



## TRANSPORT NOTE

### PROPOSED RESIDENTIAL DEVELOPMENT HAWTHORNE COURT, RYEFIELD CRESCENT, NORTHWOOD HA6 1LJ

On behalf of **Bankway Properties Ltd**

Report Reference: **22/109/16A**

February 2023

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## REPORT CONTROL SHEET

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**Magna Ref. 22/109/16A**

**February 2023**

<b>Revision</b>	<b>Status</b>	<b>Date</b>	<b>Author</b>
A	CLIENT DRAFT 1	14/11/2022	AMOL PISAL
B	CLIENT DRAFT 2	21/12/2022	AMOL PISAL
C	FINAL	16/02/2023	AMOL PISAL

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## **1 INTRODUCTION**

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### **1.1 Purpose Of Report**

- 1.1.1 Magna Transport Planning Ltd has been appointed by Bankway Properties Ltd to prepare a Transport Note in relation to the Prior Approval Application for the proposed conversion of a ground floor commercial units to up to 15 residential units (Class C3), under the provisions of Class MA of Schedule 2, Part 3 of the Town & Country Planning (General Permitted Development) (England) Order 2015.
- 1.1.2 This Transport Note has been prepared to assess the transport and highways impact of the proposed development. It has been in accordance with the National Planning Policy Framework (NPPF, 2021), The London Plan 2021 and London Borough of Hillingdon's (LBH) Local Plan.

### **1.2 Structure of Report**

- 1.2.1 Chapter 2 provides details of site and surrounding area.
- 1.2.2 Chapter 3 provides details of the accessibility by non-car modes of transport.
- 1.2.3 Chapter 4 provides description of the proposed development.
- 1.2.4 Chapter 5 outlines the traffic and parking impact assessment.
- 1.2.5 Chapter 6 concludes the study.

