Chase Park, Enfield
Spatial Framework Appendix B: Movement Baseline Analysis

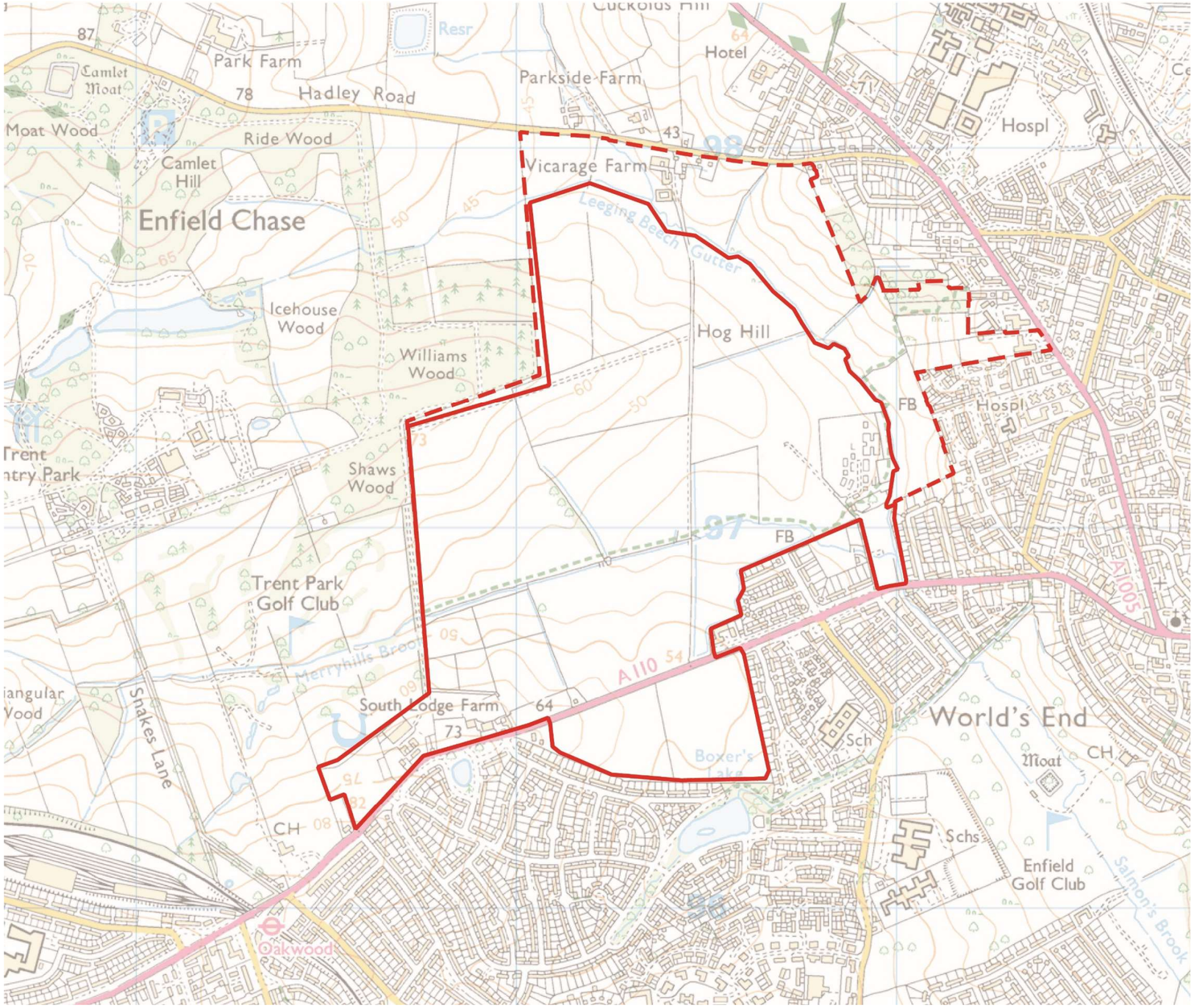
Prepared for London Borough of Enfield

October 2023

Preamble

This report was produced in Spring/Summer 2023 following Regulation 18 consultation on the draft Enfield Local Plan. The plans and policy references contained within this baseline report reflect the Regulation 18 Placemaking Area boundary and draft policy wording at that time (unless noted otherwise).

Subsequently the proposed Placemaking Area boundary has been amended for the draft Regulation 19 Local Plan as shown here. This is reflected in the Spatial Framework report for Chase Park.



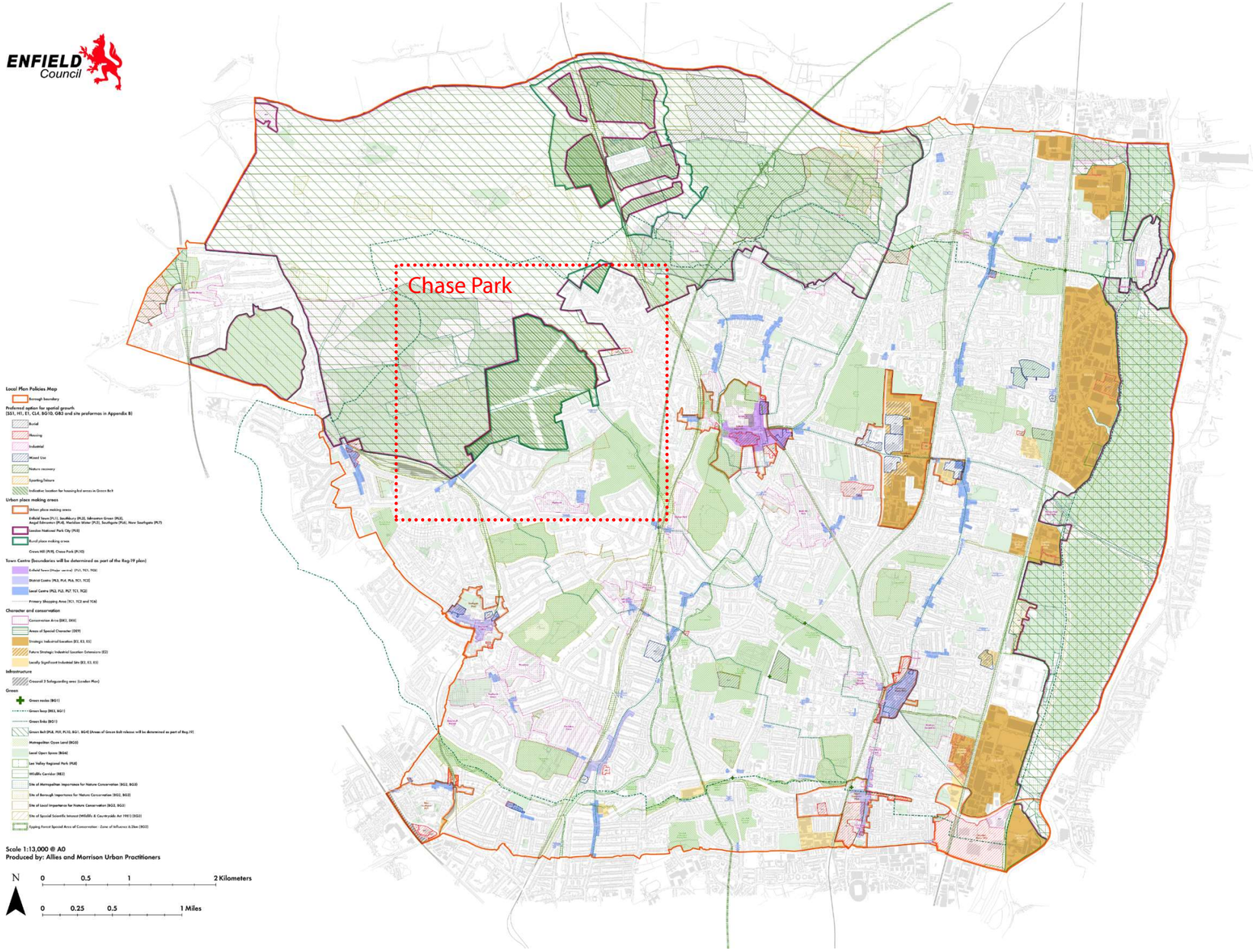
Regulation 18 Boundary

Regulation 19 boundary

1.0 Introduction

Alan Baxter (ABA) has been commissioned to provide transport advice in relation to the preparation of a Spatial Framework for Chase Park in the London Borough of Enfield, which is a strategic site (PL10) allocated in the emerging new Enfield Local Plan. This is located approximately 2-3km west of Enfield Town. The site had been identified by the Council as potentially suitable for an allocation of 5,718 homes, with 3,000 homes delivered within the Plan period, and the remaining to be delivered after 2041.

This report provides a summary of the baseline transport at and in the vicinity of the site.



2.0 Context Plans

A range of plans are provided in this section, in order to place the site within context.

Drawing 1875/220/SK001 demonstrates the borough context, showing the 10km radius in which Chase Park sits. It is in the vicinity of other notable parts of North London, including Tottenham, Barnet, Finchley, and the Lea Valley. The site is also in proximity to settlements in Hertfordshire, including Cheshunt, Cuffley and Potters Bar. As demonstrated in subsequent sections, the site is also well connected via rail to Central London.

Drawing 1875/220/SK002 shows the local context. With isochrones of up to 4800m, or a 20 minute cycle, this is a similar scale to Transport for London's "Active Travel Zone". This drawing shows that a large number of local schools can be potentially accessed via cycle, as well as the major town centre of Enfield Town. Other district centres are within a cyclable distance, including Southgate, New Barnet, Whetstone, and Palmer's Green.

1875/220/SK003 shows the site context. This include the site boundary and isochrones for 400m, 800m, and 1200m (i.e. 5-15 min walk, and up to a 5 minute cycle), overlaid on an OS base, with public transport nodes shown. The isochrones are from the site boundary, and therefore show the general potential in terms of access. This shows that the western end of the site is within a 5-10 minute walk of Oakwood Station. There are also bus stops, local schools, and some local centres and local parades within potential walking distance of various parts of the site.

Drawing 1875/220/SK004 is a variant of the site context drawing, using Transport for London's PTAL (Public Transport Accessibility Level) contours as an overlay. PTAL ranges from 0 to 6b, and TfL calculate using a range of metrics including proximity to transport nodes, frequency of services, and local walking routes. As can be seen, much of the site currently suffers from low PTAL values, probably due to the distance from public transport nodes and lack of walking routes to these. However, around Oakwood station PTAL rises to 4, and there are some areas of the site within PTAL 3.

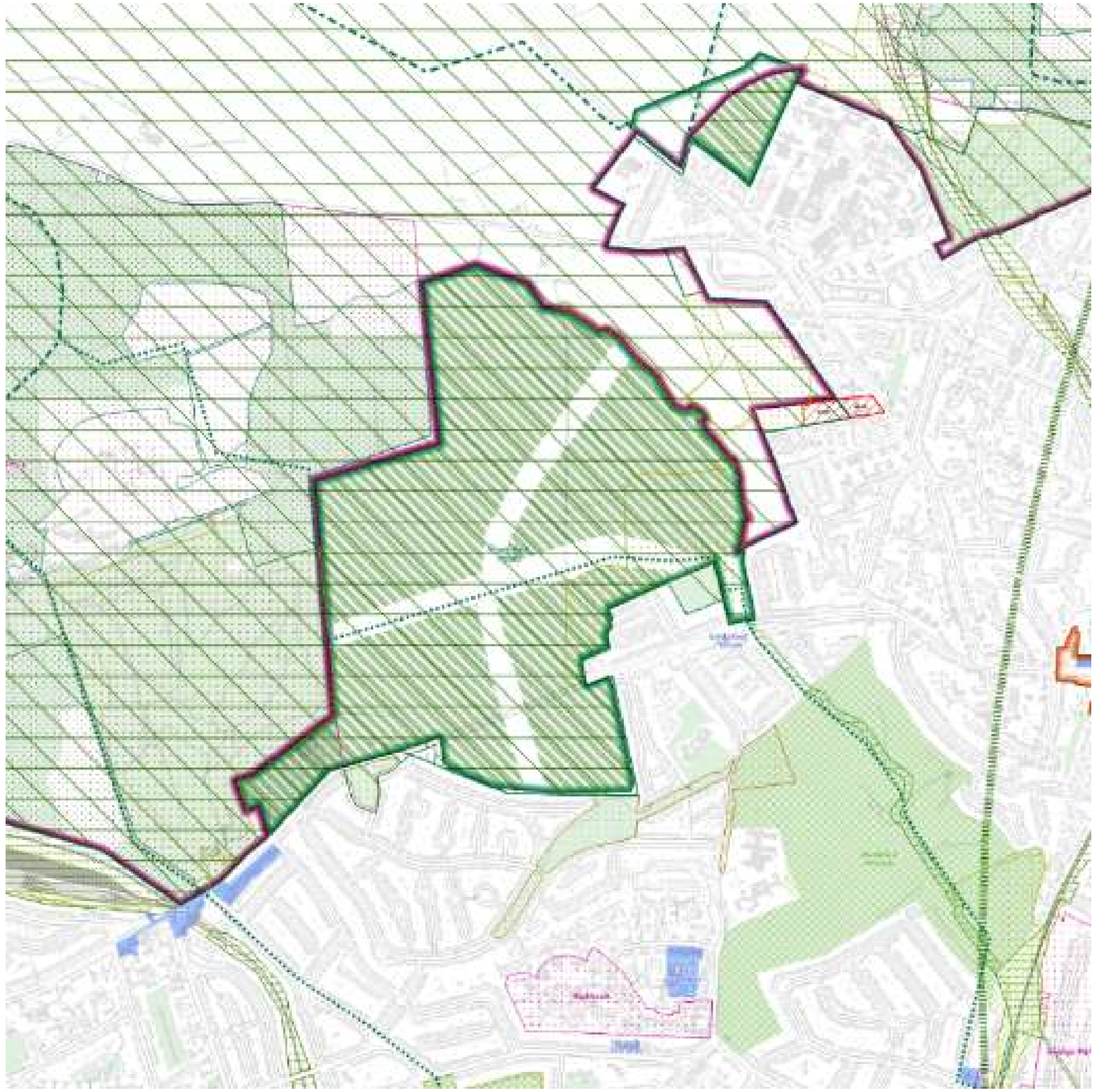
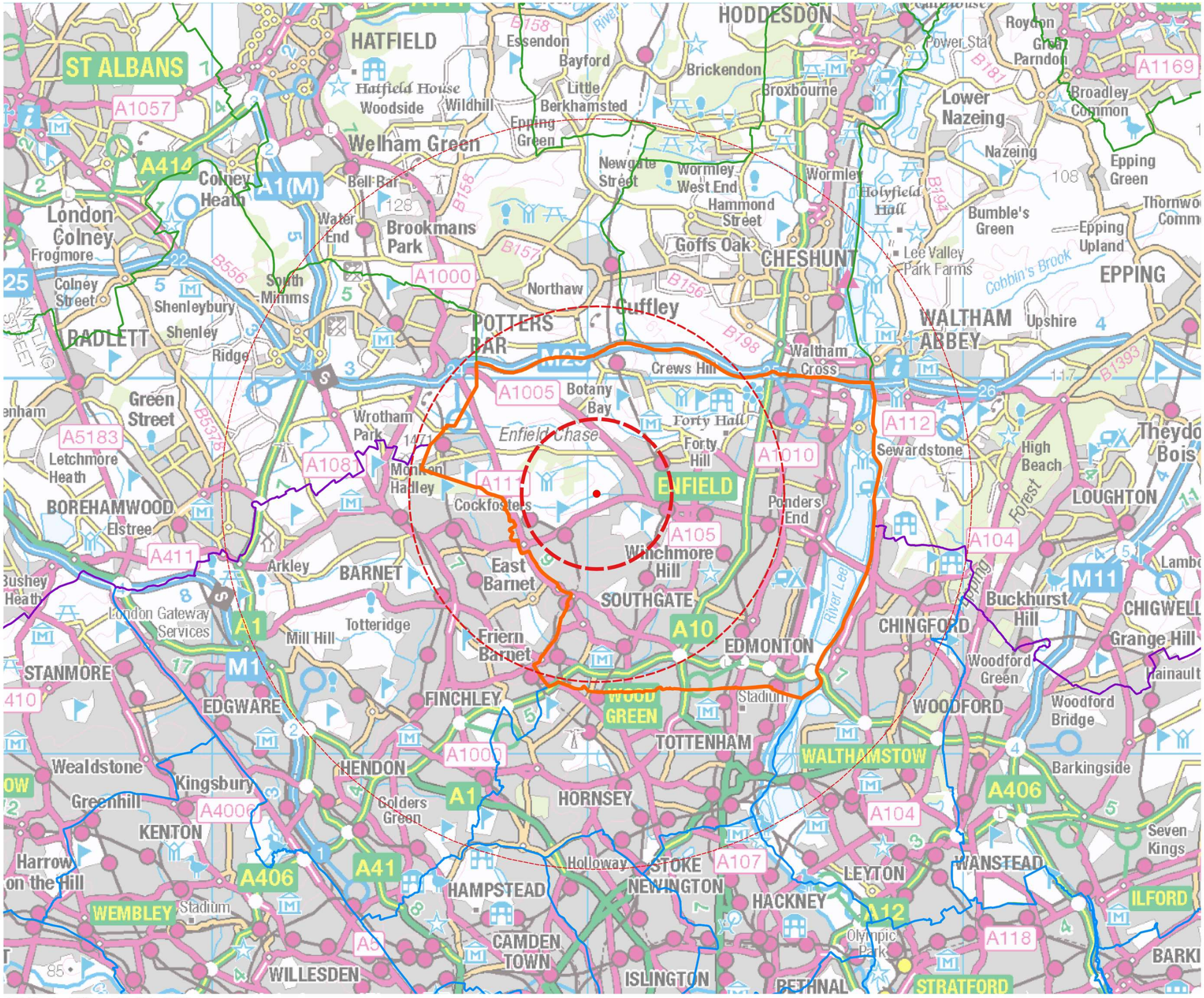


Figure 2-1



N

0 1 2 3 4 5 km

1:100,000

- Site
- 2km
- 5km
- 10km
- Enfield Borough Boundary
- GLA Boundary
- London Boroughs
- Local Authorities (Outside London)

CHASE PARK TRANSPORT BASELINE	
BOROUGH CONTEXT	
1875/220/SK001	
APRIL 2023	Alan Baxter

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N

0 0.5 1 1.5 2 km

1:50,000

- Site Boundary
- 400m / 5 min walk
- 800m / 10 min walk
- 1200m / 15 min walk / 5 min cycle
- 2400m / 10 min cycle
- 4800m / 20 min cycle
- GLA Boundary
- Enfield Borough Boundary
- Underground Stations
- London Rail Stations
- London Overground Stations

Schools

- All Through
- Primary
- Secondary

GLA Town Centres & Selected Enfield Local Centres

- Major Town Centre
- District Town Centre
- Large Local Centre
- Small Local Centre

