

Client:
Mr Frank Newbold

Project:
**Bellegrove Road,
Welling**

Transport Statement

August 2021

REPORT CONTROL

Document: Transport Statement

Project: Bellegrove Road, Welling

Client: Mr Frank Newbold

Job Number: 20116

File Reference: R01-AH-Bellegrove Road TS 210826

Document Checking:

Primary Author	Adam Humphries	Initialed:	AH
-----------------------	----------------	-------------------	----

Issue	Date	Status	Checked for Issue
1	19/01/21	Draft for Comment	KH
2	27/08/21	Issued for planning	KH

CONTENTS

1	INTRODUCTION	1
	BACKGROUND	1
	PROPOSED DEVELOPMENT.....	1
2	EXISTING CONDITIONS	2
	SITE LOCATION	2
	ACCESSIBILITY	2
3	POLICY REVIEW	6
	INTRODUCTION	6
	NATIONAL POLICY	6
	REGIONAL POLICY	8
	LOCAL POLICY.....	9
	SUMMARY	10
4	THE PROPOSED DEVELOPMENT.....	11
	PEDESTRIAN ACCESS.....	11
	SERVICING	11
	VEHICLE PARKING.....	11
	CYCLES.....	11
5	TRIP ASSESSMENT.....	13
	RESIDENTIAL TRIP RATES & TRIP GENERATION.....	13
6	SUMMARY & CONCLUSIONS	14

Figures

Figure 1 - Site Location Plan

Appendices

Appendix A - Architect's Layout

Appendix B - PTAL Output

Appendix C - TRICS Output

1 INTRODUCTION

1.1 Mr Frank Newbold has commissioned Pulsar to prepare a Transport Statement in support of a planning application for the demolition of an existing office building and construction of a mixed-use building consisting of a new 'E' use class unit and seven dwellings.

Background

1.2 The Local Planning Authority and Local Highway Authority are the London Borough of Bexley (LBB).

Proposed Development

1.3 The Applicant seeks to submit an application for a new mixed-use building. The proposed development is located within the centre of Welling and is therefore in a highly accessible area with multiple amenities in the vicinity of the site. Therefore, the development is proposed to be car free with cycle parking provided to London Plan standards. The proposed layout is shown on the architect's plans in **Appendix A**.

1.4 The Transport Statement is structured as follows:

- **Section 2: Existing Conditions** – A review of travel and transport conditions at the site and surrounding area.
- **Section 3: Policy Review** – A review of relevant national, regional and local transport and land use planning policy.
- **Section 4: The Proposed Development** – A description of the proposed development with an emphasis on proposed transport infrastructure.
- **Section 5: Trip Generation** – A review of the likely number of trips to be generated by the proposed development.
- **Section 6: Summary & Conclusions** – A review of key issues and conclusions raised in the report.

2 EXISTING CONDITIONS

2.1 This section describes existing conditions at the site in relation to transport.

Site Location

2.2 The site is located adjacent to the junction with Deepdene Road on Bellegrave Road, Welling, DA16 3PU. Bellegrave Road is the main road through Welling and as such the site is surrounded by retail developments and other residential developments.

2.3 The site is currently occupied by a two-storey office building with yard area provided at the rear. The existing building has a floor area of c.71sqm.

2.4 **Figure 1** shows the site location plan.

Figure 1 Site Location Plan



Accessibility

2.5 This section provides information on access to and from the site by sustainable modes of transport.

Walking & Cycling

2.6 The topography in the area is generally flat which is good for walking and cycling activity.

2.7 Bellegrave Road has footways on both sides of the main carriageway. Dropped kerbs and tactile paving are located outside the site to support accessible pedestrian movement by pushchair users and the mobility and sight impaired. There is an

informal pedestrian crossing with a central island on Bellegrove Road, approximately 20m to the east of the site. A signal controlled pedestrian crossing is provided on Bellegrove Road approximately 160m to the east of the site, located at the junction with the A209 Upper Wickham Lane and the A207 Welling High Street.

2.8 According to the TfL Local Cycling Guide 8, Bellegrove Road is indicated as a route signed or marked for use by cyclists. There are several other routes in the vicinity of the site that have been recommended by cyclists, including Upper Wickham Lane, Hook Lane, Danson Crescent and Faraday Road.

2.9 The site is located within the centre of Welling, which means it is in close proximity to numerous local amenities, including:

- Morrisons, Lidl and Tesco Supermarkets;
- Banks;
- Pharmacies;
- Take-aways;
- DIY stores; and
- Public houses.

Public Transport

2.10 Bus stops are available on Bellegrove Road; the eastbound stop is located approximately 35m to the west and the westbound approximately 160m to the west. From these stops, four locally accessible bus services are available, which offer services to destinations including Bexleyheath, Lewisham and Greenwich. Both eastbound and westbound services are accessible from a sheltered stop with seating marked by a bus flag. Further information on the accessible bus services is provided in **Table 2.1**.

