilities, landscaping, public realm, amenity space, cycle parking and disabled car parking.
- 1.1.6. Lighting associated with the Proposed Development will comply with the Institution of Lighting Professionals (ILP) guidance to ensure obtrusive light is minimised in accordance with best practice.
- 1.1.7. This report outlines the following:
 - Relevant obtrusive light policies in direct relation to the Proposed Development;
 - Relevant National and Local Policies;
 - Details as to how lighting will be implemented for the Proposed Development.



Figure 1 - Proposed Development Site

2. LEGISLATIVE FRAMEWORKS AND LOCAL POLICIES

2.1.1. National Policies

Environmental Protection Act 1990 / Clean Neighbourhoods and Environment Act 2005

- 2.1.2. Since 2005, artificial light has been incorporated as a potential statutory nuisance. An amendment to section 79 of the Environmental Protection Act 1990, contained within the Clean Neighbourhoods and Environment Act 2005, states:

"Artificial light emitted from premises so as to be prejudicial to health and nuisance constitutes a 'statutory nuisance' and it shall be the duty of every local authority to cause its area to be inspected from time to time to detect any statutory nuisances which ought to be dealt with under section 80 and, where a complaint of a statutory nuisance is made to it by a person living within its area, to take such steps as are reasonably practicable to investigate the complaint"

Planning Policy Framework England (December 2023)

- 2.1.3. "The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans can provide for sufficient housing and other development in a sustainable manner. Preparing and maintaining up-to-date plans should be seen as a priority in meeting this objective."

"Limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation."

2.2. Relevant Local Policies

- 2.2.1. The most applicable policies for the development relating specifically to well-designed or thoroughly considered lighting are:

Reading Borough Council Local Plan (Adopted November 2019)

- 2.2.2. The Local Plan is the document that guides development in Reading up to 2036, and it will therefore play a decisive role in how our town evolves over the next two decades

CC8: SAFEGUARDING AMENITY

“Development will not cause a detrimental impact on the living environment of existing residential properties or unacceptable living conditions for new residential properties, in terms of artificial Lighting”.

EN16: POLLUTION AND WATER RESOURCES

Development will only be permitted where it would not be damaging to the environment and sensitive receptors through land, noise or light pollution; where it would result in no deterioration in, or ideally enhance, ground and surface water quality; and where adequate water resources, sewerage and wastewater treatment infrastructure will be in place to support the proposed development prior to occupation. Proposals for development that are sensitive to the effects of noise or light pollution will only be permitted in areas where they will not be subject to high levels of such pollution, unless adequate mitigation measures are provided to minimise the impact of such pollution.

3. BRITISH STANDARDS AND GUIDANCE

3.1. Relevant British Standards

- 3.1.1. BS 5489-1:2020 – Design of road lighting, Part 1: Lighting of roads and public amenity areas – Code of practice.

This part of BS 5489 gives recommendations on the general principles of road lighting and its aesthetic and technical aspects and provides guidance on operation and maintenance. It also provides guidance on means of minimizing energy consumption and limiting the impact on the environment and adjacent property. It gives recommendations for the design of lighting for all types of highway and public thoroughfare, including those specifically for pedestrians and cyclists, and for pedestrian subways and bridges. It excludes the lighting of vehicular tunnels and underpasses, which are covered in BS 5489-2. It gives recommendations for the design of lighting for urban centres and public amenity areas. It gives recommendations and guidance for lighting relating to smart cities.

3.2. Guidance Notes for the Reduction of Obtrusive Light (GN01:2021)

The Lighting Strategy is informed by industry guidance notes which aim to reduce the potential for obtrusive light to occur, which is typically caused by poorly designed and installed exterior artificial lighting. The Technical report is informed by the most relevant sections of GN 01:2021 that has recently been published to reduce the potential for obtrusive light from a wide range of exterior lighting applications.

3.3. Professional Lighting Guidance - The Application of Conflict Areas on the Highway (PLG02:2021)

The purpose of this document is to define a conflict area as referenced in BS5489-1:2013 Road Lighting, CIE standards and EN13201 and to provide the lighting designer with guidance to lighting such areas and the application of conflict areas.

4. DESKTOP STUDY

4.1. Existing Lighting Scenario

- 4.1.1. A lighting model of the existing lighting scene has been carried out to assess the amount of spilt light on the proposed building due to the close proximity of the high masts illuminating roads in front of the Proposed Development – A329 and Mill Lane.
- 4.1.2. The section of the A329 and Mill Lane between Bridge Street and London Street has been considered.
- 4.1.3. The owner [CU Phosco] and maintenance supervisor of the high mast have been contacted seeking guidance regarding current lighting specifications. Based on the provided documentation it has been established that 30m high masts are going to be replaced in the near future with 250W CU Phosco P855-288 high mast LED luminaires at 0° tilt with F5 optic, 4000K and both roads and conflict areas lit to a C2 lighting class.
- Table 1** of BS EN 13201-2: 2015 provides lighting level requirements for the C Lighting Class.

Class	Horizontal illuminance	
	$\bar{E}$ [minimum maintained] lx	U_0 [minimum]
C0	50.0	0.40
C1	30.0	0.40
C2	20.0	0.40
C3	15.0	0.40
C4	10.0	0.40
C5	7.5	0.40

Table 1: C lighting classes based on road surface illuminance.

- 4.1.4. Required lighting levels on the street have been achieved with such specifications.
- 4.1.5. Based on the 3D model it is clear that the amount of light getting into the windows of the proposed building from the existing adjacent high masts exceeds the maximum values of vertical illuminance as per **Table 4**. Please refer to **Figure 6** in APPENDIX 1 – 3D MODEL.

4.2. Environmental Zone Classification

- 4.2.1. The Institution of Lighting Professions (ILP) has published GN01:2021 '*Guidance Notes for the Reduction of Obtrusive Light*'. This is a widely used document in the lighting industry and aims to provide guidance on reducing obtrusive light through good lighting practice. **Table 2** (Environmental Zones) of GN01:2021 provides classifications for environmental zones.
- 4.2.2. Information regarding the brightness level where the scheme is located has also been used to aid with the assessment. The level of radiance for the area where the scheme is located is shown in **Figure 2**.

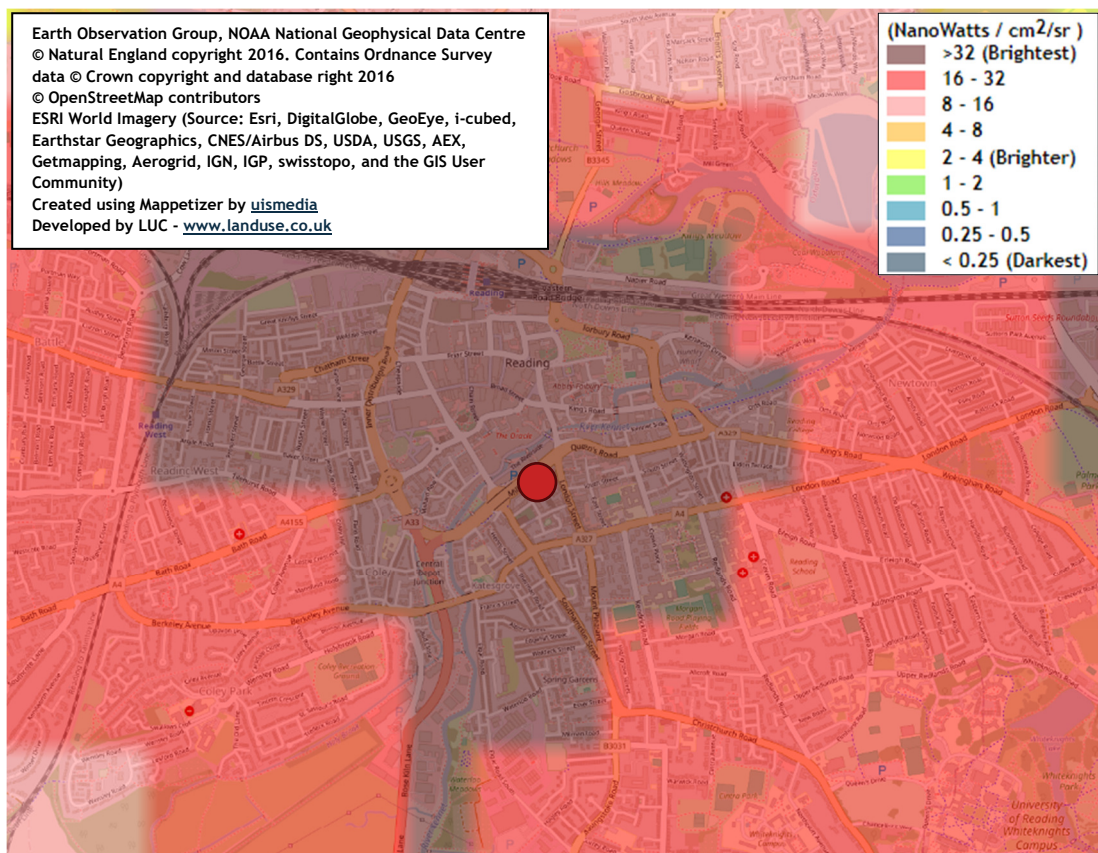


Figure 2 - CPRE Nightblight Map

- 4.2.3. Based on the area where the scheme is located, an environmental zone of E4 would be applicable due to being with high levels of night-time activity and with high district brightness.

Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark (SQM 20.5+)	Astronomical Observable dark skies, UNESCO starlight reserves, IDA Dark Sky Parks.
E1	Natural	Intrinsically dark (SQM 20 to 20.5)	Relatively uninhabited rural areas, National Parks, Areas of Outstanding Natural Beauty, etc.
E2	Rural	Low district brightness (SQM ~ 15 to 20)	Sparsely inhabited rural areas, Village or relatively dark outer suburban locations.
E3	Suburban	Medium district brightness	Well inhabited rural and urban settlements, small town centres or suburban locations.
E4	Urban	High district brightness	Town / City centres with high levels of night-time activity.

Table 2: Environmental Zone Descriptions

Notes:

1. Where an area to be lit lies on the boundary of two zones the obtrusive light limitation values used should be those applicable to the most rigorous zone.
2. Rural zones under protected designations should use a higher standard of policy.
3. Zone E0 must always be surrounded by an E1 Zone.
4. Zoning should be agreed with the local planning authority and due to local requirements a more stringent zone classification may be applied to protect special/specific areas.
5. SQM (Sky Quality Measurements) referenced by the International Dark-Sky Association (IDA), the criteria for E0 being revised in mid-2019 but not retrospective.
6. Astronomical observable dark skies will offer clearer views of the Milky Way and of other objects such as the Andromeda galaxy and the Orion Nebula.
7. Although values of SQM 20 to 20.5 may not offer clear views of astronomical dark sky objects such as the Milky Way, these skies will have their own relative intrinsic value in the UK.