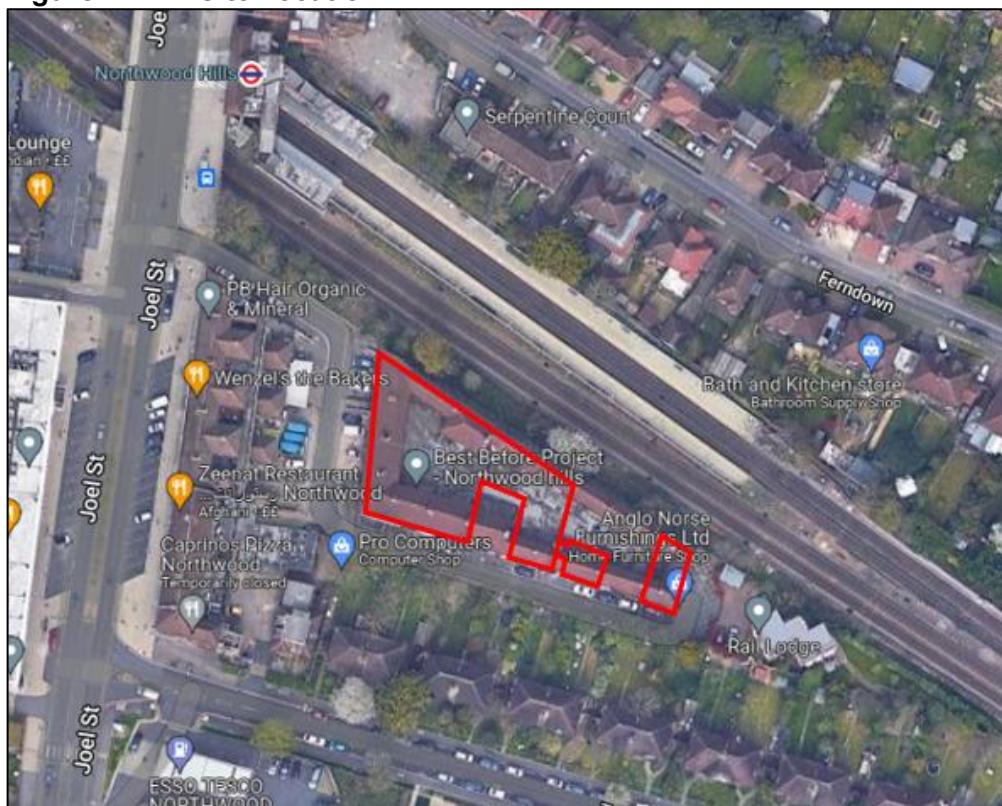
## **2 SITE AND SURROUNDING AREA**

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### **2.1 The Site**

- 2.1.1 The application site is located in Northwood, a suburb of North West London. The site postcode is HA6 1LJ. commercial units which form part of this planning application are located on the ground floor of a 3-storey mixed use building (Hawthorne Court) with residential units on the upper two floors.
- 2.1.2 The site is located within a primarily residential area and is surrounded by existing built-form on all aspects. Adjoining Hawthorn Court to the south are semi-detached residential units to the south, and to the west there is a small high-street, with commercial high-street uses backing on to the site and Hawthorn Court more generally. There is reasonable separation distance between these nearby buildings and Hawthorn Court. To the north of the site lies a railway line servicing Northwood Hills Station.
- 2.1.3 The site is located within an area identified by the Local Development Plan as a 'Minor Town Centre' of Northwood Hills.
- 2.1.4 The site location in its local context is shown in Figure 2A.

**Figure 2A Site Location**



2.1.5 The commercial units that form part of this application are:

- Units 2-6
- Units 8-12
- Units 15-20
- Unit 20
- Unit 22
- Unit 30

2.1.6 The total floorspace associated with these units is 1,400 sqm and are identified as 'charitable service offices' (Class E).

2.1.7 The remainder commercial units on ground floor (which do not form part of this application) are Unit 14-16 which is an MOT test centre and Unit 28, which has permission for residential conversion into five units (planning ref: 77316/APP/2022/1726).

2.1.8 The existing ground floor plan which shows the arrangement of these units is shown in Figure 2B.

**Figure 2B Existing Ground Floor Arrangement**

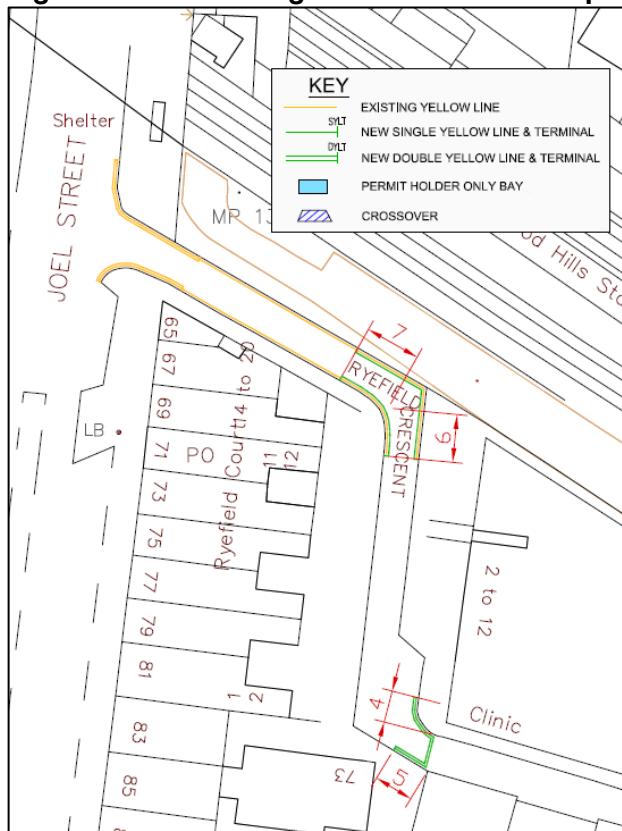


- 2.1.9 As can be seen in above Figure 2B, nine car parking spaces along the site's western boundary are leased on a monthly license to the existing residential units on the upper floors.
- 2.1.10 The ten car parking spaces along the site's southern boundary are currently not allocated. These spaces are currently being used by the commercial units on an informal basis.
- 2.1.11 The loading bay in between these car parking spaces (outside Units 14-16 and 18-20) are currently used by the MOT test centre.

