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LAND NORTH OF BARNET LANE,
BOREHAMWOOD, HERTS, WD6

INDEPENDENT HIGHWAYS ASSESSMENT

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I.0 INTRODUCTION

- I.1 Paul Mew Associates has been instructed by the Woodcock Hill Village Green Committee to prepare an Independent Highways Assessment in relation to possible development of land to the north of Barnet Lane, Borehamwood, Herts, WD6. The site location and context are shown in Appendix A.
- I.2 According to the current Hertsmere Local Plan (2012-2027) the site is in the greenbelt and is not currently identified for housing development. The site was however submitted as part of the Housing and Economic Land Availability Assessment (HELAA) 2017/18 (Call for Sites) as part of the formulation of the new Local Plan that is currently being prepared.
- I.3 Appendix B includes documents submitted as part of the Call for Sites process which includes a suggestion that the site could provide 250 homes.
- I.4 The site was subsequently assessed and reported in Hertsmere Borough Council's Housing and Economic Land Availability Assessment 2019, with the summary setting out;

Under the current policy framework, none of the site would be suitable for development due to its Green Belt designation. Were the impact on the Green Belt considered to be outweighed by the wider sustainability benefits of delivering additional homes in this location, part of the site could potentially be suitable, available and achievable for the delivery of 442 homes. However, currently the site can only be recorded in the category of sites as not currently acceptable.

- I.5 The relevant extract from the Housing and Economic Land Availability Assessment 2019 is included in Appendix B.
- I.6 This Independent Highways Assessment presents the findings of a policy review for new development and an accessibility audit of the site and local area including vehicle access, the local road network and sustainable travel links. It also assesses the suggested level of development in terms of land use provision, likely trip generation and the impact on highways / sustainable transport infrastructure.

2.0 LOCAL PLAN REVIEW & POLICY CONTEXT

2.1 With regard to policies relating to the relationship between new development and transport, the current means by which planning applications are assessed is set out in:

- 'Core Strategy' (January 2013), Hertsmere Borough Council.
- 'Site Allocations and Development Management Policies Plan' (July 2015), Hertsmere Borough Council.
- 'Draft Hertsmere Local Plan' (September 2021), Hertsmere Borough Council.
- 'Travel Plan Guidance' (May 2020), Hertfordshire County Council.
- 'Local Transport Plan 2018-2031' (May 2018), Hertfordshire County Council.
- 'Roads in Hertfordshire - Highway Design Guide' (2011), Hertfordshire County Council.
- National Planning Policy Framework (July 2021), Department for Communities and Local Government.

'Core Strategy' (January 2013), Hertsmere Borough Council

2.2 The Core Strategy, adopted in 2013 includes as one of its objectives, the aim...

To raise levels of access by seeking development in locations not dependent on access by car and by requiring the provision of physically accessible transport interchanges and other buildings.

2.3 As set out later in this report, the proposed development site would not meet this objective as it would predominantly only be accessible by car.

2.4 The text of Chapter 7 of the Core Strategy goes on to set out that:

Congestion is a major local concern with a high number of vehicle movements across the Borough and even greater levels of through traffic, including major traffic flows to and from London. The reduction of traffic congestion has been identified as a key aspiration amongst the local population, standing out as a priority in the 2005 householder survey - reflecting concerns over journey delays and the impact of congestion on air pollution and noise. Addressing year-on-year traffic growth in the Borough remains a priority and the Council is committed to supporting the improvement of public transport facilities across the Borough. There are several areas that have been recognised across the Borough that continue to cause concerns about congestion, including: the Hartspring roundabout on the A41; Elstree High Street crossroads; the Stirling Corner roundabout; and the South Mimms services (Bignell's Corner) junction

2.5 Again this report will demonstrate that the proposed development site would lead to an increase in car movements on the local road network including at Stirling Corner, which even in 2013 was identified as an area of key concern.

2.6 Core Strategy Policy CS24 (Development and Accessibility to Services and Employment) sets out that:

The Council will work towards Hertfordshire County Council's vision of providing a safe, efficient and affordable transport system that allows access for all to everyday facilities. To obtain the best use of the existing highway network, major trip generating development should be focused principally on Transport Development Areas and town centres...

- 2.7 The proposed development site is not located in a transport development area or a town centre.

- 2.8 Core Strategy Policy CS26 (Promoting Alternatives to the Car) sets out that:

New developments will be assessed in terms of their accessibility by a range of transport modes and where appropriate, measures to promote alternatives to the car will need to be provided as part of a proposed scheme, having regard to the requirements of the Parking Standards Supplementary Planning Document, and the adopted Greenway Strategy.

- 2.9 As is demonstrated later in this report, the proposed development site has poor levels of accessibility by sustainable transport. Given this, it is questioned how realistic measures to promote alternatives to the car will be

'Site Allocations and Development Management Policies Plan' (July 2015)

- 2.10 With regard the impact of new development on the local road network, Policy SADM38 of the Site Allocations and Development Management Policies Plan sets out that:

The traffic generated from new development must be compatible with the location, design and capacity of the current and future operation of the road(s) within the road hierarchy. In reaching a judgement, the Council will have regard to:

- i. any planned improvements on the road;*
- ii. the cumulative effects of incremental developments;*
- iii. advice from the local highway authority, including guidance on the relative priorities given to particular types of traffic and/or modes of transport; and*
- iv. the protection of rural character.*

- 2.11 As mentioned above, and detailed later in this report, the local road network is currently under considerable strain at peak times, with little political will to improve matters. The proposed development will add to local traffic flows and hence local traffic problems.

- 2.12 Policy SADM39 (Transport Development Areas) sets out that:

In accordance with policy CS24, major trip generating development should be focused principally on town centres and on the Transport Development Areas at Borehamwood and Potters Bar which are shown on the Policies Map.

- 2.13 Again, the proposed site is not identified as a development location.

2.14 Policy SADM40 (Highway and Access Criteria for New Development) sets out that development will be permitted where:

- i. it can be accessed by a range of transport modes including, where appropriate, public and other sustainable transport modes;*
- ii. it provides safe and convenient links through the site and within the site and enables access to adjoining routes and services for all users;*
- iii. it will not harm the safety of any users of the highway network, cause or add significantly to road congestion or unduly harm the flow of vehicles;*
- iv. the proposed design and layout give priority to pedestrians, cyclists and other non-vehicle users and provide for safe and convenient:*
 - a) movement, circulation, parking, manoeuvring and picking up or dropping off;*
 - b) accommodation of larger vehicles including emergency and servicing vehicles and/or coaches where required and*
 - c) site access for all users (including adequate visibility splays);*
- v. off-street car and cycle parking is provided in accordance with Core Strategy Policy CS25 and is consistent with the Parking Standards SPD; and*
- vi. for major trip generating schemes, the applicant provides a Transport Statement or Transport Assessment (prepared in compliance with guidance issued by the Council and local highway authority), which demonstrates that the scheme accords with the policies in the Local Plan.*

Where development may be expected to have negative impacts, appropriate mitigation measures will be required at the developer's expense.

2.15 It is considered that any proposed development at the site would struggle to meet the key criteria of Policy SADM40.

Draft Hertsmere Local Plan' (September 2021), Hertsmere Borough Council.

2.16 Although not yet adopted, the Draft Local Plan has been examined. While this does include the proposed development site as a site put forward for development it does not endorse or promote the site.

2.17 The Draft Local Plan builds on the same key criteria as the current Local Plan in terms of accessibility, connectivity and sustainability, as echoed in;

- Policy ST1 - Strategic Approach to Transport (to ensure that growth can be safely and sustainably accommodated across the local transport network),
- Policy ST2 - Hertsmere's Transport Network and Supporting Infrastructure (developers should work closely with the council, highway authorities and other key partners to support the implementation of transport schemes which improve connectivity and increase sustainable travel patterns between and beyond the key centres of Borehamwood, Radlett, Bushey and Potters Bar),
- Policy ST3 - Reducing Emissions and Promoting Health and Wellbeing (measures should be taken to reduce and / or mitigate the environmental impacts of safe travel including carbon emissions and noise and air pollution and provide a clear choice of sustainable transport modes), and,

- Policy ST4 – The Highway Network and Vehicular Parking (to obtain the best use of the existing highway network and facilitate access to services and employment, major trip generating development should be focused on town centres and other areas of greater public transport accessibility)

Travel Plan Guidance (May 2020), Hertfordshire County Council

2.18 Hertfordshire County Council's 'Travel Plan Guidance' (March 2020) has been consulted with regards thresholds for the production of a Travel Plan, with Full Travel Plans being required for residential developments in excess of 80 dwellings. On this basis, the suggested level of development on land north of Barnet Lane would require a full Residential Travel Plan.

2.19 The County guidance sets out that residential travel plans need to;

Address travel generated by residents of housing developments and deal with the journey origin rather than destination. The development's location, design and amenities within the development should reduce car use, the need to travel, and be supported by site permeability and connectivity to alternative modes. They incorporate personalised travel planning and travel information for each home.

2.20 Any forthcoming planning submission would need to be accompanied by a robust residential travel plan to help mitigate the impact the scheme will have on the local road network.

Local Transport Plan 2018-2031 (May 2018), Hertfordshire County Council

2.21 Hertfordshire County Council's Local Transport Plan (LTP4) again echoes the aims of the local planning authority. Policy 2 (Influencing Land Use Planning) of Hertfordshire County Council's Local Transport Plan (LTP4) sets out that:

The county council will encourage the location of new development in areas served by, or with the potential to be served by, high quality passenger transport facilities so they can form a real alternative to the car, and where key services can be accessed by walking and cycling.

2.22 Policy 3 (Travel Plans and Behaviour Change) again promotes the development, implementation and operation of Travel Plans for new developments.

2.23 With regards new development, the Local Transport Plan sets out that:

New development proposals are expected to support delivery of the LTP objectives and align with its policies, including those contained within any of its supporting documents. New developments should also adhere to guidance documents such as the county council's Highway Design Standards (as outlined in Roads in Hertfordshire or any successor document to this), and any national design guidance this recommends such as Manual for Streets.

2.24 Any subsequent planning application will need to fully address the requirements of the Local Transport Plan.

Roads in Hertfordshire - Highway Design Guide (2011), Hertfordshire County Council.

- 2.25 With regards to specific highway design elements within the new development, advice given in Roads in Hertfordshire - Highway Design Guide would be adhered to. This could only be assessed once a planning application is submitted.

National Planning Policy Framework, (July 2021), Ministry of Housing, Communities and Local Government

- 2.26 On a wider level, the National Planning Policy Framework (July 2021) is the relevant national policy pertaining to the development. The national policy has two key objectives: to facilitate economic growth by taking a positive approach to planning development; and to support reductions in greenhouse gas emissions and congestion and promote accessibility through planning for the location and mix development.

- 2.27 Relevant extracts from Section 9 'Promoting Sustainable Transport' of the NPPF (July 2021) are set out as follows:

104. Transport issues should be considered from the earliest stages of plan-making and development proposals, 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.*

105. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

112. Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

2.28 It is clear from the policy assessment set out above, that any forthcoming development proposals would need to be able to demonstrate higher levels of connectivity, accessibility, and sustainability than the site currently affords.

3.0 SITE & AREA AUDIT

- 3.1 This chapter sets out an assessment of the site in terms of accessibility, connectivity and sustainable transport.
- 3.2 The site is located approximately 1.5km south east of Borehamwood, 4.0km west of Barnet and 4.0km north east of Edgware. The applicant has indicated that access to the site would be provided on Furzehill Road at a point roughly midway between Cranes Way and Ashley Drive.

Pedestrian and Cycle Access

- 3.3 The connectivity of a development site includes factors that relate to pedestrian and cycle access. In relation to the site and surrounding area, this relates to public rights of way and footways adjacent to local roads.
- 3.4 In terms of public rights of way, Appendix C shows an extract from Hertfordshire County Council's public rights of way map. The only local PROW (Public Right of Way) within the vicinity of the site is Route 9, a footpath, which extends 560m;

...from Furzehill Road to Barnet Lane Commences from Barnet Lane opposite Thanmory thence NE to junction with Carrington Avenue thence E to junction with Furzehill Road.

- 3.5 In its current form, this PROW does not benefit the connectivity of the site. There are no other existing PROW routes that provide sustainable connections between the site and local amenities.
- 3.6 Any development of the site would need to retain this Public Right of Way. If the applicant wanted to amend the route of this Public Right of Way, the due legal process would have to be observed.
- 3.7 Given the lack of local PROW routes, pedestrian access to the site would rely on footways adjacent to Furzehill Road. The current arrangement on the western side of Furzehill Road provides a 2.8m wide (approx.) route which features a 1.6m wide footway along the carriageway edge and a 1.2m cycle way to the west.
- 3.8 According to Roads in Hertfordshire: Highway Design Guide 3rd Edition, Section 4 Design Standards and Advice, Chapter 12 Cycling Facilities, segregated (two-way) off-road shared tracks should be provided at a recommended width of 5.0m (2.0m footway and 3.0m cycle way). The current provision is therefore substandard and would not be suitable for increased usage by pedestrians and cyclists. Any proposed development would need to provide this design requirement on highways / applicant land while paying due regard to the existing tree line that extends along the western side of Furzehill Lane.
- 3.9 It should also be noted that the shared footway / cycle way on the western side of Furzehill Road is flanked by trees / hedges from the site, north to Arundel Drive, as is the eastern side of Furzehill Road. This limits the natural surveillance of the footway from adjacent houses, especially during hours of darkness, which could

lead to security concerns for pedestrians. Although the site is not located in a London Borough, it should be noted that one of Transport for London's 'Healthy Streets' indicators relates to 'People Feeling Safe'. The accompanying text from Healthy Streets sets out:

Feeling safe is a basic requirement that can be hard to deliver. Motorised road transport can make people feel unsafe on foot or bicycle, especially if drivers are travelling too fast or not giving them enough space, time or attention. Managing how people drive so that people can feel safe walking and cycling is vital.

People also need to feel safe from antisocial behaviour, unwanted attention, violence, and intimidation. Street lighting and layout, 'eyes on the street' from overlooking buildings and other people using the street can all help to contribute to the sense of safety.