Environmental Zones	Sky Glow ULR (Max %)	Light Trespass (Into Windows) E_v (lux)		Building Luminance Average, Pre-curfew
		Pre- Curfew	Post-Curfew	Average L (cd/m ²)
E0	0	0	0	0
E1	0	2	0 (1*)	0
E2	2.5	5	1	5
E3	5	10	2	10
E4	15	25	5	25

Table 3: Obtrusive Light Criteria

- > ULR (Upward Light Ratio) is the maximum permitted percentage of luminaire flux that goes directly into the sky.
- > E_v is Vertical Illuminance in Lux.
- > L is Luminance in Candelas per square metre; and
- > Curfew refers to a time when the local planning authority has agreed that the lighting installation should be switched off; this typically refers to 23h00 – 07h00.
- > (*) Permitted only from public road lighting installations up to a maximum of 1.0 lux.

Lighting technical parameter	Application conditions	Environmental zone				
		E0	E1	E2	E3	E4
Illuminance in the vertical plane (E_v)	Pre-curfew	n/a	2 lx	5 lx	10 lx	25 lx
	Post-curfew	n/a	<0.1 lx*	1 lx	2 lx	5 lx

Table 4: Maximum values of vertical illuminance on premises

* If the installation is for public (road) lighting then this may be up to 1 lx.

- > Limits apply to nearby dwellings / premises or potential dwellings / premises and specifically windows. The values are the summation of all lighting installations.

5. FEASIBILITY OPTIONS

5.1. Brief

- 5.1.1. Drawings 08278-CJA-ZZ-00-DR-A-0200 to 08278-CJA-ZZ-00-DR-A-211 were used as the basis for the 3D model of the proposed building consisting of multiple floors. The topography in the vicinity of the proposed building has been modelled using a purchased ZMap which is accurate to 0.5m.
- 5.1.2. All designs and 3D modelling have been carried out and checked by competent designers.
- 5.1.3. Various scenarios have been analysed based on the desktop design to determine the potential for relocation or removal of the high masts. The objective is to ensure that the proposed development has adequate amenity while simultaneously taking into account wider amenity and highway safety considerations. The evaluation process has been conducted with a high degree of thoroughness and professionalism, addressing all relevant factors to arrive at an optimal solution.

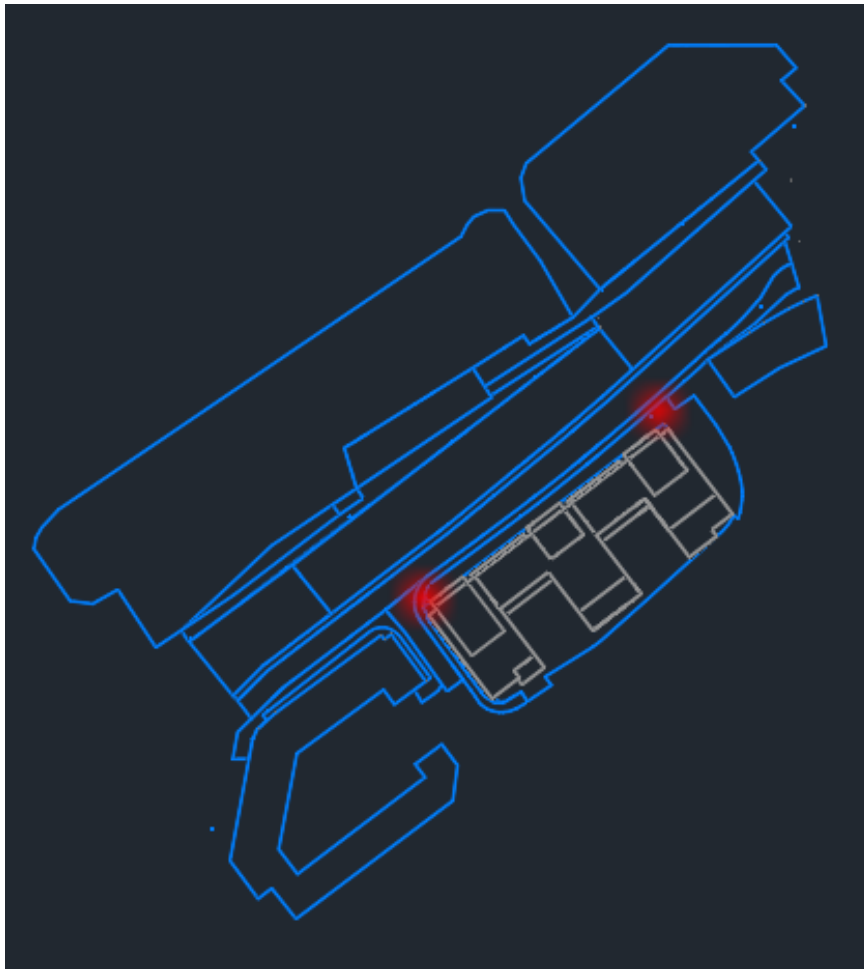


Figure 3 – existing high mast locations adjacent to the proposed building

5.2. Lighting scenario 1 – relocation of the west high mast (no additional lighting).

- 5.2.1. The west high mast would be relocated across the street to see if that would reduce the amount of spilt light on the proposed building.
- 5.2.2. In this scenario, the east high mast remains where it is to show the contrast between scenarios and because there is no suitable place for its relocation on the other side of the road.
- 5.2.3. Required lighting levels on the A329 have been achieved after the relocation but Mill Lane would be underlit and additional lighting units would be required to compensate.
- 5.2.4. Based on the 3D model, the amount of light getting into the windows of the proposed building from the relocated high masts would be slightly reduced but it would still exceed the maximum values of vertical illuminance as per **Table 4**. Please refer to **Figure 7** in APPENDIX 1 – 3D MODEL.

5.3. Lighting scenario 2 – removal of the west high mast (replaced with localised lighting).

- 5.3.1. The west high mast would be removed and several 16m columns between the overpass and The Oracle car park would be installed to provide light on the road with the aim of reducing the amount of spilt light on to the proposed building.
- 5.3.2. In this scenario, the east high mast remains where it is to show the contrast between scenarios and because there is no suitable place for its relocation on the other side of the road.
- 5.3.3. The required lighting levels on the A329 have been achieved with 16m columns but Mill Lane and the adjacent Letcombe Street would be underlit and additional lighting units would be required to achieve compliance.
- 5.3.4. Based on the 3D model, the amount of light getting into the windows of the proposed building from the 16m column has been reduced below the maximum values of vertical illuminance where the west high mast was removed as per **Table 4**. Please refer to **Figure 8** in APPENDIX 1 – 3D MODEL.

5.4. Lighting scenario 3 – both high masts removed (replaced with localised lighting)

- 5.4.1. Both high masts would be removed. Instead, a combination of 16m columns between the overpass and The Oracle car park and 8m columns in other places is proposed to see if it would reduce the amount of spill light on to the proposed building.

- 5.4.2. The required lighting levels on the A329 have been achieved with 16m columns but Mill Lane and the adjacent Letcombe Street would be underlit and additional 8m and 6m lighting columns, respectively, would be required to achieve compliance.
- 5.4.3. Based on the 3D model, the amount of light getting into the windows of the proposed building from the combination of 16m and 8m columns has been reduced below the maximum values of vertical illuminance as per **Table 4** across the whole building, excluding ground floor which is a commercial area. Please refer to **Figure 9** in APPENDIX 1 – 3D MODEL.

Front of proposed building - commercial area				Front of proposed building - residential area			
	0.94 cd/m ²	0.57		0.29 cd/m ²	0.010		
	5.88 lx	0.58		1.77 lx	0.010		
Surface result object (Perpendicular illuminance)				Surface result object (Perpendicular illuminance)			
	Actual	Target			Actual	Target	
Average	5.88 lx	-		Average	1.77 lx	-	
Min	3.39 lx	-		Min	0.017 lx	-	
Max	9.24 lx	-		Max	4.14 lx	-	
Min/average	0.58	-		Min/average	0.010	-	
Min/max	0.37	-		Min/max	0.004	-	
Parameter				Parameter			
Height	1.500 m			Height	19.423 m		

Table 5: Lighting levels on proposed building.

6. PREFERRED DESIGN

6.1. Brief

- 6.1.1. This lighting strategy considers the relevant local planning policies as outlined in **Section 2**, thus aiming to provide minimal lighting levels where required.
- 6.1.2. Proposed lighting levels applied are in accordance with the British Standards and Guidance outlined in **Section 3**, thus maintaining highway safety.
- 6.1.3. A desktop survey was conducted to assess the lighting situation as indicated in **Section 4**. Based on the desktop survey, the most appropriate scenario has been determined. See **Section 5.4**.
- 6.1.4. The lighting design will be based on Lighting Scenario 3 with additional 11 lighting units along Mill Lane and 1 lighting unit on Letcombe Street to provide a compliant solution.
- 6.1.5. Luminaires will be used with integral LEDs and only where the luminaire photometry is available from the manufacturer. This is to ensure the photometric footprint of the luminaires can be modelled to ensure the potential effects of light spill are minimised or mitigated.
- 6.1.6. Proposed lighting columns will be located in carefully selected locations considering street and underground infrastructure.
- 6.1.7. Luminaires will distribute light downwards only to reduce the potential light spill onto the boundaries of the surrounding buildings and upwards towards the sky.
- 6.1.8. All lighting unless otherwise stated is to emit a neutral white colour temperature light (4000 Kelvin) to stay in line with converted high mast units in the vicinity.