Table 2.1 Accessible Bus Services: Typical Frequencies (Mins)

No.	Route	Week	Sat	Sun
51	Woolwich – Welling – Sidcup Station – Orpington Station	10	10	15
89	Lewisham Station – Blackheath – Welling – Bexleyheath Bus Garage – Slade Green Station	20	N/A	N/A
486	North Greenwich Station – Charlton – Welling – Bexleyheath	12	12	N/A
B16	Bexleyheath Bus Garage – Welling – Falconwood Station – Eltham – Kidbrooke	15	15	30

2.11 The PTAL rating is also supported by services from Welling Station located 600m north west of the site. Welling Station is served by South Eastern Rail services. This offers direct connections to destinations including London Cannon Street, London

Bridge, Lewisham, Barnehurst, London Charing Cross, London Waterloo East, Dartford, London Victoria and Woolwich Arsenal.

PTAL

- 2.12 PTAL is a theoretical measure of the accessibility of a given point to the surrounding public transport network, taking into account walk access time and service availability. The method used is essentially a way of measuring the density of the public transport network at a particular point.
- 2.13 The PTAL measure, reflects:
- The walking distance from the point of interest to the public transport access points;
 - The reliability of the service modes available;
 - The number of services available within the catchment; and
 - The level of service at the public transport access points – i.e. average waiting time.
- 2.14 According to TfL, the site has a public transport accessibility level (PTAL) rating of 4 (good) on a scale of 1 (very poor) to 6 (excellent). This accessibility rating is supported by local bus and National Rail services. The PTAL outputs are included in **Appendix B**.
- 2.15 PTAL is only one measure of accessibility, and given that the site is located within the centre of Welling and is therefore close to numerous amenities, the overall accessibility of the site is considered to be very good.

Local Highway Network

- 2.16 The A207 Bellegrove Road is a single carriageway road accommodating traffic in both directions. The road operates a 30mph speed limit. Pay and display parking laybys are provided on both sides of the carriageway. These laybys are provided into the footways to ensure no parking encroaches onto and therefore reduces the width of the carriageway. This still allows for wide footways on both sides of the carriageway.
- 2.17 Deepdene Road is a single carriageway residential street, which also operates a 30mph speed limit. A CPZ is in operation, with parking restricted to permit holders Monday-Friday 13:00-15:00 within bays marked on street. Elsewhere on Deepdene Road, single yellow line markings are provided restricting parking Monday-Saturday 08:00-18:30 and restricting parking at all other times by vehicles over 5 tonnes. Outside of these restrictions parking is limited on Deepdene Road due to access required to the numerous driveways.
- 2.18 Bellegrove Road leads to Welling High Street and onto Bexley to the east. To the west, it leads to the A205 Well Hall Road and the A2, which can be used to access central

London. The A2 is also available to the south of the site via Welling Way, which to the east connects to the M25 and the A282.

3 POLICY REVIEW

Introduction

- 3.1 This section of the report considers the current and emerging planning policy guidance at national, regional and local level.

National Policy

National Planning Policy Framework (NPPF)

- 3.2 The recently revised NPPF was published in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied.
- 3.3 The NPPF reiterates that "*the purpose of the planning system is to contribute to the achievement of sustainable development*" and "*at the heart of the Framework is a **presumption in favour of sustainable development***".
- 3.4 Section 9 deals with promoting sustainable transport. Paragraph 102 sets out the reasons transport issues should be considered from the earliest stages of plan-making and development proposals, i.e. so that:
- a) the potential impacts of development on transport networks can be addressed;*
 - b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
 - c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
 - d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
 - e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.*
- 3.5 Paragraph 105 states that the planning system should actively manage patterns of growth in support of the above objectives.
- 3.6 Paragraph 110 states that in assessing specific applications for development, the following should be ensured:
- "appropriate opportunities to promote sustainable transport modes can be – or have been - taken up given the type of development and its location;*
 - Safe and suitable access to the site can be achieved for all users;*

The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Mode Design Code; and

Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

3.7 Paragraph 111 goes on to state:

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

3.8 NPPF states that all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment.

National Planning Practice Guidance (NPPG), 2014

3.9 On 6 March 2014 the Department for Communities and Local Government (DCLG) launched the National Planning Practice Guidance web-based resource. One section relates specifically to Transport and is titled 'Travel Plans, Transport Assessments and Statements in decision-taking' and this provides the overarching principles of Travel Plans, Transport Assessments and Statements.

3.10 The guidance explains the role of Transport Assessments and Statements as:

"ways of assessing the potential transport impacts of developments (and they may propose mitigation measures to promote sustainable development. Where that mitigation relates to matters that can be addressed by management measures, the mitigation may inform the preparation of Travel Plans)".

3.11 The guidance demonstrates that Transport Assessments and Statements and Travel Plans can positively contribute in the following ways:

- *"encouraging sustainable travel;*
- *lessening traffic generation and its detrimental impacts;*
- *reducing carbon emissions and climate impacts;*
- *creating accessible, connected, inclusive communities;*
- *improving health outcomes and quality of life;*
- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads."*

Regional Policy

New London Plan

- 3.1 The new London Plan is a broad plan to shape the way London develops over the next 20-25 years.
- 3.2 Following an extensive consultation process, an Examination in Public (EIP), and comments from the Secretary of State, the new London Plan was published and adopted in March 2021.
- 3.3 A key objective of the new London Plan is to enable “Good Growth”, i.e. delivering a more socially integrated and sustainable city.
- 3.4 Policy GG2 “Making Best Use of Land” supports use of brownfield land and sites that are well connected by public transport and promotes the utilisation of small sites.

where local amenities are within walking and cycling distance, and public transport options are available for longer distance trips, supporting good health, allowing strong communities to develop, and boosting the success of local businesses.