## **2.2 Local Highway Network**

- 2.2.1 Hawthorne Court is accessed from Ryefield Crescent which envelopes the site to the west, south and east. Along the western alignment, Ryefield Crescent is approximately four metres wide.
- 2.2.2 As it continues along the site's southern boundary, Ryefield Crescent is approximately 3.3 metres in width. At the eastern end of Ryefield Crescent is a turning head marked with hatching and the access to Rail Lodge, a residential development
- 2.2.3 The first approximately 90-metre section of Ryefield Crescent (starting from its junction with Joel Street) is an adopted highway. Past this point, it is a privately owned street.
- 2.2.4 This section is characterised by single and double yellow line restrictions, as shown in Figure 2C.

**Figure 2C Parking Restrictions on Adopted Section of Ryefield Crescent**



- 2.2.5 Joel Street is one of the primary routes in the vicinity of the site. It provides frontage access to Ryefield Parade (terrace of local shops, takeaways, restaurants and other commercial services). This is located immediately adjacent to the junction with Ryefield Crescent. There are bus stops as well as Northwood Hills Underground Station located on Joe Street.
- 2.2.6 Joel Streets is a single carriageway street, subject to a 30mph speed limit. It runs in north-south direction; and connects to the A404 Pinner Road to the north at a distance of 240 metres from Ryefield Crescent junction.
- 2.2.7 To the south, Joel Street provides frontage access to residential properties as well as other residential streets, before connecting to the B466 High Road Eastcote.

### 2.3 Local Amenities

- 2.3.1 Given that the site is located in town centre, there are a number of local services and facilities located within comfortable walking distance of one-kilometre metres or less than 15-minute walk. They are as follows:
- High street style local shops, restaurants, cafes, takeaways, convenience stores and other amenities within Ryefield Parade along Joel Street

- Bus stops on Joel Street
- Northwood Hills Underground Station on Joel Street
- Northwood Surgery on Joel Street
- The Health Club on Joel Street
- Northwood School on Pinner Road
- Harlyn Primary School on Tolcarne Drive

2.3.2 The site is therefore located in a highly sustainable location with excellent access to local services and amenities within comfortable walking distance.

### **3 ACCESSIBILITY**

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#### **3.1 Pedestrians and Cyclists**

- 3.1.1 Chartered Institute of Highways and Transportation (CIHT) document – ‘Planning for Walking’ (2015) states that 80% of journeys shorter than one mile (1.6 kilometres) are made wholly on foot. The local amenities in the vicinity of the site are well within this distance. In terms of access to local shops and services, the site location is therefore considered to be very sustainable.
- 3.1.2 There is a footway on south side of Ryefield Crescent adjacent to its junction with Joel Street. This continues for approximately 40 metres. Past this point, there is some hardstanding along the street adjacent to the car parking spaces at the western side of the site which doubles up as a footway. The private section of Ryefield Crescent is a shared surface.
- 3.1.3 There are at least three metres wide footways on both sides of Joel Street. These footway provide direct pedestrian access to Ryefield Parade, bus stops and railway station. These footway continue onto Pinner Road to the north, providing pedestrian access to key destinations in the wider area.
- 3.1.4 There are a number of opportunities in the form of zebra crossings on Joel Street. Similarly, the Pinner Road/Joel Street roundabout has zebra crossings across Pinner Road approaches, thus facilitating safe crossing.
- 3.1.5 Local Transport Note 1/20 (Cycle Infrastructure Design) states that two out every three personal trips are less than five miles (eight kilometres) in length which is an achievable distance to cycle for most people. The areas of Northwood, Pinner Green, Moor Park, South Oxhey, Stanmore, South Harrow, Ruislip and Ickenham are within this distance.
- 3.1.6 As such, LBH recommends Joel Street as one of the quieter roads to travel from Northwood Hills to Uxbridge, via Ruislip and Ickenham district centres.
- 3.1.7 The site is therefore located in an environment which is conducive to encouraging residents to walk and cycle to short journeys in and around the site.