CHASE PARK
TRANSPORT BASELINE

LOCAL CONTEXT

1870/220/SK002

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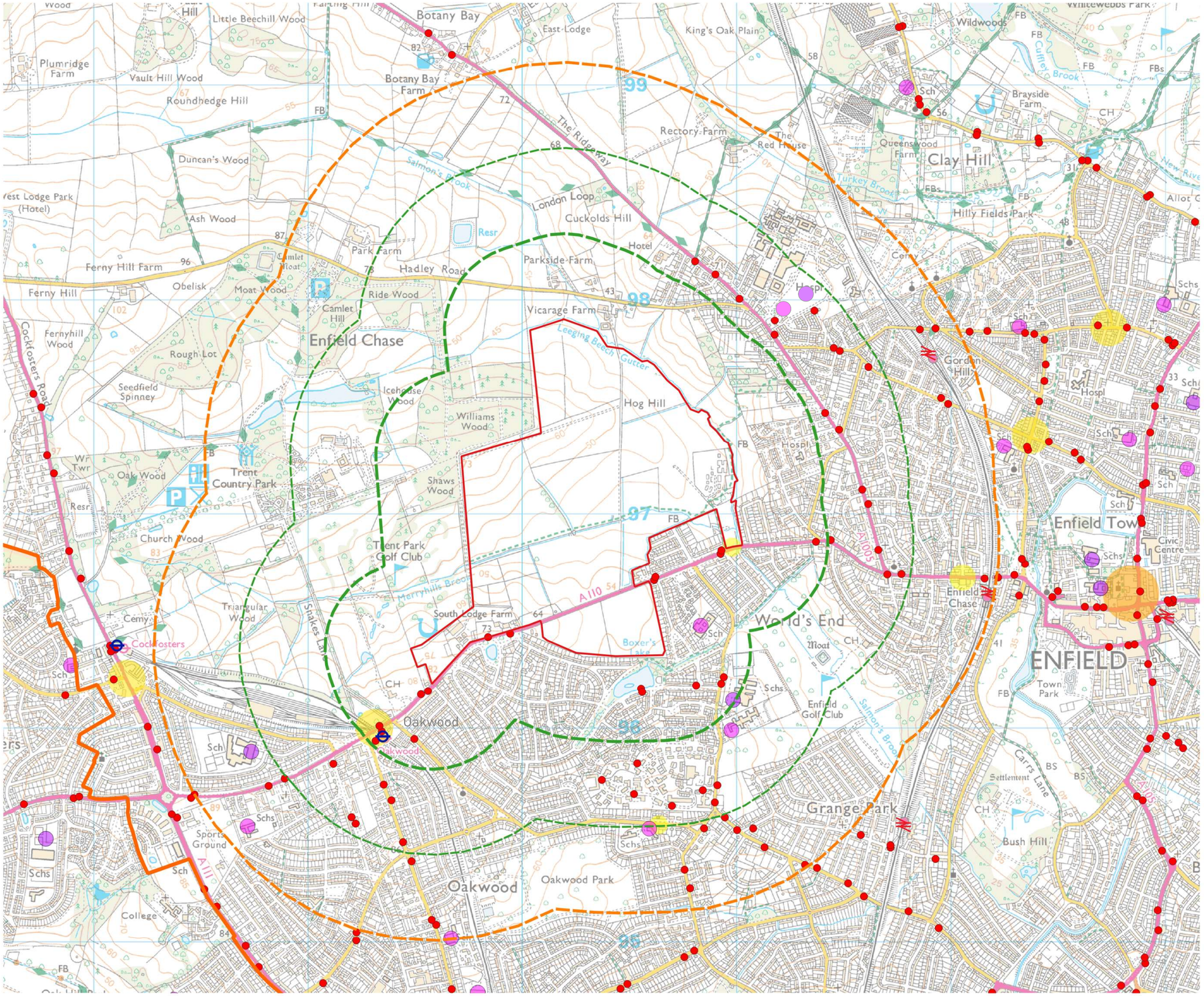


N

0 0.25 0.5 0.75 1 km

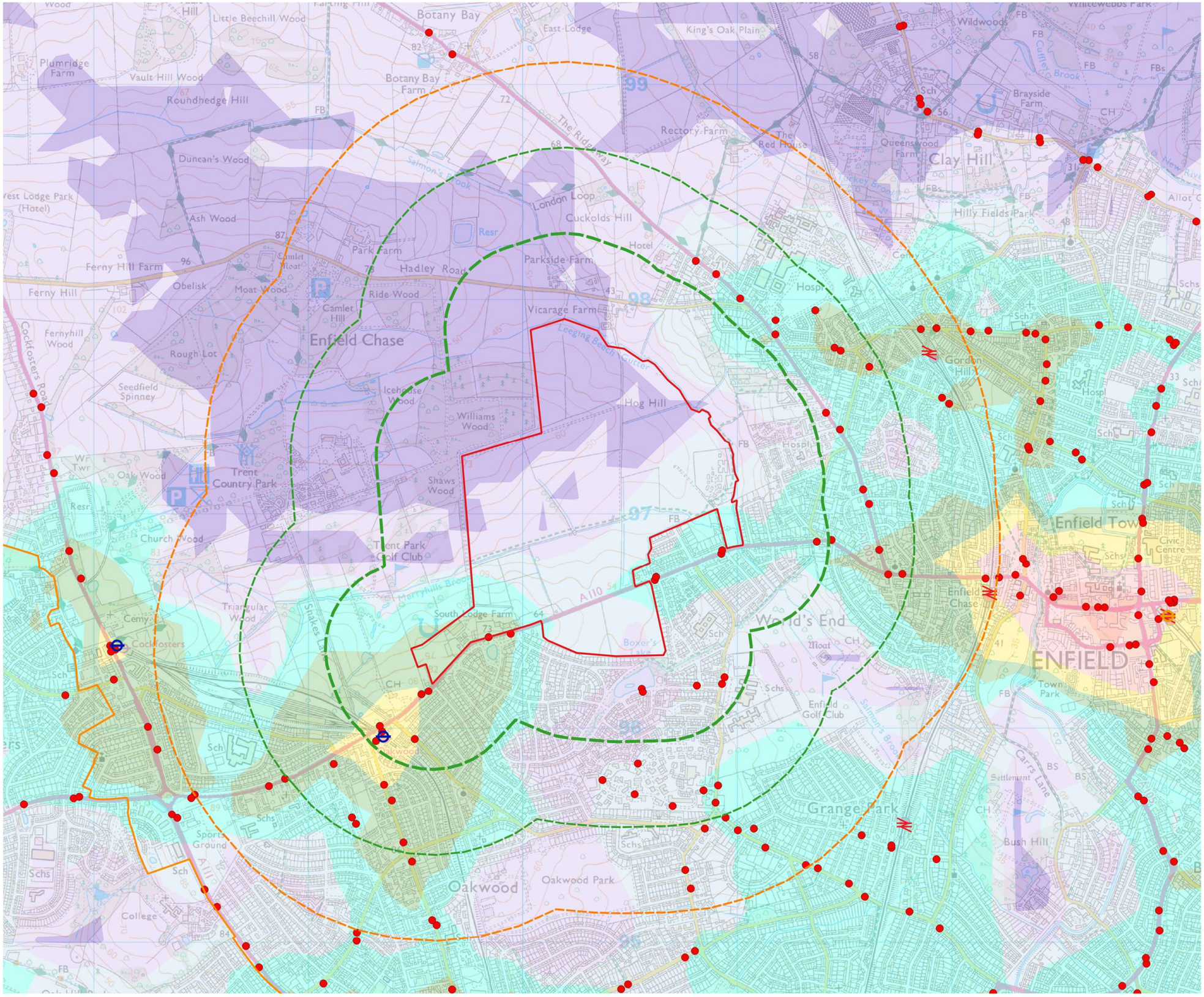
1:17,500

- Site Boundary
- 400m / 5 min walk
- 800m / 10 min walk
- 1200m / 15 min walk / 5 min cycle
- Underground Stations
- London Rail Stations
- Bus Stops

Schools
- Primary
- Secondary

GLA Town Centres & Selected Enfield Local Centres
- Major Town Centre
- Large Local Centre
- Small Local Centre
- Local Parade

CHASE PARK TRANSPORT BASELINE	
SITE CONTEXT	
1870/220/SK003	
APRIL 2023	Alan Baxter



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N

0 0.25 0.5 0.75 1 km

1:17,500

- Site Boundary
- 400m / 5 min walk
- 800m / 10 min walk
- 1200m / 15 min walk / 5 min cycle
- Underground Stations
- London Rail Stations
- London Overground Stations
- Bus Stops

PTAL Contours

- 0
- 1a
- 1b
- 2
- 3
- 4
- 5
- 6a

CHASE PARK
TRANSPORT BASELINE

SITE CONTEXT - PTAL

1870/220/SK004

APRIL 2023 | Alan Baxter

3.0 Rail Network

A number of rail stations are in the vicinity of the site, or can be accessed via a connecting bus journey. This is summarised in Table 3-1 overleaf. Oakwood Station on the Piccadilly Line has the highest frequency, with 18 trains per hour, and is a 5-10 minute walk from the western end of the site. The Piccadilly Line enables key journeys within Central London to be reached, including King's Cross in 30 minutes, the West End in 35 minutes, South Kensington in 50 minutes, and Heathrow Airport can also be reached. Enfield Chase and Gordon Hill are both on Great Northern, and provide services to key employment destinations such as Old Street and Moorgate. Via a bus connection, London Overground services at Enfield Town provides services to Liverpool Street.

Furthermore, other key destinations within London can be reached via transfer. At Finsbury Park (22min from Oakwood), a transfer is available to the Victoria Line and Thameslink. This means that numerous further areas of Central London can be reached. Additionally, Thameslink can be used to connect to Gatwick Airport. At Highbury & Islington (22min from Enfield Chase), a transfer is available to the London Overground, including both the North London Line and the East London Line. Destinations that can be reached include Stratford, Shoreditch, Canada Water, Camden, and Old Oak Common. Time mapping is shown in Figure 3-3, using TfL's "TIM" tool. This is shown for Oakwood, Enfield Chase, and Enfield Road between the two stations, to show the potential for convenient commuting to areas of Central London.

The Local Plan Strategic Assessment (2021) by WSP report included baseline analysis on rail, and some key figures have been extracted from this. Figures 3-4 and 3-5 show flows in the AM and PM peak. This demonstrates the north-south radial nature of rail corridors, with Thameslink and Greater Anglia being the heaviest used services that pass through the borough. Furthermore, boarding and alighting is shown in Figures 3-6 through 3-9. These show larger numbers of passengers boarding in the AM, and alighting in the PM, demonstrating the commuting nature of these rail corridors. Note that preliminary work by WSP has also showed that generally there are no issues with rail capacity following the inclusion of the Chase Park development.

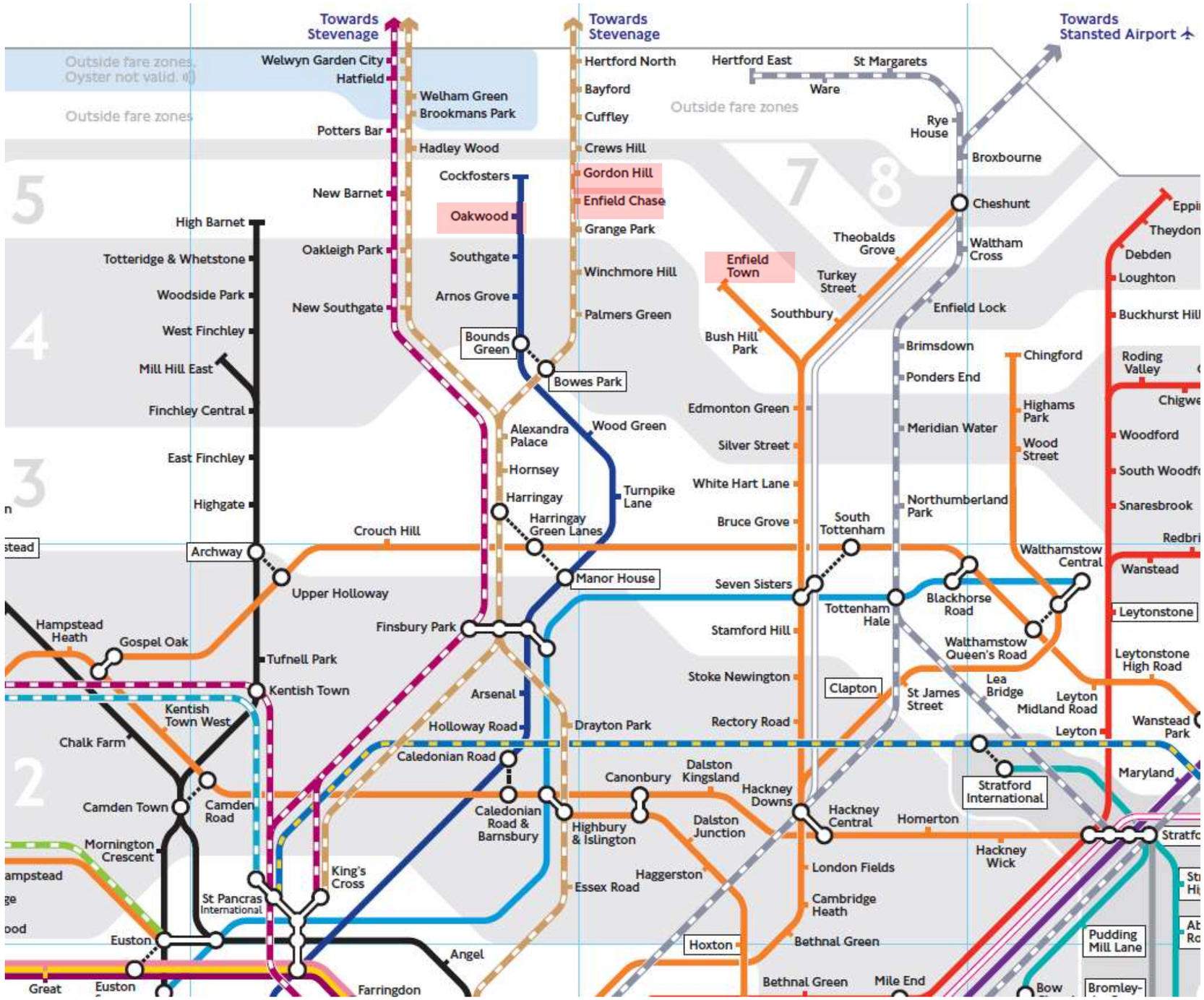


Figure 3-1 London Tube and Rail Map - Extract

Table 3-1 Rail Services

Station	Managed By	Fare Zone	Entries + Exits	Frequency		Time to Key Destinations	Transfers	Step-free access	Proximity to Site
				MF peak	MF off-peak				
Oakwood - Piccadilly Line	TfL	5	2.78 million (2019)	18 tph	18 tph	• Finsbury Park: 22min • King's Cross: 30min • Piccadilly Circus: 35min • South Kensington: 50min • Heathrow T5: 1hr 25min	• Transfer available at Finsbury Park to Victoria Line, Thameslink, and Great Northern • Numerous transfers via Central London underground stations	Yes	• 5-10 min walk from western areas of site • Potential 15 min walk/5min cycle from central areas of site • Potential 5 min bus journey from central/NE areas of site
Enfield Chase	Great Northern	5	1.55 million (2018-19)	4tph	2tph	• Finsbury Park: 20min • Highbury & Islington: 22min • Moorgate: 34min • Stevenage: 30min	• Transfer available at Finsbury Park to Victoria Line, Thameslink • Transfer available at Highbury & Islington to London Overground (North London Line & East London Line)	No	• Potential 5-10 min cycle from central/eastern areas of site • Potential 5-10 min bus journey from central/eastern areas of site
Gordon Hill	Great Northern	5	1.42 million (2018-19)	4tph	2tph	• Finsbury Park: 23min • Highbury & Islington: 29min • Moorgate: 37min • Stevenage: 25min	• Transfer available at Finsbury Park to Victoria Line, Thameslink • Transfer available at Highbury & Islington to London Overground (North London Line & East London Line)	No	• Potential 5-10 min cycle from NE areas of site • Potential 5-10 min bus journey from central/NE areas of site
Enfield Town - London Overground	TfL	5	2.33 million (2018-19)	4tph	2tph	• Seven Sisters: 13min • Hackney Downs: 22min • Liverpool Street: 35min	• Transfer available at Seven Sister to Victoria Line, Greater Anglia • Transfer available at Hackney to London Overground (North London Line)	Yes	• Potential 10-15 min cycle from central/eastern areas of site • Potential 10-15 min bus journey from central/eastern areas of site