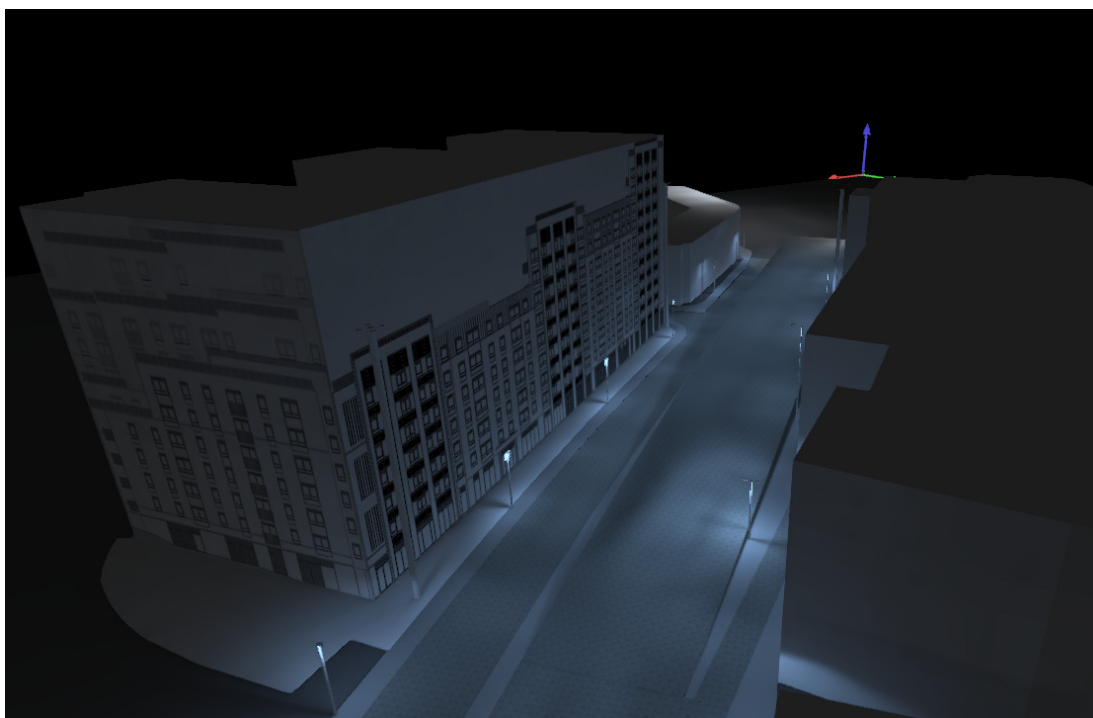


Figure 4 - 3D Model of Proposed Development

Lighting Type	Installation Requirements
Correlated Colour Temperature (Kelvin)	4000K
Luminaire Manufacturer	Urbis Shredder (or equivalent)
Lighting Class	C2
Typical Luminaire Image	
Light Source	LED
Mounting Height	16m, 8m & 6m
Mounting Type	Bracket / Post Top
Luminaire Tilt	0°
Controls	as per Local Authorities' requirements

Table 6: Luminaire Performance Requirements

6.2. Proposed column locations

6.2.1. Proposed and existing column luminaires would be as indicated in the **Figure 5**. This is an overlay of the proposal in all three lighting scenarios.

- Red points are 16m columns.
- Green points are 8m columns with brackets.
- Blue points are 8m post-top columns.
- Yellow point is a 6m post-top column.

- Existing columns as per white points.
- The violet point indicates the proposed location of the relocated high mast.

6.2.2. For 3D model shots refer to figures **Figure 10** to **Figure 13** in APPENDIX 1 – 3D MODEL

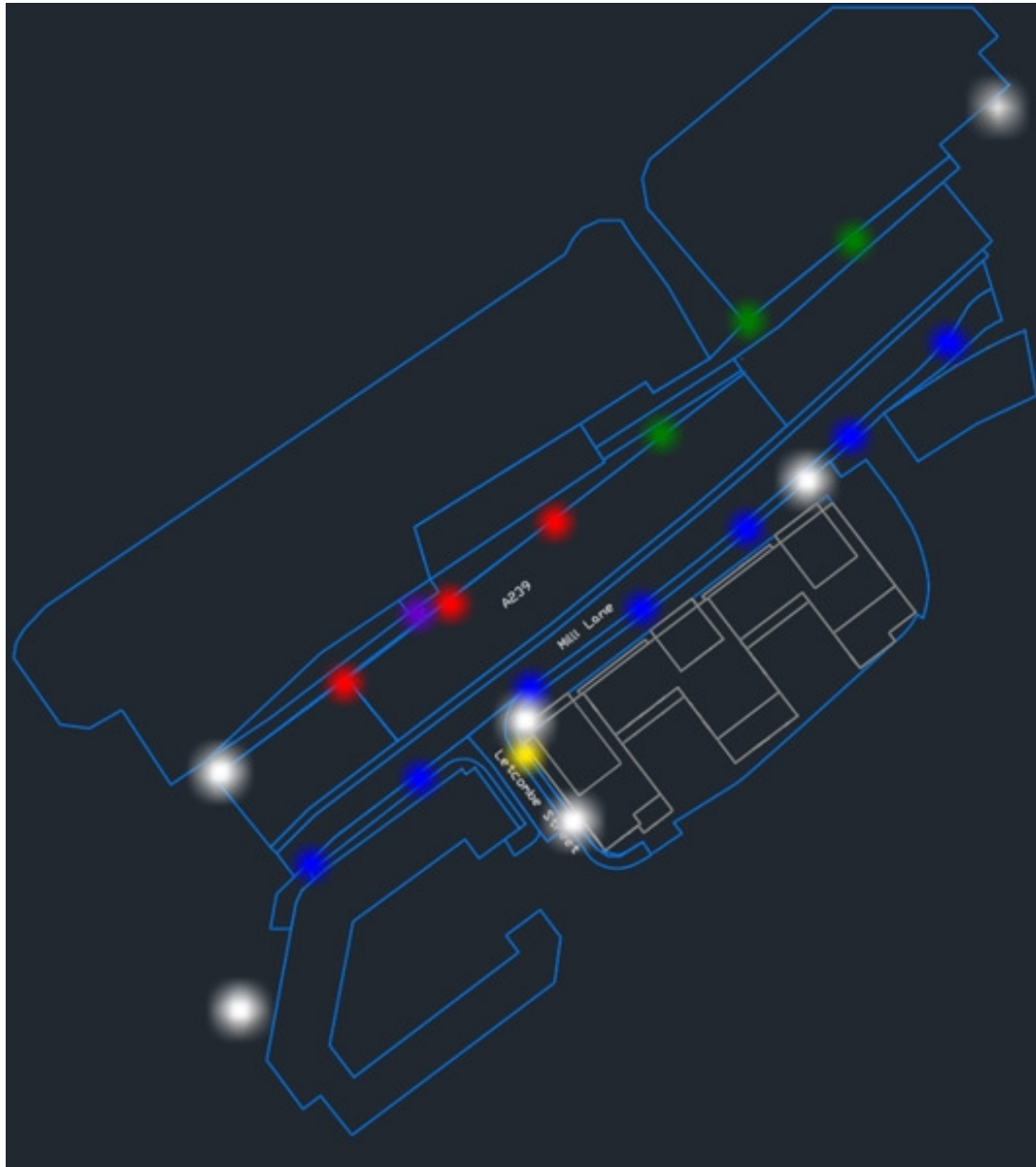


Figure 5 – Proposed and existing columns locations.

6.3. Summary of lighting results

Road	Expected levels			Achieved levels		
	Eav [lx]	Emin [lx]	E0	Eav [lx]	Emin [lx]	E0
A239	20.00	N/A	0.40	22.23	N/A	0.52
Mill Lane	20.00	N/A	0.40	20.70	N/A	0.46
Letcombe Street	5.00	1.00	N/A	9.79	1.07	N/A

Table 7: Lighting levels on streets

6.4. Energy

- 6.4.1. Existing two high masts consume 2000W, as each is equipped with four 250W units.
- 6.4.2. Proposed units consume only 1551W, see **Table 8**, which is over 22% energy savings.

Column height	Amount of Lanterns	Unit Power	Total
16m	3	172[W]	516[W]
8m	1	172[W]	172[W]
8m	4	94[W]	376[W]
8m	6	78[W]	468[W]
6m	1	19[W]	19[W]
	15	:Sum:	1,551[W]

Table 8: Proposed units consumed power.

6.5. Summary of results

- 6.5.1. The light spill was modelled to show how the light emitted from the existing and proposed light source would affect the proposed building. The results from the modelling show that any use of the high mast, either existing location or relocation, would result in unacceptable light intrusion into windows. The proposed solution is to install 16m, 8m and 6m columns along the A239, Mill Lane and Letcombe Street to mitigate against light intrusion whilst achieving suitable lighting compliance.
- 6.5.2. The proposed solution minimises spill light on the adjacent properties as well and therefore reduces the current light intrusion into existing residences.
- 6.5.3. The lighting associated with the proposed lighting design complies with the British Standards and Institution of Lighting Professionals (ILP) guidance, ensuring lighting levels are compliant and obtrusive light is minimised.
- 6.5.4. All lighting level calculations are completed with Maintenance Factors applied, as per manufacturer's specifications, and in line with BS 5489-1:2020 guidance.
- 6.5.5. All images and building façades assessments are a worst-case scenario, with a Maintenance Factor of 1.0 and no blocking effects modelled from shields.

7. SCOPE OF MITIGATION

7.1. Mitigation of lighting to reduce obtrusive light.

- 7.1.1. The design has been carried out to meet the requirements in the relevant guidance in ILP GN01:2021 (Guidance Note for the Reduction of Obtrusive Light).
- 7.1.2. All designs have been carried out and checked by competent designers.
- 7.1.3. The use of shields on a high mast has been considered but due to their close proximity to the building it would be not possible to get shields big enough to effectively reduce the light spill across the whole building and at the same time small enough to avoid a sail effect on the high mast itself that would not create oscillation or structural damage.
- 7.1.4. The model was created to show that the light spill from the proposed lighting units would not be intrusive on the proposed or nearby buildings.
- 7.1.5. The proposed 8m post-top units along the proposed property and hotel would cause some light intrusion into the proposed building and hotel due to its proximity to it. Refer to **Figure 10**. As a mitigation factor, these units could be fitted with back shields.
- 7.1.6. Proposed units would also reduce light spill on adjacent buildings, refer to **Figure 6, Figure 10, Figure 14 and Figure 15** as comparison.

8. CONCLUSION

8.1. General

- 8.1.1. Lighting associated with the Proposed Development shall be designed in accordance with the Lighting Strategy for the Application Site outlined in **Section 6**.
- 8.1.2. Lighting Scenario 3 with additional column along Mill Lane and Letcombe Street has been selected as the most appropriate lighting strategy to maintain compliance with the C2 classification of the highway whilst reducing the light spill on the proposed building below the maximum level of light intrusion.
- 8.1.3. This Lighting Strategy ensures the lighting installation at the proposed development will be in accordance with British Standards, Guidance and Local Policy.
- 8.1.4. The proposed column mounted scheme would reduce the light spill onto the residential components of this Proposed Development and others in the vicinity.
- 8.1.5. Through the adoption of a column-based approach to the lighting, there would be a net reduction in light spill onto the windows of existing premises.
- 8.1.6. Furthermore, the levels of obtrusive light in the nightscape would be reduced, through the reduction of light distributed at a high level above ground. This would lead to a net reduction of light distributed at oblique angles, with the potential to scatter and give rise to sky glow.
- 8.1.7. As set out in **Section 6**, there would be a reduction in energy consumption, which would lead to a potential saving in annual energy costs by removal of the high-masts and installation of the column mounted scheme.
- 8.1.8. There would also be an ease of maintenance introduced, whereby specialists in high-mast equipment would no longer need to be involved in the maintenance of the assets.