### 3.2 Public Transport

#### Buses

- 3.2.1 CIHT's Buses in Urban Developments (2018) guidance recommends that the new developments should be within walking distance of 250 metres from town centre bus stops.
- 3.2.2 There are bus stops on Joel Street, within 250 metres walking distance from the site. The site is located well within the CIHT's recommended walking distance from the bus stop. These bus stop is served by a number of bus routes, which are summarised in Table 3A.

**Table 3A Bus Services**

Route No.	Route Location	Frequency		
		Mon-Fri	Saturday	Sunday
282	Mount Vernon Hospital – Ealing Hospital	5 per hr	5 per hr	3/4 per hour
H11	Mount Vernon Hospital – Harrow Bus Station	4 per hr	4 per hr	3 per hr
H13	St Vincent's Nursing Home – Ruislip Lido	3 per hr	3 per hr	3 per hr

Source: TfL Website, 14<sup>th</sup> November 2022

- 3.2.3 As shown in Table 3A, there are services to locations such as Northwood (Mount Vernon Hospital), Ealing, Harrow, Pinner (St Vincent's Nursing Home) and Ruislip.

#### Rail

- 3.2.4 Northwood Hills Underground Station is located on Joel Street immediately north of the site. This Underground station is on the Metropolitan line.
- 3.2.5 In the northbound direction the station is served by trains to Watford (four trains per hour (tph)), Amersham (2tph) and Chesham (2tph) trains (at peak times, 'fast' trains do not stop at stations between Harrow-on-the-Hill and Moor Park). In the southbound direction off-peak services generally run 4tph to Baker Street and 4tph to Aldgate.

#### PTAL

- 3.2.6 Public Transport Accessibility Levels (PTALs) are a detailed and accurate measure of accessibility of a point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at any location within Greater London.
- 3.2.7 Each area is graded between 0 and 6b, where a score of 0 is very poor access to public transport, and 6b is excellent access to public transport. The measure reflects:

- Walking time 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.

3.2.8 As such, the PTAL (Public Transport Accessibility Level) rating of the site is 3 i.e., moderate.

3.2.9 The proposed development, by virtue of its strategic location, provide significant opportunities to its residents and staff to take up public transport as their main mode of transport.

3.2.10 Whilst it is suggested that the theoretical PTAL score is moderate (rating = 3); in the previous planning application 77316/APP/2022/1726 for conversion of Unit 28 into five residential units, the Highways Officer stated that 'real-world' PTAL score to be higher than 3.

3.2.11 It is likely that the Highways Officer came this view due to the fact that the site is within a sustainable location with, public transport links in close proximity to the site. Northwood Hills Underground Station is less than a three-minute walk, providing access to the Metropolitan Line with links to Watford and Baker Street. In addition, there are convenient bus links to Harrow, Southall and Ruislip.

## **4 PROPOSED DEVELOPMENT**

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### **4.1 The Proposals**

- 4.1.1 Prior Approval is sought for the conversion of ground floor commercial units (with a total floor area of approximately 1,400 sqm) to 15 residential units, comprising four studio units, 13 one-bedroom flats and four two-bedroom flats. The proposed site plan is provided in Appendix 1.

### **4.2 Access and Parking Arrangements**

#### Site Access

- 4.2.1 The existing site accesses via Ryefield Crescent will be retained. There are no changes proposed to these accesses.