Making the best use of land means directing growth towards the most accessible and well-connected places, making the most efficient use of the existing and future public transport, walking and cycling networks.

All options for using the city’s land more effectively will need to be explored as London’s growth continues, including the redevelopment of brownfield sites and the intensification of existing places

- 3.5 Specific transport related policies are dealt with in Chapter 10 of the new London Plan. There is a focus on reducing car dependency and promoting a significant shift towards active modes of travel and public transport use.
- 3.6 Policy T1 “Strategic approach to transport” states:
 - A. *Development Plans and development proposals should support and facilitate:*
 - 1. *The delivery of the Mayor’s strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041*
 - 2. *The proposed transport schemes set out in Table 4.1*
 - B. *All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London’s transport networks and supporting infrastructure are mitigated.*

- 3.7 Policy T2 “Healthy Streets” is seeking a pattern of land use that facilitate shorter, regular trips by walking or cycling. This is in line with the Mayor’s Transport Strategy to deliver infrastructure and public realm to increase levels of walking, cycling and public transport use.
- 3.8 Policy T4 “Assessing and mitigating transport impacts” notes that Transport Assessments should be submitted with development proposals to ensure that any impacts on the capacity of the transport network are fully assessed.
- 3.9 Policy T6 “Car Parking” notes that car parking “*should be restricted in line with existing and future public transport accessibility and connectivity*” and that car-free development should be the starting point for all development proposals in places where there is (or will be) high levels of public transport.

Local Policy

Bexley Local Plan

- 3.10 The Bexley Council Development plan includes the Mayor’s London Plan and the Local Plan. The Local Plan provides the basis for all planning decisions within the Borough. It contains the Core Strategy (adopted 22nd February 2012), current policies in the Unitary Development Plan (UDP) and other technical documents.

- 3.11 Policy CS15 of the Core Strategy relates to Sustainable Transport and states:

The Council will work to achieve a comprehensive, high quality, safe, integrated and sustainable transport system which makes the most of existing and proposed transport infrastructure within the borough and seeks to ensure a much improved and expanded role for public transport through the following actions: ...

g) adopting a parking policy that addresses the need for appropriate controls to secure a sustainable environment within the borough, whilst recognising the need to help viable development in town centres and major employment areas.

4.7.15 Future policy documents, such as a development plan document that deals with detailed sites and policies, will set out parking standards, including cycle parking for the borough in further detail and will have regard to both recently revised national guidance and the parking standards set out in the London Plan, taking into account the appropriate local circumstances.

- 3.12 As noted above, various policies with LBB’s UDP were saved following the adoption of the Core Strategy. An Addendum Statement for the LBB UDP was issued in 2012 and in relation to UDP 2007 saved policy G23 ‘Car parking’, states:

This saved UDP policy has been replaced in part by London Plan policy 2.8 ‘Outer London: Transport’, Policy 6.11 ‘Smoothing Traffic Flow and tackling Congestion’ and

policy 6.13 'Parking.' Three of the objectives in the UDP policy have been largely incorporated into the London Plan Transport policies; therefore this element of the UDP policy has been replaced by the above London Plan policies. Other London Plan policies including 6.1 (Strategic approach) 6.2 (Providing public transport capacity and safeguarding land for transport) 6.9 (Cycling), and 6.10 (Walking) should be taken into account.

3.13 The Addendum Statement also notes that:

Saved UDP (2007) Transport policies T17 – T22 on parking regulations / standards are in general conformity with the 2011 London Plan, however annex one on parking standards has been replaced by the London Plan parking standards set out in table 6.2. In interpreting the London Plan parking standards reference should be made to paragraph 4.7.14 of the Core Strategy.

3.14 As noted above, the New London Plan has recently been adopted. The parking standards within the new version of the London Plan have evolved from 2012 and now expect car-free development to be the starting point in areas of good public transport accessibility.

Summary

3.15 The focus of transport and land use planning policy is on the development of sustainable travel measures and the encouragement of development proposals which widen the accessibility of sustainable travel to site attendees and the wider community. The site is situated in an accessible location and further information is provided later in this report which details the transport infrastructure proposed for the site.

4 THE PROPOSED DEVELOPMENT

4.1 This section of the report provides a description of the proposed development with a focus on transport infrastructure. **Appendix A** contains the architect's layout.

4.2 The proposed development will comprise a new 'E' use class unit (the user has not yet been defined) and seven residential dwellings. The residential mix comprises 4 x 1B2P units, 2 x 2B3P units and 1 x 2B4P units. The employment unit will have a floor area of 74sqm (GIA).

Pedestrian Access

4.3 Pedestrian access will take place from Deepdene Road.

4.4 This pedestrian access will be at grade to enable mobility by all users including those using pushchairs and the mobility impaired.

Servicing

4.5 It is expected that the proposed development will be typically serviced by refuse vehicles, home food deliveries, non-food deliveries and infrequent maintenance. Given the relatively small number of residential units, the number of delivery / servicing trips will be very low. These vehicles would be able to load / unload on-street as they would for other dwellings in the area.

4.6 The servicing arrangements for the employment unit will remain unchanged.

Vehicle Parking

4.7 The proposed development will be car-free to reflect the accessibility of public transport and a wide range of local amenities in the area.