APPENDIX 1 – 3D MODEL

The following images have been taken from the model designed in DIALux Evo, which is industry standard software, to give an indication of the spill light on the proposed building and adjacent infrastructure. The red line and red colour represent 5 lx requirements as per **Table 4**.

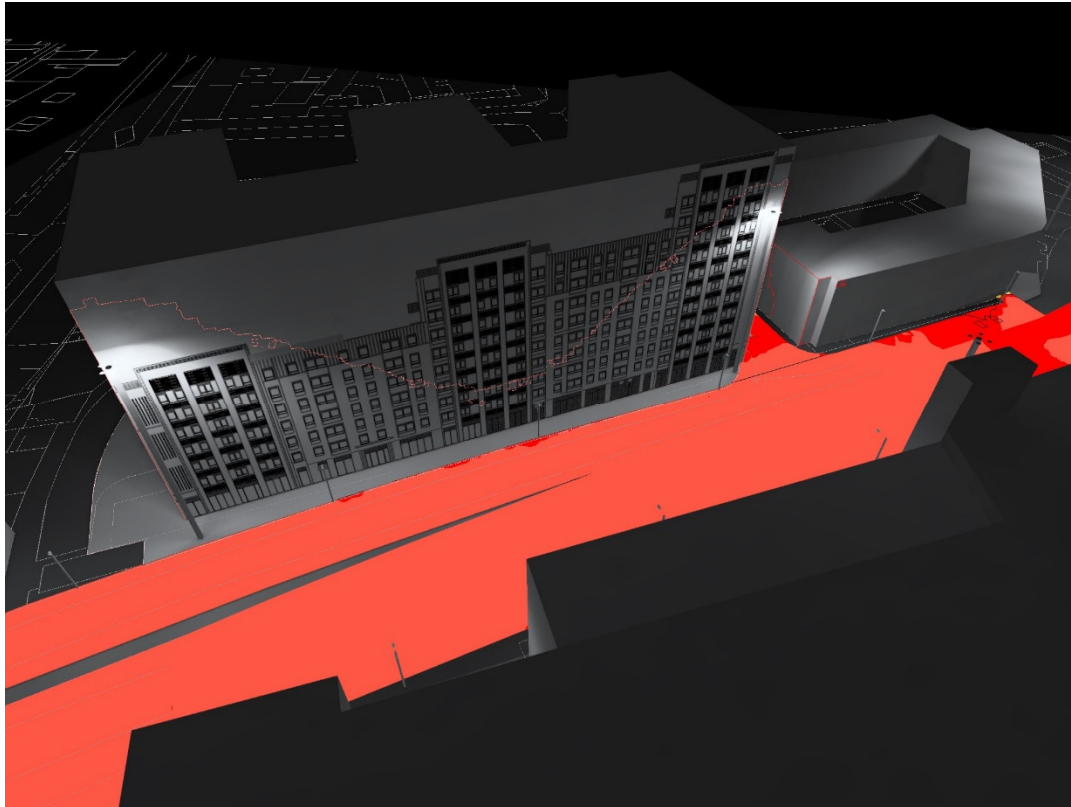


Figure 6 - Existing lighting – view 1 - spill review.

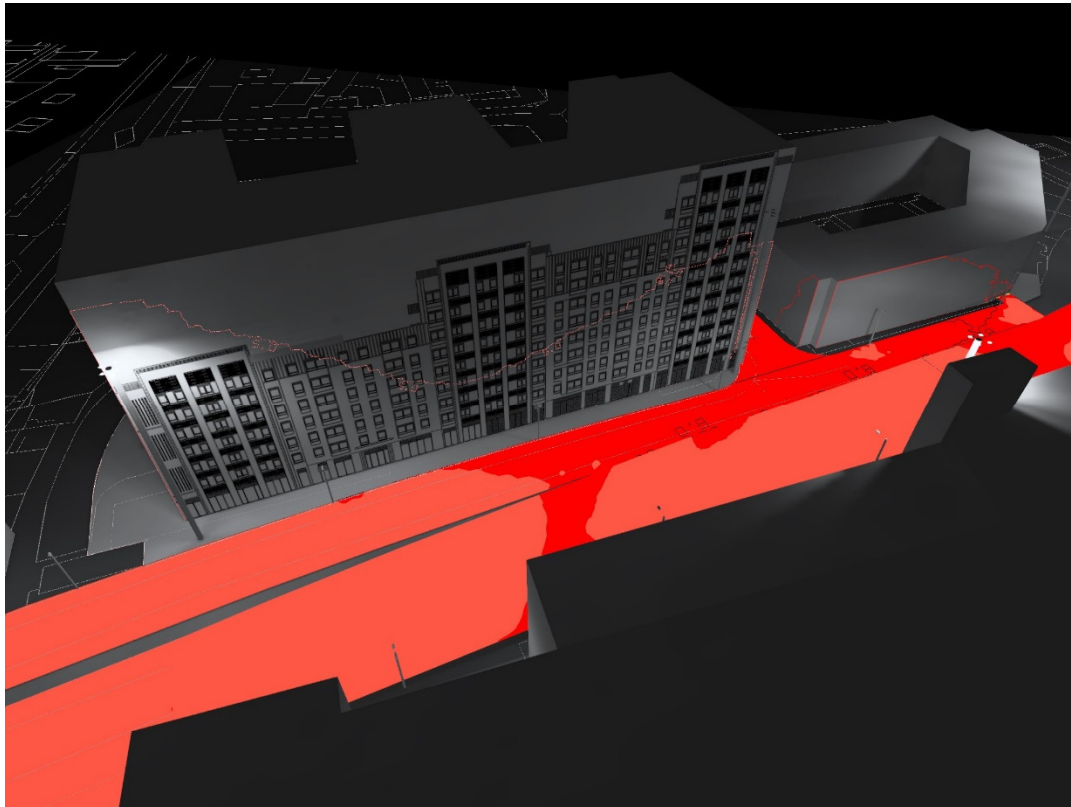


Figure 7 – Lighting scenario 1 – view 1 - spill review.

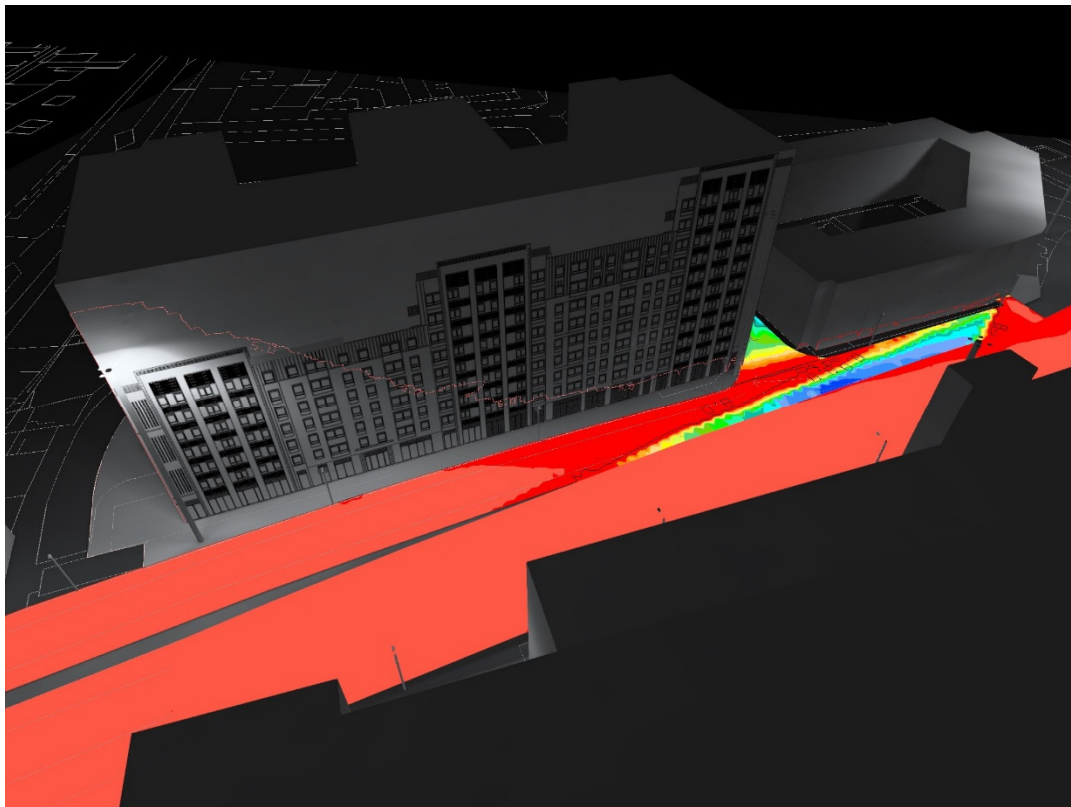


Figure 8 – Lighting scenario 2 – spill review.

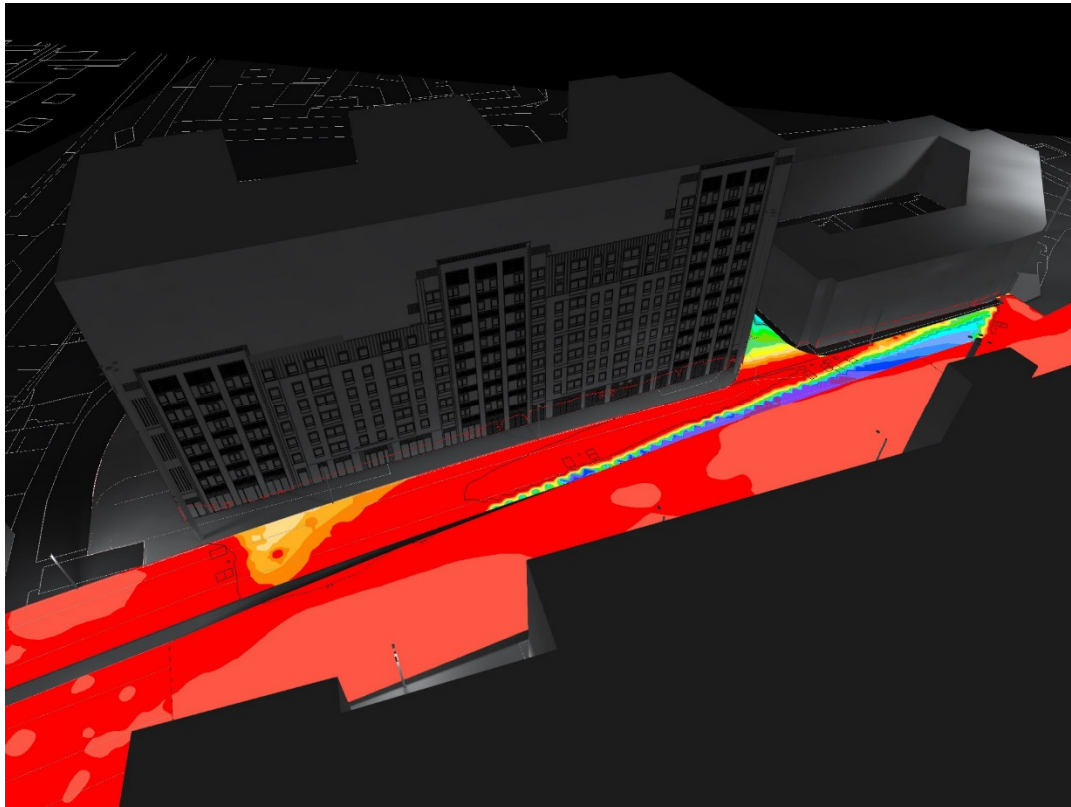


Figure 9 – Lighting scenario 3 – spill review.