- 3.10 It is questioned as to how appropriate the reliance on Furzehill Road is for pedestrian access to the main areas of local amenities (north of the site).
- 3.11 Local cycle routes are shown in a map extract in Appendix C and comprise locally the shared footway / cycle way that runs along the western side of Furzehill Road as discussed above (1.2m wide cycle route, partially obscured by trees / undergrowth, with poor natural surveillance), and a cycle route that runs parallel to the A1 north of Stirling Corner.
- 3.12 In summary, there are limited Public Right of Way, footway and cycle connections between the site and local amenities. Those that are provided appear to be substandard in design and with poor levels of natural surveillance.

Public & Sustainable Transport

- 3.13 Appendix C presents an extract of the local bus map and shows at present 3 bus routes serve bus stops on Furzehill Road which are around 190m to the south of the proposed site access. A summary of services is presented in Table 1.

Table 1. Local Bus Services from Furzehill Road / Ashley Drive Bus Stops

Route	Towards...	First & Last Service	Peak Hour Frequency
107	Edgware	05:18 to 00:33	4
	New Barnet Station	05:23 to 00:33	4
292	Colindale Asda	05:45 to 00:11	3
	Borehamwood Rossington Ave	06:25 to 00:30	3
644	Queensbury Station	06:32 to 19:10	1
	Hatfield Station	07:34 to 19:18	1

Source: Intalink

- 3.14 The above assessment shows there are 16 services during peak hours from local bus stops.
- 3.15 The nearest train station to the site is Elstree & Borehamwood station which is 1.6km north of the site. High Barnet and Edgware London Underground stations are 5.8km to the east, and 5.6km to the south of the site respectively. Appendix C presents an extract of the local rail network map. Rail services available are detailed in Table 2.

Table 2. Local Rail Services

Station	Operator	Towards...	First & Last Service	Peak Hour Frequency
Elstree & Borehamwood	Thameslink	London, Sutton, Medway Towns, Gatwick Airport and the South Coast	01:04 to 23:56	8
		Bedford	00:01 to 23:48	7
High Barnet	London Underground	Central & South London	05:22 to 00:00	18
Edgware	London Underground	Central & South London	05:23 to 00:01	21

Source: Thameslink / Transport for London

- 3.16 At all stations detailed there is level step-free access to trains.
- 3.17 Although the site location is outside of the Greater London boundary, the southern boundary of the site is adjacent to the boundary with the London Borough of Barnet. As such it considered valid to carry out a PTAL (Public Transport Assessment Level) assessment for the site. This assesses bus services available within a 640m walk distance of a given location, and rail services within a 960m walk distance. PAL scores range from 1a which is classified as 'very poor' to 6b, which is classified as 'excellent'.
- 3.18 A manual PTAL assessment has been carried out, as shown in Appendix C, which reveals that the proposed development site has a PTAL of 1b which is classified as 'very poor'. Given the 'very poor' level of local public transport accessibility, it is likely that most trips the proposed development would generate would be made by private car.
- 3.19 With regards local car clubs, Appendix C shows that the nearest car club vehicle is located 4km from the site. As such residents of the proposed development would not be able to take advantage of existing car club facilities.

Local Amenities

- 3.20 There are no local amenities within a short distance of the site as shown by the Local Amenities map in Appendix C.
- 3.21 The nearest local amenities are located on Shenley Road which is 1.4km to the north of the site. As discussed above the footways on Furzehill Road have poor natural surveillance and the cycleway is narrow and affected by overhanging vegetation. As such these local amenities are likely to be accessed by private car.
- 3.22 A Morison's supermarket is located 670m to the south east of the site but the footway that links the site to the supermarket has poor natural surveillance, is narrow and affected by overhanging vegetation. During hours of darkness this pedestrian route would not provide the Health Streets requirement of 'People Feeling Safe'. As such the supermarket will likely be accessed by private car.

Local Road Network

- 3.23 The site is bounded to the south by Barnet Lane, to the east by Furzehill Road and to the north by Carrington Avenue.
- 3.24 Appendix C includes a map extract indicating the various public authorities that have jurisdiction over local land and roads. It is clear from this, that there are multiple parties with interests in the area, including;
- Hertsmere Borough Council
 - Hertfordshire County Council
 - The London Borough of Barnet
 - Transport for London
 - Highways England / National Highways
- 3.25 Furzehill Road adjacent to the site is formed of a 6.3m wide two lane carriageway with a 'ghost' central reserve and continues north in this form to Shenley Road. To the south, 250m from the site, the junction of Furzehill Road with Barnet Lane and Farriers Way takes the form of a roundabout junction with 2 lane approaches on the Furzehill Road and Barnet Lane approaches.
- 3.26 Barnet Lane then continues for a distance of 400m to Stirling Corner – a major junction on the A1 which also serves Barnet Road and Stirling Way for access to the retail park.
- 3.27 Research has been carried out to obtain traffic flow data for local roads.
- 3.28 In 2005 Furzehill Road had an average daily flow of 12,931 vehicle per day (Source: Air Quality Updating and Screening Assessment for Hertsmere Borough Council – June 2006). No further traffic flows data has been found for Furzehill Road.
- 3.29 Historic average daily traffic flow data for Barnet Lane and the A1 has been sourced from the Department for Transport as shown in Table 3

Table 3. Local Historic Average Daily Traffic Flows

Year	A411 Barnet Lane (south of site)	A1 Barnet Way (south of Stirling Corner)	A1 Barnet By-Pass (north of Stirling Corner)	Difference in A1 flows north and south of Stirling Corner
2020*	12,008	55,229	49,440	5,789
2019	16,041	63,718	55,833	7,885
2018	16,010	65,055	56,053	9,002
2017	16,041	61,674	55,718	5,956
2016	15,921	59,798	56,625	3,173
2015	15,557	58,530	55,251	3,279
2014	14,968	56,866	52,112	4,754

Source: Department for Transport

* It should be noted that traffic flows in 2020 were severely impacted by Covid 19 restrictions.

- 3.30 It is clear that Barnet Lane to the south of the site, prior to 2020, was experiencing increases in flows of around 1,000 extra vehicles per day from 2014 to 2019. The A1, north and south of Stirling Corner, had also been experiencing increases in

average daily flows. It is interesting to note the discrepancy in flows on the A1 north and south of Stirling Corner, with an average of around 5,700 more vehicles per day on the A1 south of Stirling Corner than on the A1 north of Stirling Corner. This difference represents the amount of traffic that comes from / goes to Barnet Lane and Barnet Road and which has generally been increasing over recent years.

- 3.31 It has not been possible to obtain turning count movement data for the Furzehill Road / Barnet Lane roundabout, or Stirling Corner to assess how these junctions are performing, but Google maps 'traffic' feature has been researched which shows 'how fast' traffic moves at any 'typical' time of the day or week, and indeed where traffic is stationary. Appendix C includes Google maps traffic output for AM and PM peak periods.
- 3.32 During the AM period, traffic is seen to be slow moving (queuing) on Barnet Lane from Stirling Corner back past the proposed site access on Furzehill Road. This effect is seen to persist from around 07:00 to 09:00. The roundabout junction of Furzehill Road with Barnet Lane is also seen to be congested as is the Barnet Road approach to Stirling Corner. The most significant congestion is however seen on the southbound A1 approach to Stirling Corner where traffic is seen to be slow moving / queuing / stationary for a distance of around 2.2km north of the junction.
- 3.33 During the PM period, a similar scenario to the AM period is repeated with congestion / queuing on Furzehill Road and Barnet Lane towards Stirling Corner and for around 2km north of Stirling Corner for southbound A1 traffic. The congestion / queuing on Barnet Lane approaching Stirling Corner is seen to persist from around 11:00 to 19:00, while the congestion / queuing on Furzehill Road adjacent to the site is seen to persist from around 16:00 to 18:30.
- 3.34 In terms of local road network improvements, historic Google Earth images have been examined (as shown in Appendix C). It is clear that despite increasing traffic flows and congestion that no changes / improvements have been made to the Furzehill Road / Barnet Lane roundabout since at least 1999 (the oldest Google Earth image of this junction). With regards Stirling Corner, the most recent changes took place after March 2012, when additional circulatory road markings were introduced, although no additional road space was provided.
- 3.35 It is clear that local roads and junctions are currently subject to high levels of demand resulting in queuing and congestion, and hence increased air pollution.

Road Traffic Accidents

- 3.36 Appendix C presents a map extract showing road traffic accidents by severity for the 5-year period 2016 to 2020 in the area around the development site.
- 3.37 There have been a number of accidents on Furzehill Road including a serious injury accident close to where the proposed site access would be. There is also a cluster of 6 accidents at the Furzehill Road / Barnet Lane roundabout junction, including 1 serious injury accident. There have been 31 accidents at the Stirling Corner junction, or on the immediate approaches to the junction, including 3 serious injury accidents.

- 3.38 The significant number of road traffic accidents and injuries, reflects the fact that local traffic flows are high as are levels of congestion and slow moving traffic.

Car Ownership

- 3.39 Data from the 2011 Census has been examined to determine local car ownership characteristics comparing the local output area (E01023542: Hertsmere 011D) with the wider Hertsmere Borough Council area.
- 3.40 The Census data shows that in the local area, as with the Borough, each household owns on average 1.4 cars. However, in the local area, the proportions of households owning 3 or 4 cars per household (10% and 4% respectively) are higher than for the wider Borough (8% and 3% respectively). As such, any proposed development would be likely to increase the number of cars on local road, proportionally more than in other areas of the Borough. This may be due to the 'very poor' level of public transport available in the area of the proposed development.

Mode Split Data

- 3.41 Data from the 2011 Census has also been examined to determine the mode of transport used for 'journeys to work'. This gives an indication as to the availability of 'sustainable' forms of transport and its suitability for journeys to work. Other contributing factors will be destination and length of journey which are discussed in more detail in the following chapter. Table 4 presents the results of the assessment for those in employment.

Table 4. Census Journey to Work Mode Split

Mode of Transport	No. of Persons	% of Persons
Underground, metro, light rail, tram	37	5%
Train	98	12%
Bus, minibus or coach	52	6%
Taxi	6	1%
Motorcycle, scooter or moped	10	1%
Driving a car or van	492	60%
Passenger in a car or van	38	5%
Bicycle	10	1%
On foot	73	9%
Other method of travel to work	3	0%
Total	819	100%

Source: 2011 Census. Table QS701EW – LSOA 2011 E01023542 Hertsmere 011D

- 3.42 The Census data shows that the majority of journeys to work (65%) are made as car driver or car passenger, with just 23% made by public transport.
- 3.43 In summary, the proposed development site and surrounding area has substandard pedestrian and cycle links, 'very poor' levels of public transport accessibility, few local amenities within walking distance, congested local roads and junctions, high levels of car use and a poor road safety.

4.0 TRIP GENERATION & IMPACT

- 4.1 The volume of trips generated by any development will depend on the number of residential dwellings, and any other land uses proposed. At this stage, no firm details are available but as an indication of potential trip generation analysis data from a range of sources have been identified for residential land uses based on a series of assumptions.

Trip Generation Forecast

- 4.2 As set out in the introduction to this report, it has been suggested that the site could provide between 250 and 442 dwellings.
- 4.3 To gain an indication of the trip generating potential of a residential development of this size, the TRICS database has been consulted. Based on a mix of privately owned and affordable houses across sites in the south east of England (excluding Greater London), the worst case development of 442 residential dwellings could generate trips as shown in Table 5 and as fully detailed in Appendix D.

Table 5. Potential Residential Trip Generation Assessment (442 dwellings)

Hour Starting	Vehicle Trips	Cyclist Trips	Pedestrian Trips	Public Transport Trips	Total Person Trips
07:00	156	6	33	21	264
08:00	215	8	90	18	442
09:00	130	4	37	7	210
10:00	112	3	28	5	175
11:00	114	2	34	4	188
12:00	123	3	31	6	194
13:00	123	3	30	6	196
14:00	127	3	40	6	213
15:00	177	6	85	14	378
16:00	169	6	52	12	311
17:00	203	8	46	13	343
18:00	186	4	35	8	293
19:00	59	0	7	0	89
20:00	52	0	0	0	74
Total	1,946	57	548	120	3,370

Source: TRICS database

- 4.4 The residential development could be expected to generate around 1,946 vehicle trips per day (in and outbound trips) which would comprise of trips made by cars, taxis, motorcycles and goods vehicles. During peak hours, this could lead to over 215 additional vehicles per hour on local roads and passing through local junctions.
- 4.5 In addition, it could generate around 57 cyclist trips, 548 pedestrian trips and 120 public transport trips. In total, the development could generate 3,370 trips per day by all modes of transport.
- 4.6 Even at the more modest development of 250 dwellings, the scheme could generate 1,100 vehicle trips, 32 cyclist trips, 310 pedestrian trips and 68 public transport trips. In total, a development of 250 dwellings could generate 1,906 trips per day by all modes of transport.

Mode Split & Destination

- 4.7 Being an extension to the existing urban settlement of Borehamwood, it is considered appropriate to assess the destination of 'journeys to work' for the potential development site. To this end 'Location of Usual Residence and Place of Work by Method of Travel to Work' data for the super output area (mid layer) in which the site is located from the 2011 Census has been analysed. Table 6 shows the 21 destinations of journeys to work (by car) from the area and the most likely routing they would take from the proposed development site.