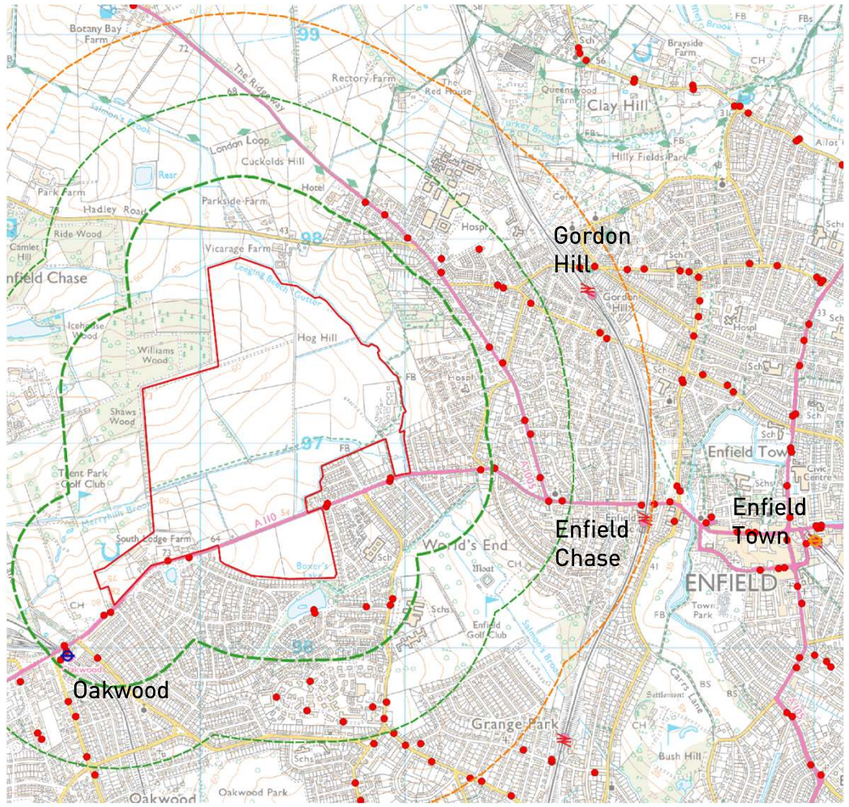
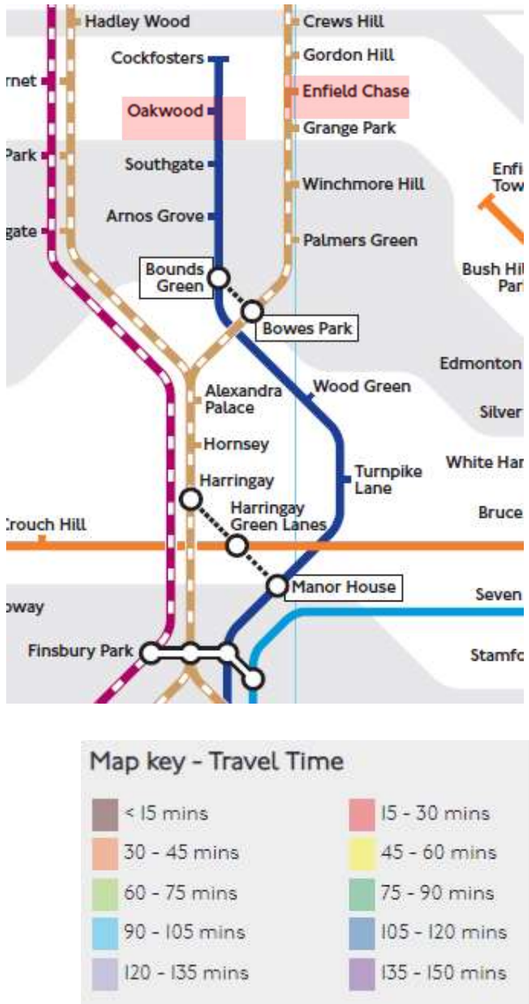
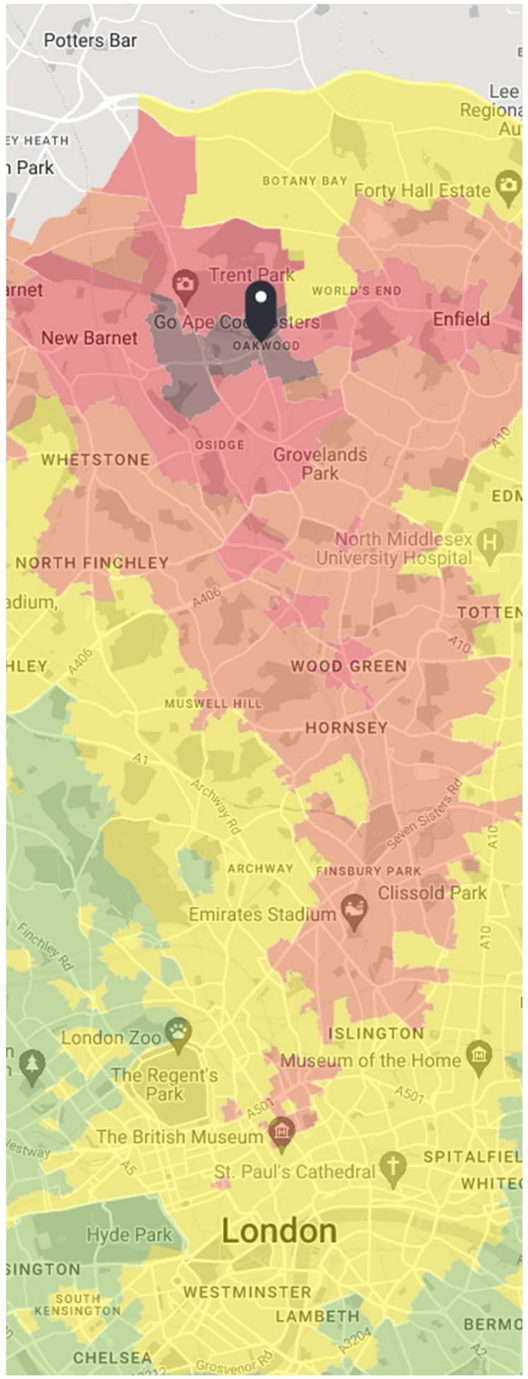


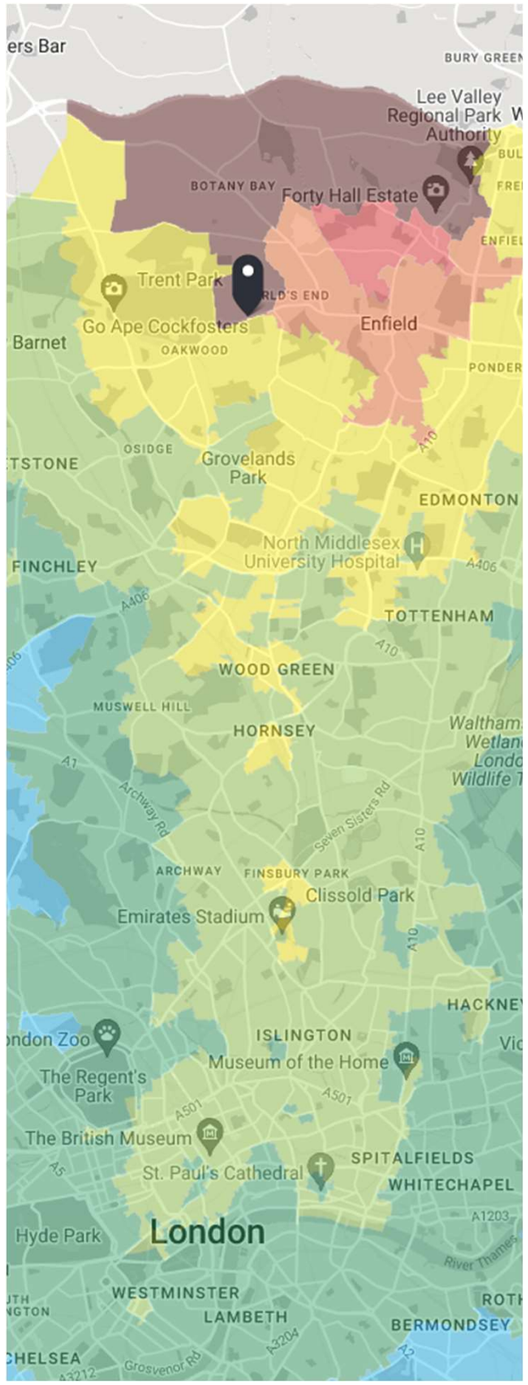
Figure 3-2

Figure 3-3 Time Mapping (All Public Transport Modes)

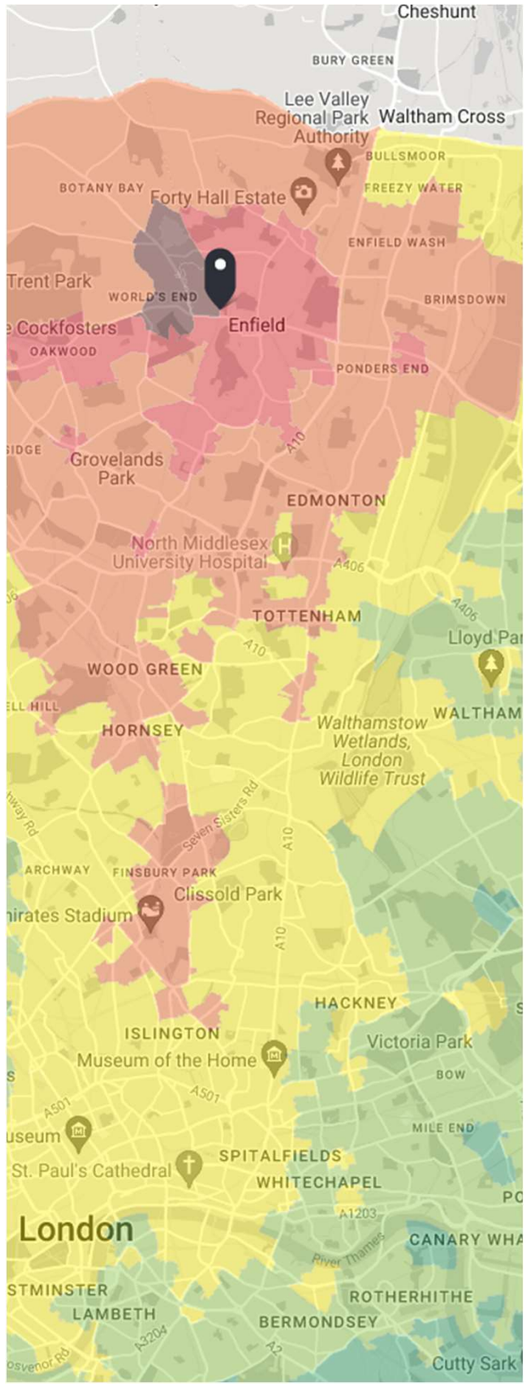




Origin: Oakwood

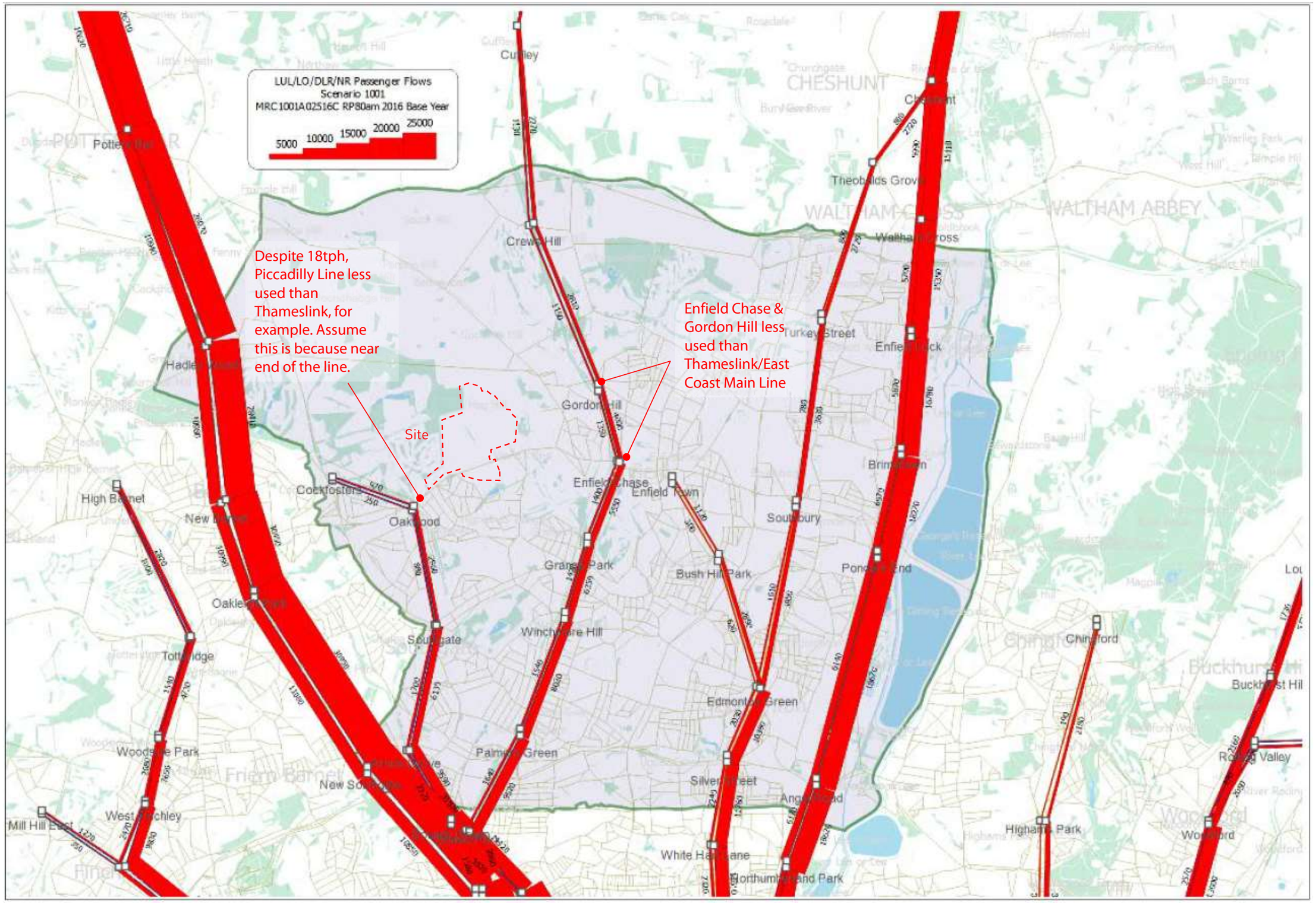


Origin: Enfield Road/A110



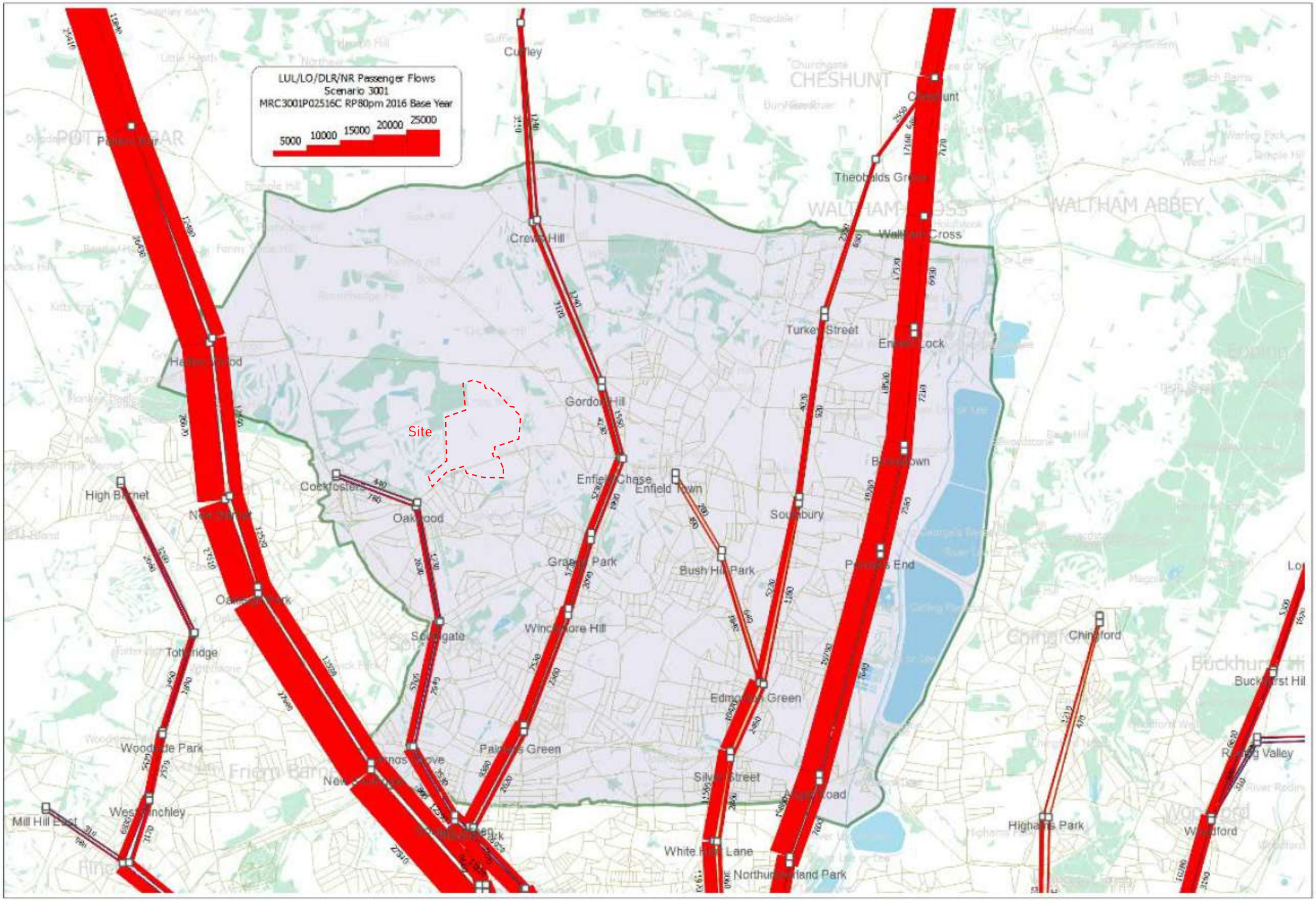
Origin: Enfield Chase

Figure 3-4 Rail Usage – Passenger Flows AM Peak



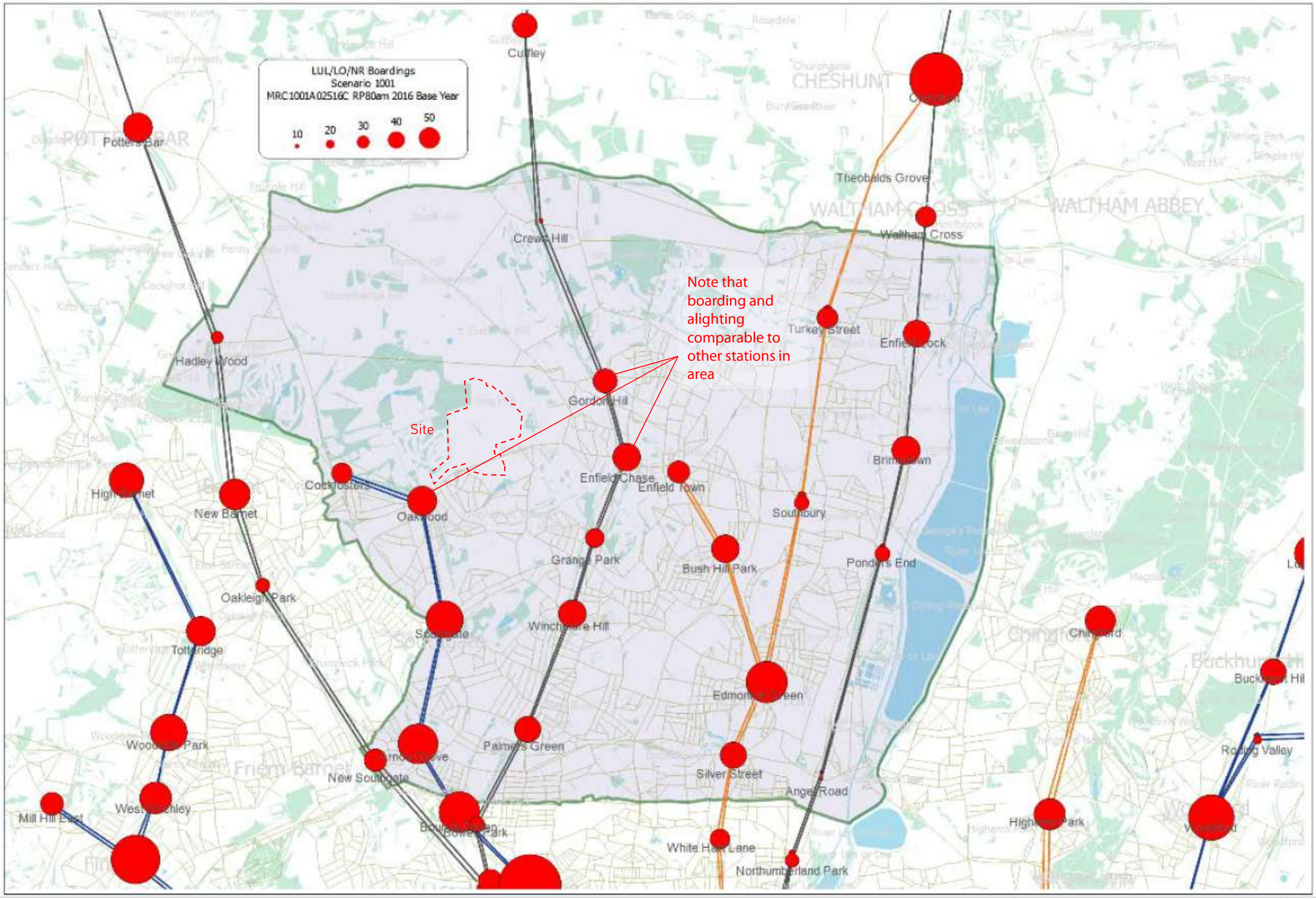
Note: from WSP Baseline Transport Report, dated June 2021