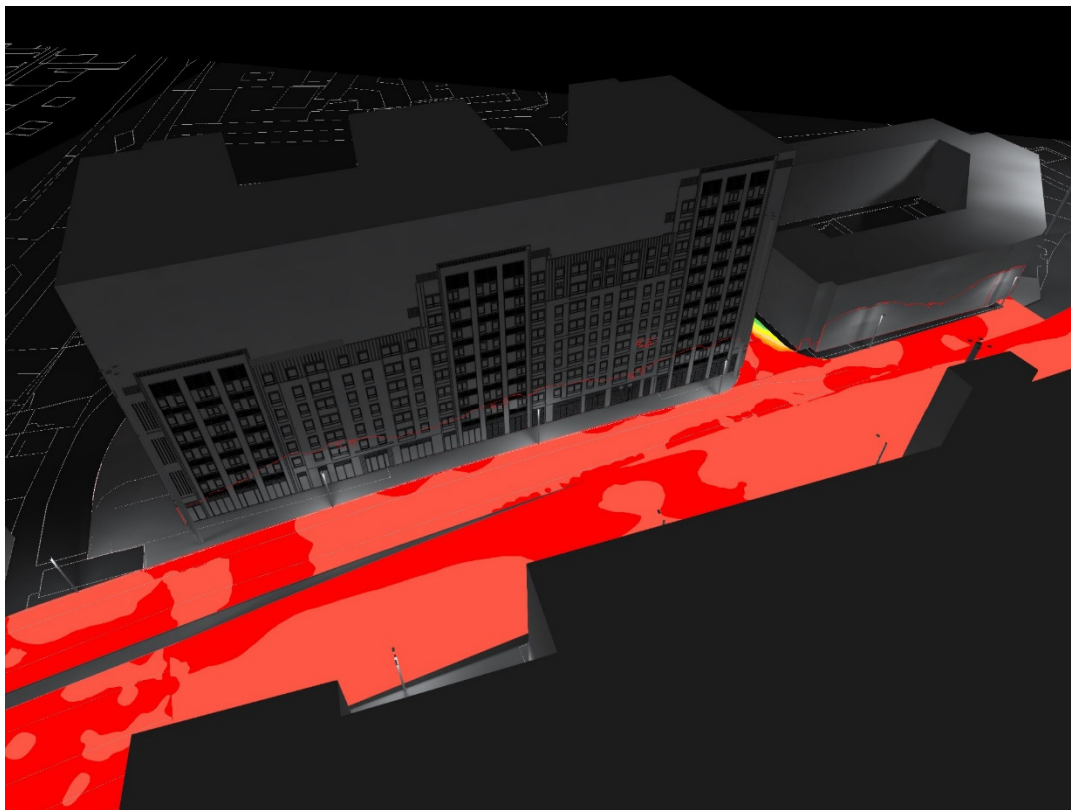


Figure 10 – Lighting design - view 1.

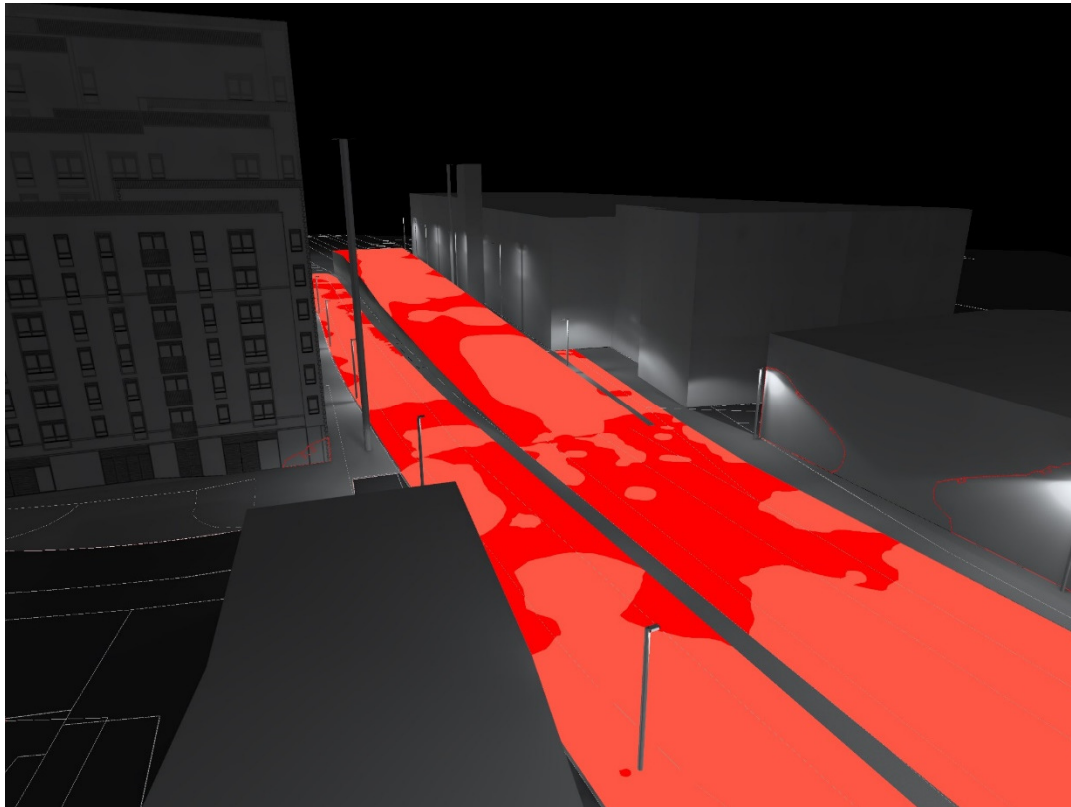


Figure 11 – Lighting design – view 2.

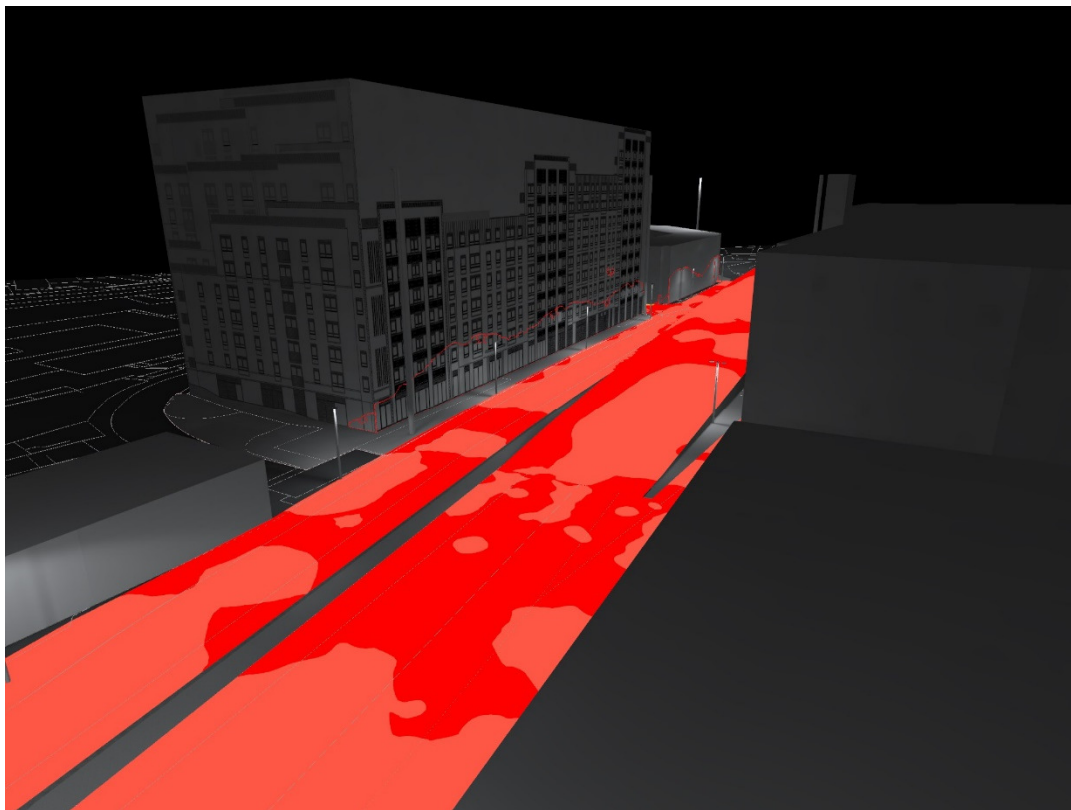


Figure 12 – Lighting design – view 3.