Table 6. Census Journey to Work Destinations – Car Drivers

Destination (local authority district)	Number of People	Proportion of People	Potential Routing
Hertsmere	662	32%	Furzehill Road (north) / Barnet Lane (west)
Barnet	428	21%	A1 (south)
St Albans	138	7%	A1 (north)
Welwyn Hatfield	110	5%	A1 (north)
Harrow	106	5%	A1 (south)
Watford	93	5%	Furzehill Road (north) / Barnet Lane (west)
Brent	92	4%	A1 (south)
Enfield	51	2%	A1 (south)
Dacorum	47	2%	A1 (north)
Westminster, City of London	45	2%	A1 (south)
Camden	43	2%	A1 (south)
Hillingdon	39	2%	A1 (south)
Ealing	37	2%	A1 (south)
Three Rivers	36	2%	Furzehill Road (north) / Barnet Lane (west)
Stevenage	26	1%	A1 (north)
Haringey	21	1%	A1 (south)
Islington	19	1%	A1 (south)
Luton	16	1%	A1 (north)
North Hertfordshire	15	1%	A1 (north)
Broxbourne	13	1%	A1 (north)
East Hertfordshire	12	1%	A1 (north)
All	2,049	100%	

Source: Table WU03EW E02004906: Hertsmere 011 (2011 super output area - middle layer)

- 4.8 The greatest proportion of car based 'journeys to work' (32%) would be to destinations in the Hertsmere Borough Council area which are likely to route on Furzehill Road north of the site, or on Barnet Lane west of the site.
- 4.9 A further 21% of 'journeys to work' by car would be made to the London Borough of Barnet via the A1 south, and then 7% to the St Albans District Council area, and 5% to the Welwyn & Hatfield Borough Council - both of which would be likely to route via the A1 north of the site.

Impact

- 4.10 Summarising potential routings and assuming the proposed development will generate 215 additional car trips in the morning peak hour (Table 5), the proposed development could lead to;
- 83 additional cars on Furzehill Road (north) / Barnet Lane (west)
 - 92 additional cars on the A1 (north)
 - 40 additional cars on the A1 (south)
- 4.11 An additional 83 cars per hour on Furzehill Road (north) / Barnet Lane (west) would be likely to further exacerbate current congestion, and impact on the performance of the Furzehill Road / Barnet Lane roundabout.
- 4.12 More significant is the 132 additional cars per hour that could route to Stirling Corner to head north or south on the A1. As has been seen from Google traffic outputs, the Stirling Corner junction currently experiences significant levels of queuing at peak times, which would be made worse by additional development traffic.
- 4.13 It also needs to be noted that in addition to new vehicle trips generated by the proposed development site, there will be 'background' growth in traffic on local roads due to other development. The Government's traffic forecasting tool, TEMPO, has been consulted for the Hertsmere Borough Council area for the period 2021 to 2031. TEMPRO suggests that traffic on roads in the area will increase by over 6% in the next 10 years. This increase in traffic alone, would lead to significant increases in congestion. The impact of additional traffic from the proposed development site would compound these problems.

5.0 DEVELOPMENT IMPLICATIONS

- 5.1 Were the site to be put forward for future development, a range of mitigation measures would need to be examined and implemented. This chapter sets out a brief assessment of the form these mitigation measures would be likely to take.

Highway Infrastructure

- 5.2 Full traffic modelling of the impact of the development would need to be undertaken to identify the impact of the scheme on local roads and junctions. This would be a significant undertaking as all 3 local highways authorities (Hertfordshire County Council, London Borough of Barnet and Transport for London) would need to be involved and it is likely that each authority will have its own 'agenda' and funding issues.
- 5.3 As previously mentioned, the junctions of Furzehill Road with Barnet Lane and the Stirling Corner both currently experience significant queuing / congestion. These junctions would require amendments to improve capacity. It is questioned as to why no such improvements have been carried out.
- 5.4 With regards the Furzehill Road / Barnet Lane roundabout, Hertfordshire County Council, as the highways authority, has made no amendments to the junction for at least 22 years. The issues experienced at this junction are a knock on effect from Stirling Corner, which falls under the jurisdiction of Transport for London. Again, any scheme to improve junction performance will involve multiple agencies.
- 5.5 In terms of the proposed development itself, any new access junctions and internal road layout would need to comply with design guidelines set out by Hertfordshire County Council.
- 5.6 In addition to highways infrastructure, any new development would need to provide on-site car, cycle and accessible parking in line with current / emerging local parking standards.

Public Transport Access

- 5.7 The site has been shown to have 'very poor' levels of public transport accessibility. The only way that public transport accessibility could be improved would be to provide a significant increase in bus services that serve the site. It is unlikely that any bus operator would be able to run a financially viable service to increase public transport accessibility to a level approaching 'good'. There is no option to provide rail service access within close proximity to the development site.

Pedestrian & Cycle Access

- 5.8 In terms of pedestrian and cycle access, any development would need to link in to existing provision. This would take the form of access points linking the site to Furzehill Road for pedestrian and cycle use and to access local bus services, as well as providing safe access to public rights of way. As has been demonstrated above, the cycle way / footway on Furzehill Road is substandard in design and

layout and has security issues due to lack of natural surveillance. Significant investment would be required to remedy these concerns.

- 5.9 Within the site, high quality footways alongside the internal road layout in conjunction with footpaths / cycleways would be required to provide access to all parts of the site and facilities to be provided as well as linking to the site's pedestrian / cycle access points.

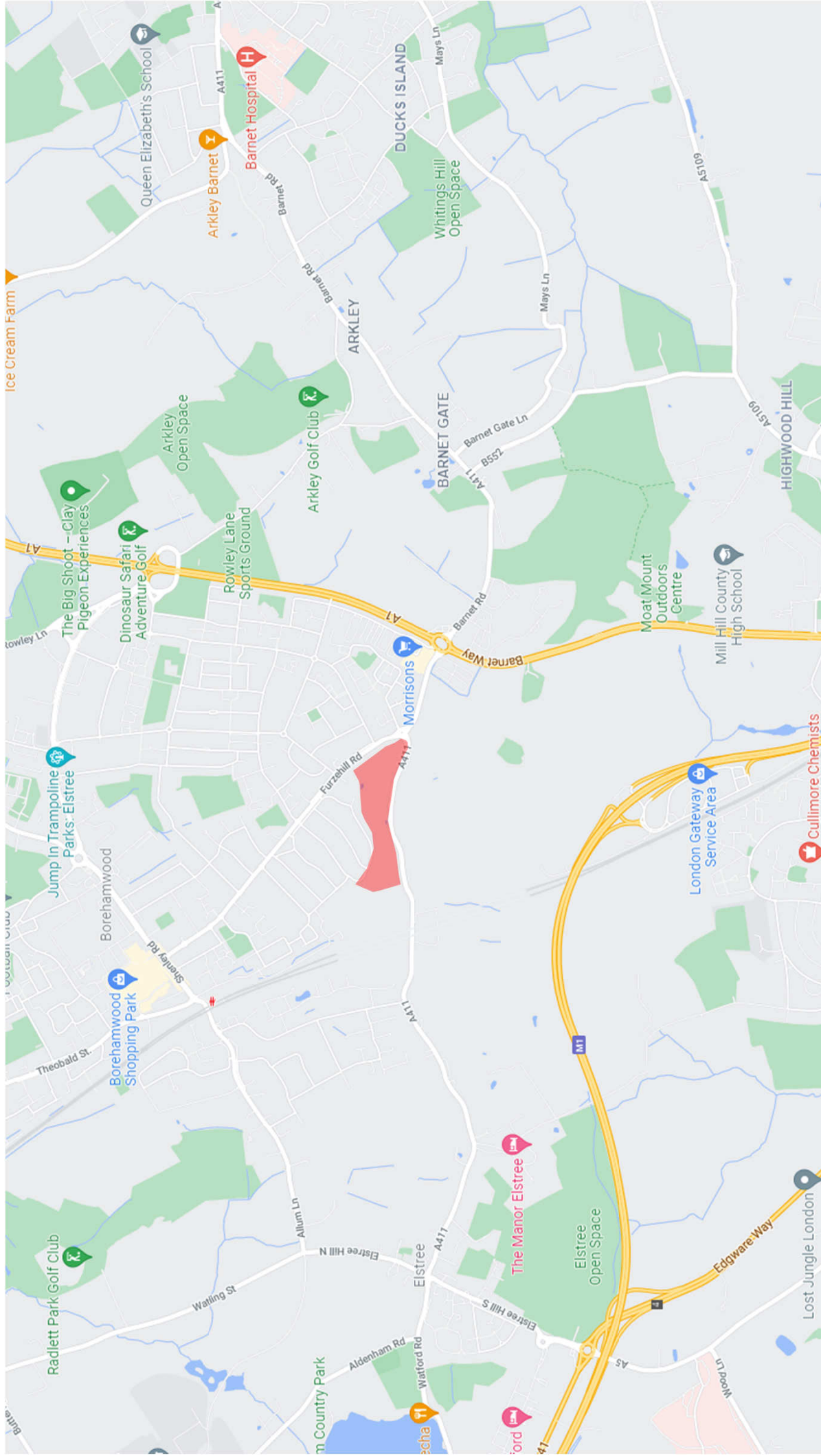
Reducing the Need to Travel

- 5.10 In order to facilitate the option for residents of the scheme to be able to work from home, rather than having to commute to local employment areas, other infrastructural provision would need to include high-speed internet access.
- 5.11 A robust Travel Plan would also be developed, implemented and operated to reduce reliance on the private car and to promote sustainable travel. Initiatives such as free / discounted public transport tickets, car share, car club and cycle to work scheme would need to be included.
- 5.12 It is noted that at present, alternatives to the private car are not considered attractive enough to have any significant impact on sustainable transport use.

6.0 SUMMARY & CONCLUSIONS

- 6.1 In summary, the site is located in an area with 'very poor' levels of public transport accessibility, with poor quality pedestrian and cycle links and no local amenities within a reasonable walk distance.
- 6.2 Car ownership and 'journeys to work' by car are high. As a result, local roads carry relatively high volumes of traffic and congestion is prone to occur at a number of local and wider area junctions.
- 6.3 The proposed development would lead to a significant increase in car based trips, in addition to background growth in car use. As a result, there would be significant impacts on local road and the performance of the roundabout junction of Furzehill Road and Barnet Lane and at Stirling Corner.
- 6.4 Any development proposals would need to include detailed traffic modelling such that the extent of mitigation works can be identified. That said, it should be recognised that securing agreement from the various highways authorities that have jurisdiction for local roads would be a considerable undertaking and that significant contributions to the process and mitigation works would be required.
- 6.5 In conclusion, the parcel of land to the north of Barnet Lane, Borehamwood is not considered suitable for the provision of new residential development.

Appendix A Site Location & Context



Date: 22/11/21

Scale: NTS

Source: Google

● Site Location



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.

Site Location



PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



Date: 22/11/21

Scale: NTS

Source: Google

● Site Location



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Site Context



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Appendix B

Call for Sites Submission & Assessment

Site BE6: Land north of Barnet Lane, Borehamwood

- Residential development
- Access point
- Biodiversity and ecology

Land north of Barnet Lane, Borehamwood is proposed for development. The new development will:

New homes

- q.** Provide a sustainable new neighbourhood delivering around 250 new homes through a mix of dwelling sizes, tenures and types to include 40% of all new homes as affordable housing;

Community facilities

- r.** Secure contributions towards the delivery of education, health and other community facilities in Borehamwood;
- s.** Provide an on-site education and information centre;
- t.** Maintain the area of Village Green which is located within the site;

Sustainable transport

- u.** Provide attractive and safe walking and cycling routes from the development site into the surrounding area;
- v.** Facilitate off-site improvements to the local highway network including at the junction of Furzehill Road and Barnet Lane and at Stirling Corner prior to the completion of development;
- w.** Ensure off-site improvements to public transport to enhance existing services;
- x.** Provide vehicular access into the development site from Furzehill Road, with pedestrian and cycle access from Carrington Avenue and Linster Gardens;

Environmental and compensatory green belt improvements

- y.** Establish appropriate buffer zones to Woodcock Hills Fields Local Wildlife Site (LWS) within the site, as well as to the retained broadleaved woodland outside of the LWS;
- z.** Create wildlife corridors and ecological zones;
- aa.** Secure ecological enhancements to the portion of Woodcock Hill Village Green that falls within the site;
- ab.** Address the effects of noise and air pollution, within and outside of the site, with focus on minimising any impact on the existing AQMA at Shenley Road, Borehamwood;

High quality design

- ac.** Follow an agreed masterplan and design code to secure a high quality environment which promotes health, well-being and digital connectivity;
- ad.** Focus areas of higher density development to the centre of the site with lower density transition towards Barnet Lane; and
- ae.** Provide street scene frontage with Barnet Lane and Furzehill Road.

HOUSING AND ECONOMIC LAND AVAILABILITY ASSESSMENT (HELAA) 2017/18



SITE SUBMITTED TO HERTSMERE BOROUGH COUNCIL FOR CONSIDERATION

Site Address	Land north of Barnet Lane, Borehamwood, WD6 2DR		
Site Reference	HEL209a	Site size	12.63 ha
Promoted by	Barratt David Wilson North Thames		
On behalf of	Mr Jacques Onona		
Promoted through	Call for Sites 2017/18		
View the site pro-forma submitted to the council here		View the site map submitted to the council here	
These additional documents have been submitted to the council by the applicant in support of their site. Documents are available to view on request at the council offices.		Photos Development Concept document Habitat survey Ecological constraints document Landscape assessment and TPO documents Mr Onona's land ownership Questionnaire submitted by Daniel Rinsler	

REMINDER

This site has been submitted to the council by or on behalf of an owner or prospective developer, to be assessed as part of the work to produce an updated HELAA which is currently underway.

The site has not been promoted by the council and its promotion does not determine whether or not it is suitable for development or for allocation in a Local Plan. It is not a statement of planning policy - this is the role of the Local Plan.

The HELAA is a technical study prepared to inform the preparation of the Council's new Local Plan by helping quantify the availability of potential housing and employment land. This initial assessment and identification of sites has no status in formally allocating land for future development and will not be treated as a material consideration in any future decision that the Council makes on individual planning applications.



**Housing and Economic Land Availability Assessment
Local Plan Call for Sites 2016
Site Questionnaire**

Hertsmere Borough Council is currently reviewing its Housing and Economic Land Availability Assessment (HELAA) to identify land available for potential future housing and economic development sites up to 2031 in order to inform the preparation of its new Local Plan.