Figure 3-5 Rail Usage – Passenger Flows PM Peak



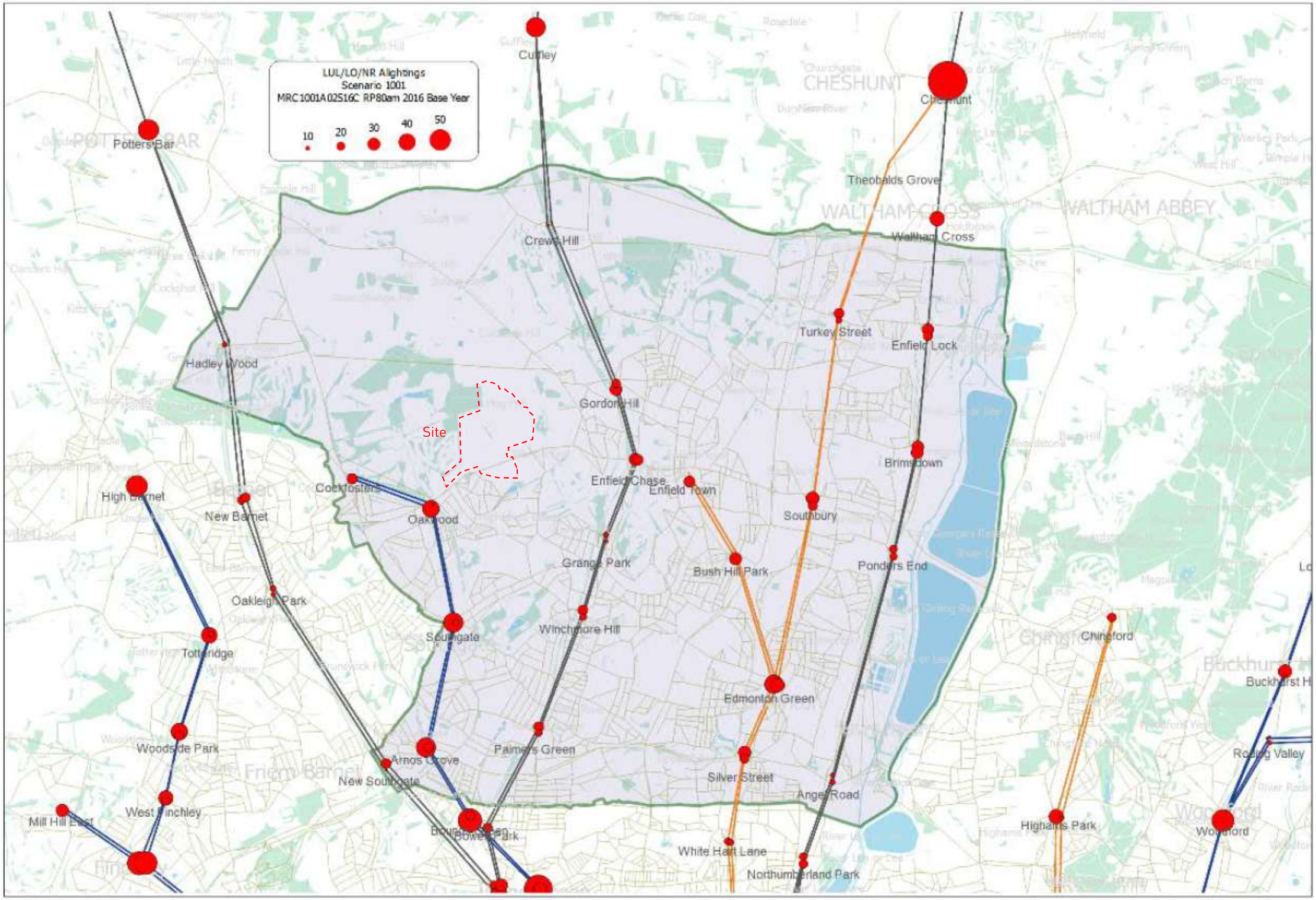
Note: from WSP Baseline Transport Report, dated June 2021

Figure 3-6 Rail Usage – Passengers Boarding AM Peak



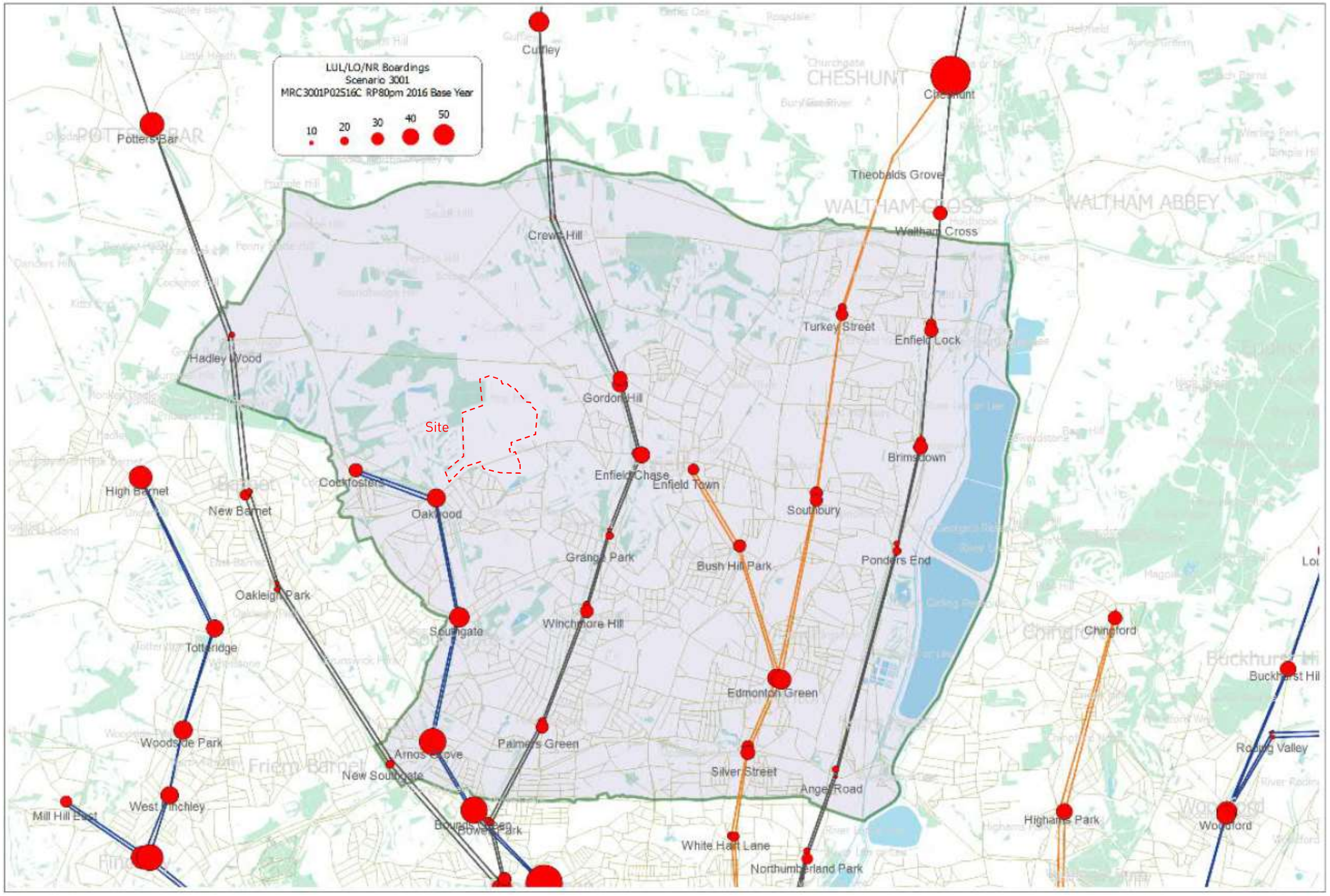
Note: from WSP Baseline Transport Report, dated June 2021

Figure 3-7 Rail Usage – Passengers Alighting AM Peak



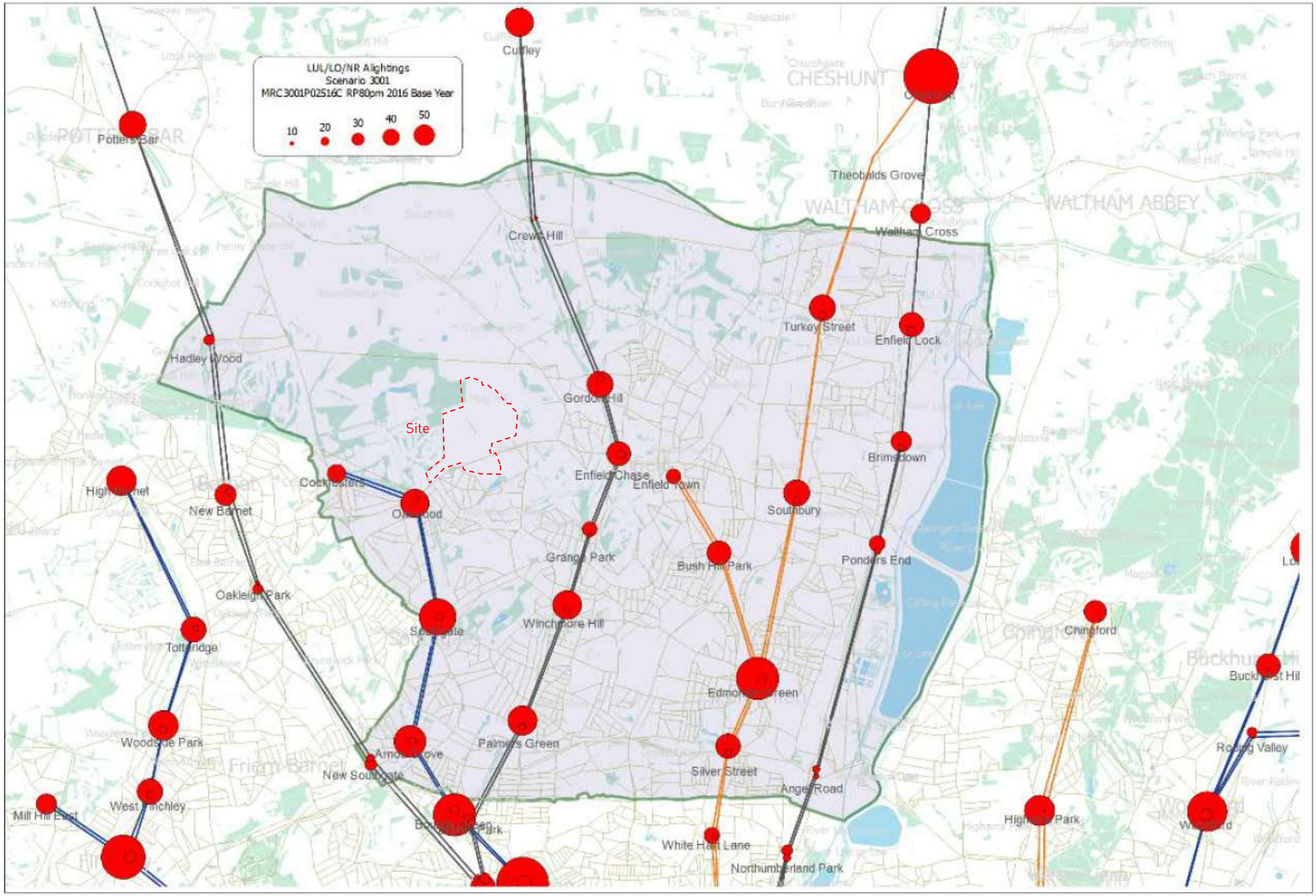
Note: from WSP Baseline Transport Report, dated June 2021

Figure 3-8 Rail Usage – Passengers Boarding PM Peak



Note: from WSP Baseline Transport Report, dated June 2021

Figure 3-9 Rail Usage – Passengers Alighting PM Peak

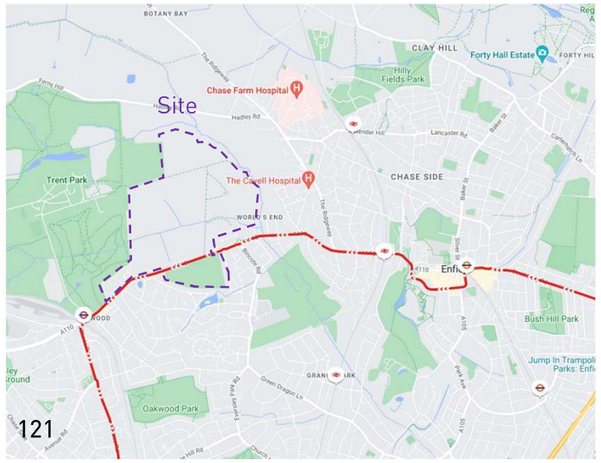


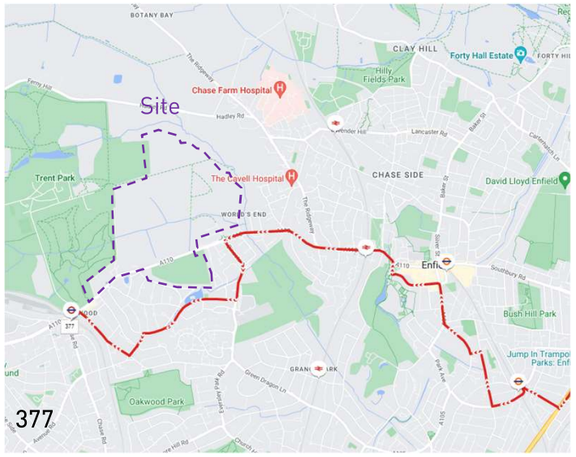
Note: from WSP Baseline Transport Report, dated June 2021

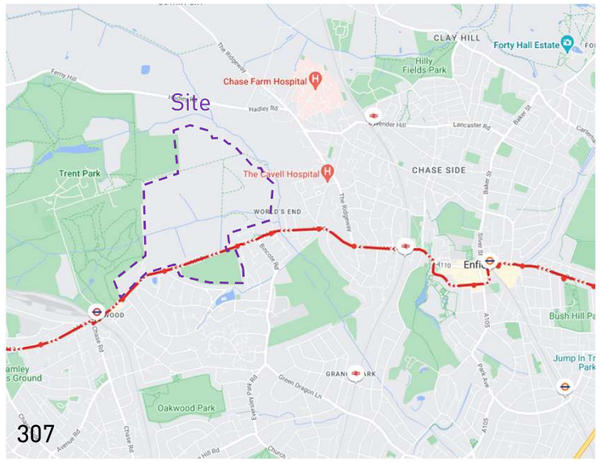
4.0 Bus Provision

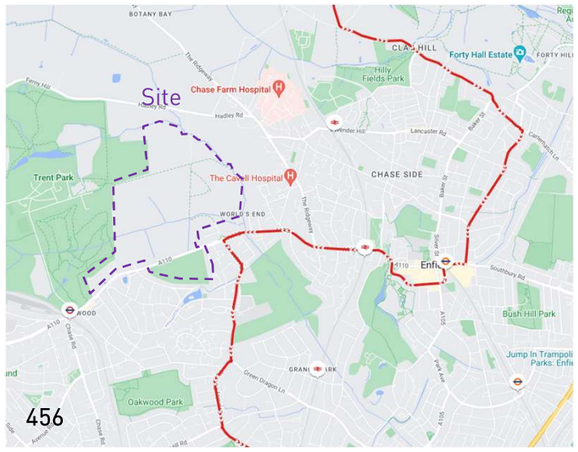
Bus provision includes services running on the key east-west corridor of the A110, which passes by the site. Routes include the 121, which provides 6 buses per hour to Oakwood and Enfield Chase stations, and Enfield Town; and the 307 which provides 5 buses per hour to these same destinations, plus Barnet Hospital (see Table 4-1). Additionally, the 377 and 456 have stops along the A110, at Link Side. There are also bus services of note to the east of the site. These include the 313 which runs along The Ridgeway/A1005, with 3-4 buses per hour to Enfield Town and Enfield Chase, as well as connecting to wider destinations such as Potters Bar, Ponders End, Chingford and a local school. The W8 and W9 are services that terminate at Chase Farm Hospital, both via Enfield Town, with the W8 also serving Gordon Hill. Individual routes are shown in the thumbnails of Fig 4-1, with the TfL bus spider diagram for Oakwood and Chase Farm Hospital is shown in Figures 4-2 & 4-3 overleaf.

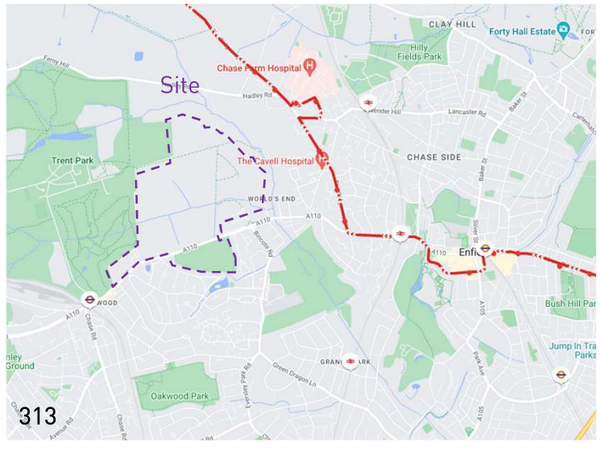
Furthermore, 2021 WSP report included wider baseline analysis on bus usage within the Borough, and some key figures have been extracted from this. Figures 4-5 and 4-6 show flows in the AM and PM peak, and Figures 4-7 to 4-10 show boarding and alighting. In broad terms, this shows that bus usage is more evenly distributed across the borough (compared to the rail network with its peaked commuting nature). This suggest that buses serve a multitude of local destinations within the Borough, likely for different purposes, throughout the course of a typical weekday. In the vicinity of the site, it can be seen that that A110 is a key east-west corridor in the Borough in terms of bus passenger flows. Services along The Ridgeway/A1005, and to Chase Farm Hospital are less intensive, however.