4.8 It is acknowledged that future occupants are likely to be restricted from obtaining a residents parking permit. This arrangement can be incorporated within a suitable legal agreement.

Cycles

4.9 The development will have a total of 14 cycle parking spaces. This comprises of 12 long-stay spaces and a further 2 long-stay cycle space will be provided within the 'E' use class unit.

4.10 Given that the employment floorspace will be virtually unchanged, the cycle parking demand will also be the same. Furthermore, the site is located adjacent to Welling town centre and therefore close to numerous Sheffield stands. Therefore, it is not considered necessary to provide short stay cycle parking for the development.

- 4.11 Cycle parking will be located at ground floor level (refer to Architect's drawing in **Appendix A**). All cycle parking for the development will be covered, secure and safely accessible.

5 TRIP ASSESSMENT

5.1 This section considers the likely number of trips that the development is forecast to generate. Given the that the commercial floorspace is likely to be very similar (a marginal increase of 3sqm), the trip generation for this element has not been calculated.

Residential Trip Rates & Trip Generation

5.2 Trip rates have been derived using the TRICS database and the following selection criteria have been applied:

- Residential – Flats Privately Owned;
- Greater London sites;
- Sites with 6-40 units;
- Town Centre and Edge of Town Centre areas;
- Weekday surveys only.

5.3 The trip rates are summarised in **Table 5.1** below as well as the net trip generation. The trip rates have been applied to the net number of residential units (i.e. 7 units). The full TRICS output is included in **Appendix C**.

Table 5.1 Residential Trip Rates & Trip Generation: All Modes

Period	Trip Rates			Proposed Trip Generation (Net: 7 Units)		
	In	Out	Total	In	Out	Total
08:00 – 09:00	0.136	0.636	0.772	1	5	5
17:00 – 18:00	0.438	0.243	0.681	3	2	5
07:00 – 19:00	2.941	3.251	6.192	21	23	43

* Arithmetic discrepancies due to rounding of numbers

5.4 The proposed development is expected to generate an additional 5 two-way all person trips during 08:00 to 09:00 and the same number during 17:00 to 18:00. This will have an insignificant impact on the transport network.

5.5 Given the car-free nature of the scheme, the level of motor vehicle trip generation associated with the scheme will be negligible.

6 SUMMARY & CONCLUSIONS

- 6.1 Mr Frank Newbold has commissioned Pulsar to prepare a Transport Statement to support a planning application for development on Bellegrove Road, Welling, DA16 3PU.
- 6.2 The proposal involves the demolition of an existing office building and the construction of a new mixed-use building comprising an 'E' use class unit and seven residential units. The development is proposed to be car free.
- 6.3 A total of 12 no. secure and sheltered cycle parking spaces are proposed for residents and a further 2no. long stay spaces are proposed for the employment space, to encourage active travel patterns. Pedestrian access to the site would be gained from Deepdene Road.
- 6.4 The site is located within the centre of Welling and is therefore close to a wide range of local amenities. There are also numerous bus services available to residents, and Welling rail station is also within walking distance. The site benefits from a PTAL of 4 (a "good" level of public transport accessibility).
- 6.5 The level of car parking is compliant with the New London Plan, which recommends car-free developments in areas with good public transport. Residents would not have access to residents parking permits, thereby reducing the impact on local streets.
- 6.6 A trip generation assessment was undertaken, which shows that the net impact of the proposed development is expected to be very low.
- 6.7 The site is expected to have a minimal impact on the public highway network and from a transport perspective meets the tests of the NPPF namely to ensure:
- opportunities for sustainable transport modes have been taken up;
 - safe and suitable access to the site can be achieved by all people;
 - that where necessary, improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development.
- The impact of the development is not severe.
- 6.8 In conclusion, and on the basis of the above, the proposed development should not be refused on transport grounds. The cumulative residual transport impacts of the proposal would be minimal.

APPENDIX A – ARCHITECT’S LAYOUT

This drawing and the design are the copyright of ON Architecture Ltd only.
 This drawing should not be copied or reproduced without written consent.
 All dimensions are to be checked on site prior to setting out and fabrication and ON Architecture Ltd should be notified of any discrepancy prior to proceeding further.
 For Construction & Fabrication Purposes - Do not scale from this drawing, use only the illustrated dimensions herein. Additional dimensions are to be requested and checked directly.
 Illustrated information from 3rd party consultants/specialists is shown as indicatively only. See other consultant / specialist drawings for full information and detail.



Ordnance Survey (c) Crown Copyright 2020. All rights reserved. Licence number 100022432



Revision Note & Date		Amended	Checked
Rev	Date	By	SM
P1	22.06.21		
P2	24.06.21		

ON ARCHITECTURE

Canterbury Studio
 Logan House, St Andrews Close
 Canterbury, CT1 2BP
 info@onarchitecture.co.uk
 01227 634334

London Studio
 Ink Rooms, 25-37, Easton Street
 Clerkenwell, WC1X 0DS

Project Title
Residential Development at 28 Bellegrove Rd, Welling, Kent, DA16 3PU
 Clients Details
 Acorn Planning Management

Drawing Title
 Existing Block Plan

BIM Number			
Scale	Date	Drawn	Checked
1:500 @ A3	June 2021	KB	SM

Drawing Status
PLANNING

Project No.	Drawing No.	Status	Revision
20.180	020		P2

This drawing and the design are the copyright of ON Architecture Ltd only.
 This drawing should not be copied or reproduced without written consent.
 All dimensions are to be checked on site prior to setting out and fabrication and ON Architecture Ltd should be notified of any discrepancy prior to proceeding further.
 For Construction & Fabrication Purposes - Do not scale from this drawing, use only the illustrated dimensions herein. Additional dimensions are to be requested and checked directly.
 Illustrated information from 3rd party consultants/specialists is shown as indicatively only. See other consultant / specialist drawings for full information and detail.