To assist the Council in determining whether sites are potentially available, suitable or achievable for housing (including for Gypsy and Traveller pitches) or economic development, please complete and return this questionnaire. All sites submitted should be capable of delivering five or more dwellings, or economic development on sites of 0.25ha or 500m² of floorspace and above. Completed questionnaires can be returned using one of the following methods:

By Email (preferred): local.plan@hertsmere.gov.uk

By Post: Planning Policy and Transport Team, Civic Offices,
Elstree Way, Borehamwood, WD6 1WA

**Please use a separate form for each site submitted and
Include a plan clearly identifying in red the site boundary.**

Please note that information on sites considered through the land availability assessment process will be openly available to the public and the information submitted will NOT be treated as confidential.

Inclusion in and assessment through the HELAA does not guarantee planning permission for nor imply the designation or allocation of any site for development.

1. CONTACT DETAILS

Owners Details (required):

Name:

Mr Jacques Onona

Address:

[REDACTED]

Postcode:

[REDACTED]

Tel No:

[REDACTED]

Email Address:

Click here to enter text.

[REDACTED]

Agent's Details: (if applicable)

Name:

Barratt David Wilson North Thames

Address:

Wellstones House Wellstones Watford

Postcode:

WD17 2AF

Tel No:

01923297354

Email Address:

michael.george@barratthomes.co.uk

2. SITE DETAILS

Please include a plan clearly showing the exact location, and boundaries (marked in red) of the site. Forms submitted without a site plan will not be considered.

Site Address including postcode:

Land North of Barnet Lane Borehamwood WD6.2DR

OS Grid Reference (if known):

51.38455 N 1551.8W

Site Area (Hectares):

12 hectares with further parcel of land circa 4 hectares see site ownership plan attached.

Land ownership (if you are not the owner):

Mr Jacques Onona see detail above

3. CURRENT AND POTENTIAL USE

a) What is the site currently used for?

Grazing Horses

b) When did this use commence?

Not known

c) What was the site used for prior to the current use?

Low grade Agricultural use

d) If the site is currently occupied by another individual or organisation, please describe their status (e.g. tenant, leaseholder) and the expected duration of this arrangement.

Tenant on short term lease

e) Please describe the overall level of occupancy:

The whole site in Mr Ononas ownership as per attached plan

f) What is the proposed use of the site? (i.e. residential (please indicate type if known – eg market, affordable, specialist, gypsy/traveller), employment, mixed use)

Proposed Residential Scheme with mix use options for school site and or Health facilities and or extra care facilities

g) Does the site currently have planning permission and if so, would this form the basis of what you intend to deliver on the site?

No existing planning consent for proposed uses future proposals would be a change of use to residential and ancillary uses.

h) If the site has a recently lapsed planning permission

(i) please clarify why the permission has been allowed to lapse

Non- Applicable

and

(ii) do you intend to reapply for a similar scheme which delivers the same amount of development?

No change of use to assist with meeting the Councils Housing targets, together with any other appropriate uses which facilitate development

4. TIMESCALE

When do you consider the site will be available for development?(Please select the option that applies)

Within 5 years

On what grounds is this assessment based?

Willing Land Owner working in Contractual Partnership with Housing Developer Barratt David Wilson Homes who have a track record of delivering family homes nationwide.

5. ECONOMIC VIABILITY

a) *Has there been interest in the site from any other developer?*
☒ **Yes Interest from Faith School Care Home and Health Facility provider working in association with Barratt Homes and the land owner should these options be acceptable and supported locally.**

☐ No

b) *Has a developer or you already taken steps toward developing the site for housing? (If yes, please give details)*

☐ Yes

Previously promoted at Core Strategy Stage and at EIP

With later submissions as per the call for sites issued by HBC

☐ No

c) *How many dwellings might you/the developer wish to build on the site, if known?*

(Please give details)

150 dwellings providing mix of family homes of 1,2,3,4bed accommodation of private open market and affordable with rented and shared equity tenures

6. SITE CONSTRAINTS (Please give as much detail as possible if any of the following affect the site)

a) <i>Contamination/pollution issues (previous hazardous land uses)</i> Existing ground conditions do not present any known constraints to development of the site.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	--

b) <i>Environmental issues (e.g. Tree Preservation Orders, SSSIs)</i> See Landscape Assessment submitted	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	--

c) <i>Flood Risk</i> Flood Risk Assessment to be undertaken to support future application .A sustainable drainage proposal would be submitted designed to accommodate a green field run off only. Therefore flood risk not considered a constraint to future proposals or delivery.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	--

d) <i>Topography affecting site (land levels, slopes, ground conditions)</i> Land levels, slopes and ground conditions do not present a constraint to residential development or other uses.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

e) <i>Utility Services (access to mains electricity, gas, water, drainage etc.)</i> All located in Close proximity to the site.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

<p>f) Legal issues (For example, restrictive covenants or multiple ownership/titles affecting the site)</p> <p>Non Applicable</p>	<p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p>
<p>g) Access. Is the site accessible from a public highway without the need to cross land in a different ownership to the site?</p> <p>Site Bounded by Barnet Lane, Furzehill Road and Carrington Avenue.</p> <p><i>If no please provide details of how the site could be accessed. (Without this information the site will not be considered to be deliverable).</i></p> <p>Non -applicable</p>	<p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p>
<p>h) Any other constraints affecting the site</p> <p>Existing trees can be accommodated within any future design proposals helping to enhance the design rather than be a constraint to delivery.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input checked="" type="checkbox"/></p>

7. ADDITIONAL INFORMATION

Is there any other information regarding the site that we should be aware of? (if yes, please provide details)

☒ Yes

Landscape Assessment undertaken report attached

☐ No

If you require any further assistance completing this form please contact the Planning Policy and Transport team on 020 8207 2277. Alternatively email local.plan@hertsmere.gov.uk.

**HELAA 2018
SITE ASSESSMENT FORM**
Site reference HEL209a

Site source CFS 2017

Site location / address:

Site Name	Land North of Barnet Lane		
Address	Barnet Lane, Borehamwood (eastern site)		
Postcode	WD6 2DR	Parish	Elstree and Borehamwood CP
Ward	Borehamwood Hillside	Town/Village	Borehamwood
Promoter	Barratt David Wilson North Thames		

Site size / use:

Size (ha) Gross	12.63	Current use(s)	Grazing Horses. Much of the site is open field with mature trees around the edge and dispersed across the site. The western end of the site is rougher grassland with more trees across the area.
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Surrounding area:

Neighbouring land uses	Residential to the north and east, A41 to the south, Woodcock Hill Village Green to the west		
Character of surrounding area – landscape, townscape	This is open land on the edge of built up area. The residential areas to the north and east of the site are largely semidetached to the north, with some terraced as well to the east, all with reasonable sized gardens. The open land runs right up to the edge of built up area. To the south of the A411 residential properties are larger detached with extensive gardens. Barnet Lane is an urbanising influence.		
Could this site be joined to another to form a larger site?	No. adjoining land is Woodcock Hill Village Green. Submission also made for an additional site to the west in same ownership (HEL209b) but which does not physically adjoin this site.		
If yes, give details of adjoining site including site reference if applicable	n/a		

Planning history:

Relevant Planning history (include unimplemented permissions, non-confidential enforcement issues)	TP/80/0797 outline application for housing and open space (REFUSED)
---	---

Use(s) proposed by owner/developer (tick and complete relevant box):

Residential		Employment (B class)		Mixed use (specify below)		Other (specify below)	
<input checked="" type="checkbox"/>	C3	<input type="checkbox"/>	Choose an item.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Option for school site, health facilities or extra care facilities

Location type (tick relevant box):

Urban settlement ¹ PDL	Urban settlement ¹ non-PDL	Green Belt settlement ² PDL	Green Belt settlement ² non-PDL	Green Belt other³ PDL	Green Belt other³ non-PDL
--	--	---	---	---	---

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
¹ outside the Green Belt		² washed over by the Green Belt		³ isolated sites and open countryside	

Green Belt purposes:

Stage 1				
Parcel number	1 Prevent sprawl score	2 Prevent coalescence score	3 Protect countryside score	4 Historic towns score
12	3+	1	3	0
Stage 1 Comment	The parcel forms a small part of the less essential gap between Borehamwood and Greater London, which is of sufficient scale and character that development is unlikely to cause merging between settlements. Barnet Lane and the M1 are likely to contribute to the prevention of coalescence of Borehamwood and Greater London.			
Stage 2				
Sub-area number	1 Prevent sprawl score	2 Prevent coalescence score	3 Protect countryside score	4 Historic towns score
SA50	1	1	4	0
Stage 2 Comment	The sub-area meets Purpose assessment criteria strongly, but makes a less important contribution to the wider strategic Green Belt. It is recommended for further consideration.			

Site Suitability:

Conflict with existing policy.	Yes – the site is within the current Green Belt. The western part of site is local wildlife site Woodcock Hill Fields
Flood Zone 2 or 3?	No
Any heritage designations within or adjoining the site.	No
Site promoter indicated evidence of land contamination, pollution, poor ground conditions or hazards.	No
Any access difficulties.	No
Any existing 'bad neighbours' which would be unsuitable in relation to the proposed use.	No
Any other environmental constraints?	The western and south western part of site is Village Green and local wildlife site Woodcock Hill Fields so would not be able to be built on. Any negative impact must be avoided or mitigated. TPO/387/1997 affects the site - 17 individual trees and six groups
Is the Site suitable for the proposed use?	Not under current policy but part could be suitable for development should Green Belt boundaries be changed. Wildlife site most likely not suitable for development.

Site Availability:

Has the owner said the site is available	Yes	Is there developer interest	Yes
Ownership constraints / indications that the site may not actually be available	No. Tenant on short term lease		

Is the Site available	Yes
------------------------------	-----

Site Achievability:

Is the Site achievable	Yes
-------------------------------	-----

Estimated development potential - residential**(a) Density multiplier (baseline 30dph):**

Area type	Prevailing density	Accessibility	Likely type
Rural	V.Low	High	Garden suburbs

(b) Net capacity

Density dph	Net Ha	Net capacity: (no. units)*
54	8.19	442

Deliverability / Developability:

What is the likely timescale within which the site is capable of being developed taking into account suitability, availability, achievability and constraints, plus anticipated lead in times and build out rates							
<input checked="" type="checkbox"/>	Deliverable 1-5 years	<input checked="" type="checkbox"/>	Developable 6-10 years	<input type="checkbox"/>	Developable 11-15 years	<input type="checkbox"/>	Developable 16 years + or unknown

Brownfield Register:

Should the site be considered for inclusion on the Brownfield Site Register?		no
Reason	n/a	

Survey undertaken:

Date	07/03/2018
-------------	------------

Conclusion:

The western side of the site forms part of Woodcock Village Green which is also a Local Wildlife Site (Woodcock Hill Fields) supporting a range of grassland and scrub species. A TPO (387/1997) covers a large number of trees across the site including mainly individual Oaks as well as various groups and woodland areas containing a variety of species.

Given the above constraints, the area indicated for future residential development by the site promoter would be to the east of the village green and amounts to approximately half of the entire 12.6ha site. A concept plan submitted indicates that the village green site presents an opportunity for a school site but the village green designation would preclude development from taking place.

The site is approximately 1 mile on foot from (via Coleridge Way) the station and (via Furzehill Road) the town centre would potentially be accessed via both Barnet Lane and Furzehill Road. The 107 (Edgware – New Barnet) and 292 (Borehamwood – Colindale) bus routes serve the south east corner of the site which is 400m from the Morrisons supermarket.

The site makes up a large proportion of a moderately performing Green Belt parcel identified in the Stage 1 assessment. The parcel was identified as playing an important role in preventing encroachment into the countryside south of Borehamwood albeit forms part of the less essential gap between Borehamwood and Greater London with Barnet Lane itself identified as contributing to the prevention of coalescence.

Under the current policy framework, none of the site would be suitable for development due to its Green Belt designation. Were the impact on the Green Belt considered to be outweighed by the wider sustainability benefits of delivering additional homes in this location, part of the site could potentially be suitable, available and achievable for the delivery of 442* homes. However, currently the site can only be recorded in the category of sites as not currently acceptable.

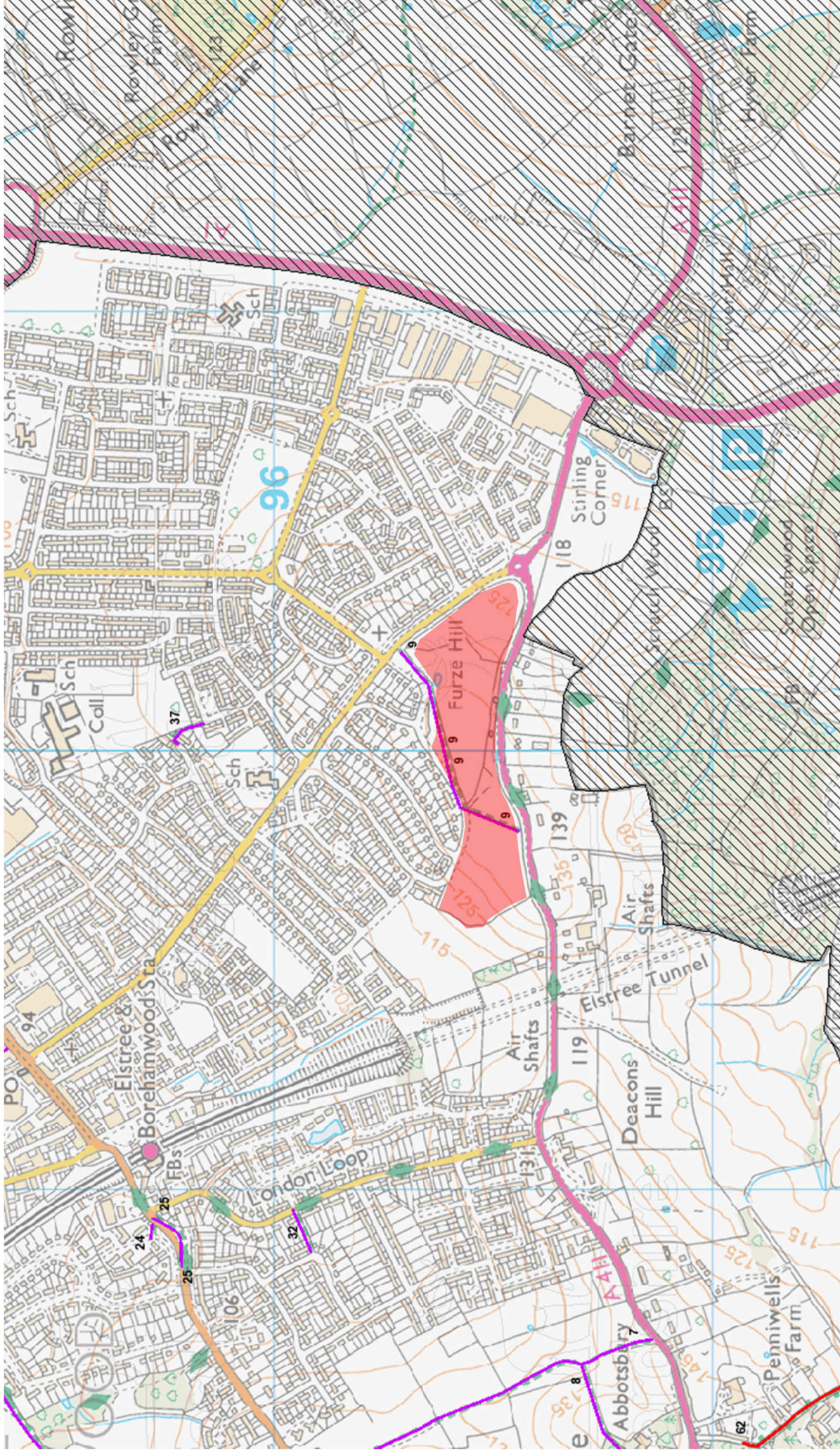
Capacity under current policy framework: 0