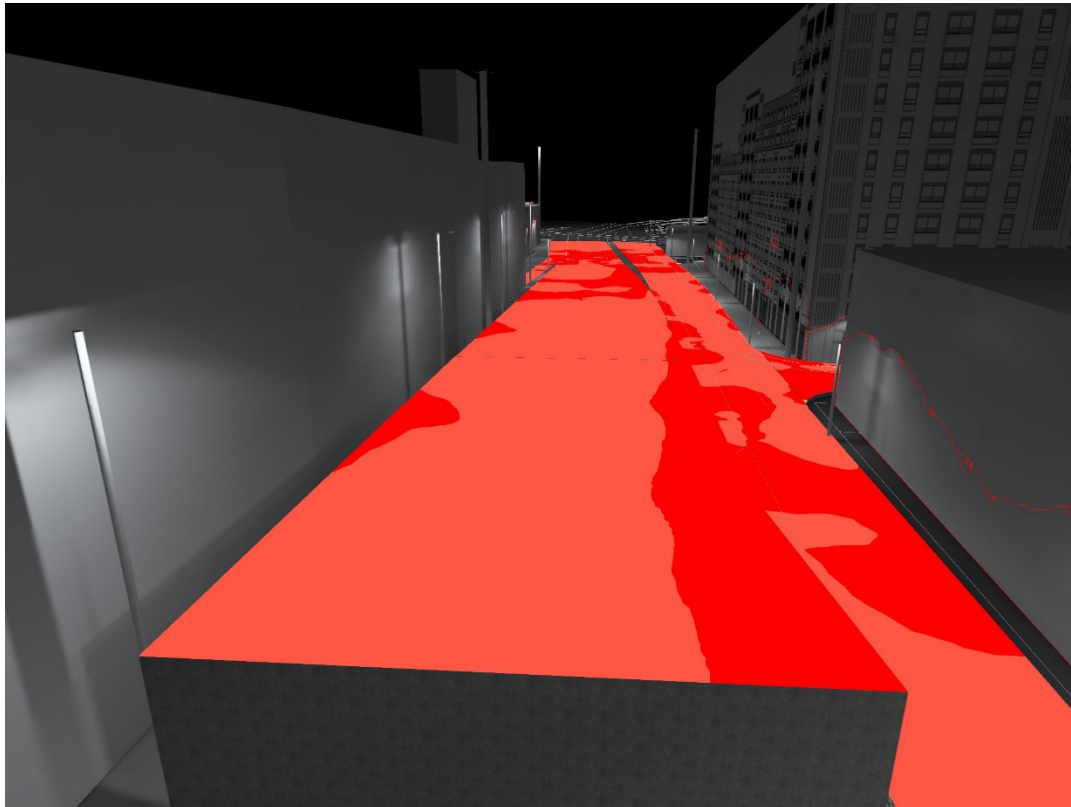


Figure 13 – Lighting design – view 4.

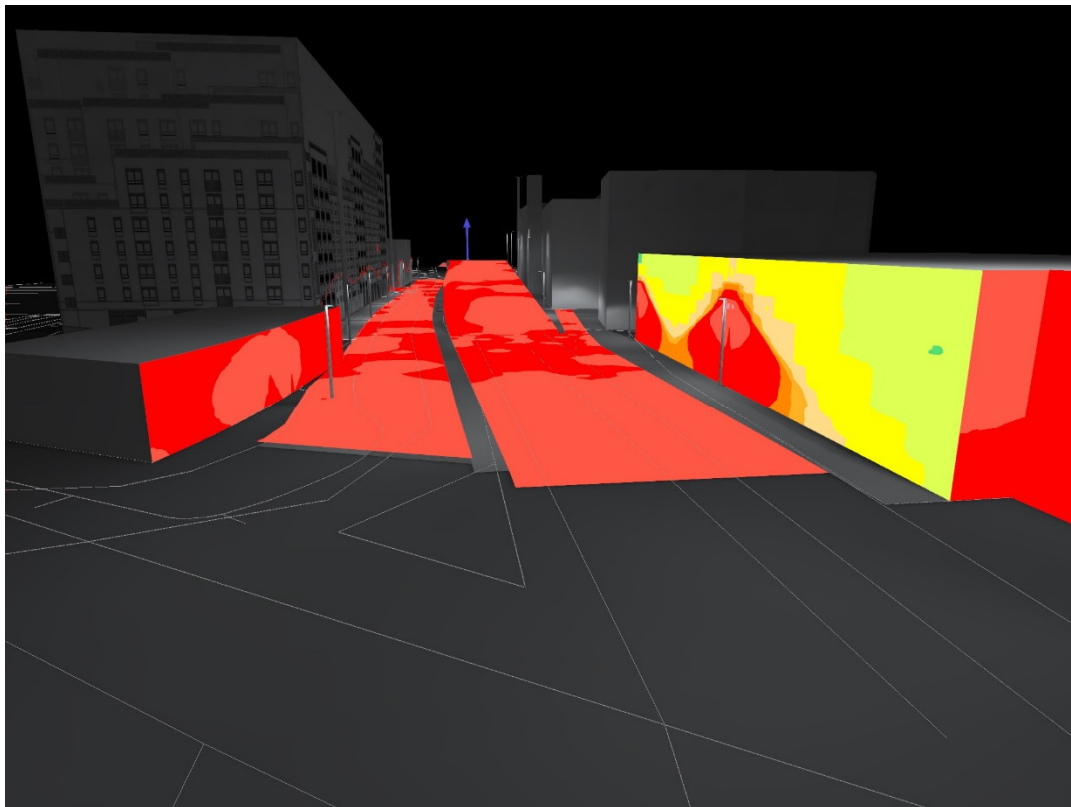


Figure 14 – Lighting design – view 5 - spill review.

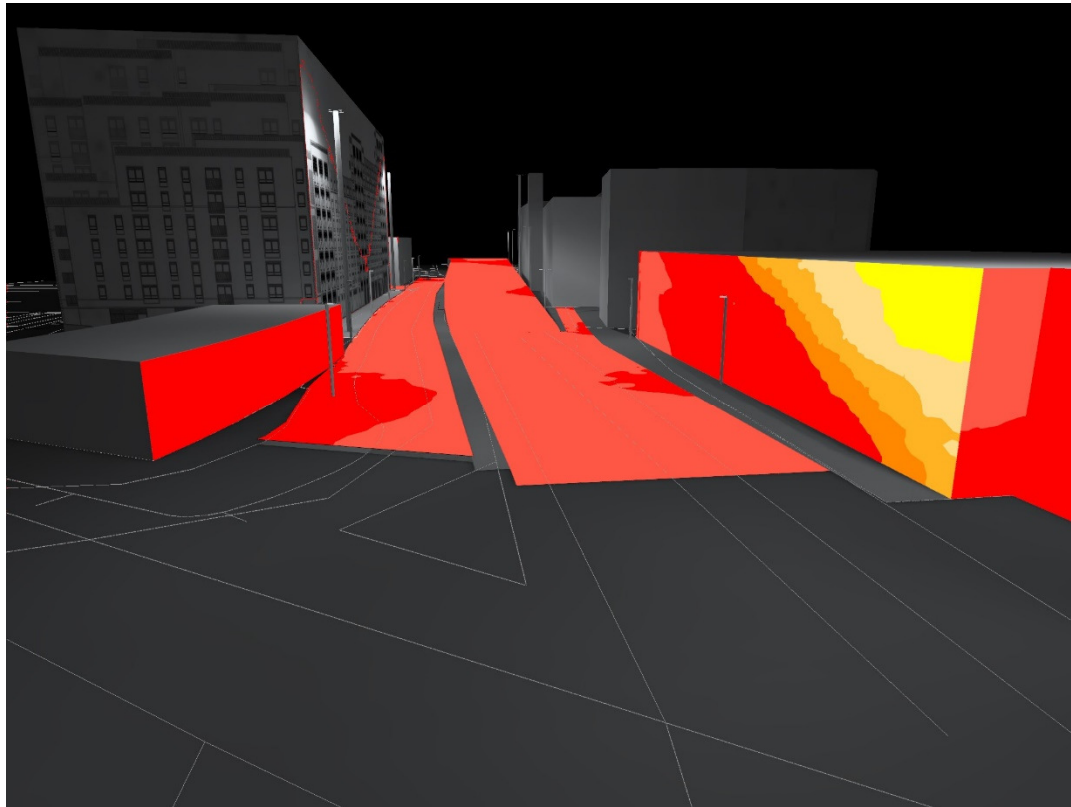


Figure 15 - Existing lighting – view 5 - spill review.

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- **Residential** teams that cover all aspects of new development and redevelopment spanning private, section 38 and section 278 design packages.
- **Public Realm** teams that are experts in enhancing night-time public spaces to create inviting spaces and opportunity for local economies to thrive during the hours of darkness.
- **Electrical** teams – we don't just put a light in the ground, we can help you get power to it as well! Additionally, we also offer design services for EV charging. As this market rapidly expands, make sure you have the experts managing the load, otherwise your EV charging solutions might not live up to expectations.
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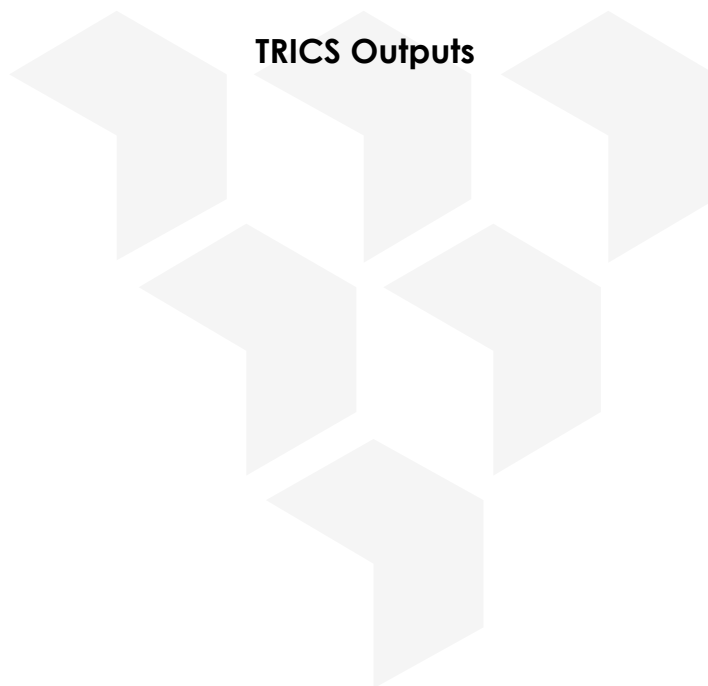
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17/18 City Business Centre, Hyde
Street, Winchester, Hampshire,
SO23 7TA

Appendix G

TRICS Outputs



Calculation Reference: AUDIT-225601-240228-0232

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	SK SOUTHWARK	1 days

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

Glanville Foxhall Road Didcot

Licence No: 225601

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: 233 to 233 (units:)
Range Selected by User: 6 to 493 (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: 01/01/13 to 14/06/23

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:

Thursday 1 days

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

Selected survey types:

Manual count 1 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:

Neighbourhood Centre (PPS6 Local Centre) 1

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:

Development Zone 1

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 7 days - Selected
Servicing vehicles Excluded 2 days - Selected

Secondary Filtering selection:

Use Class:

C3 1 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

100,001 or More 1 days

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

Population within 5 miles:

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 1 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 1 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:

6a Excellent 1 days

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

LIST OF SITES relevant to selection parameters

1

SK-03-C-03

BLOCKS OF FLATS

SOUTHWARK

MARITIME STREET

SURREY QUAYS

Neighbourhood Centre (PPS6 Local Centre)

Development Zone

Total No of Dwellings: 233

Survey date: THURSDAY 14/11/19

Survey Type: MANUAL

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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BN-03-C-01	High Parking Provision
HF-03-C-04	Covid-19 restrictions
HG-03-C-01	High Parking Provision
HO-03-C-04	High Parking Provision
NH-03-C-01	High Parking Provision
TH-03-C-04	High Parking Provision
WF-03-C-03	Covid-19 restrictions
WS-03-C-01	High Parking Provision