Ordnance Survey (c) Crown Copyright 2020. All rights reserved. Licence number 100022432



Revision Note & Date		Amended	Checked
Rev	Date	By	SM
P1	22.06.21		
P2	24.06.21		

ON ARCHITECTURE

Canterbury Studio
 Logan House, St Andrews Close
 Canterbury,
 CT1 2BP
 info@onarchitecture.co.uk
 01227 634334

London Studio
 Ink Rooms, 25-37, Easton Street
 Clerkenwell
 WC1X 0DS

Project Title
Residential Development at 28 Bellegrove Rd, Welling, Kent, DA16 3PU
 Clients Details
 Acorn Planning Management

Drawing Title
 Proposed Block Plan

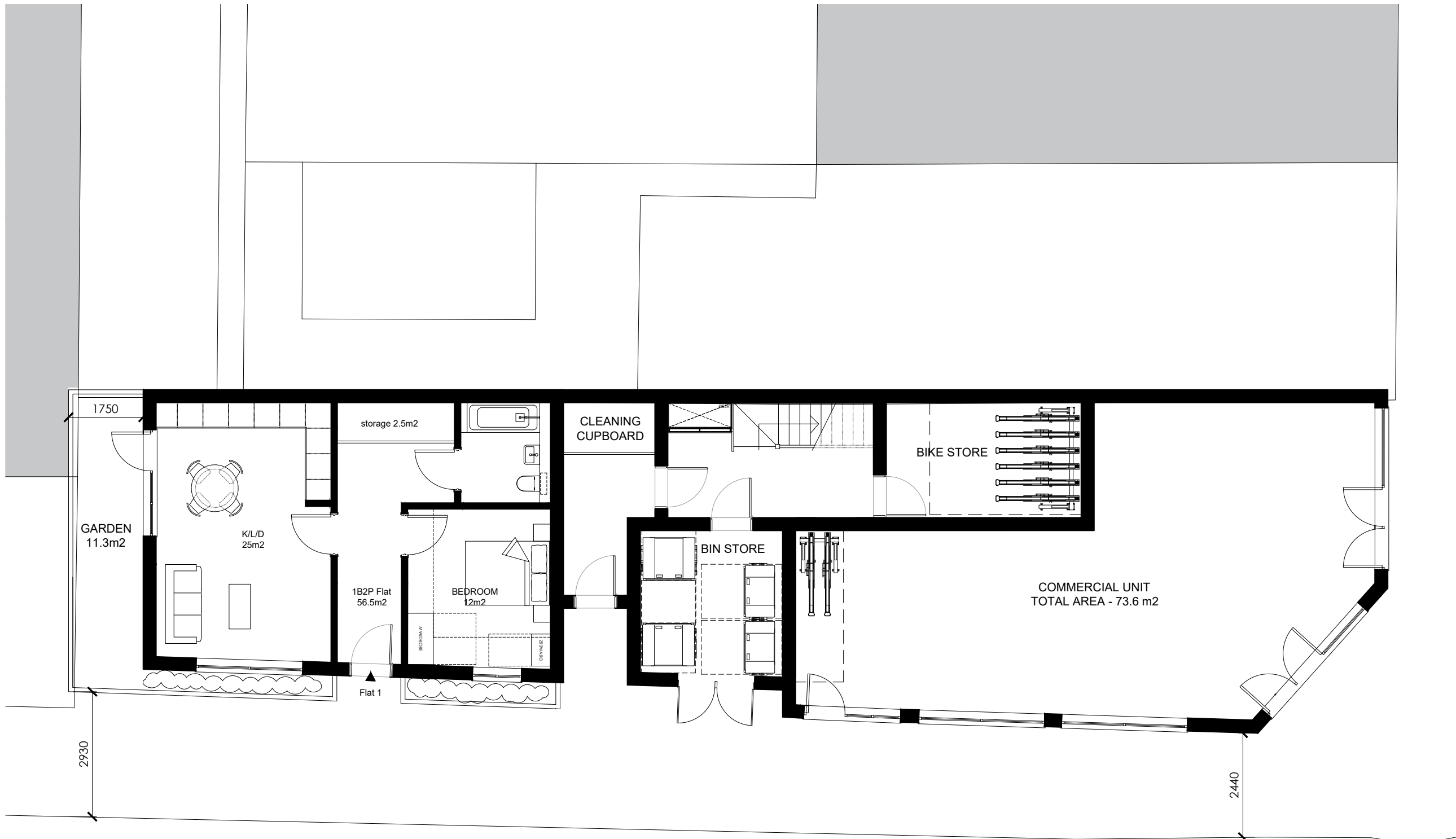
BIM Number

Scale	Date	Drawn	Checked
1:500 @ A3	June 2021	KB	SM

Drawing Status
PLANNING

Project No.	Drawing No.	Status	Revision
20.180	0200		P2

This drawing and the design are the copyright of **ON Architecture Ltd** only.
 This drawing should not be copied or reproduced without written consent.
 All dimensions are to be checked on site prior to setting out and fabrication and **ON Architecture Ltd** should be notified of any discrepancy prior to proceeding further.
 For Construction & Fabrication Purposes - Do not scale from this drawing, use only the illustrated dimensions herein. Additional dimensions are to be requested and checked directly.
 Illustrated information from 3rd party consultants/specialists is shown as indicatively only. See other consultant / specialist drawings for full information and detail.