Capacity following any Green Belt review and change to policy framework: 442 homes*, 75* homes in years 1-5, 367* homes in years 6-10

*** Capacity figures are based on a standard calculation and are an indication only. It does not mean that this number of homes would be built were the site to be taken forward for development.**

Appendix C

Site & Area Audit



Date: 22/11/21

Scale: NTS

Source: HCC

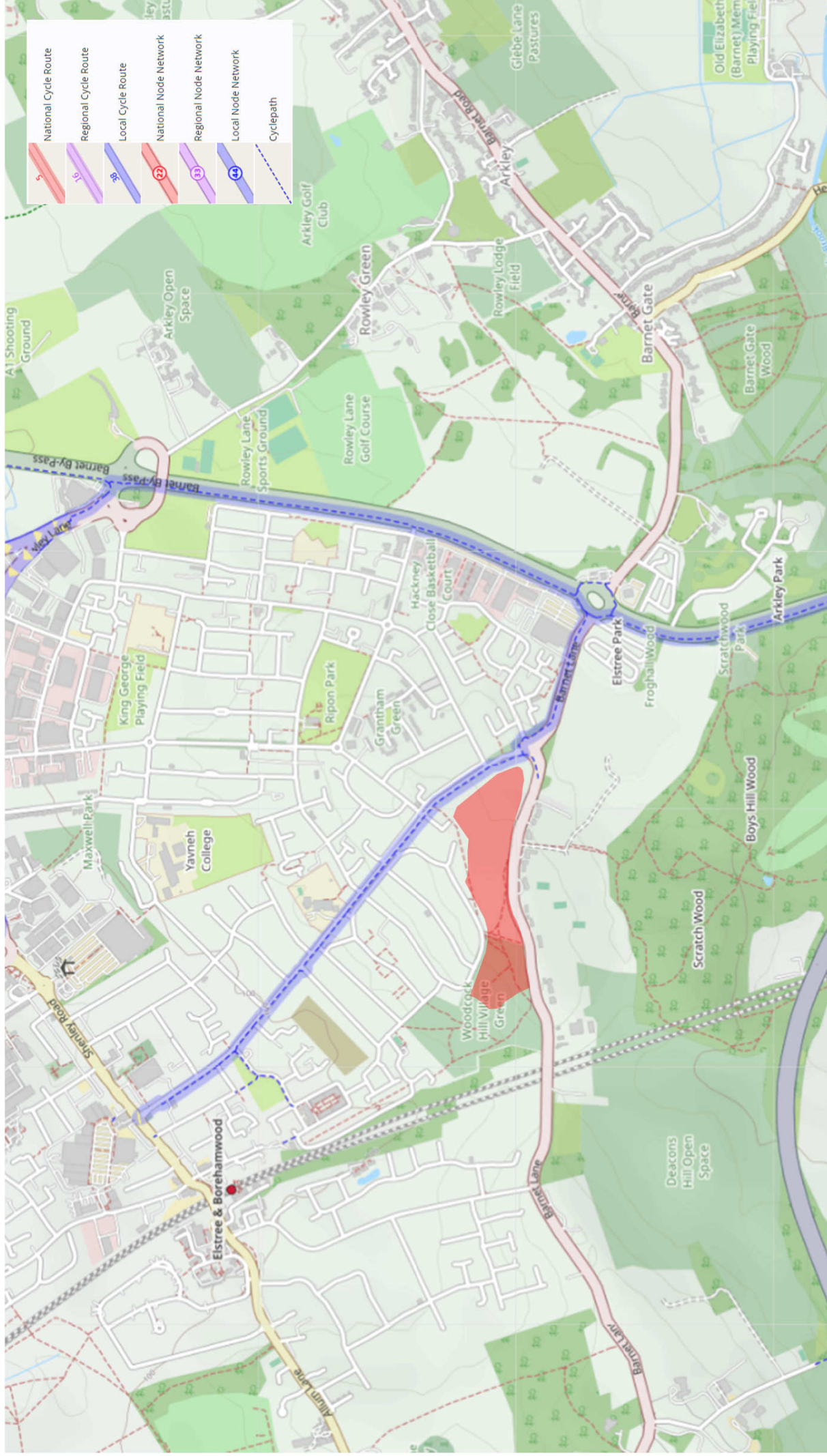
● Site Location



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Local Public Right of Way Map



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Date: 22/11/21

Scale: NTS

Source: Open Cycle Map

● Site Location

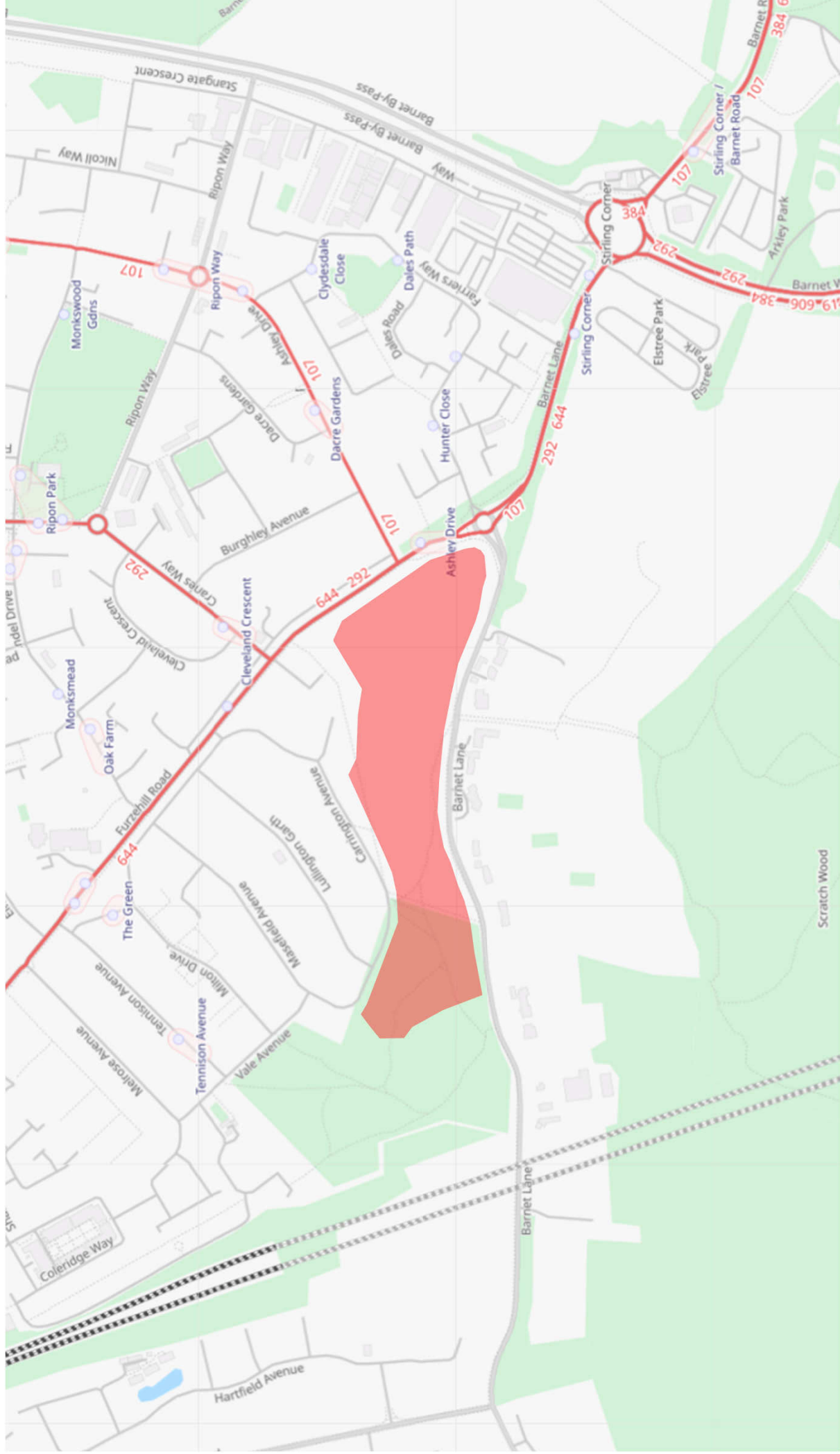


P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.

Local Cycle Route Map



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Date: 22/11/21
Scale: NTS
Source: Open Street Map
● Site Location

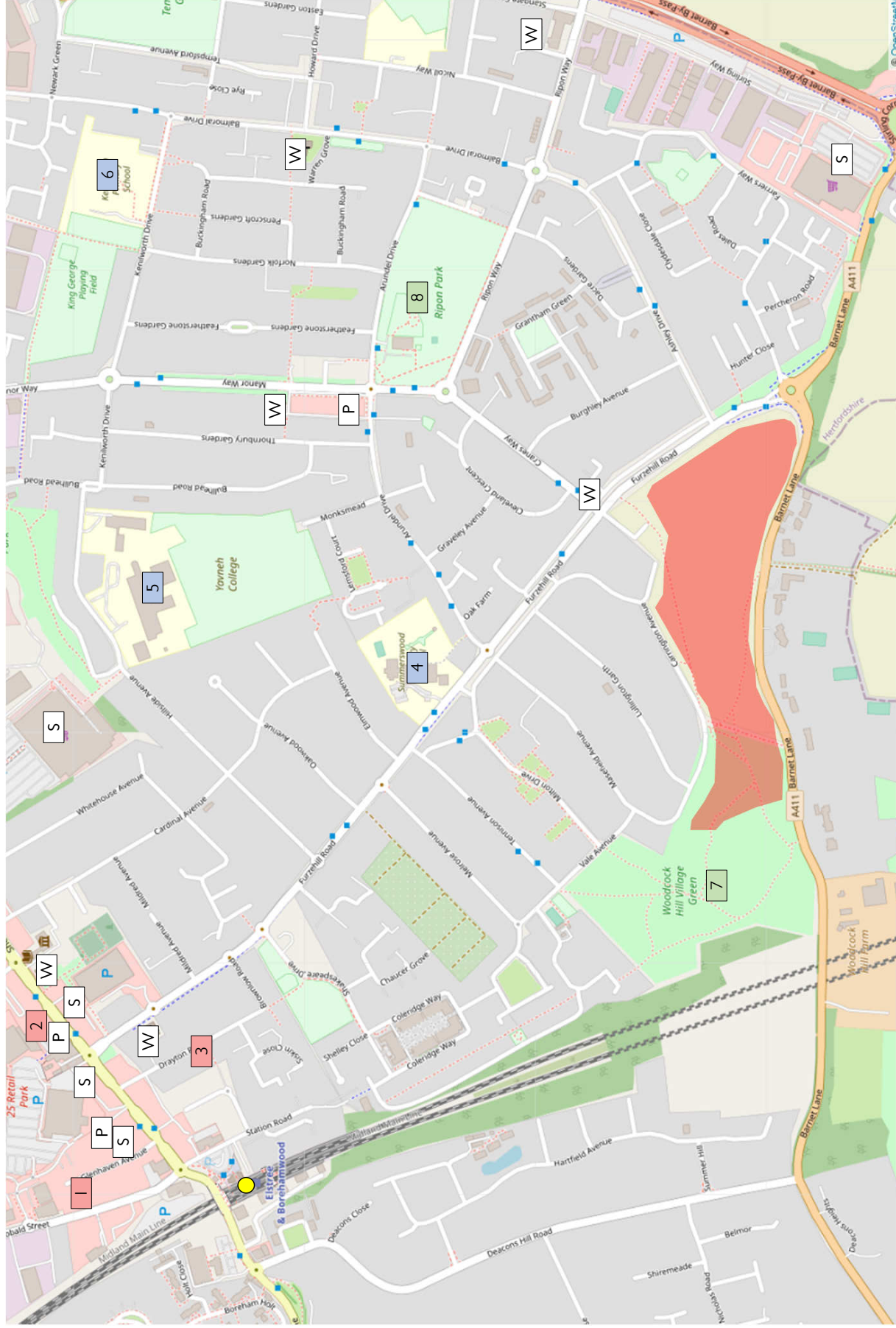


P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Local Public Bus Map



● Site Location

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TRAFFIC CONSULTANTS
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T: 0208 780 0426 W: www.pma-traffic.co.uk



- Trunk road
- Primary road
- Secondary road
- Track
- Cycleway
- National cycleway
- Regional cycleway
- Local cycleway
- Footway
- Railway

1. The Grove Medical Centre
2. Medicspot Clinic
3. Drayton House Dental Clinic

4. Summerswood Primary School
5. Yavneh College
6. Kenilworth Primary School
7. Hancock Hill Village Green
8. Ripon Park

- P. Pharmacies
- W. Places of Worship
- S. Supermarket / Food Store / Local Retail

- Bus Stops
- Stations

Date: 22/11/21

Scale: 1:10,000 Approx.