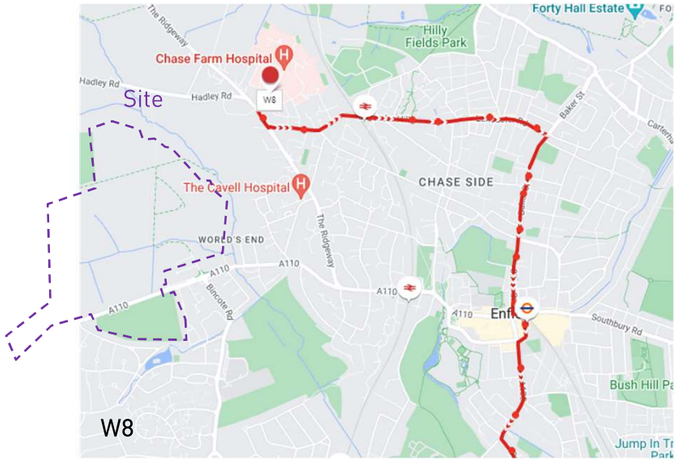












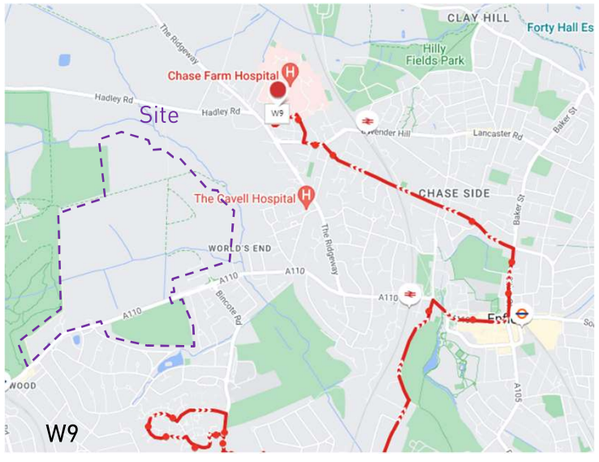


Figure 4-1

Table 4-1 Bus Services

Route No.	Route Description & Key Destinations	Frequency (per hour)		Time to Key Destinations
		AM peak/ daytime	Off Peak	
121	Enfield Island Village - Enfield Town - Enfield Chase Station - **Site** - Oakwood Station - Palmers Green Station - Turnpike Lane Station	6	4	From Lakeside Stop: • Oakwood Station: 2min • Enfield Chase Station: 8min • Enfield Town: 12min
307	Brimsdown - Enfield Town - Enfield Chase Station - **Site** - Oakwood Station - High Barnet - Barnet Hospital	5	3-4	From Lakeside Stop: • Oakwood Station: 2min • Enfield Chase Station: 8min • Enfield Town: 12min • Barnet Hospital: 25min
377	Southbury - Bush Hill Park - Enfield Town - Enfield Chase Station - Links Side **(Site)** - Oakwood Station	2	1	From Links Side stop: • Oakwood Station: 8min • Enfield Chase Station: 8min • Enfield Town: 11min
456	Crews Hill - St Johns Primary School - Enfield Town - Enfield Chase Station -Links Side **(Site)** - Winchmore Hill - North Middlesex Hospital	2	0 (last bus 20:05)	From Links Side stop: • Enfield Chase Station: 8min • Enfield Town: 11min • North Middlesex Hospital: 32mins
313	Chingford - Ponders End - Enfield Town Station - Enfield Chase Station - Chase Farm Hospital - **Site** - Potters Bar - Dame Alice Owen's School	3-4	3-4	From Roundhedge Way Stop: • Enfield Chase Station: 7min • Enfield Town: 12min • Dame Alice Owen's School: 26min (only during peak)
W8	Chase Farm Hospital - Gordon Hill Station - Enfield Town - Edmonton Green - Picketts Lock Centre	8	4-6	From Chase Farm Hospital: • Gordon Hill Station: 3min • Enfield Town: 12min
W9	Chase Farm Hospital - Enfield Town - Grange Park - Southgate Station	4	2	From Chase Farm Hospital: • Enfield Town: 12min

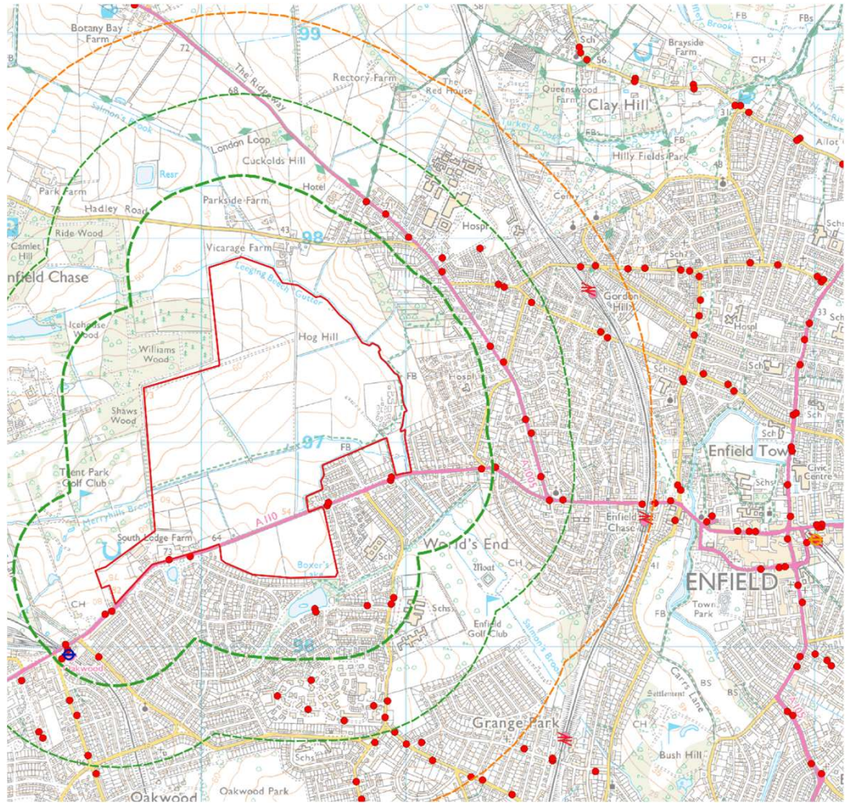
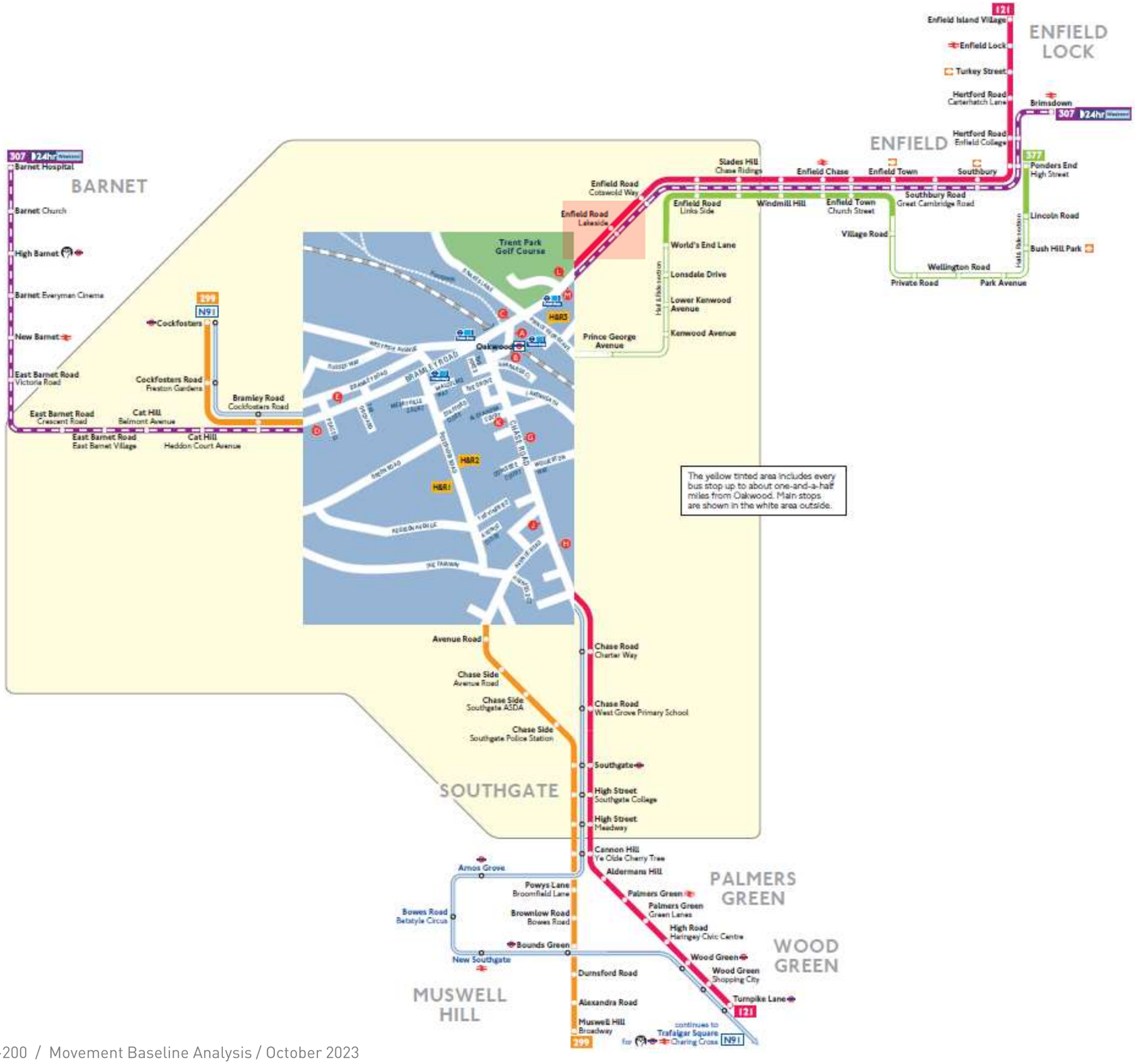


Figure 4-2 Bus Stop Context

Figure 4-3 TfL Spider Diagram: Buses from Oakwood



Route finder

Bus route	Towards	Bus stops
121	Enfield Island Village	C J K L
	Turnpike Lane	A G H M
299	Cockfosters	D H&R1
	Muswell Hill	E H&R2
307 24hr Weekend	Barnet	A D M
	Brimsdown	C E L
377	Ponders End ★	B C H&R3

Night buses

Bus route	Towards	Bus stops
N91	Cockfosters	A D J K
	Trafalgar Square	A E G H

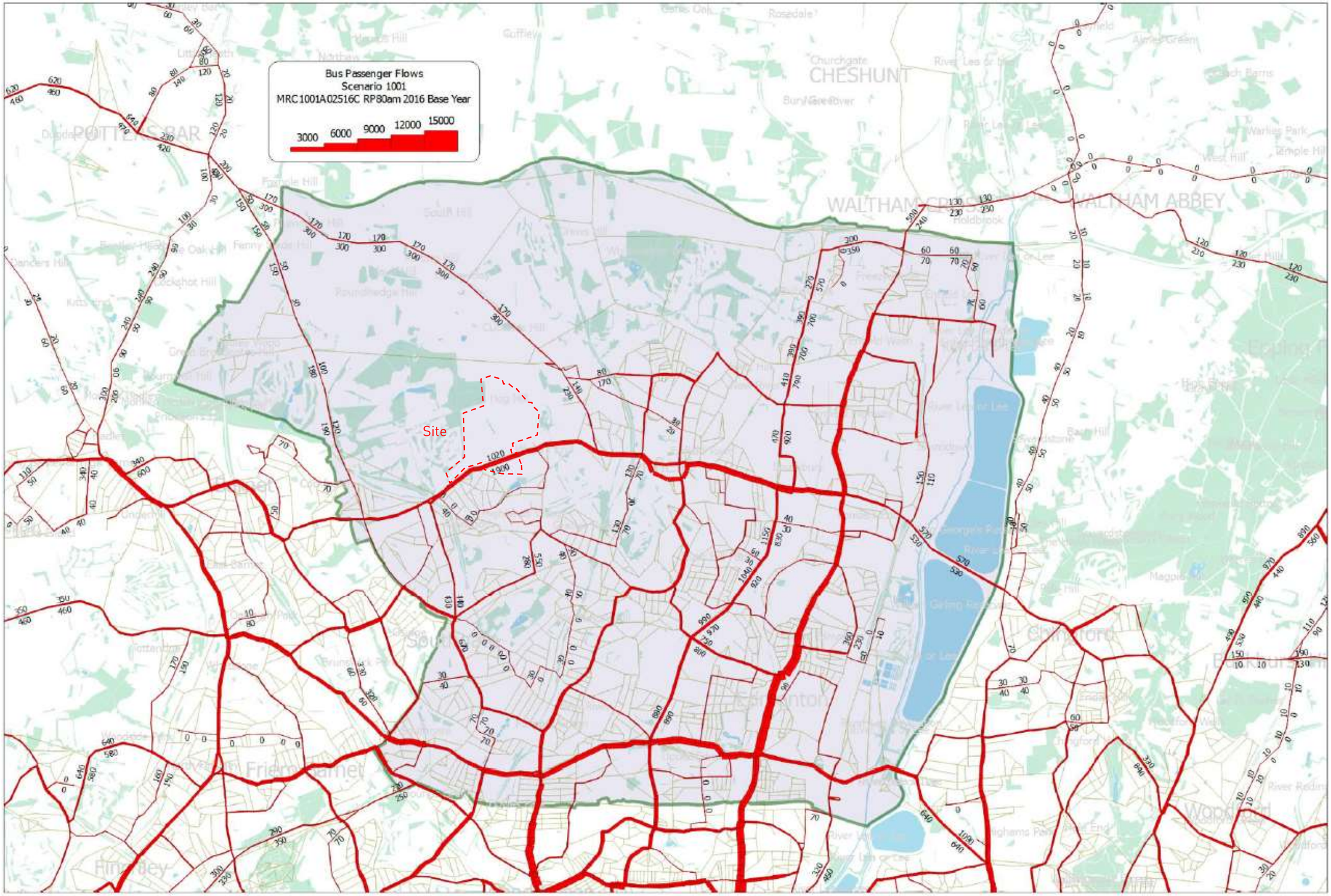
★ Mondays to Saturdays only

Hail & Ride — Route 299 operates as Hail and Ride on the sections of roads marked H&R1 and H&R2 on the map. Buses stop at any safe point along the road. There are no bus stops at these locations, but please indicate clearly to the driver when you wish to board or alight.

Hail & Ride — Route 377 on the sections of the road marked H&R3. Buses stop at any safe point along the road. There are no bus stops at these locations, but please indicate clearly to the driver when you wish to board or alight.

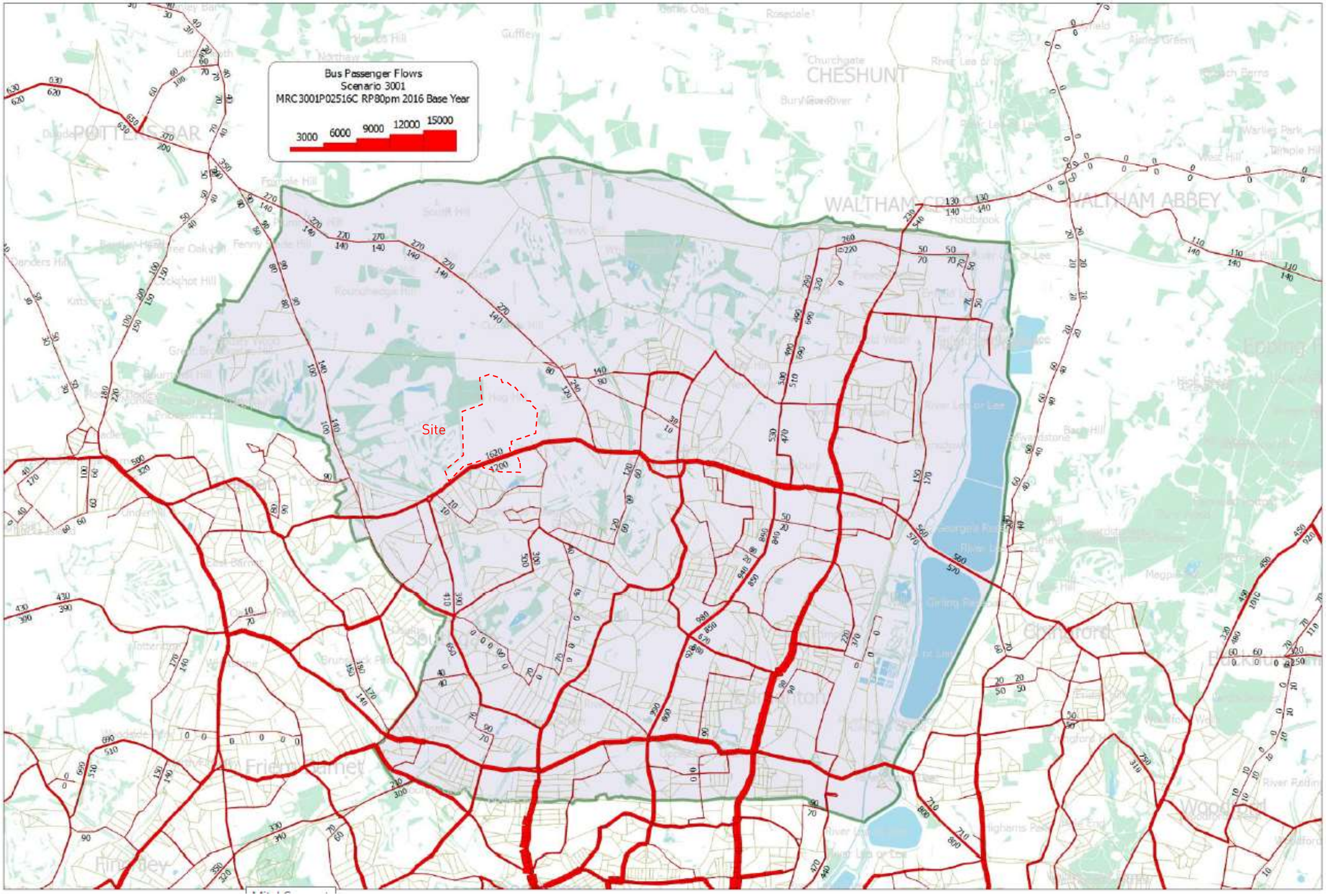
Figure 4-4 TfL Spider Diagram: Buses from Chase Farm Hospital