Revision Note & Date					
Rev	Date	Note	Amended	Checked	
P1	22.08.21	Planning Issue	KB	SM	
P2	24.08.21	Updated Following Client Comments	KB	SM	

ON ARCHITECTURE

Canterbury Studio
 Logan House, 51 Andrews Close
 Canterbury, CT1 2BP
 info@onarchitecture.co.uk
 01227 634334

London Studio
 Ink Rooms, 25-37, Easton Street
 Clerkenwell, WC1X 0DS

Project Title
Residential Development at 28 Bellegrave Rd, Welling, Kent, DA16 3PU
 Clients Details
Acorn Planning Management

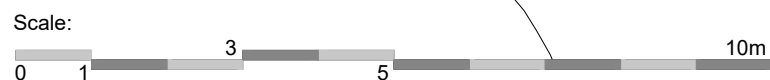
Drawing Title
Proposed Ground Floor Plan

BIM Number

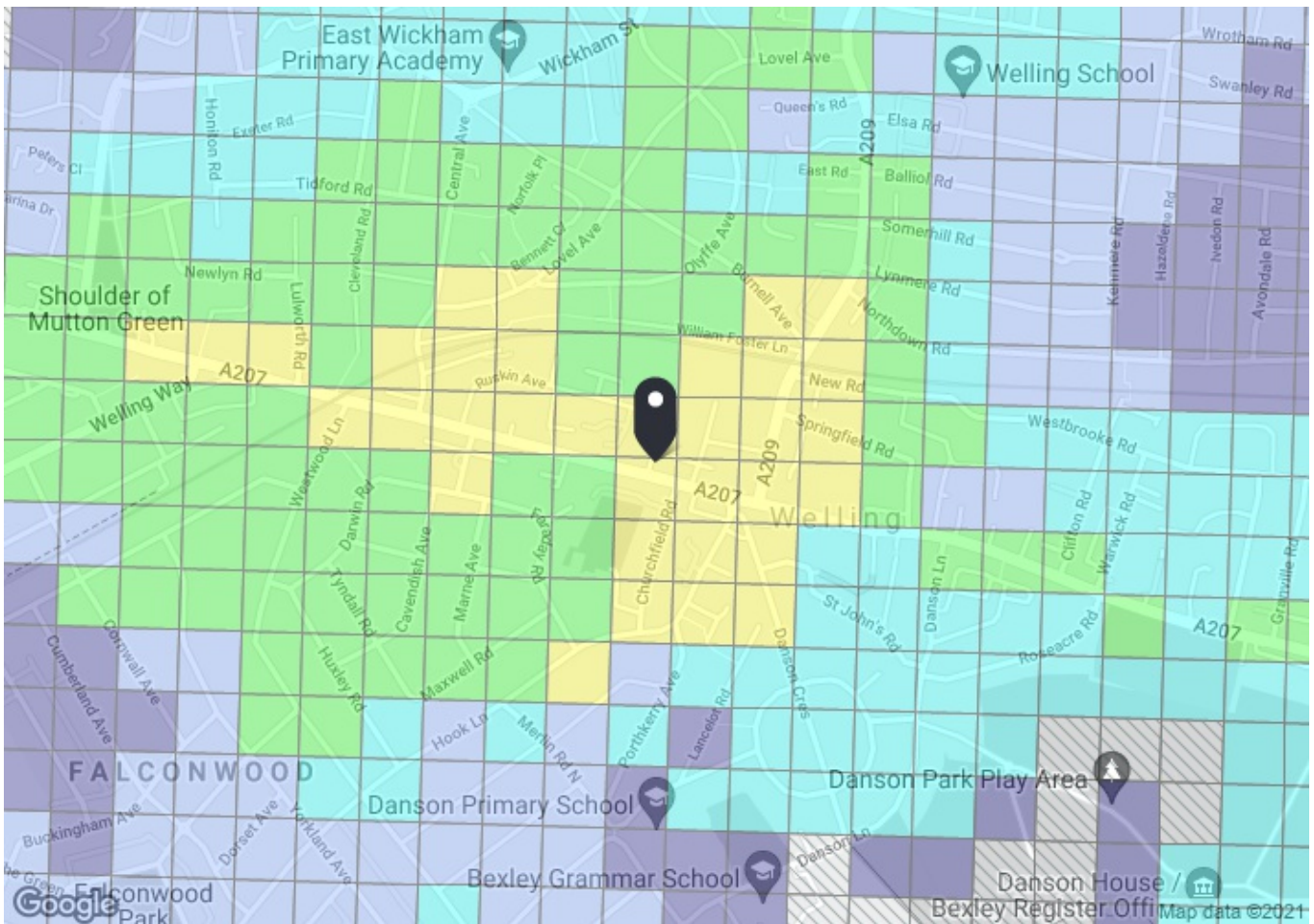
Scale 1:100@A3 Date June 2021 Drawn KB Checked SM