Source: Open Streetmap

Site Location

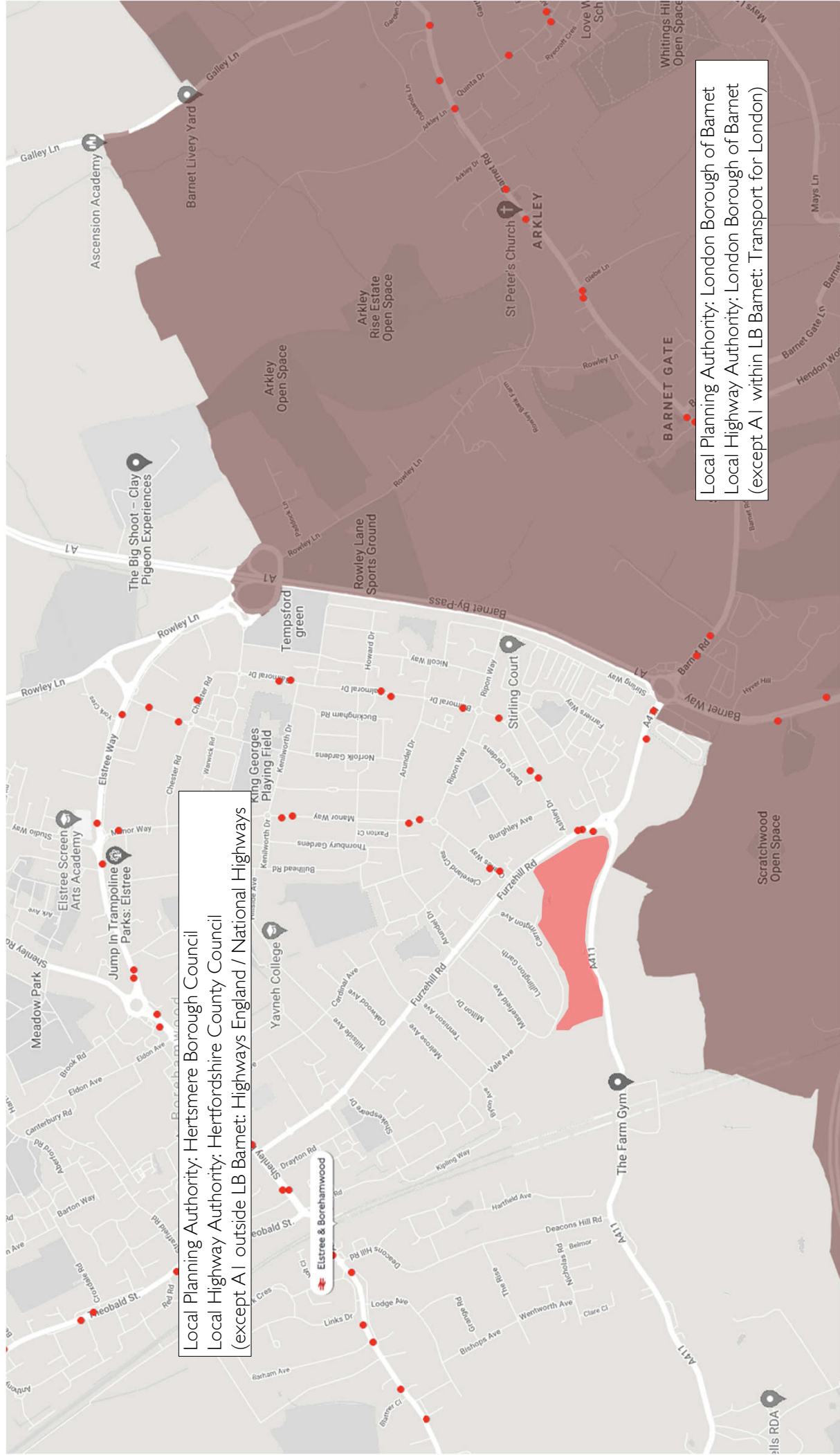


P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.

Local Amenities Map



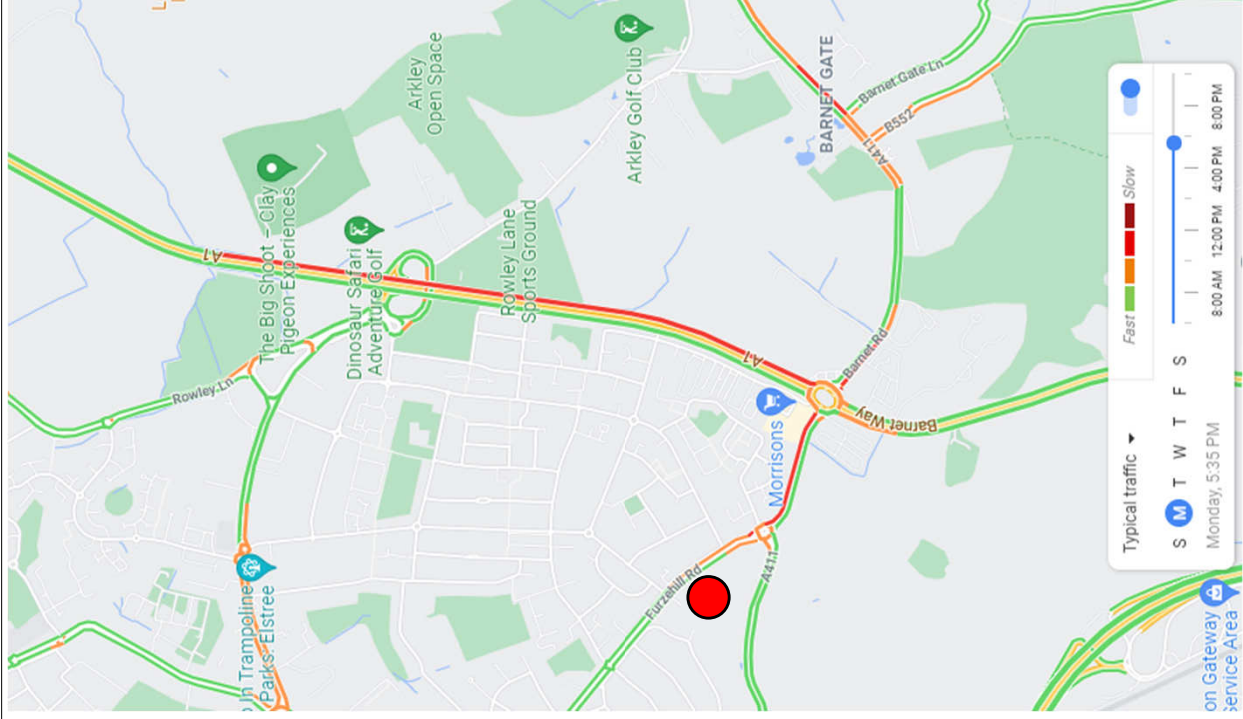
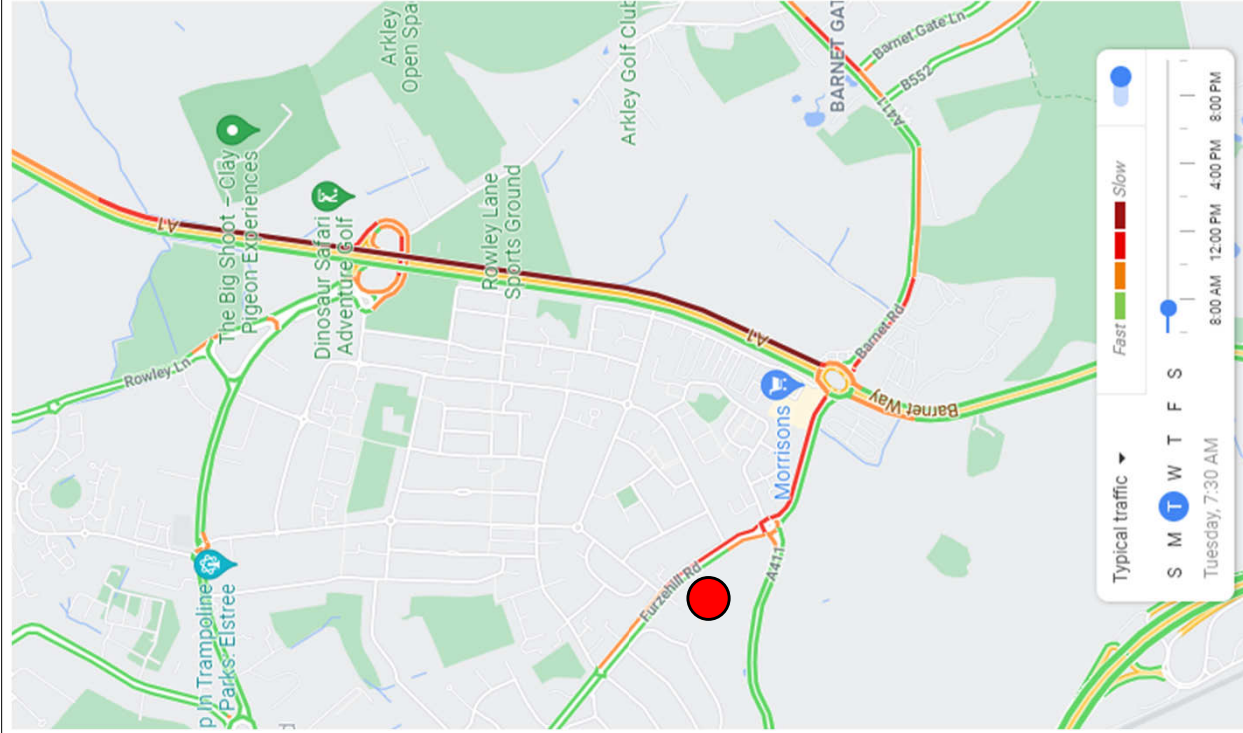
PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Local Public Authority Boundaries



PAUL MEW ASSOCIATES
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Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



Date: 22/11/21

Scale: NTS

Source: Google

● Site Location



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.

Google Maps Traffic



PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



September 1999



June 2021

Date: 22/11/21

Scale: NTS

Source: Google Earth



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Furzehill Road / Barnet Lane Junction



PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



Date: 22/11/21

Scale: NTS

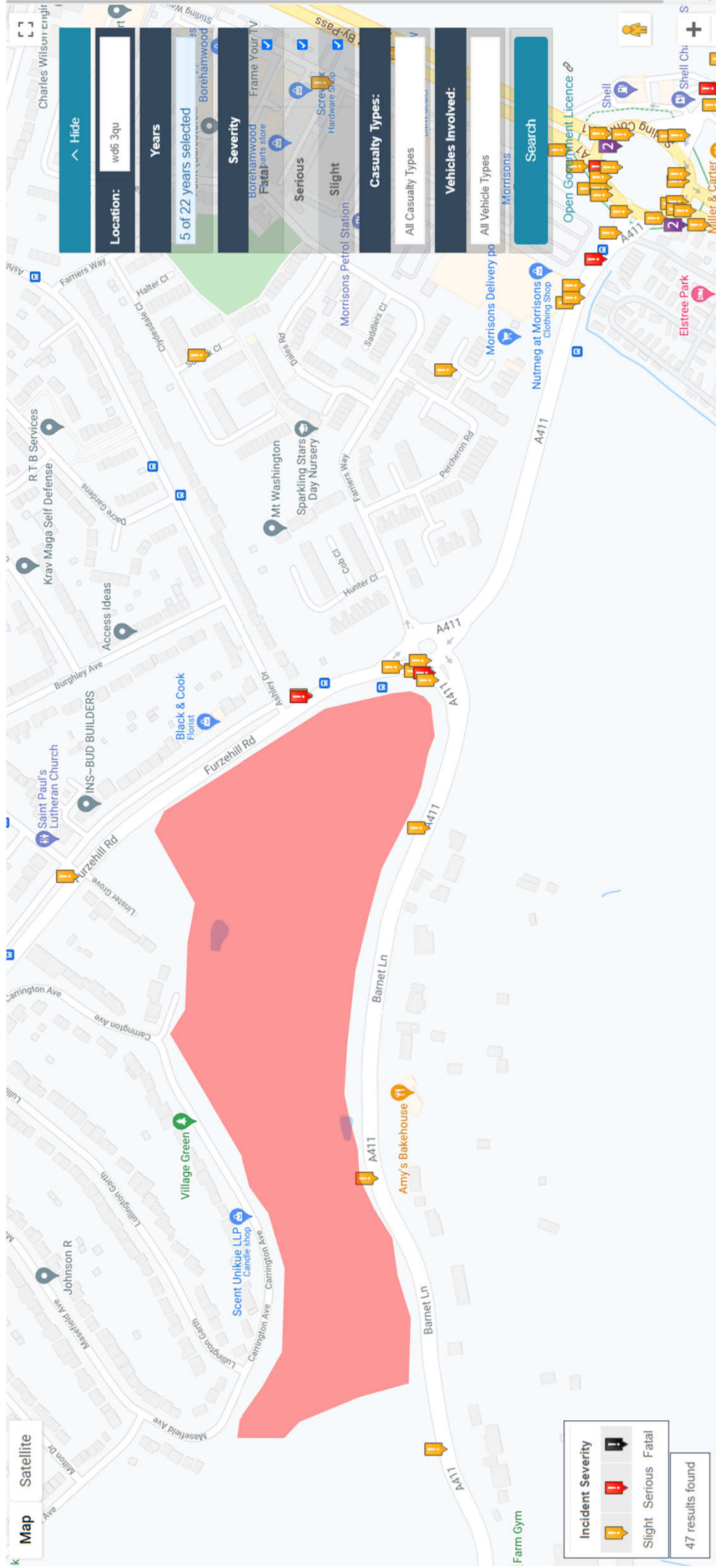
Source: Google Earth



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Stirling Corner Junction



PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
T: 0208 780 0426 W: www.pma-traffic.co.uk