#### Car Parking

- 4.2.2 As discussed previously, there are 10 car parking spaces along the site's southern boundary. These spaces are used by the commercial units, majority of who form part of this planning application.
- 4.2.3 As such, the commercial parking demand will not exist once these units are converted into flats as part of this application; and hence these spaces would be available for the proposed residential units.
- 4.2.4 Should the residents of the new flats require on-site parking, Bankway Properties Ltd will lease the spaces to the new flats on a monthly license, in the similar manner as the parking bays located along the western boundary of the site.
- 4.2.5 Instead of allocating these spaces to the proposed units as part of their sale/rent agreement, the proposal to lease them out on a monthly license ensures that the car parking spaces are made available to only those who truly need a space which in turn results in an efficient use of the land. This arrangement is also in line with the London Plan 2021 Policy T6.1 (bullet point C).
- 4.2.6 Alternatively, these spaces could be allocated to the proposed flats on a first come first serve basis, if required by the Highway Authority.

Cycle Parking

- 4.2.7 There would be a total of 36 cycle parking spaces within an internal cycle store. This exceeds the minimum requirement for cycle parking prescribed within the London Plan.

**4.3 Servicing**

- 4.3.1 There will be two refuse stores on the ground floor provided as shown in Appendix 1.
- 4.3.2 The refuse would be presented within 10 metres from a refuse vehicle. The details in respect to on-site refuse and recycling provision could be secured by condition, in the similar manner as the previous planning application 77316/APP/2022/1726 in relation to Unit 28.

## 5 TRAFFIC AND PARKING IMPACT ASSESSMENT

### 5.1 Permitted Commercial Development Trip Generation

5.1.1 In order to estimate people trips associated with the permitted office development with a floor space of approximately 1,400 sqm, TRICS database has been interrogated. Following criteria within TRICS have been used:

- Land Use Employment
- Sub-land Use Offices
- Regions Greater London
- PTAL Rating 3 and 4

5.1.2 TRICS report is provided in Appendix 2 and the results for typical commuter peak hours of 08:00-09:00 and 17:00-18:00 are summarised in Table 5A.

**Table 5A Office Vehicular Trip Generation**

Hour	Trip Rate		Vehicular Trips (1,400 sqm)		
	In	Out	In	Out	Two-way
0800-0900	0.284	0.009	4	0	4
1700-1800	0.053	0.364	1	5	6

5.1.3 Table 5A shows that the commercial units within the application site could generate up to six two-way vehicular trips during typical commuter peak hours.

### 5.2 Proposed Residential Development Trip Generation

5.2.1 In order to estimate people trips associated with the permitted residential development comprising 15 flats, TRICS database has been interrogated. Following criteria within TRICS have been used:

- Land Use Residential
- Sub-land Use Flats Privately Owned
- Regions Greater London
- PTAL Rating 3 and 4

5.2.2 TRICS report is provided in Appendix 3 and the results for typical commuter peak hours of 08:00-09:00 and 17:00-18:00 are summarised in Table 5B.

**Table 5B Residential Vehicular Trip Generation**

Hour	Trip Rate		Vehicular Trips (15 Flats)		
	In	Out	In	Out	Two-way
0800-0900	0.043	0.072	1	1	2
1700-1800	0.169	0.106	3	2	5

- 5.2.3 Table 5B shows that the proposed 15 residential units could generate up to five two-way vehicular trips during typical commuter peak hours.

### 5.3 Net Change in Vehicular Trips

- 5.3.1 Table 5C compares the permitted office development with the proposed residential development.

**Table 5C Net Change in Traffic**

	Permitted Offices		Proposed Flats		Net Change in Traffic		
	In	Out	In	Out	In	Out	2-way
0800-0900	4	0	1	1	-2	+1	-1
1700-1800	1	5	3	2	-2	-3	-5

- 5.3.2 Table 5C shows that the proposed development represents a reduction in vehicular traffic when compared to the existing commercial development on site; and as such it will not have any adverse traffic impact on the local road network.

### 5.4 Parking Impact

- 5.4.1 The London Plan 2021 states that residential development (one and two-bedroom units) in Outer London borough with PTAL rating of 3 should be provided with a maximum of up to 0.75 car parking spaces per unit. Therefore 15 residential units would be allowed a maximum of 11 car parking spaces. As discussed previously, there are 10 car parking spaces along the southern boundary of the site which could be made available to the proposed units on a monthly license.