Figure 4-5 Bus Usage – Passenger Flow AM Peak



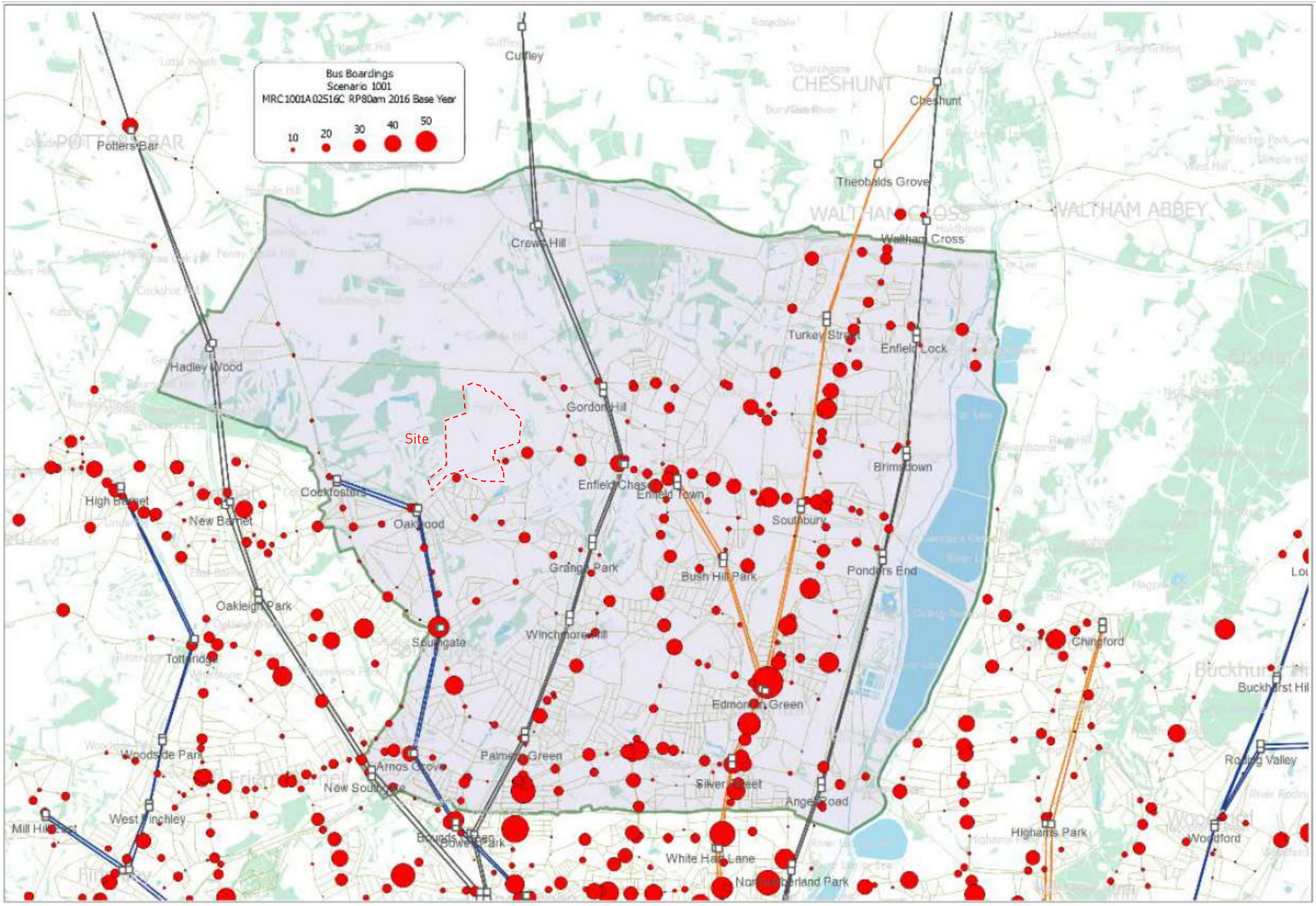
Note: from WSP Baseline Transport Report, dated June 2021

Figure 4-6 Bus Usage – Passenger Flow PM Peak



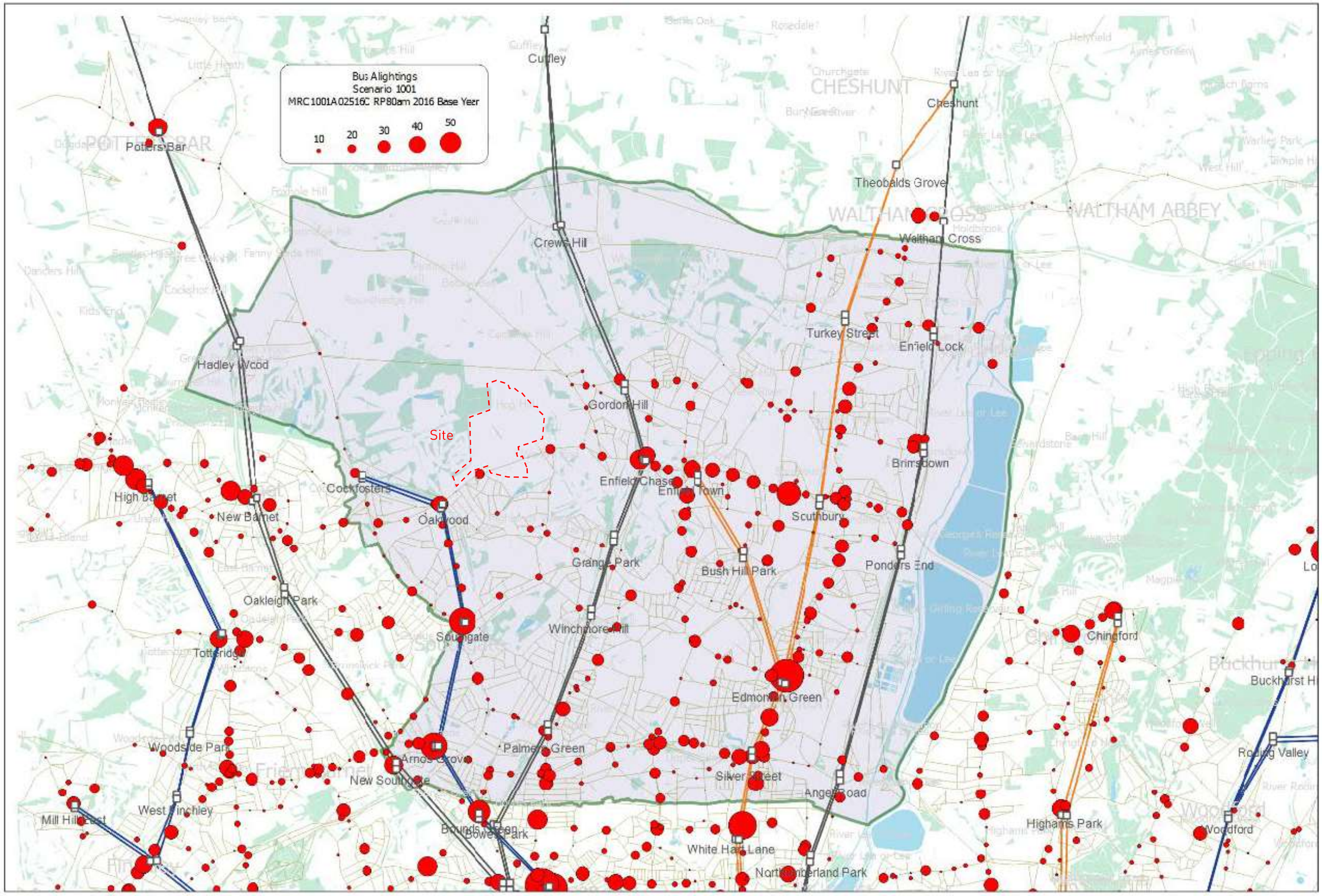
Note: from WSP Baseline Transport Report, dated June 2021

Figure 4-7 Bus Usage – Passengers Boarding AM Peak



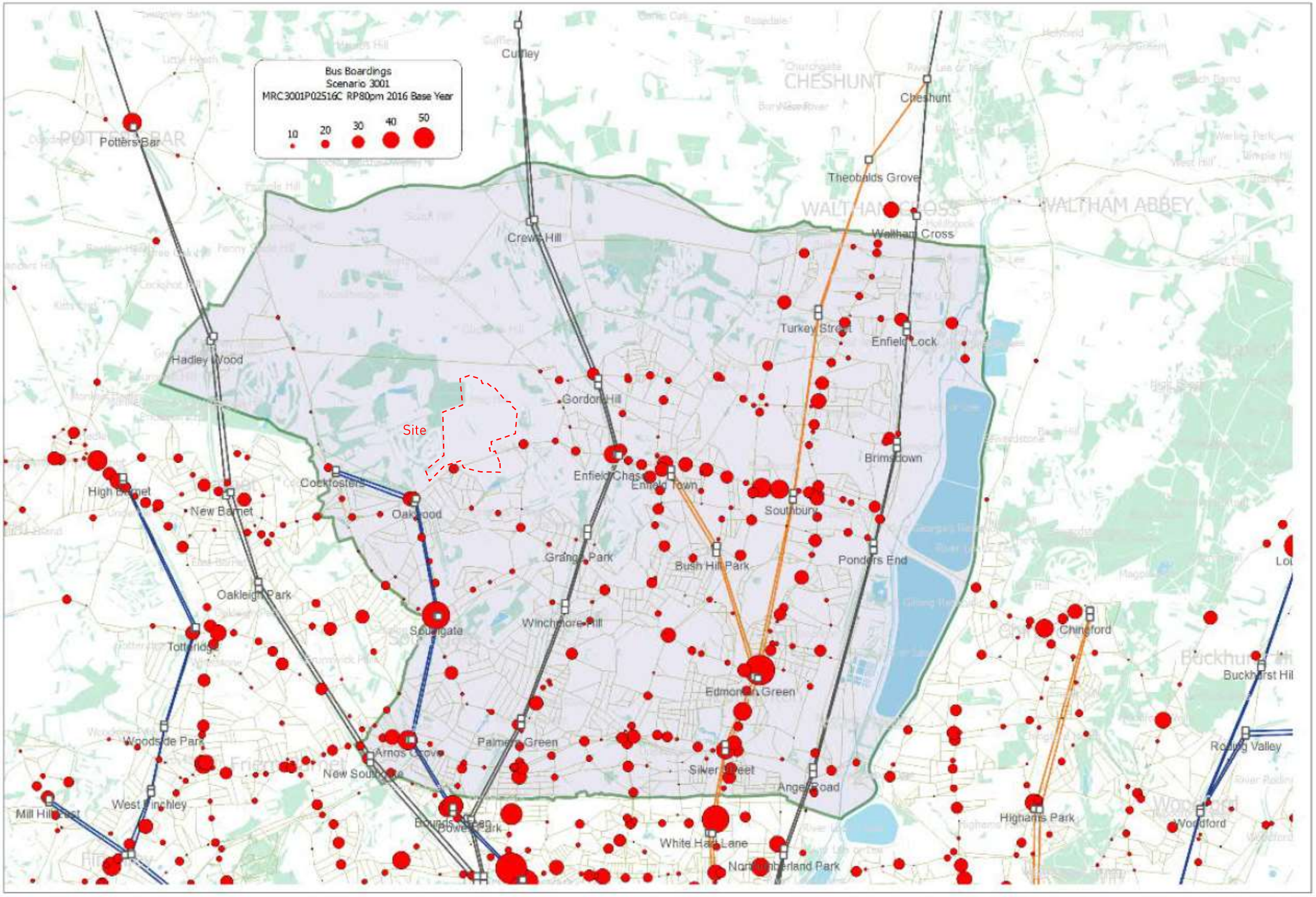
Note: from WSP Baseline Transport Report, dated June 2021

Figure 4-8 Bus Usage – Passengers Alighting AM Peak



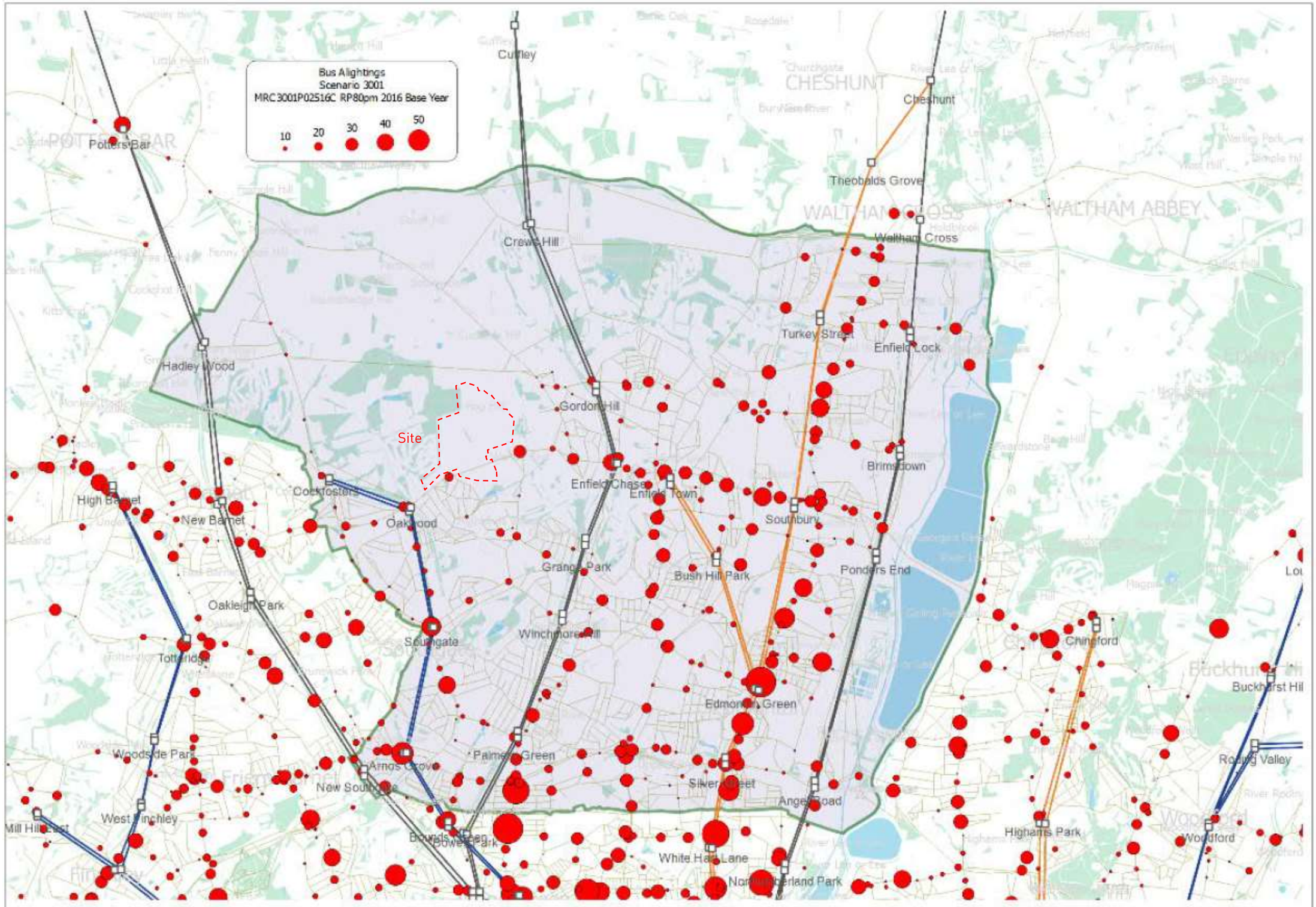
Note: from WSP Baseline Transport Report, dated June 2021

Figure 4-9 Bus Usage – Passengers Boarding PM Peak



Note: from WSP Baseline Transport Report, dated June 2021

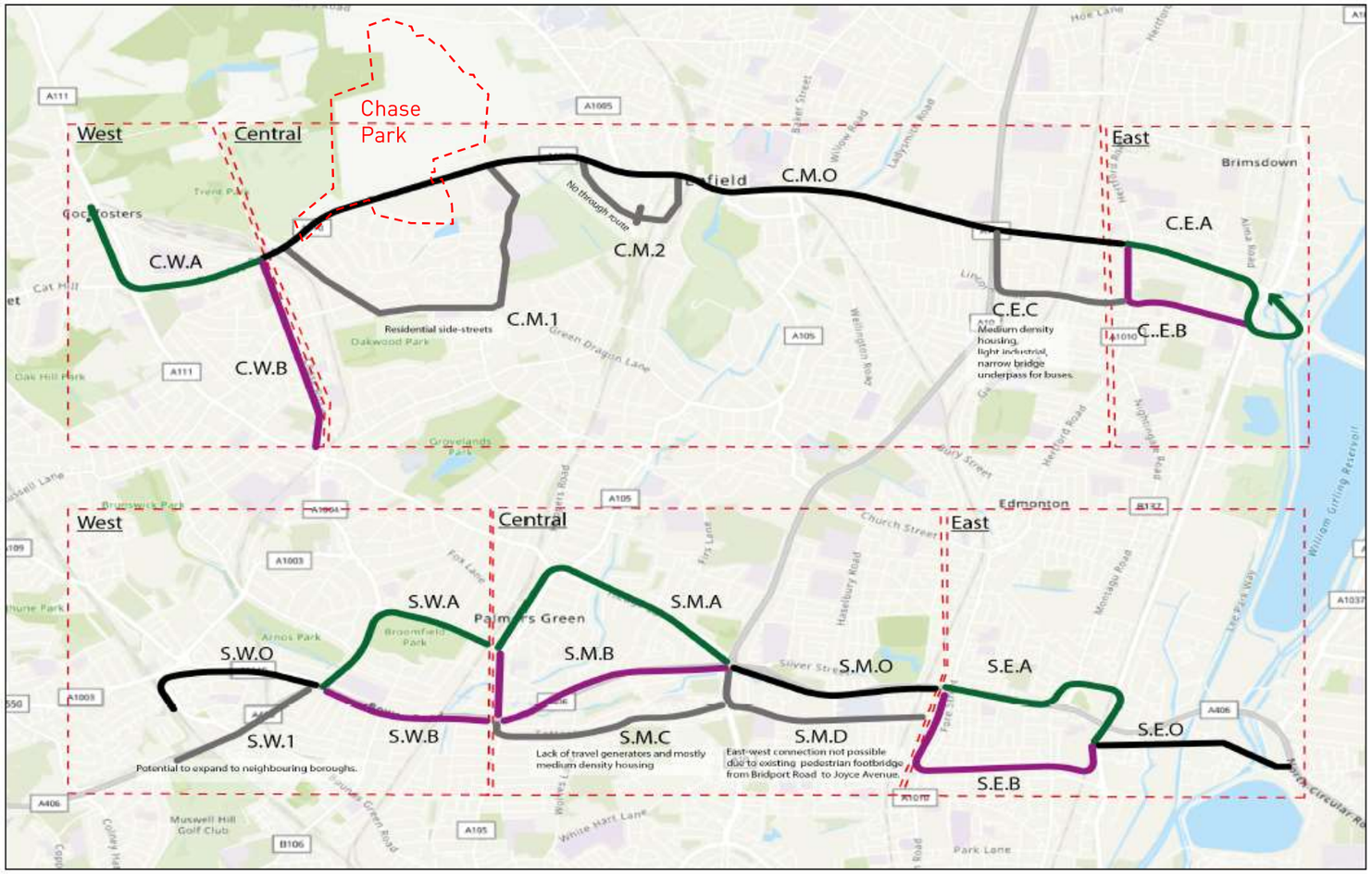
Figure 4-10 Bus Usage – Passengers Alighting PM Peak



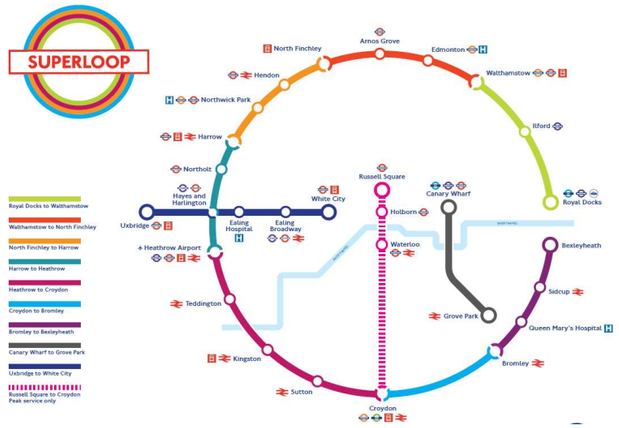
Note: from WSP Baseline Transport Report, dated June 2021

Potential Enfield Transit Corridor

A study for the Enfield Transit Corridor was undertaken during 2019-20. It was commissioned jointly by LB Enfield and TfL, and produced by Arup. There are Stage 1, 2, and 3 reports. The study recommended two strong corridors for improvements, and these were appraised in terms of land use, pedestrian environment, road widths, constructability etc. These were both included as "critical" in the LB Enfield draft Infrastructure Delivery Plan. The infrastructural proposals in order to deliver the scheme include bus stops, dedicated lanes, minor junction improvements, and major junction improvements. Subsequent to the study, the "southern corridor" has been incorporated into TfL's proposed Superloop. With regards to the "central corridor", which passes along the A110 past Chase Park, the report states: *"The alignment via Enfield Town Centre, passing Oakwood, World's End, Enfield Chase, Enfield Town Centre and Southbury performs well for population growth, has good existing integration with the public transport network, and an overall good pedestrian environment and road network assessment score. Challenges along this corridor include high existing travel time variability and higher environmental impact scores compared to other alignments in the Central Corridor."*



From Enfield Transit Corridor Study, Stage 2 Report.by Arup (Jan 2020)



TfL Superloop (2023)

Project Title	Planned provision	When	Delivery partners & stakeholders	Cost (where known)	Funding source (where known)	Prioritisation	Notes
Enfield rapid transit	Rapid transit bus lanes in the Upper Lee Valley corridor from Ponders End (via Enfield Town, Enfield Chase and Oakwood) to East Barnet and along the North Circular from Meridian Water to New Southgate	Medium to long term	• TFL • Better Streets for Enfield • LB of Barnet		• Developer contributions • TFL	Critical	Likely to be a phased approach which links to housing and employment growth along corridors.