Glanville Foxhall Road Didcot

Licence No: 225601

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS 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): 20.60

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.009	1	233	0.004	1	233	0.013
09:00 - 10:00	1	233	0.013	1	233	0.009	1	233	0.022
10:00 - 11:00	1	233	0.009	1	233	0.013	1	233	0.022
11:00 - 12:00	1	233	0.009	1	233	0.009	1	233	0.018
12:00 - 13:00	1	233	0.009	1	233	0.013	1	233	0.022
13:00 - 14:00	1	233	0.009	1	233	0.009	1	233	0.018
14:00 - 15:00	1	233	0.017	1	233	0.013	1	233	0.030
15:00 - 16:00	1	233	0.013	1	233	0.013	1	233	0.026
16:00 - 17:00	1	233	0.004	1	233	0.004	1	233	0.008
17:00 - 18:00	1	233	0.013	1	233	0.017	1	233	0.030
18:00 - 19:00	1	233	0.013	1	233	0.013	1	233	0.026
19:00 - 20:00	1	233	0.026	1	233	0.017	1	233	0.043
20:00 - 21:00	1	233	0.013	1	233	0.021	1	233	0.034
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.157			0.155			0.312

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: 233 - 233 (units:)
Survey date range: 01/01/13 - 14/06/23
Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 8

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL TAXIS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.004	1	233	0.004	1	233	0.008
09:00 - 10:00	1	233	0.000	1	233	0.000	1	233	0.000
10:00 - 11:00	1	233	0.004	1	233	0.004	1	233	0.008
11:00 - 12:00	1	233	0.004	1	233	0.004	1	233	0.008
12:00 - 13:00	1	233	0.004	1	233	0.004	1	233	0.008
13:00 - 14:00	1	233	0.004	1	233	0.004	1	233	0.008
14:00 - 15:00	1	233	0.013	1	233	0.009	1	233	0.022
15:00 - 16:00	1	233	0.000	1	233	0.004	1	233	0.004
16:00 - 17:00	1	233	0.004	1	233	0.004	1	233	0.008
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.004	1	233	0.004	1	233	0.008
19:00 - 20:00	1	233	0.013	1	233	0.009	1	233	0.022
20:00 - 21:00	1	233	0.004	1	233	0.009	1	233	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.058			0.059			0.117

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.*

Glanville Foxhall Road Didcot

Licence No: 225601

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.000	1	233	0.000
09:00 - 10:00	1	233	0.004	1	233	0.004	1	233	0.008
10:00 - 11:00	1	233	0.000	1	233	0.000	1	233	0.000
11:00 - 12:00	1	233	0.004	1	233	0.000	1	233	0.004
12:00 - 13:00	1	233	0.000	1	233	0.004	1	233	0.004
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.004	1	233	0.004	1	233	0.008
15:00 - 16:00	1	233	0.000	1	233	0.000	1	233	0.000
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.000	1	233	0.000	1	233	0.000
19:00 - 20:00	1	233	0.000	1	233	0.000	1	233	0.000
20:00 - 21:00	1	233	0.000	1	233	0.000	1	233	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

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.

Glanville Foxhall Road Didcot

Licence No: 225601

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.009	1	233	0.009
08:00 - 09:00	1	233	0.000	1	233	0.017	1	233	0.017
09:00 - 10:00	1	233	0.000	1	233	0.004	1	233	0.004
10:00 - 11:00	1	233	0.000	1	233	0.009	1	233	0.009
11:00 - 12:00	1	233	0.000	1	233	0.009	1	233	0.009
12:00 - 13:00	1	233	0.004	1	233	0.009	1	233	0.013
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.009	1	233	0.000	1	233	0.009
16:00 - 17:00	1	233	0.009	1	233	0.000	1	233	0.009
17:00 - 18:00	1	233	0.004	1	233	0.000	1	233	0.004
18:00 - 19:00	1	233	0.017	1	233	0.004	1	233	0.021
19:00 - 20:00	1	233	0.013	1	233	0.000	1	233	0.013
20:00 - 21:00	1	233	0.004	1	233	0.009	1	233	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.060			0.070			0.130

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL VEHICLE OCCUPANTS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.021	1	233	0.017	1	233	0.038
09:00 - 10:00	1	233	0.013	1	233	0.013	1	233	0.026
10:00 - 11:00	1	233	0.009	1	233	0.021	1	233	0.030
11:00 - 12:00	1	233	0.017	1	233	0.009	1	233	0.026
12:00 - 13:00	1	233	0.009	1	233	0.017	1	233	0.026
13:00 - 14:00	1	233	0.009	1	233	0.013	1	233	0.022
14:00 - 15:00	1	233	0.017	1	233	0.021	1	233	0.038
15:00 - 16:00	1	233	0.017	1	233	0.017	1	233	0.034
16:00 - 17:00	1	233	0.004	1	233	0.009	1	233	0.013
17:00 - 18:00	1	233	0.017	1	233	0.026	1	233	0.043
18:00 - 19:00	1	233	0.013	1	233	0.013	1	233	0.026
19:00 - 20:00	1	233	0.030	1	233	0.021	1	233	0.051
20:00 - 21:00	1	233	0.021	1	233	0.026	1	233	0.047
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.197			0.223			0.420

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.

Glanville Foxhall Road Didcot

Licence No: 225601

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	1	233	0.013	1	233	0.077	1	233	0.090
08:00 - 09:00	1	233	0.034	1	233	0.094	1	233	0.128
09:00 - 10:00	1	233	0.047	1	233	0.082	1	233	0.129
10:00 - 11:00	1	233	0.056	1	233	0.026	1	233	0.082
11:00 - 12:00	1	233	0.056	1	233	0.052	1	233	0.108
12:00 - 13:00	1	233	0.086	1	233	0.060	1	233	0.146
13:00 - 14:00	1	233	0.086	1	233	0.056	1	233	0.142
14:00 - 15:00	1	233	0.107	1	233	0.030	1	233	0.137
15:00 - 16:00	1	233	0.090	1	233	0.047	1	233	0.137
16:00 - 17:00	1	233	0.090	1	233	0.064	1	233	0.154
17:00 - 18:00	1	233	0.094	1	233	0.082	1	233	0.176
18:00 - 19:00	1	233	0.064	1	233	0.086	1	233	0.150
19:00 - 20:00	1	233	0.099	1	233	0.056	1	233	0.155
20:00 - 21:00	1	233	0.116	1	233	0.069	1	233	0.185
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.038			0.881			1.919

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.

Glanville Foxhall Road Didcot

Licence No: 225601

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	1	233	0.030	1	233	0.099	1	233	0.129
08:00 - 09:00	1	233	0.052	1	233	0.163	1	233	0.215
09:00 - 10:00	1	233	0.030	1	233	0.193	1	233	0.223
10:00 - 11:00	1	233	0.021	1	233	0.043	1	233	0.064
11:00 - 12:00	1	233	0.060	1	233	0.090	1	233	0.150
12:00 - 13:00	1	233	0.034	1	233	0.043	1	233	0.077
13:00 - 14:00	1	233	0.039	1	233	0.150	1	233	0.189
14:00 - 15:00	1	233	0.030	1	233	0.047	1	233	0.077
15:00 - 16:00	1	233	0.034	1	233	0.039	1	233	0.073
16:00 - 17:00	1	233	0.099	1	233	0.026	1	233	0.125
17:00 - 18:00	1	233	0.133	1	233	0.043	1	233	0.176
18:00 - 19:00	1	233	0.215	1	233	0.043	1	233	0.258
19:00 - 20:00	1	233	0.133	1	233	0.047	1	233	0.180
20:00 - 21:00	1	233	0.116	1	233	0.030	1	233	0.146
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.026			1.056			2.082

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL TOTAL RAIL PASSENGERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.009	1	233	0.133	1	233	0.142
08:00 - 09:00	1	233	0.026	1	233	0.206	1	233	0.232
09:00 - 10:00	1	233	0.034	1	233	0.176	1	233	0.210
10:00 - 11:00	1	233	0.034	1	233	0.090	1	233	0.124
11:00 - 12:00	1	233	0.026	1	233	0.043	1	233	0.069
12:00 - 13:00	1	233	0.021	1	233	0.030	1	233	0.051
13:00 - 14:00	1	233	0.043	1	233	0.047	1	233	0.090
14:00 - 15:00	1	233	0.009	1	233	0.013	1	233	0.022
15:00 - 16:00	1	233	0.030	1	233	0.013	1	233	0.043
16:00 - 17:00	1	233	0.090	1	233	0.017	1	233	0.107
17:00 - 18:00	1	233	0.090	1	233	0.026	1	233	0.116
18:00 - 19:00	1	233	0.185	1	233	0.043	1	233	0.228
19:00 - 20:00	1	233	0.180	1	233	0.021	1	233	0.201
20:00 - 21:00	1	233	0.137	1	233	0.017	1	233	0.154
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.914			0.875			1.789

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL COACH PASSENGERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.009	1	233	0.009
09:00 - 10:00	1	233	0.000	1	233	0.000	1	233	0.000
10:00 - 11:00	1	233	0.000	1	233	0.000	1	233	0.000
11:00 - 12:00	1	233	0.000	1	233	0.004	1	233	0.004
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.000	1	233	0.000	1	233	0.000
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.000	1	233	0.000	1	233	0.000
19:00 - 20:00	1	233	0.000	1	233	0.000	1	233	0.000
20:00 - 21:00	1	233	0.000	1	233	0.000	1	233	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.013			0.013

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.039	1	233	0.232	1	233	0.271
08:00 - 09:00	1	233	0.077	1	233	0.378	1	233	0.455
09:00 - 10:00	1	233	0.064	1	233	0.373	1	233	0.437
10:00 - 11:00	1	233	0.056	1	233	0.133	1	233	0.189
11:00 - 12:00	1	233	0.086	1	233	0.137	1	233	0.223
12:00 - 13:00	1	233	0.056	1	233	0.073	1	233	0.129
13:00 - 14:00	1	233	0.082	1	233	0.197	1	233	0.279
14:00 - 15:00	1	233	0.039	1	233	0.064	1	233	0.103
15:00 - 16:00	1	233	0.064	1	233	0.052	1	233	0.116
16:00 - 17:00	1	233	0.189	1	233	0.043	1	233	0.232
17:00 - 18:00	1	233	0.223	1	233	0.069	1	233	0.292
18:00 - 19:00	1	233	0.399	1	233	0.086	1	233	0.485
19:00 - 20:00	1	233	0.318	1	233	0.069	1	233	0.387
20:00 - 21:00	1	233	0.253	1	233	0.047	1	233	0.300
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.945			1.953			3.898

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS 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): 20.60