- 5.4.2 In the event that all spaces are leased out (although unlikely given the highly sustainable location of the site), the parking provision would be in accordance with the maximum parking standards prescribed within the London Plan.

- 5.4.3 At the previous planning application 77316/APP/2022/1726 in relation to Unit 28, the Highways Officer's view was that:

*“... Given the relatively moderate scale of proposal and the existence of relatively extensive parking controls in the area together with a 'real-world' PTAL score that is considered higher than suggested, it is not anticipated that any measurable undue parking displacement would result due to the absence of provision hence no objection is raised.”*

- 5.4.4 There is no reason why this statement cannot hold true for this planning application also. It is therefore concluded that the proposed development would not result in any parking overspill on the local residential streets, thereby not exacerbating the parking stress situation on these streets.

## **6 CONCLUSIONS**

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- 6.1 This Transport Note assesses the traffic and highways impact of the proposed development at Hawthorne Court, Ryefield Crescent, Northwood HA6 1LJ, under the provisions of Class MA of Schedule 2, Part 3 of the Town & Country Planning (General Permitted Development) (England) Order 2015.
- 6.2 The pedestrian and cycle infrastructure, as well as public transport facilities in town centre are excellent. The site has very good links to a number of local services and amenities, which can be accessed easily by non-car modes of transport. The site is therefore in a highly sustainable location.
- 6.3 The proposed development comprises conversion of ground floor commercial units (with a total floor area of approximately 1,400 sqm) to 15 residential units, comprising a mix of 1-bed and 2-bed units.
- 6.4 There are 10 car parking spaces along the site's southern boundary. These spaces are used by the commercial units, majority of these form part of this planning application. As such, this commercial parking demand will not exist once these units are converted into flats as part of this application; and hence these spaces would be available for the proposed residential units.
- 6.5 Should the residents of the new flats require on-site parking, Bankway Properties Ltd will lease the spaces to the new flats on a monthly license, in the similar manner as the parking bays located along the western boundary of the site.
- 6.6 Instead of allocating these spaces to the proposed units as part of their sale/rent agreement, the proposal to lease them out on a monthly license ensures that the car parking spaces are made available to only those who truly need a space which in turn results in an efficient use of the land. This arrangement is also in line with the London Plan 2021 Policy T6.1 (bullet point C).
- 6.7 In the event that all spaces are leased out (although unlikely given the highly sustainable location of the site), the parking provision would be in accordance with the maximum parking standards prescribed within the London Plan. the proposed development would not result in any parking overspill on the local residential streets, thereby not exacerbating the parking stress situation on these streets.

- 6.8 Alternatively, these spaces could be allocated to the proposed flats on a first come first serve basis, if required by the Highway Authority.
- 6.9 There would be a total of 36 cycle parking spaces within an internal cycle store. This exceeds the minimum requirement for cycle parking prescribed within the London Plan.
- 6.10 There will be two refuse stores on the ground floor. The refuse would be presented within 10 metres from a refuse vehicle. The details in respect to on-site refuse and recycling provision could be secured by condition, in the similar manner as the previous planning application 77316/APP/2022/1726 in relation to Unit 28.
- 6.11 The proposed development represents a reduction in vehicular traffic when compared to the existing commercial development on site. The proposed development will therefore not have any adverse traffic impact on the local road network.
- 6.12 The NPPF states:

*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.*

- 6.13 The development is therefore in line with National Planning Policy Framework 2021 and hence there are no highways reasons to refuse this planning application.