From LB Enfield Draft Infrastructure Delivery Plan (2021)

5.0 Highways

In terms of strategic highways, the M25 is 4km to the north. This can be reached using the A110 and the A111 or A1005, or using the A110 and A10. The main highway which passes east-west through the southern part of the site is the A110/Enfield Road, which provides links to key destinations through the Borough, including Enfield Town. At the northern end of the site is Hadley Road, which also provides east-west connections but is more rural in nature. To the east of the site is The Ridgeway/A1005, which provide connectivity between Enfield Town and the M25. The highway context, including road classifications is shown in drawing 1875/220/SK005.

The only TfL red route is the A10, which is located to the east of the site (see Figure 5-1). The Strategic Road Network includes the A110 which passes by the site. In terms of speed limits, local highways in the vicinity of the site are generally 30mph, although Enfield Road/A110 as it passes by the site is 40mph, and Hadley Road is 50mph (see Figure 5-2). Regarding vehicle emission restrictions, the Ultra Low Emission Zone (ULEZ) is due to be expanded from August 2023. This will encompass the majority of the GLA area, including the site (see Figure 5-3). In terms of parking restrictions, the Oakwood Controlled Parking Zone (CPZ) is located to the southwest of the site, and is immediately adjacent to the red line boundary (see Figure 5-4). There is also a CPZ located to the northeast of the site, in the vicinity of Gordon Hill Station. Adoptable highway boundaries within the vicinity of the site is shown in drawing 1875/220/SK006 (note: within the Borough only).

Furthermore, the 2021 WSP report has been sourced for highway information. The highway model formed part of this study, and base year traffic flows for the AM and PM peak are shown in Figures 5-5 and 5-6, with delay in Figure 5-7 and 5-8, and volume-to-capacity ratios in Figure 5-9 and 5-10. It is important to note that this is a higher level, wider area model, and therefore there is some simplification to the highway links in these diagrams. In relation to the site, this shows that between 500 and 1000 vehicle PCUs use Enfield Road/A110 during peak hour periods. Hadley Road to the north sees 250-500 vehicle PCUs during peak hours. In terms of delay, the model shows delays present on one section of Enfield Road to the east of the site, and on Hadley Road. In terms of volume/capacity, there is some network pressure on Enfield Road to the east of the site, and on Hadley Road.

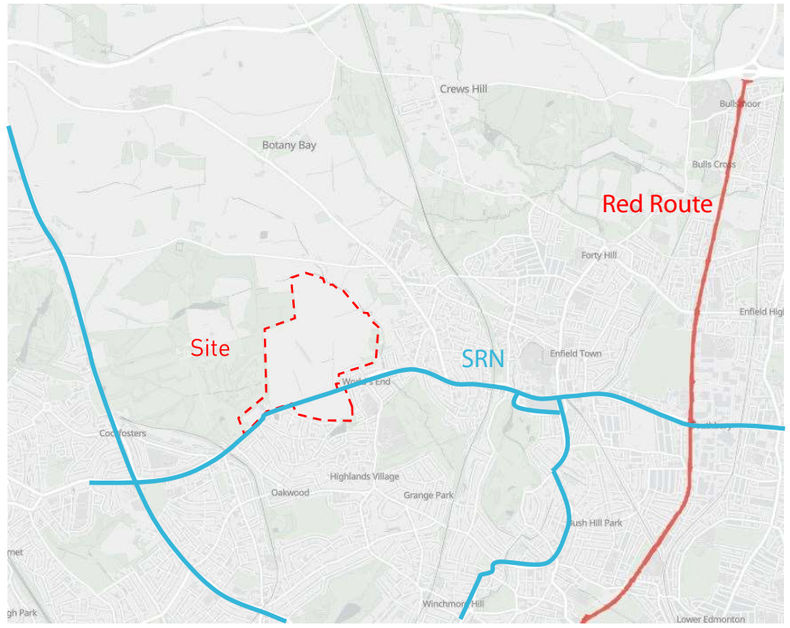


Figure 5-1 Red Routes

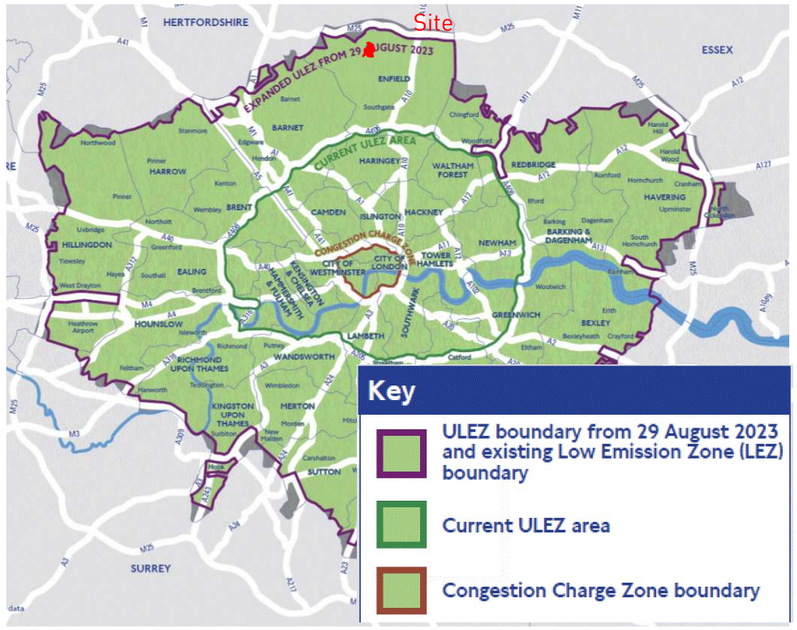


Figure 5-3 ULEZ

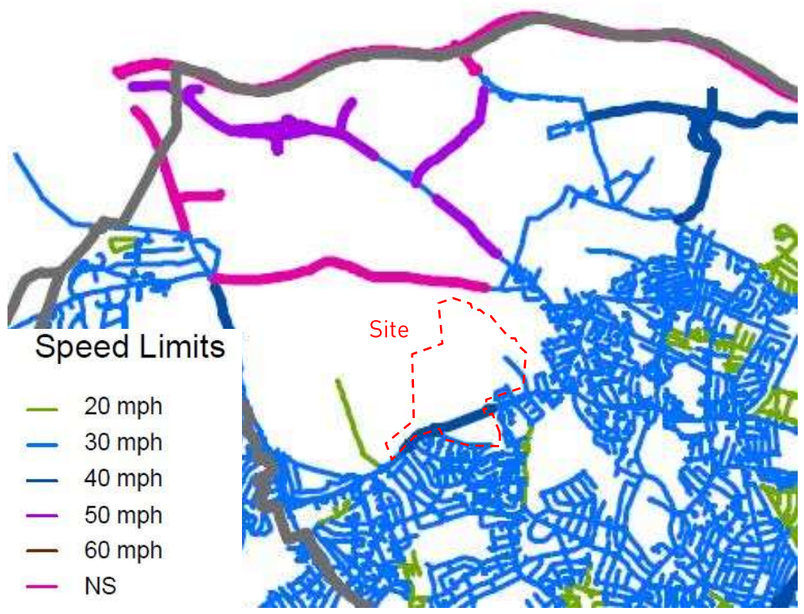


Figure 5-2 Speed Limits

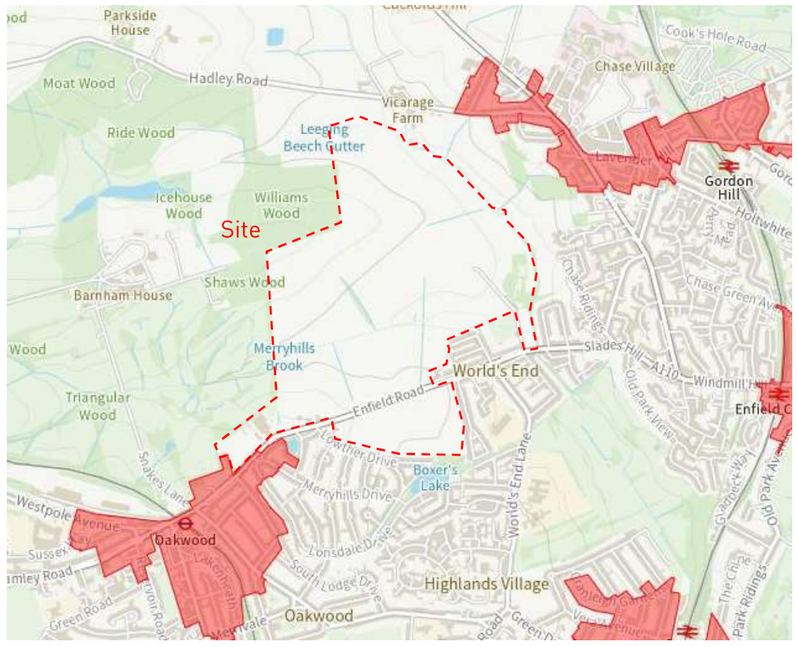
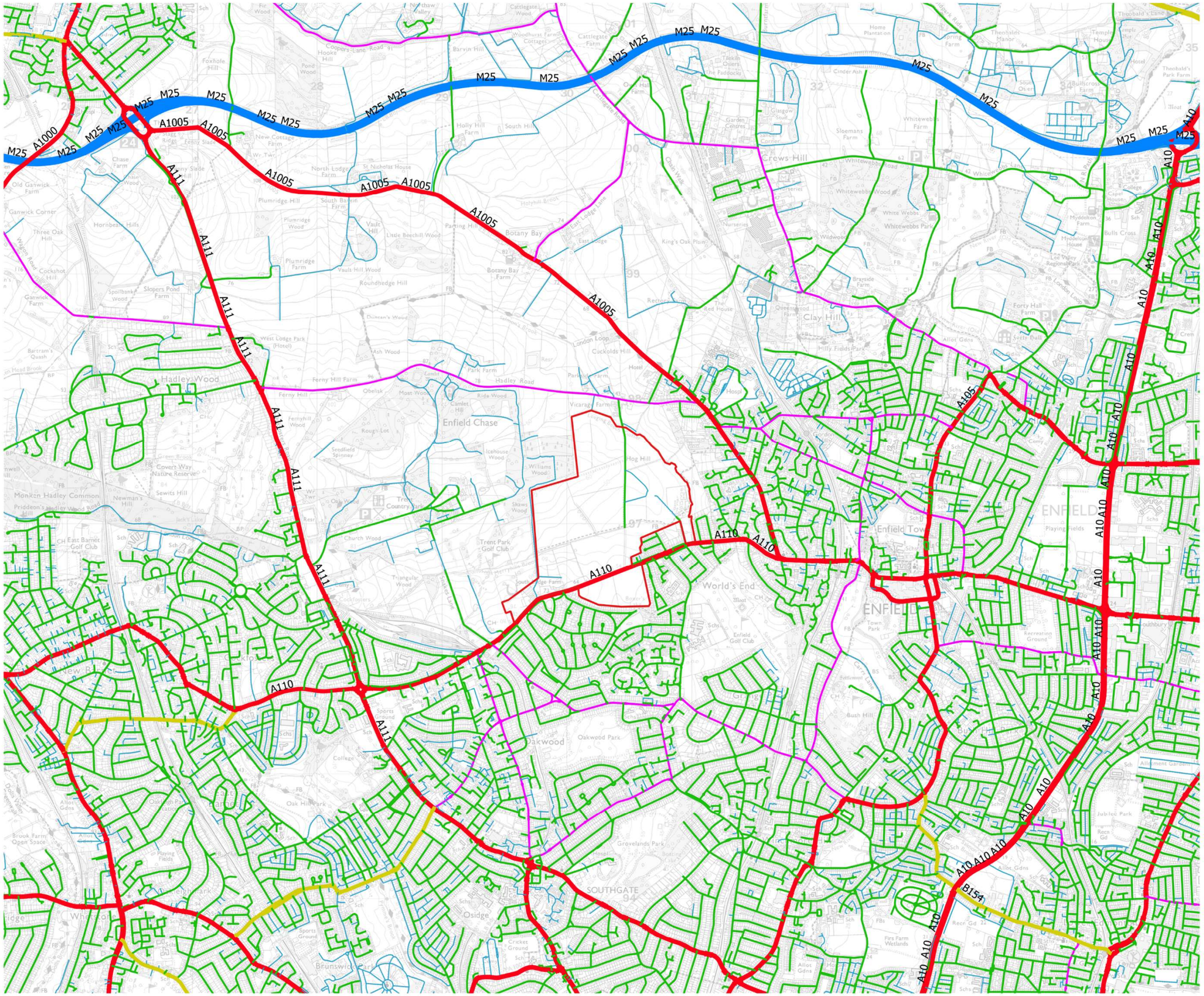