Date: 22/11/21
Scale: NTS
Source: CrashMap
Site Location



P2590. Land North of Barnet Lane, Borehamwood, Herts, WD6.
Local Road Traffic Accidents (2016-2020) – All Casualties



PAUL MEW ASSOCIATES
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T: 0208 780 0426 W: www.pma-traffic.co.uk

Land North of Barnet Lane, Borehamwood

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

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	Furzehill Road / Ashley Drive	107	190	4.00	2.38	9.50	11.88	2.53	1	2.53
Bus	Furzehill Road / Ashley Drive	292	190	3.00	2.38	12.00	14.38	2.09	0.5	1.04
Bus	Furzehill Road / Ashley Drive	644	190	1.00	2.38	32.00	34.38	0.87	0.5	0.44
Total PTAL										4.01
PTAL										Ib (very poor)

Appendix D TRICS Trip Generation

TRICS 7.8.3
Trip Rate P: No of Dwellings

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 03 - RESIDENTIAL
Category M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

2 SOUTH EAST
ES EAST SUSSEX 11 days
HC HAMPSHIRE 8 days
HF HERTFORD 1 days
KC KENT 2 days
OX OXFORDSHIRE 1 days
SC SURREY 3 days
WS WEST SUSSEX 13 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 16 to 500 (units:)
Range Selected 16 to 1412 (units:)

Public Transport Provision:

Selection by Include all surveys

Date Range: 01/01/13 to 11/06/21

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 3 days
Tuesday 7 days
Wednesday 11 days
Thursday 15 days
Friday 3 days

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

Selected survey types:

Manual count 39 days
Directional 0 days

This data displays the total and whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre 0
Edge of Town 1
Suburban Area 8
Edge of Town 23
Neighbourhood 7
Free Standing 0
Not Known 0

This data displays Edge of Town Suburban Area Neighbourhood Edge of Town Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone 1
Commercial 0
Development 0
Residential 29
Retail Zone 0
Built-Up Zone 1
Village 5
Out of Town 1
High Street 0
No Sub Category 2

This data displays Industrial Zone Development Residential Retail Zone Built-Up Zone Village Out of Town High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 39 days

This data displays which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less 2 days
1,001 to 5,000 5 days

5,001 to 10,10 days
10,001 to 15,8 days
15,001 to 20,2 days
20,001 to 25,5 days
25,001 to 30,7 days

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

Population within 5 miles:

25,001 to 5,6 days
50,001 to 7,6 days
75,001 to 1,7 days
100,001 to 4, days
125,001 to 1,15 days
250,001 to 1,1 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 4 days
1.1 to 1.5 31 days
1.6 to 2.0 4 days

This data displays within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes 32 days
No 7 days

This data displays and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Rating 39 days

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

Covid-19 Restrictions:

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

LIST OF SITES relevant to selection parameters

- 1 ES-03-M-05 HOUSES & EAST SUSSEX
A26 CROWBOROUGH RD
FIVE ASH DOWN VILLAGE
NEAR UCKFIELD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 138
Survey date: MONDAY 30/06/2014 Survey Type MANUAL
- 2 ES-03-M-07 MIXED HO EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total No of Dwellings: 188
Survey date: THURSDAY 12/11/2015 Survey Type MANUAL

- 3 ES-03-M-09 DETACHED EAST SUSSEX
STATION ROAD

NORTHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 16
Survey date: WEDNESDAY 17/05/2017 Survey Type MANUAL
- 4 ES-03-M-10 MIXED HO EAST SUSSEX
DITTONS ROAD

POLEGATE
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: MONDAY 11/07/2016 Survey Type MANUAL

- 5 ES-03-M-11 MIXED HO EAST SUSSEX
HEMPSTEAD LANE
UPPER HORSEBRIDGE
HAILSHAM
Edge of Town
Residential Zone
Total No of Dwellings: 354
Survey date: WEDNESDAY 13/07/2016 Survey Type MANUAL
- 6 ES-03-M-12 MIXED HO EAST SUSSEX
PARK ROAD

HAILSHAM
Edge of Town

Residential Zone
 Total No of Dwellings: 93
 Survey date: THURSDA\21/06/2018 Survey Type MANUAL
 7 ES-03-M-13 MIXED HO EAST SUSSEX
 NORTH COMMON ROAD

 WIVELSFIELD GREEN
 Neighbourhood Centre (PPS6 Local Centre)
 Village
 Total No of Dwellings: 66
 Survey date: FRIDAY 22/06/2018 Survey Type MANUAL
 8 ES-03-M-14 MIXED HO EAST SUSSEX
 KINGS DRIVE
 UPPERTON
 EASTBOURNE
 Edge of Town
 Residential Zone
 Total No of Dwellings: 119
 Survey date: THURSDA\15/11/2018 Survey Type MANUAL
 9 ES-03-M-15 MIXED HO EAST SUSSEX
 FIELD END

 MARESFIELD
 Edge of Town
 Residential Zone
 Total No of Dwellings: 80
 Survey date: WEDNESD 13/03/2019 Survey Type MANUAL
 10 ES-03-M-16 MIXED HO EAST SUSSEX
 BARNHORN ROAD
 LITTLE COMMON
 BEXHILL
 Edge of Town
 Residential Zone
 Total No of Dwellings: 119
 Survey date: WEDNESD 10/07/2019 Survey Type MANUAL
 11 ES-03-M-17 MIXED HO EAST SUSSEX
 NEW ROAD
 AMBERSTONE
 HAILSHAM
 Edge of Town
 Residential Zone
 Total No of Dwellings: 91
 Survey date: THURSDA\07/11/2019 Survey Type MANUAL
 12 HC-03-M-0: HOUSES & HAMPSHIRE
 WIMPSON LANE
 MAYBUSH
 SOUTHAMPTON
 Suburban Area (PPS6 Out of Centre)
 Residential Zone
 Total No of Dwellings: 62
 Survey date: FRIDAY 03/10/2014 Survey Type MANUAL
 13 HC-03-M-0: HOUSES & HAMPSHIRE
 HUNTS POND ROAD
 TITCHFIELD
 NEAR FAREHAM
 Edge of Town
 Residential Zone
 Total No of Dwellings: 328
 Survey date: WEDNESD 04/11/2015 Survey Type MANUAL
 14 HC-03-M-0: MIXED HO HAMPSHIRE
 CHURCHILL WAY WEST

 BASINGSTOKE
 Edge of Town Centre
 Built-Up Zone
 Total No of Dwellings: 279
 Survey date: THURSDA\16/06/2016 Survey Type MANUAL
 15 HC-03-M-0: MIXED HO HAMPSHIRE
 ROMSEY ROAD
 STANMORE
 WINCHESTER
 Edge of Town
 Residential Zone
 Total No of Dwellings: 157
 Survey date: THURSDA\07/06/2018 Survey Type MANUAL
 16 HC-03-M-1: MIXED HO HAMPSHIRE
 RAWLINGS LANE

 ALTON
 Edge of Town
 Residential Zone

Total No of Dwellings: 176
Survey date: TUESDAY 05/03/2019 Survey Type MANUAL
17 HC-03-M-1 MIXED HO HAMPSHIRE
ALDERMASTON ROAD

BASINGSTOKE
Edge of Town
No Sub Category
Total No of Dwellings: 238
Survey date: THURSDAY 07/03/2019 Survey Type MANUAL
18 HC-03-M-1 MIXED HO HAMPSHIRE
BARNFIELD WAY
HEDGE END
NEAR SOUTHAMPTON
Edge of Town
Out of Town
Total No of Dwellings: 181
Survey date: WEDNESD 23/10/2019 Survey Type MANUAL
19 HC-03-M-1 MIXED HO HAMPSHIRE
COOMBE ROAD

YATELEY
Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date: TUESDAY 08/06/2021 Survey Type MANUAL
20 HF-03-M-01 BLOCKS OI HERTFORDSHIRE
BRIDLINGTON ROAD
SOUTH OXHEY
WATFORD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 174
Survey date: FRIDAY 11/06/2021 Survey Type MANUAL

21 KC-03-M-02 MIXED HO KENT
HERMITAGE LANE
BARMING
MAIDSTONE
Edge of Town
No Sub Category
Total No of Dwellings: 119
Survey date: TUESDAY 05/06/2018 Survey Type MANUAL

22 KC-03-M-03 MIXED HO KENT
BUNYARD WAY
ALLINGTON
MAIDSTONE
Edge of Town
Residential Zone
Total No of Dwellings: 140
Survey date: TUESDAY 22/05/2018 Survey Type MANUAL
23 OX-03-M-0 MIXED HO OXFORDSHIRE
WENMAN ROAD

THAME
Edge of Town
Industrial Zone
Total No of Dwellings: 100
Survey date: THURSDAY 28/06/2018 Survey Type MANUAL
24 SC-03-M-06 HOUSES & SURREY
ST ANNE'S DRIVE

REDHILL
Edge of Town
Residential Zone
Total No of Dwellings: 500
Survey date: WEDNESD 11/12/2013 Survey Type MANUAL
25 SC-03-M-07 HOUSES/FL SURREY
EPSOM ROAD

GUILDFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 199
Survey date: THURSDAY 24/10/2013 Survey Type MANUAL
26 SC-03-M-08 MIXED HO SURREY
CHOBHAM LANE

LONGCROSS
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 107

Survey date: TUESDAY 12/11/2019 Survey Type MANUAL
27 WS-03-M-0 HOUSES & WEST SUSSEX
SUMMERSDALE ROAD

CHICHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 214

Survey date: THURSDAY 08/05/2014 Survey Type MANUAL
28 WS-03-M-0 MIXED HO WEST SUSSEX

ELLIS ROAD
S BROADBRIDGE HEATH
WEST HORSHAM
Edge of Town
Residential Zone

Total No of Dwellings: 92

Survey date: THURSDAY 23/10/2014 Survey Type MANUAL
29 WS-03-M-0 SEMI DETA WEST SUSSEX

SOUTHFIELDS CLOSE

CHICHESTER
Edge of Town
Residential Zone
Total No of Dwellings: 67

Survey date: TUESDAY 27/01/2015 Survey Type MANUAL
30 WS-03-M-0 HOUSES & WEST SUSSEX

ROSE GREEN ROAD
ALDWICK
BOGNOR REGIS
Edge of Town
Residential Zone

Total No of Dwellings: 90

Survey date: WEDNESD 05/03/2014 Survey Type MANUAL

31 WS-03-M-1 HOUSES & WEST SUSSEX
UPPER SHOREHAM ROAD

SHOREHAM BY SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 192

Survey date: WEDNESD 27/04/2016 Survey Type MANUAL
32 WS-03-M-1 TERRACED WEST SUSSEX

IRENE AVENUE
LANCING
WORTHING
Suburban Area (PPS6 Out of Centre)
Residential Zone

Total No of Dwellings: 23

Survey date: TUESDAY 21/06/2016 Survey Type MANUAL

33 WS-03-M-1 MIXED FLA WEST SUSSEX
BROYLE ROAD

CHICHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 252

Survey date: WEDNESD 21/03/2018 Survey Type MANUAL
34 WS-03-M-1 MIXED HO WEST SUSSEX

STANE STREET
WESTHAMPNETT
CHICHESTER
Neighbourhood Centre (PPS6 Local Centre)
Village

Total No of Dwellings: 99

Survey date: WEDNESD 03/10/2018 Survey Type MANUAL

35 WS-03-M-1 MIXED HO WEST SUSSEX
WESTLOATS LANE

NORTH BERSTED
BOGNOR REGIS
Suburban Area (PPS6 Out of Centre)
Residential Zone

Total No of Dwellings: 86

Survey date: THURSDAY 17/10/2019 Survey Type MANUAL

36 WS-03-M-1 MIXED HO WEST SUSSEX
ADLINGTON GARDENS

BOGNOR REGIS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 32

Survey date: THURSDAY 17/10/2019 Survey Type MANUAL

37 WS-03-M-2 MIXED HO WEST SUSSEX
 OLD GUILDFORD ROAD
 BROADBRIDGE HEATH
 HORSHAM
 Neighbourhood Centre (PPS6 Local Centre)
 Residential Zone
 Total No of Dwellings: 121
 Survey date: THURSDAY 24/10/2019 Survey Type MANUAL

38 WS-03-M-2 MIXED HO WEST SUSSEX
 CLAPPERS LANE

 BRACKLESHAM BAY
 Edge of Town
 Residential Zone
 Total No of Dwellings: 57
 Survey date: THURSDAY 14/11/2019 Survey Type MANUAL

39 WS-03-M-2 MIXED HO WEST SUSSEX
 RUSPER ROAD
 IFIELD
 CRAWLEY
 Edge of Town
 Residential Zone
 Total No of Dwellings: 91
 Survey date: MONDAY 19/10/2020 Survey Type MANUAL

This section it displays a the selectex the day of t and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: TOTAL VEHICLES

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	39	145	0.078	35	39	145	0.274	121	39	145	0.352	156
08:00-09:00	39	145	0.124	55	39	145	0.362	160	39	145	0.486	215
09:00-10:00	39	145	0.132	58	39	145	0.161	71	39	145	0.293	130
10:00-11:00	39	145	0.118	52	39	145	0.136	60	39	145	0.254	112
11:00-12:00	39	145	0.126	56	39	145	0.133	59	39	145	0.259	114
12:00-13:00	39	145	0.146	64	39	145	0.132	58	39	145	0.278	123
13:00-14:00	39	145	0.138	61	39	145	0.14	62	39	145	0.278	123
14:00-15:00	39	145	0.123	54	39	145	0.164	73	39	145	0.287	127
15:00-16:00	39	145	0.236	104	39	145	0.165	73	39	145	0.401	177
16:00-17:00	39	145	0.238	105	39	145	0.145	64	39	145	0.383	169
17:00-18:00	39	145	0.309	137	39	145	0.15	66	39	145	0.459	203
18:00-19:00	39	145	0.273	120	39	145	0.147	65	39	145	0.42	186
19:00-20:00	1	119	0.126	56	1	119	0.008	4	1	119	0.134	59
20:00-21:00	1	119	0.101	45	1	119	0.017	7	1	119	0.118	52
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			2.268				2.134				4.402	1946