## **Appendix 1. PROPOSED SITE PLAN**

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Revision:	Date:	Drawn:	Check:
A	Updated based on comments received from Client, including bin store and flat amendments. Bikes added based on Transport comments.	30.11.22	VNO VTQ
B	Updated based on comments received from Client, including cycle store and store room.	21.12.22	VNO VTQ
C	Plant room and bin store updated as per Clients comments	22.12.22	VNO VTQ
D	Refuse store updated to show allocation for bags instead of eurobins	13.01.23	VTQ
E	1bed apartment of 51.5sqm amended to give more space to living area	13.01.23	VTQ
F	1bed apartment of 51.5sqm amended to give more space to living area	18.01.23	VTQ
G	Apartments layouts highlighted amended to client's comments	10.02.23	VTQ
H	Apartments layouts highlighted amended to client's comments	13.02.23	VTQ
I	Sliding doors added as clouded	13.02.23	VTQ

Key:

- Studio Apartment - 1 unit
- 1 Bed Apartment - 10 units
- 2 Bed Apartment - 4 units
- Circulation
- Previously Approved

**rg+p**

Project: A development at Hawthorne Court, Northwood Hills

Status: Feasibility

Client: Bankway Properties Ltd

Sheet title: Proposed Ground Floor Plan

Scale: 1:200@A2

Date: 19/10/2022

Drawn: VNO

Checked: VTQ

**101-173/(P)011 I**

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## **Appendix 2. TRICS: OFFICES**

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Calculation Reference: AUDIT-213601-221113-1142

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

## TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
BN	BARNET		1 days
CI	CITY OF LONDON		1 days
EN	ENFIELD		1 days
WH	WANDSWORTH		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: Gross floor area

Actual Range: 1366 to 6552 (units: sqm)

Range Selected by User: 408 to 120000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 28/06/22

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

Monday	1 days
Tuesday	1 days
Thursday	1 days
Friday	1 days

*This data displays the number of selected surveys by day of the week.*Selected survey types:

Manual count	4 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 undertaking using machines.*Selected Locations:

Town Centre	2
Edge of Town Centre	1
Suburban Area (PPS6 Out of 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:

Commercial Zone	1
Built-Up Zone	2
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:

Not Known

4 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®.*

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000	2 days
50,001 to 100,000	2 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	3 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	1 days
0.6 to 1.0	2 days
1.1 to 1.5	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:

No	4 days
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*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:

3 Moderate	1 days
4 Good	3 days

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

LIST OF SITES relevant to selection parameters

1	BN-02-A-01	OFFICES		BARNET
	MOON LANE			
	HIGH BARNET			
	Edge of Town Centre			
	No Sub Category			
	Total Gross floor area:	1366 sqm		
	<i>Survey date: THURSDAY</i>	11/11/21		<i>Survey Type: MANUAL</i>
2	CI-02-A-03	OFFICES		CITY OF LONDON
	MONUMENT STREET			
	CITY OF LONDON			
	MONUMENT			
	Town Centre			
	Commercial Zone			
	Total Gross floor area:	1951 sqm		
	<i>Survey date: FRIDAY</i>	29/11/13		<i>Survey Type: MANUAL</i>
3	EN-02-A-01	MICROSOFT OFFICES		ENFIELD
	GENOTIN ROAD			
	ENFIELD			
	Town Centre			
	Built-Up Zone			
	Total Gross floor area:	6552 sqm		
	<i>Survey date: TUESDAY</i>	07/06/22		<i>Survey Type: MANUAL</i>
4	WH-02-A-03	OFFICE		WANDSWORTH
	BROUGHTON STREET			
	NINE ELMS			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total Gross floor area:	1400 sqm		
	<i>Survey date: MONDAY</i>	16/11/15		<i>Survey Type: MANUAL</i>