Drawing Status
PLANNING

Project No. 20.180 Drawing No. 201 Status Revision P2



APPENDIX B – PTAL OUTPUT



PTAL output for Base Year
4

28 Bellegrove Rd
28 Bellegrove Rd, Welling DA16 3PY, UK
Easting: 546365, Northing: 175881

Grid Cell: 57822

Report generated: 27/08/2021

Map key - PTAL

	0 (Worst)		1a
	1b		2
	3		4
	5		6a
	6b (Best)		

Map layers

- PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

APPENDIX C – TRICS OUTPUT

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	BELLEGROVE RD RUSKIN DRV	B15	95.42	3	1.19	12	13.19	2.27	0.5	1.14
Bus	BELLEGROVE RD RUSKIN DRV	B16	95.42	4	1.19	9.5	10.69	2.81	0.5	1.4
Bus	BELLEGROVE RD RUSKIN DRV	89	95.42	5.75	1.19	7.22	8.41	3.57	0.5	1.78
Bus	BELLEGROVE RD RUSKIN DRV	51	95.42	6	1.19	7	8.19	3.66	0.5	1.83
Bus	BELLEGROVE RD RUSKIN DRV	486	95.42	7.5	1.19	6	7.19	4.17	1	4.17
Bus	WELLING HIGH STREET	96	283.17	8	3.54	5.75	9.29	3.23	0.5	1.61
Rail	Welling	'BRNHRST-CANONST 2C07'	591.76	1.67	7.4	18.71	26.11	1.15	0.5	0.57
Rail	Welling	'BRNHRST-CANONST 2C09'	591.76	1	7.4	30.75	38.15	0.79	0.5	0.39
Rail	Welling	'CANONST-CRFD 2M09'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'CANONST-DARTFD 2M11'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'CANONST-SLADEGN 2M13'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'CANONST-BRNHRST 2M21'	591.76	1	7.4	30.75	38.15	0.79	0.5	0.39
Rail	Welling	'BRNHRST-CHRX 1C90'	591.76	0.67	7.4	45.53	52.92	0.57	0.5	0.28
Rail	Welling	'GRVSEND-CHRX 2C06'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'DARTFD-CHRX 2C08'	591.76	2.33	7.4	13.63	21.02	1.43	1	1.43
Rail	Welling	'CHRX-CRFD 2M10'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'CHRX-DARTFD 2M14'	591.76	1.33	7.4	23.31	30.7	0.98	0.5	0.49
Rail	Welling	'CHRX-SLADEGN 2M16'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'VICTRIE-DARTFD 2U16'	591.76	1.33	7.4	23.31	30.7	0.98	0.5	0.49
Rail	Welling	'DARTFD-VICTRIE 2U54'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'BRNHRST-VICTRIE 2U56'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15
Rail	Welling	'DARTFD-VICTRIE 2U58'	591.76	1.67	7.4	18.71	26.11	1.15	0.5	0.57
Rail	Welling	'SLADEGN-VICTRIE 2U90'	591.76	0.33	7.4	91.66	99.06	0.3	0.5	0.15

Total Grid Cell AI: 17.9

Pulsar Transport Planning Underwood Row London

Licence No: 805401

Filtering Summary

Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-40 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-40 DWELLS	
Date Range	Minimum: 01/01/12	Maximum: 06/03/20
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	
Days of the week selected	Monday	5
	Tuesday	1
	Wednesday	2
	Thursday	2
	Friday	1
Main Location Types selected	Town Centre	1
	Edge of Town Centre	10
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	5,001 to 10,000	2
	10,001 to 15,000	2
	25,001 to 50,000	3
	50,001 to 100,000	1
	100,001 or More	2
Population <5 Mile ranges selected	5,001 to 25,000	1
	25,001 to 50,000	2
	50,001 to 75,000	1
	75,001 to 100,000	1
	125,001 to 250,000	1
	250,001 to 500,000	1
	500,001 or More	4
Car Ownership <5 Mile ranges selected	0.5 or Less	3
	0.6 to 1.0	2
	1.1 to 1.5	6
PTAL Rating	No PTAL Present	6
	2 Poor	1
	6a Excellent	2
	6b (High) Excellent	2

Calculation Reference: AUDIT-805401-210118-0122

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
	IS ISLINGTON	2 days
	KI KINGSTON	1 days
	SK SOUTHWARK	1 days
	WH WANDSWORTH	1 days
02	SOUTH EAST	
	EX ESSEX	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	CO CONWY	1 days
14	LEINSTER	
	LU LOUTH	2 days
16	ULSTER (REPUBLIC OF IRELAND)	
	MG MONAGHAN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 6 to 40 (units:)
 Range Selected by User: 6 to 40 (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: 01/01/12 to 06/03/20

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

Selected survey days:

Monday	5 days
Tuesday	1 days
Wednesday	2 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	11 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:

Town Centre	1
Edge of Town Centre	10

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:

Residential Zone	6
Built-Up Zone	4
No Sub Category	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.