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: TAXIS

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	39	145	0.003	1	39	145	0.003	1	39	145	0.006	2
08:00-09:00	39	145	0.007	3	39	145	0.007	3	39	145	0.014	6
09:00-10:00	39	145	0.002	1	39	145	0.002	1	39	145	0.004	2
10:00-11:00	39	145	0.002	1	39	145	0.002	1	39	145	0.004	2

11:00-12:00	39	145	0.003	1	39	145	0.002	1	39	145	0.005	2
12:00-13:00	39	145	0.003	1	39	145	0.003	1	39	145	0.006	3
13:00-14:00	39	145	0.003	1	39	145	0.002	1	39	145	0.005	2
14:00-15:00	39	145	0.002	1	39	145	0.003	1	39	145	0.005	2
15:00-16:00	39	145	0.007	3	39	145	0.007	3	39	145	0.014	6
16:00-17:00	39	145	0.003	1	39	145	0.002	1	39	145	0.005	3
17:00-18:00	39	145	0.002	1	39	145	0.002	1	39	145	0.004	2
18:00-19:00	39	145	0.001	1	39	145	0.002	1	39	145	0.003	1
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.038				0.037				0.075	33

Calculation Factor: 1 DWELLS

Count Type: OGVS

Calculation Factor: 1 DWELLS

Count Type: PSVS

[illegible]

03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00	39	145	0.021	9	39	145	0.054	24	39	145	0.075	33
08:00-09:00	39	145	0.04	18	39	145	0.163	72	39	145	0.203	90
09:00-10:00	39	145	0.045	20	39	145	0.039	17	39	145	0.084	37
10:00-11:00	39	145	0.025	11	39	145	0.037	16	39	145	0.062	28
11:00-12:00	39	145	0.038	17	39	145	0.04	18	39	145	0.078	34
12:00-13:00	39	145	0.04	18	39	145	0.03	13	39	145	0.07	31
13:00-14:00	39	145	0.036	16	39	145	0.031	14	39	145	0.067	30
14:00-15:00	39	145	0.038	17	39	145	0.053	23	39	145	0.091	40
15:00-16:00	39	145	0.137	61	39	145	0.055	24	39	145	0.192	85
16:00-17:00	39	145	0.074	33	39	145	0.043	19	39	145	0.117	52
17:00-18:00	39	145	0.066	29	39	145	0.039	17	39	145	0.105	46
18:00-19:00	39	145	0.045	20	39	145	0.034	15	39	145	0.079	35
19:00-20:00	1	119	0.008	4	1	119	0.008	4	1	119	0.016	7
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.613				0.626				1.239	548

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: BUS/TRAM PASSENGERS

Time Range	No. Days	ARRIVALS			No. Days	DEPARTURES			No. Days	TOTALS		
		Ave. DWELLS	Trip Rate	Estimated Trip Rate		Ave. DWELLS	Trip Rate	Estimated Trip Rate		Ave. DWELLS	Trip Rate	Estimated 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	39	145	0.002	1	39	145	0.028	13	39	145	0.03	13
08:00-09:00	39	145	0.002	1	39	145	0.024	11	39	145	0.026	12
09:00-10:00	39	145	0.003	1	39	145	0.008	4	39	145	0.011	5
10:00-11:00	39	145	0.002	1	39	145	0.005	2	39	145	0.007	3
11:00-12:00	39	145	0.003	1	39	145	0.005	2	39	145	0.008	4
12:00-13:00	39	145	0.006	3	39	145	0.005	2	39	145	0.011	5
13:00-14:00	39	145	0.007	3	39	145	0.005	2	39	145	0.012	5
14:00-15:00	39	145	0.004	2	39	145	0.004	2	39	145	0.008	4
15:00-16:00	39	145	0.02	9	39	145	0.005	2	39	145	0.025	11
16:00-17:00	39	145	0.016	7	39	145	0.004	2	39	145	0.02	9
17:00-18:00	39	145	0.016	7	39	145	0.003	1	39	145	0.019	8
18:00-19:00	39	145	0.007	3	39	145	0.001	1	39	145	0.008	4
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.088				0.097				0.185	83

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: TOTAL RAIL PASSENGERS

Time Range	No. Days	ARRIVALS			No. Days	DEPARTURES			No. Days	TOTALS		
		Ave. DWELLS	Trip Rate	Estimated Trip Rate		Ave. DWELLS	Trip Rate	Estimated Trip Rate		Ave. DWELLS	Trip Rate	Estimated 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	39	145	0	0	39	145	0.015	6	39	145	0.015	7
08:00-09:00	39	145	0	0	39	145	0.013	6	39	145	0.013	6
09:00-10:00	39	145	0.001	0	39	145	0.004	2	39	145	0.005	2
10:00-11:00	39	145	0.001	0	39	145	0.003	1	39	145	0.004	2
11:00-12:00	39	145	0	0	39	145	0.001	0	39	145	0.001	1
12:00-13:00	39	145	0.001	0	39	145	0.001	0	39	145	0.002	1
13:00-14:00	39	145	0.001	1	39	145	0.001	0	39	145	0.002	1
14:00-15:00	39	145	0.003	1	39	145	0.001	0	39	145	0.004	2
15:00-16:00	39	145	0.005	2	39	145	0	0	39	145	0.005	2

16:00-17:00	39	145	0.006	3	39	145	0	0	39	145	0.006	3
17:00-18:00	39	145	0.01	4	39	145	0.001	0	39	145	0.011	5
18:00-19:00	39	145	0.008	4	39	145	0.002	1	39	145	0.01	4
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.036				0.042				0.078	35

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: COACH PASSENGERS

Time Range	No. Days	Ave. DWELLS	ARRIVALS		No. Days	Ave. DWELLS	DEPARTURES		No. Days	Ave. DWELLS	TOTALS	
			Trip Rate	Estimated Trip Rate			Trip Rate	Estimated Trip Rate			Trip Rate	Estimated 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	39	145	0	0	39	145	0.001	1	39	145	0.001	1
08:00-09:00	39	145	0	0	39	145	0.002	1	39	145	0.002	1
09:00-10:00	39	145	0	0	39	145	0	0	39	145	0	0
10:00-11:00	39	145	0	0	39	145	0	0	39	145	0	0
11:00-12:00	39	145	0	0	39	145	0	0	39	145	0	0
12:00-13:00	39	145	0	0	39	145	0	0	39	145	0	0
13:00-14:00	39	145	0	0	39	145	0	0	39	145	0	0
14:00-15:00	39	145	0	0	39	145	0	0	39	145	0	0
15:00-16:00	39	145	0.003	1	39	145	0	0	39	145	0.003	1
16:00-17:00	39	145	0	0	39	145	0	0	39	145	0	0
17:00-18:00	39	145	0	0	39	145	0	0	39	145	0	0
18:00-19:00	39	145	0	0	39	145	0	0	39	145	0	0
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.003				0.003				0.006	3

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: PUBLIC TRANSPORT USERS

Time Range	No. Days	Ave. DWELLS	ARRIVALS		No. Days	Ave. DWELLS	DEPARTURES		No. Days	Ave. DWELLS	TOTALS	
			Trip Rate	Estimated Trip Rate			Trip Rate	Estimated Trip Rate			Trip Rate	Estimated 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	39	145	0.002	1	39	145	0.044	20	39	145	0.046	21
08:00-09:00	39	145	0.002	1	39	145	0.039	17	39	145	0.041	18
09:00-10:00	39	145	0.004	2	39	145	0.013	6	39	145	0.017	7
10:00-11:00	39	145	0.002	1	39	145	0.008	4	39	145	0.01	5
11:00-12:00	39	145	0.004	2	39	145	0.006	3	39	145	0.01	4
12:00-13:00	39	145	0.007	3	39	145	0.007	3	39	145	0.014	6
13:00-14:00	39	145	0.008	4	39	145	0.006	3	39	145	0.014	6
14:00-15:00	39	145	0.007	3	39	145	0.005	2	39	145	0.012	6
15:00-16:00	39	145	0.027	12	39	145	0.006	3	39	145	0.033	14
16:00-17:00	39	145	0.022	10	39	145	0.005	2	39	145	0.027	12
17:00-18:00	39	145	0.025	11	39	145	0.004	2	39	145	0.029	13
18:00-19:00	39	145	0.016	7	39	145	0.003	1	39	145	0.019	8
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.126				0.146				0.272	120

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: TOTAL PEOPLE

ARRIVALS					DEPARTURES					TOTALS		
No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	
Time Range	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	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	39	145	0.116	51	39	145	0.481	213	39	145	0.597	264
08:00-09:00	39	145	0.193	85	39	145	0.807	357	39	145	1	442
09:00-10:00	39	145	0.209	92	39	145	0.266	117	39	145	0.475	210
10:00-11:00	39	145	0.173	76	39	145	0.223	99	39	145	0.396	175
11:00-12:00	39	145	0.201	89	39	145	0.223	99	39	145	0.424	188
12:00-13:00	39	145	0.234	103	39	145	0.206	91	39	145	0.44	194
13:00-14:00	39	145	0.225	100	39	145	0.219	97	39	145	0.444	196
14:00-15:00	39	145	0.208	92	39	145	0.274	121	39	145	0.482	213
15:00-16:00	39	145	0.568	251	39	145	0.288	127	39	145	0.856	378
16:00-17:00	39	145	0.45	199	39	145	0.253	112	39	145	0.703	311
17:00-18:00	39	145	0.522	231	39	145	0.253	112	39	145	0.775	343
18:00-19:00	39	145	0.427	189	39	145	0.236	104	39	145	0.663	293
19:00-20:00	1	119	0.176	78	1	119	0.025	11	1	119	0.201	89
20:00-21:00	1	119	0.151	67	1	119	0.017	7	1	119	0.168	74
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			3.853				3.771				7.624	3370

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: CARS

ARRIVALS					DEPARTURES					TOTALS		
No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	
Time Range	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	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	39	145	0.062	28	39	145	0.243	107	39	145	0.305	135
08:00-09:00	39	145	0.101	45	39	145	0.332	147	39	145	0.433	192
09:00-10:00	39	145	0.112	49	39	145	0.143	63	39	145	0.255	112
10:00-11:00	39	145	0.092	41	39	145	0.11	48	39	145	0.202	89
11:00-12:00	39	145	0.101	45	39	145	0.108	48	39	145	0.209	92
12:00-13:00	39	145	0.119	52	39	145	0.107	47	39	145	0.226	100
13:00-14:00	39	145	0.117	52	39	145	0.118	52	39	145	0.235	104
14:00-15:00	39	145	0.104	46	39	145	0.143	63	39	145	0.247	109
15:00-16:00	39	145	0.208	92	39	145	0.137	60	39	145	0.345	152
16:00-17:00	39	145	0.209	92	39	145	0.125	55	39	145	0.334	147
17:00-18:00	39	145	0.279	123	39	145	0.133	59	39	145	0.412	182
18:00-19:00	39	145	0.254	112	39	145	0.135	60	39	145	0.389	172
19:00-20:00	1	119	0.126	56	1	119	0.008	4	1	119	0.134	59
20:00-21:00	1	119	0.101	45	1	119	0.017	7	1	119	0.118	52
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			1.985				1.859				3.844	1698

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: LGVS

ARRIVALS					DEPARTURES					TOTALS		
No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	
Time Range	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	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	39	145	0.011	5	39	145	0.024	11	39	145	0.035	15

08:00-09:00	39	145	0.014	6	39	145	0.019	8	39	145	0.033	15
09:00-10:00	39	145	0.017	8	39	145	0.014	6	39	145	0.031	14
10:00-11:00	39	145	0.022	10	39	145	0.022	10	39	145	0.044	20
11:00-12:00	39	145	0.019	9	39	145	0.021	9	39	145	0.04	18
12:00-13:00	39	145	0.021	9	39	145	0.02	9	39	145	0.041	18
13:00-14:00	39	145	0.016	7	39	145	0.017	8	39	145	0.033	15
14:00-15:00	39	145	0.015	7	39	145	0.017	8	39	145	0.032	14
15:00-16:00	39	145	0.017	8	39	145	0.018	8	39	145	0.035	15
16:00-17:00	39	145	0.021	9	39	145	0.015	7	39	145	0.036	16
17:00-18:00	39	145	0.025	11	39	145	0.013	6	39	145	0.038	17
18:00-19:00	39	145	0.015	7	39	145	0.01	4	39	145	0.025	11
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.213				0.21				0.423	188

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

Calculation Factor: 1 DWELLS

Estimated TRIP rate value per 442 DWELLS shown in Estimated column

Count Type: MOTOR CYCLES

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	39	145	0.001	0	39	145	0.003	1	39	145	0.004	2
08:00-09:00	39	145	0	0	39	145	0.002	1	39	145	0.002	1
09:00-10:00	39	145	0.001	0	39	145	0.001	1	39	145	0.002	1
10:00-11:00	39	145	0	0	39	145	0.001	0	39	145	0.001	0
11:00-12:00	39	145	0.001	0	39	145	0.001	0	39	145	0.002	1
12:00-13:00	39	145	0.001	1	39	145	0.001	0	39	145	0.002	1
13:00-14:00	39	145	0.001	1	39	145	0.002	1	39	145	0.003	1
14:00-15:00	39	145	0.001	1	39	145	0.001	0	39	145	0.002	1
15:00-16:00	39	145	0.001	1	39	145	0.001	0	39	145	0.002	1
16:00-17:00	39	145	0.003	1	39	145	0.001	0	39	145	0.004	2
17:00-18:00	39	145	0.002	1	39	145	0.001	0	39	145	0.003	2
18:00-19:00	39	145	0.002	1	39	145	0.001	0	39	145	0.003	1
19:00-20:00	1	119	0	0	1	119	0	0	1	119	0	0
20:00-21:00	1	119	0	0	1	119	0	0	1	119	0	0
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			0.014				0.016				0.03	13

Parameter summary

Trip rate per 16 - 500 (units:)

Survey date 01/01/13 - 11/06/21

Number of 39

Number of 0

Number of 0

Surveys auto 11

Surveys manual 0

This section followed by the total number of survey days that have been manually removed from the selected set outside of the standard filtering procedure