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	1	233	0.052	1	233	0.318	1	233	0.370
08:00 - 09:00	1	233	0.133	1	233	0.506	1	233	0.639
09:00 - 10:00	1	233	0.124	1	233	0.472	1	233	0.596
10:00 - 11:00	1	233	0.120	1	233	0.189	1	233	0.309
11:00 - 12:00	1	233	0.159	1	233	0.206	1	233	0.365
12:00 - 13:00	1	233	0.155	1	233	0.159	1	233	0.314
13:00 - 14:00	1	233	0.176	1	233	0.266	1	233	0.442
14:00 - 15:00	1	233	0.163	1	233	0.116	1	233	0.279
15:00 - 16:00	1	233	0.180	1	233	0.116	1	233	0.296
16:00 - 17:00	1	233	0.292	1	233	0.116	1	233	0.408
17:00 - 18:00	1	233	0.339	1	233	0.176	1	233	0.515
18:00 - 19:00	1	233	0.494	1	233	0.189	1	233	0.683
19:00 - 20:00	1	233	0.459	1	233	0.146	1	233	0.605
20:00 - 21:00	1	233	0.395	1	233	0.150	1	233	0.545
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.241			3.125			6.366

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.000	1	233	0.000
09:00 - 10:00	1	233	0.000	1	233	0.000	1	233	0.000
10:00 - 11:00	1	233	0.000	1	233	0.000	1	233	0.000
11:00 - 12:00	1	233	0.000	1	233	0.000	1	233	0.000
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.004	1	233	0.004	1	233	0.008
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.004	1	233	0.004	1	233	0.008
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.004	1	233	0.004	1	233	0.008
18:00 - 19:00	1	233	0.000	1	233	0.000	1	233	0.000
19:00 - 20:00	1	233	0.004	1	233	0.000	1	233	0.004
20:00 - 21:00	1	233	0.004	1	233	0.009	1	233	0.013
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.021			0.041

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL LGVS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.004	1	233	0.000	1	233	0.004
09:00 - 10:00	1	233	0.009	1	233	0.004	1	233	0.013
10:00 - 11:00	1	233	0.000	1	233	0.004	1	233	0.004
11:00 - 12:00	1	233	0.000	1	233	0.004	1	233	0.004
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.004	1	233	0.000	1	233	0.004
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.004	1	233	0.009	1	233	0.013
18:00 - 19:00	1	233	0.004	1	233	0.004	1	233	0.008
19:00 - 20:00	1	233	0.000	1	233	0.000	1	233	0.000
20:00 - 21:00	1	233	0.000	1	233	0.000	1	233	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.025			0.025			0.050

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL MOTOR CYCLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.000	1	233	0.000
09:00 - 10:00	1	233	0.000	1	233	0.000	1	233	0.000
10:00 - 11:00	1	233	0.004	1	233	0.004	1	233	0.008
11:00 - 12:00	1	233	0.000	1	233	0.000	1	233	0.000
12:00 - 13:00	1	233	0.004	1	233	0.004	1	233	0.008
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.004	1	233	0.004	1	233	0.008
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.004	1	233	0.004	1	233	0.008
18:00 - 19:00	1	233	0.004	1	233	0.004	1	233	0.008
19:00 - 20:00	1	233	0.009	1	233	0.009	1	233	0.018
20:00 - 21:00	1	233	0.004	1	233	0.004	1	233	0.008
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.033			0.033			0.066

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL Underground Passengers
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.094	1	233	0.094
08:00 - 09:00	1	233	0.021	1	233	0.142	1	233	0.163
09:00 - 10:00	1	233	0.030	1	233	0.137	1	233	0.167
10:00 - 11:00	1	233	0.030	1	233	0.069	1	233	0.099
11:00 - 12:00	1	233	0.021	1	233	0.034	1	233	0.055
12:00 - 13:00	1	233	0.021	1	233	0.021	1	233	0.042
13:00 - 14:00	1	233	0.017	1	233	0.030	1	233	0.047
14:00 - 15:00	1	233	0.004	1	233	0.009	1	233	0.013
15:00 - 16:00	1	233	0.026	1	233	0.009	1	233	0.035
16:00 - 17:00	1	233	0.069	1	233	0.017	1	233	0.086
17:00 - 18:00	1	233	0.064	1	233	0.021	1	233	0.085
18:00 - 19:00	1	233	0.107	1	233	0.026	1	233	0.133
19:00 - 20:00	1	233	0.129	1	233	0.017	1	233	0.146
20:00 - 21:00	1	233	0.120	1	233	0.013	1	233	0.133
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.659			0.639			1.298

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL DLR Passengers
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.013	1	233	0.013
09:00 - 10:00	1	233	0.000	1	233	0.013	1	233	0.013
10:00 - 11:00	1	233	0.000	1	233	0.000	1	233	0.000
11:00 - 12:00	1	233	0.004	1	233	0.000	1	233	0.004
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.004	1	233	0.004	1	233	0.008
14:00 - 15:00	1	233	0.000	1	233	0.000	1	233	0.000
15:00 - 16:00	1	233	0.000	1	233	0.000	1	233	0.000
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.013	1	233	0.009	1	233	0.022
19:00 - 20:00	1	233	0.013	1	233	0.000	1	233	0.013
20:00 - 21:00	1	233	0.000	1	233	0.000	1	233	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.039			0.073

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL Overground Passengers
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.009	1	233	0.034	1	233	0.043
08:00 - 09:00	1	233	0.004	1	233	0.039	1	233	0.043
09:00 - 10:00	1	233	0.004	1	233	0.026	1	233	0.030
10:00 - 11:00	1	233	0.004	1	233	0.017	1	233	0.021
11:00 - 12:00	1	233	0.000	1	233	0.009	1	233	0.009
12:00 - 13:00	1	233	0.000	1	233	0.009	1	233	0.009
13:00 - 14:00	1	233	0.017	1	233	0.009	1	233	0.026
14:00 - 15:00	1	233	0.004	1	233	0.000	1	233	0.004
15:00 - 16:00	1	233	0.004	1	233	0.004	1	233	0.008
16:00 - 17:00	1	233	0.013	1	233	0.000	1	233	0.013
17:00 - 18:00	1	233	0.026	1	233	0.004	1	233	0.030
18:00 - 19:00	1	233	0.060	1	233	0.004	1	233	0.064
19:00 - 20:00	1	233	0.030	1	233	0.004	1	233	0.034
20:00 - 21:00	1	233	0.013	1	233	0.004	1	233	0.017
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.188			0.163			0.351

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL National Rail Passengers
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.004	1	233	0.004
08:00 - 09:00	1	233	0.000	1	233	0.013	1	233	0.013
09:00 - 10:00	1	233	0.000	1	233	0.000	1	233	0.000
10:00 - 11:00	1	233	0.000	1	233	0.004	1	233	0.004
11:00 - 12:00	1	233	0.000	1	233	0.000	1	233	0.000
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.004	1	233	0.004	1	233	0.008
14:00 - 15:00	1	233	0.000	1	233	0.004	1	233	0.004
15:00 - 16:00	1	233	0.000	1	233	0.000	1	233	0.000
16:00 - 17:00	1	233	0.009	1	233	0.000	1	233	0.009
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.004	1	233	0.004	1	233	0.008
19:00 - 20:00	1	233	0.009	1	233	0.000	1	233	0.009
20:00 - 21:00	1	233	0.004	1	233	0.000	1	233	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.033			0.063

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL Bus Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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	1	233	0.030	1	233	0.099	1	233	0.129
08:00 - 09:00	1	233	0.052	1	233	0.163	1	233	0.215
09:00 - 10:00	1	233	0.030	1	233	0.193	1	233	0.223
10:00 - 11:00	1	233	0.021	1	233	0.043	1	233	0.064
11:00 - 12:00	1	233	0.060	1	233	0.090	1	233	0.150
12:00 - 13:00	1	233	0.034	1	233	0.043	1	233	0.077
13:00 - 14:00	1	233	0.039	1	233	0.150	1	233	0.189
14:00 - 15:00	1	233	0.030	1	233	0.047	1	233	0.077
15:00 - 16:00	1	233	0.034	1	233	0.039	1	233	0.073
16:00 - 17:00	1	233	0.099	1	233	0.026	1	233	0.125
17:00 - 18:00	1	233	0.133	1	233	0.043	1	233	0.176
18:00 - 19:00	1	233	0.215	1	233	0.043	1	233	0.258
19:00 - 20:00	1	233	0.133	1	233	0.047	1	233	0.180
20:00 - 21:00	1	233	0.116	1	233	0.030	1	233	0.146
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.026			1.056			2.082

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL Water Service Passengers
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.000	1	233	0.000	1	233	0.000
09:00 - 10:00	1	233	0.000	1	233	0.004	1	233	0.004
10:00 - 11:00	1	233	0.000	1	233	0.000	1	233	0.000
11:00 - 12:00	1	233	0.000	1	233	0.000	1	233	0.000
12:00 - 13:00	1	233	0.000	1	233	0.000	1	233	0.000
13:00 - 14:00	1	233	0.000	1	233	0.000	1	233	0.000
14:00 - 15:00	1	233	0.000	1	233	0.004	1	233	0.004
15:00 - 16:00	1	233	0.000	1	233	0.000	1	233	0.000
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.000	1	233	0.000	1	233	0.000
18:00 - 19:00	1	233	0.000	1	233	0.000	1	233	0.000
19:00 - 20:00	1	233	0.004	1	233	0.000	1	233	0.004
20:00 - 21:00	1	233	0.000	1	233	0.000	1	233	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.008			0.012

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL Servicing Vehicles
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

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	1	233	0.000	1	233	0.000	1	233	0.000
08:00 - 09:00	1	233	0.004	1	233	0.000	1	233	0.004
09:00 - 10:00	1	233	0.013	1	233	0.009	1	233	0.022
10:00 - 11:00	1	233	0.004	1	233	0.009	1	233	0.013
11:00 - 12:00	1	233	0.004	1	233	0.004	1	233	0.008
12:00 - 13:00	1	233	0.004	1	233	0.009	1	233	0.013
13:00 - 14:00	1	233	0.004	1	233	0.004	1	233	0.008
14:00 - 15:00	1	233	0.004	1	233	0.004	1	233	0.008
15:00 - 16:00	1	233	0.013	1	233	0.009	1	233	0.022
16:00 - 17:00	1	233	0.000	1	233	0.000	1	233	0.000
17:00 - 18:00	1	233	0.013	1	233	0.017	1	233	0.030
18:00 - 19:00	1	233	0.009	1	233	0.009	1	233	0.018
19:00 - 20:00	1	233	0.013	1	233	0.009	1	233	0.022
20:00 - 21:00	1	233	0.009	1	233	0.013	1	233	0.022
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.094			0.096			0.190

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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