Secondary Filtering selection:

Use Class:

C3 11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
25,001 to 50,000	3 days
50,001 to 100,000	1 days
100,001 or More	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	4 days

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

Car ownership within 5 miles:

0.5 or Less	3 days
0.6 to 1.0	2 days
1.1 to 1.5	6 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
No	10 days

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

PTAL Rating:

No PTAL Present	6 days
2 Poor	1 days
6a Excellent	2 days
6b (High) Excellent	2 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CB-03-C-01	Site area:	0.21 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	40
Location:	CARLISLE	Housing density:	667
Postcode:	CA1 1SR	Total Bedrooms:	80
Main Location Type:	Town Centre	Survey Date:	12/06/14
Sub-Location Type:	Built-Up Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	43
Site(2):	CO-03-C-01	Site area:	0.45 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	37
Location:	LLANDUDNO	Housing density:	247
Postcode:	LL30 1YG	Total Bedrooms:	77
Main Location Type:	Edge of Town Centre	Survey Date:	26/03/18
Sub-Location Type:	Built-Up Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	48
Site(3):	EX-03-C-01	Site area:	0.07 hect
Development Name:	FLATS	No of Dwellings:	6
Location:	SOUTHEND-ON-SEA	Housing density:	200
Postcode:	SS0 7QE	Total Bedrooms:	10
Main Location Type:	Edge of Town Centre	Survey Date:	22/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	10
Site(4):	IS-03-C-05	Site area:	0.03 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	15
Location:	FINSBURY	Housing density:	500
Postcode:	EC1V 3QY	Total Bedrooms:	27
Main Location Type:	Edge of Town Centre	Survey Date:	29/06/16
Sub-Location Type:	Built-Up Zone	Survey Day:	Wednesday
PTAL:	6a Excellent	Parking Spaces:	
Site(5):	IS-03-C-06	Site area:	0.06 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	14
Location:	HOLLOWAY	Housing density:	467
Postcode:	N7 9RB	Total Bedrooms:	21
Main Location Type:	Edge of Town Centre	Survey Date:	27/06/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	6a Excellent	Parking Spaces:	
Site(6):	KI-03-C-03	Site area:	0.14 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	20
Location:	SURBITON	Housing density:	333
Postcode:	KT6 4DJ	Total Bedrooms:	45
Main Location Type:	Edge of Town Centre	Survey Date:	11/07/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	2 Poor	Parking Spaces:	25
Site(7):	LU-03-C-02	Site area:	0.22 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	33
Location:	DUNDALK	Housing density:	183
Postcode:		Total Bedrooms:	69
Main Location Type:	Edge of Town Centre	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	31
Site(8):	LU-03-C-03	Site area:	0.19 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	20
Location:	DUNDALK	Housing density:	133
Postcode:		Total Bedrooms:	40
Main Location Type:	Edge of Town Centre	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	17
Site(9):	MG-03-C-01	Site area:	0.26 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	28
Location:	MONAGHAN	Housing density:	127
Postcode:		Total Bedrooms:	51
Main Location Type:	Edge of Town Centre	Survey Date:	06/09/13
Sub-Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	34
Site(10):	SK-03-C-02	Site area:	0.10 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	29
Location:	BERMONDSEY	Housing density:	290
Postcode:	SE1 3TT	Total Bedrooms:	55
Main Location Type:	Edge of Town Centre	Survey Date:	23/04/15
Sub-Location Type:	Built-Up Zone	Survey Day:	Thursday
PTAL:	6b (High) Excellent	Parking Spaces:	2

LIST OF SITES relevant to selection parameters (Cont.)

Site(11):	WH-03-C-01	Site area:	0.49 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	30
Location:	CLAPHAM JUNCTION	Housing density:	120
Postcode:	SW11 2JW	Total Bedrooms:	60
Main Location Type:	Edge of Town Centre	Survey Date:	09/05/12
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	6b (High) Excellent	Parking Spaces:	36

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

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	11	25	0.040	11	25	0.313	11	25	0.352
08:00 - 09:00	11	25	0.136	11	25	0.636	11	25	0.772
09:00 - 10:00	11	25	0.243	11	25	0.301	11	25	0.544
10:00 - 11:00	11	25	0.121	11	25	0.243	11	25	0.364
11:00 - 12:00	11	25	0.191	11	25	0.199	11	25	0.390
12:00 - 13:00	11	25	0.235	11	25	0.239	11	25	0.474
13:00 - 14:00	11	25	0.224	11	25	0.232	11	25	0.456
14:00 - 15:00	11	25	0.188	11	25	0.232	11	25	0.420
15:00 - 16:00	11	25	0.408	11	25	0.206	11	25	0.614
16:00 - 17:00	11	25	0.338	11	25	0.195	11	25	0.533
17:00 - 18:00	11	25	0.438	11	25	0.243	11	25	0.681
18:00 - 19:00	11	25	0.379	11	25	0.213	11	25	0.592
19:00 - 20:00	4	20	0.436	4	20	0.154	4	20	0.590
20:00 - 21:00	4	20	0.244	4	20	0.179	4	20	0.423
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.621			3.584			7.205

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.*

PAGE LEFT BLANK INTENTIONALLY



www.pulsartransport.co.uk

4 Underwood Row, London N1 7LQ. Tel: 020 7324 2677

REGISTERED OFFICE: Pulsar Transport Limited, Kemp House, 160 City Road, London EC1V 2NX