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

## TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

## TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	4	2817	0.115	4	2817	0.018	4	2817	0.133
08:00 - 09:00	4	2817	0.284	4	2817	0.009	4	2817	0.293
09:00 - 10:00	4	2817	0.319	4	2817	0.062	4	2817	0.381
10:00 - 11:00	4	2817	0.222	4	2817	0.080	4	2817	0.302
11:00 - 12:00	4	2817	0.071	4	2817	0.106	4	2817	0.177
12:00 - 13:00	4	2817	0.106	4	2817	0.115	4	2817	0.221
13:00 - 14:00	4	2817	0.062	4	2817	0.080	4	2817	0.142
14:00 - 15:00	4	2817	0.080	4	2817	0.124	4	2817	0.204
15:00 - 16:00	4	2817	0.062	4	2817	0.133	4	2817	0.195
16:00 - 17:00	4	2817	0.062	4	2817	0.115	4	2817	0.177
17:00 - 18:00	4	2817	0.053	4	2817	0.364	4	2817	0.417
18:00 - 19:00	4	2817	0.018	4	2817	0.195	4	2817	0.213
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		1.454			1.401				2.855

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:	1366 - 6552 (units: sqm)
Survey date date range:	01/01/10 - 28/06/22
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

## **Appendix 3. TRICS: FLATS**

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Calculation Reference: AUDIT-213601-221113-1135

## TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	HG	HARINGEY	1 days
	WF	WALTHAM FOREST	4 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 79 (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: 01/01/14 to 28/06/22

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

Selected survey days:

Tuesday	3 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	6 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:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	1
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:

Residential Zone	5
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	6 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:

25,001 to 50,000	5 days
50,001 to 100,000	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	6 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	6 days
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*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:

No	6 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:

3 Moderate	2 days
4 Good	4 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	BE-03-C-01	BLOCKS OF FLATS CROOK LOG BEXLEYHEATH	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	79 19/09/18	BEXLEY <i>Survey Type: MANUAL</i>
2	HG-03-C-02	BLOCK OF FLATS HIGH ROAD WOOD GREEN WOODSIDE PARK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	30 01/10/14	HARINGEY <i>Survey Type: MANUAL</i>	
3	WF-03-C-02	BLOCKS OF FLATS GROSVENOR ROAD WANSTEAD	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	28 25/05/21	WALTHAM FOREST <i>Survey Type: MANUAL</i>
4	WF-03-C-03	FLATS & TERRACED HOUSES FOREST ROAD WALTHAMSTOW	Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings: <i>Survey date: FRIDAY</i>	22 21/05/21	WALTHAM FOREST <i>Survey Type: MANUAL</i>
5	WF-03-C-04	BLOCKS OF FLATS GROSVENOR ROAD WANSTEAD	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	42 25/05/21	WALTHAM FOREST <i>Survey Type: MANUAL</i>
6	WF-03-C-05	BLOCK OF FLATS NEW WANSTEAD WANSTEAD	Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	6 25/05/21	WALTHAM FOREST <i>Survey Type: MANUAL</i>

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

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

## TOTAL 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	2	32	0.000	2	32	0.000	2	32	0.000
07:00 - 08:00	6	35	0.039	6	35	0.126	6	35	0.165
08:00 - 09:00	6	35	0.043	6	35	0.072	6	35	0.115
09:00 - 10:00	6	35	0.068	6	35	0.072	6	35	0.140
10:00 - 11:00	6	35	0.111	6	35	0.121	6	35	0.232
11:00 - 12:00	6	35	0.097	6	35	0.087	6	35	0.184
12:00 - 13:00	6	35	0.077	6	35	0.087	6	35	0.164
13:00 - 14:00	6	35	0.087	6	35	0.140	6	35	0.227
14:00 - 15:00	6	35	0.053	6	35	0.053	6	35	0.106
15:00 - 16:00	6	35	0.092	6	35	0.077	6	35	0.169
16:00 - 17:00	6	35	0.077	6	35	0.077	6	35	0.154
17:00 - 18:00	6	35	0.169	6	35	0.106	6	35	0.275
18:00 - 19:00	6	35	0.082	6	35	0.068	6	35	0.150
19:00 - 20:00	5	35	0.096	5	35	0.056	5	35	0.152
20:00 - 21:00	5	35	0.056	5	35	0.040	5	35	0.096
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		1.147			1.182				2.329

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.

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## Parameter summary

Trip rate parameter range selected:	6 - 79 (units: )
Survey date date range:	01/01/14 - 28/06/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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