Figure 5-4 Local CPZs



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N

0 0.25 0.5 0.75 1 1.25 1.5 km

1:30,000

🟥 Site Boundary

RoadLink

- Motorway
- A Road
- B Road
- Classified
- Not Classified
- Unknown

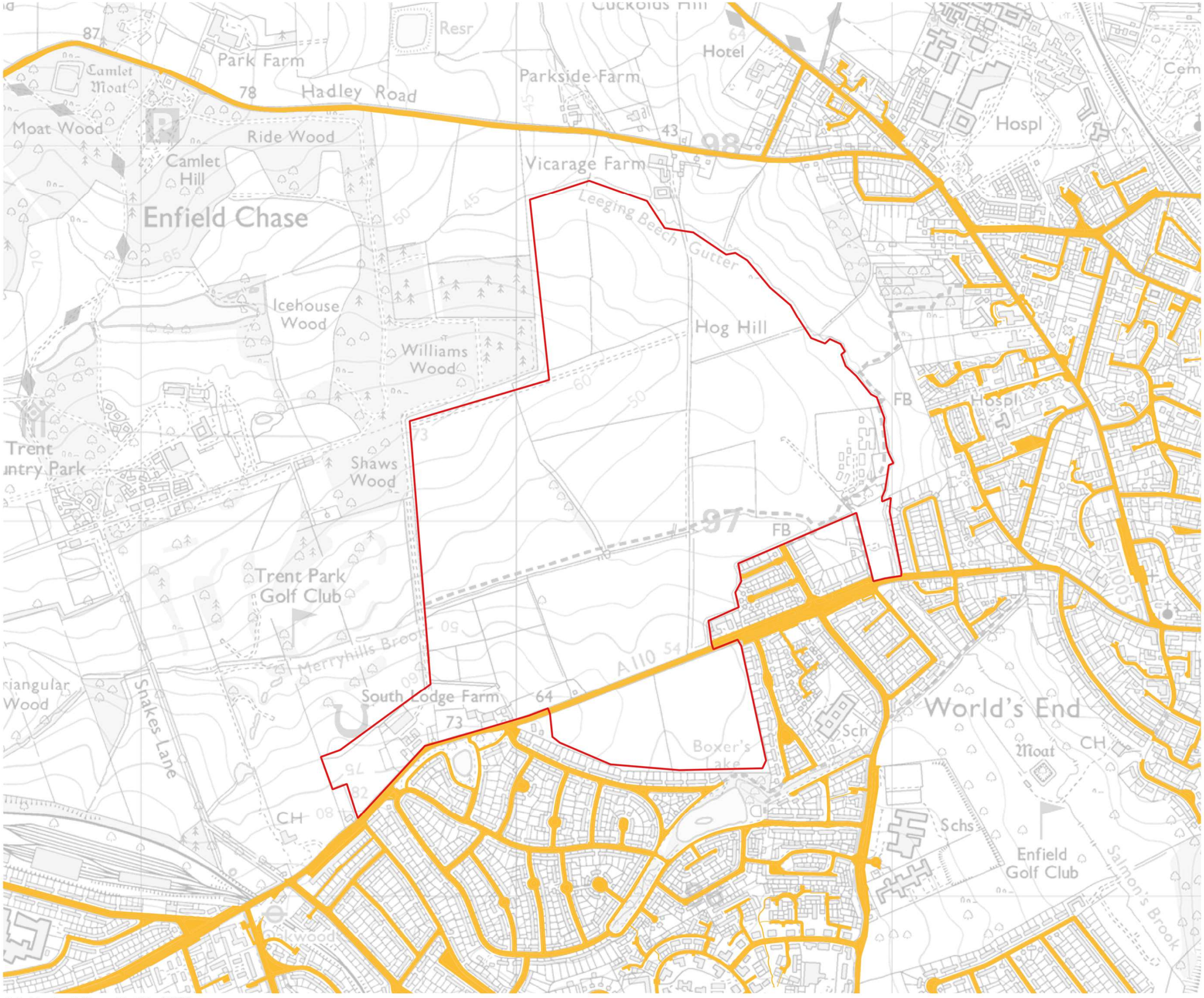
CHASE PARK
TRANSPORT BASELINE

HIGHWAY CONTEXT

1870/220/SK005

APRIL 2023

Alan Baxter



N

0 0.25 0.5 km

1:10,000

Site Boundary

Adoptable Highway Boundary

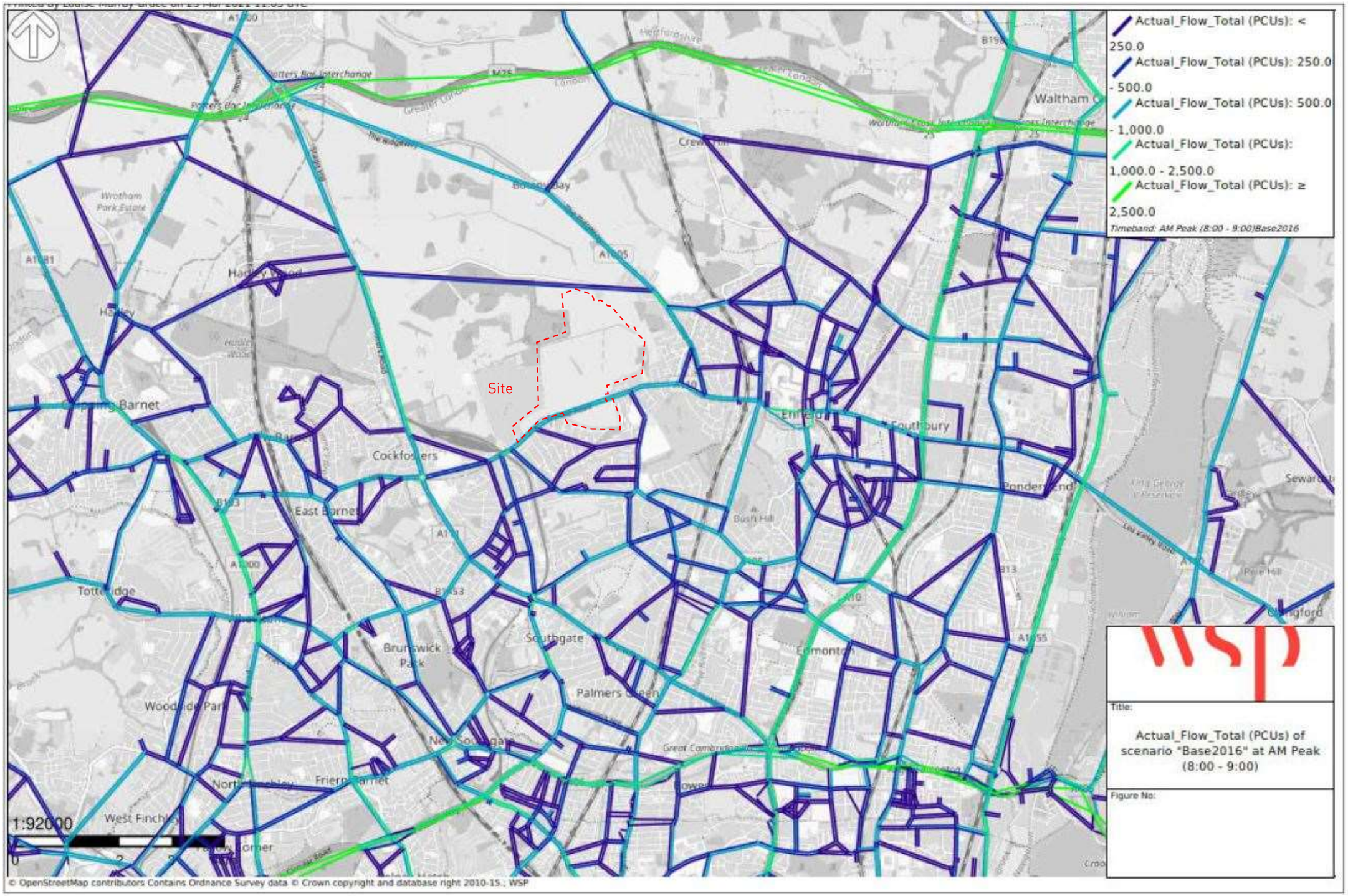
CHASE PARK
TRANSPORT BASELINE

ADOPTABLE HIGHWAY BOUNDARY

1870/220/SK006

APRIL 2023 | Alan Baxter

Figure 5-5 2016 Traffic Flows, AM Peak



Note: from WSP Baseline Transport Report, dated June 2021

Figure 5-6 2016 Traffic Flows, PM Peak

Note: from WSP Baseline Transport Report, dated June 2021

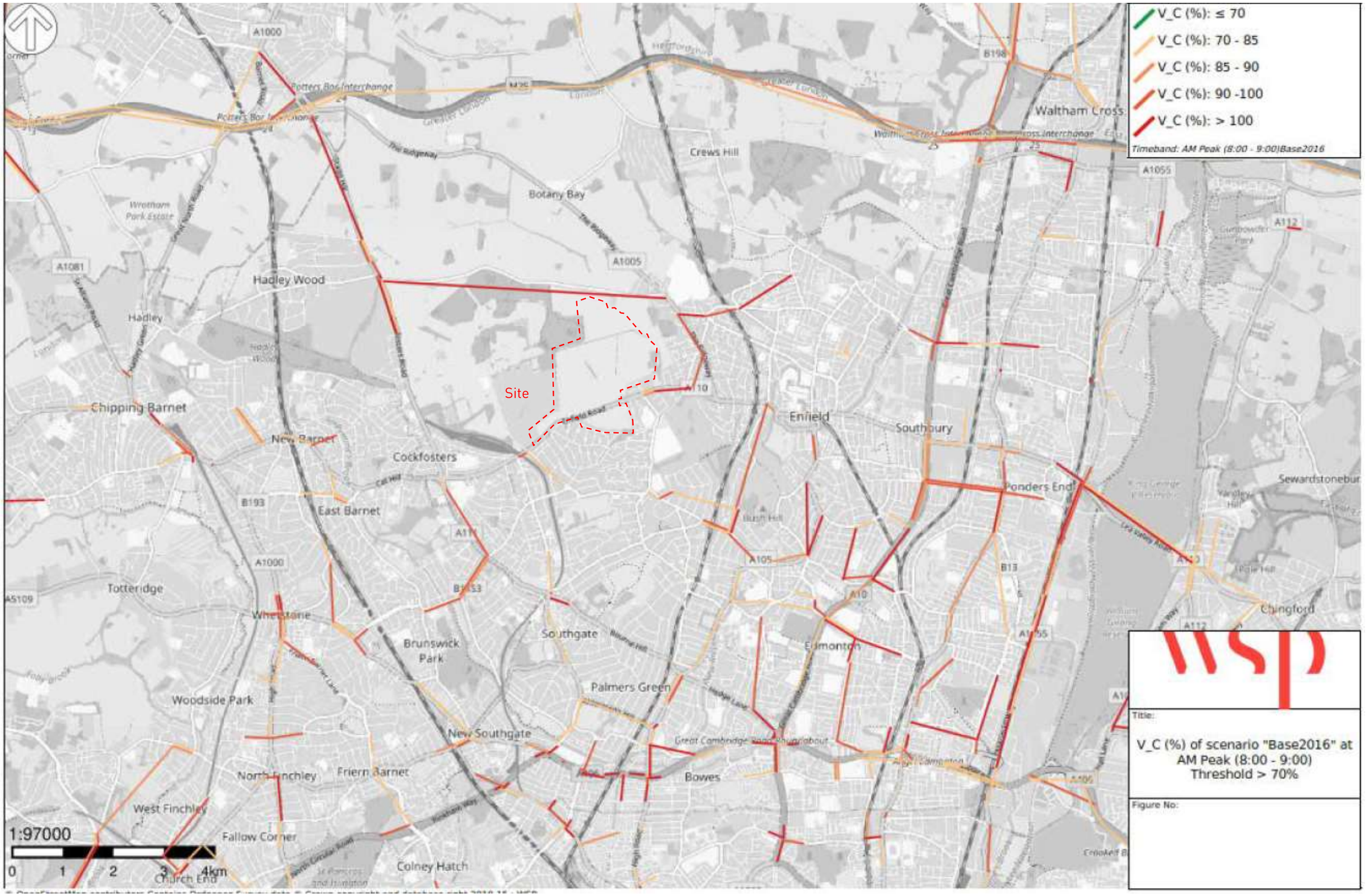
Figure 5-7 2016 Delay, AM Peak

Note: from WSP Baseline Transport Report, dated June 2021

Figure 5-8 2016 Delay, PM Peak

Note: from WSP Baseline Transport Report, dated June 2021

Figure 5-9 2016 Volume/Capacity, AM Peak



Note: from WSP Baseline Transport Report, dated June 2021

Figure 5-10 2016 Volume/Capacity, PM Peak

Note: from WSP Baseline Transport Report, dated June 2021

6.0 Cycle Network

Although there are different sources for cycle maps (e.g. TfL, Sustrans), Enfield Council's online cycle map is the most comprehensive and relevant. This has reproduced and annotated (see Fig 6-1). This shows a mix of completed schemes and planned routes, as well as older legacy routes which are planned to be updated, bike hangers and school streets. Additionally, drawing1875/220/SK002 in Section 2 shows the local context and the potential of the range of local destinations available within a 20 minute cycle (infrastructure permitting).

There are some key cycle routes in the vicinity of the site. Most immediately, there is a route running along Enfield Road/A110, which connects Enfield Chase to Cockfosters. As it passes by the site it is largely on-footway, and shared with pedestrians. This is a legacy cycle route, and has been identified by the Council as high priority route for upgrade, with some of the key issues being the width, and a disjointed nature in requiring cyclists to alternate between different sides of the streets. Towards Enfield Chase there are also steep sections.

There is also a local cycleway to the southeast of the site, linking Enfield Chase to Southgate. This consists of no specific cycle infrastructure, as it is a series of quiet streets and off road sections which are signposted for cyclists. This is similarly a legacy route that has been identified by the Council as high priority route for upgrade, with key issues including sections where it's not suitable for cyclists to mix with general traffic. To the northeast of the site is National Cycle Network Route 12, which runs from Enfield Lock to Peterborough. This includes on street sections along quiet roads, such as Strayfield Road, and off road sections. There is a notable missing section to the immediate north of the site.

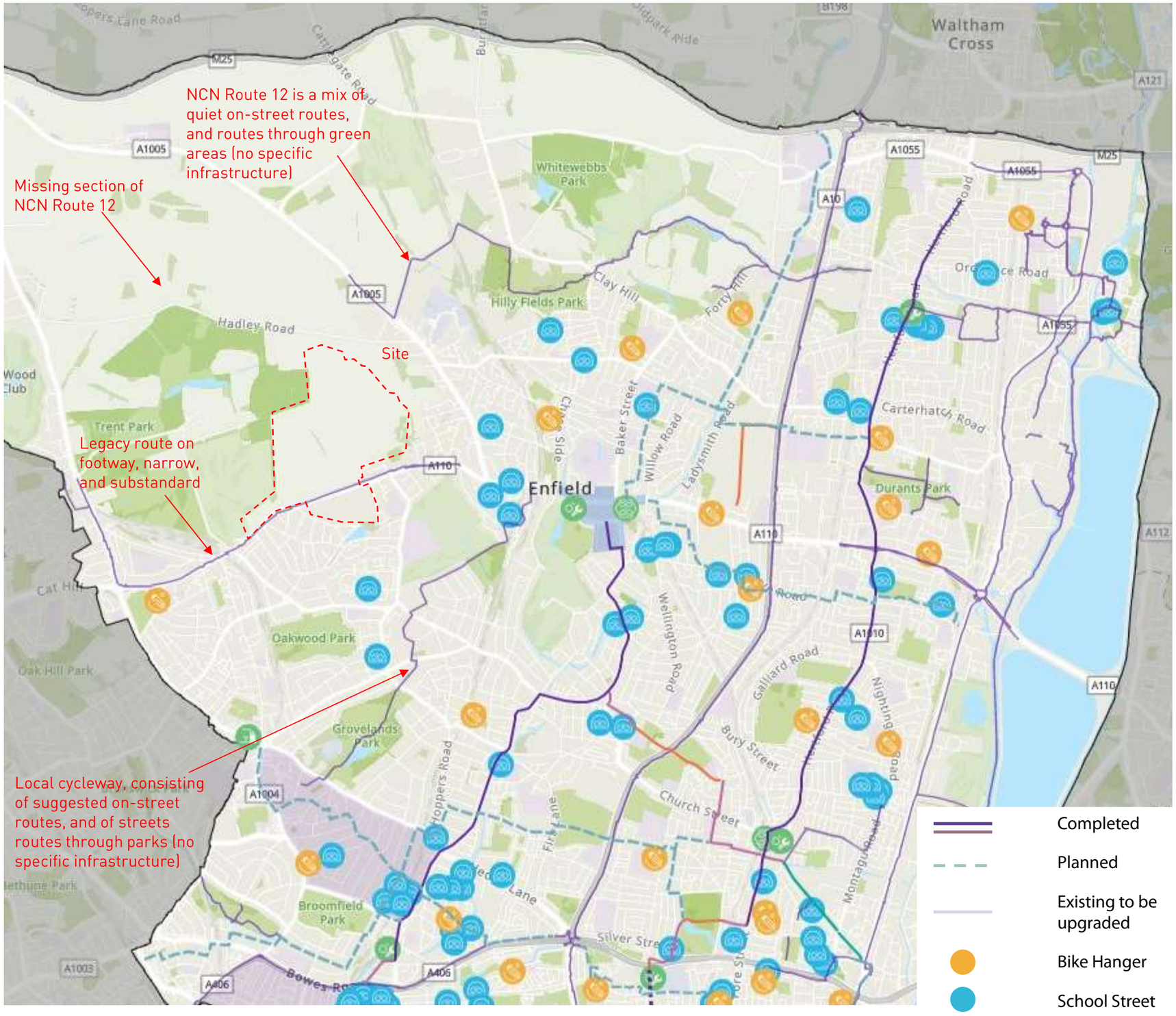


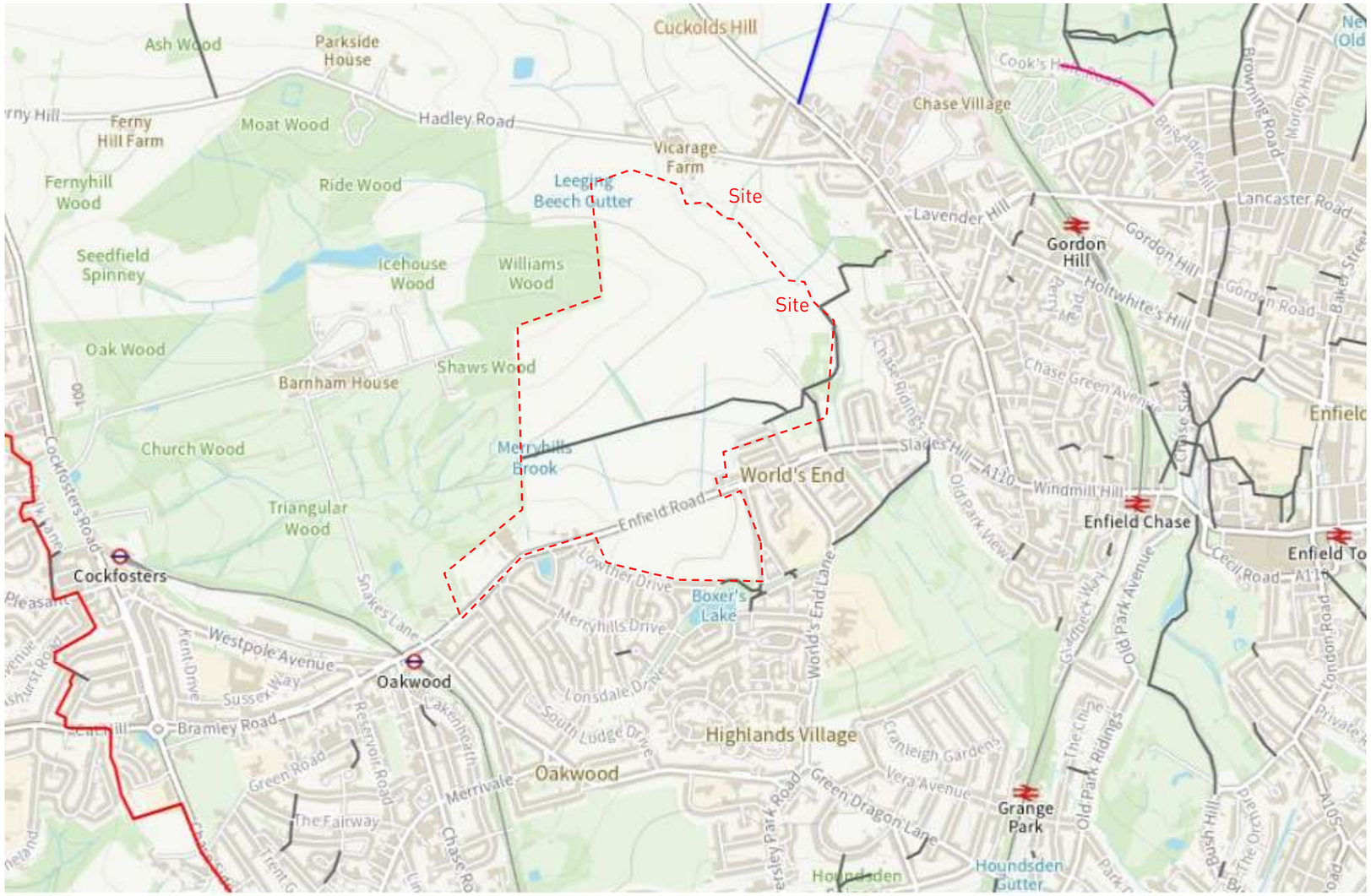
Figure 6-1: Enfield Council Cycle Map

7.0 Walking

In general, the site is located within a walkable area of Enfield. Local destinations within walkable distances (dependent on point of origin) include local shops, schools, bus stops, and Oakwood Underground Station. Drawing 1870/220/SK008 shows a 1200m/ 15 min walk isochrone from the site, overlaid on paths and footways. This shows the general walkable potential of the site. The site context drawing 1875/220/SK003 in Section 2 also shows some of the local centres and schools.

Within the vicinity of the site, there are several public rights of way (PROW), including footpaths and bridleways. These are available on Enfield's website (https://www.enfield.gov.uk/services/roads-and-transport/public-rights-of-way) and are shown in Figure 7-1. In addition to these PROWs there are other paths and leisure routes within the site which are currently available to users.

There is an Enfield Green Loop around the borough, which overlaps with the London Loop. This is a leisure route which passes to the north of the site (see drawing 1870/220/SK008), and there were recent upgrades to paths in the vicinity of the Ridgeway/Salmon's Brook during 2021-22. There is currently a programme of landscaping and green improvements (including new woodlands) proposed by the Council for areas along this route.

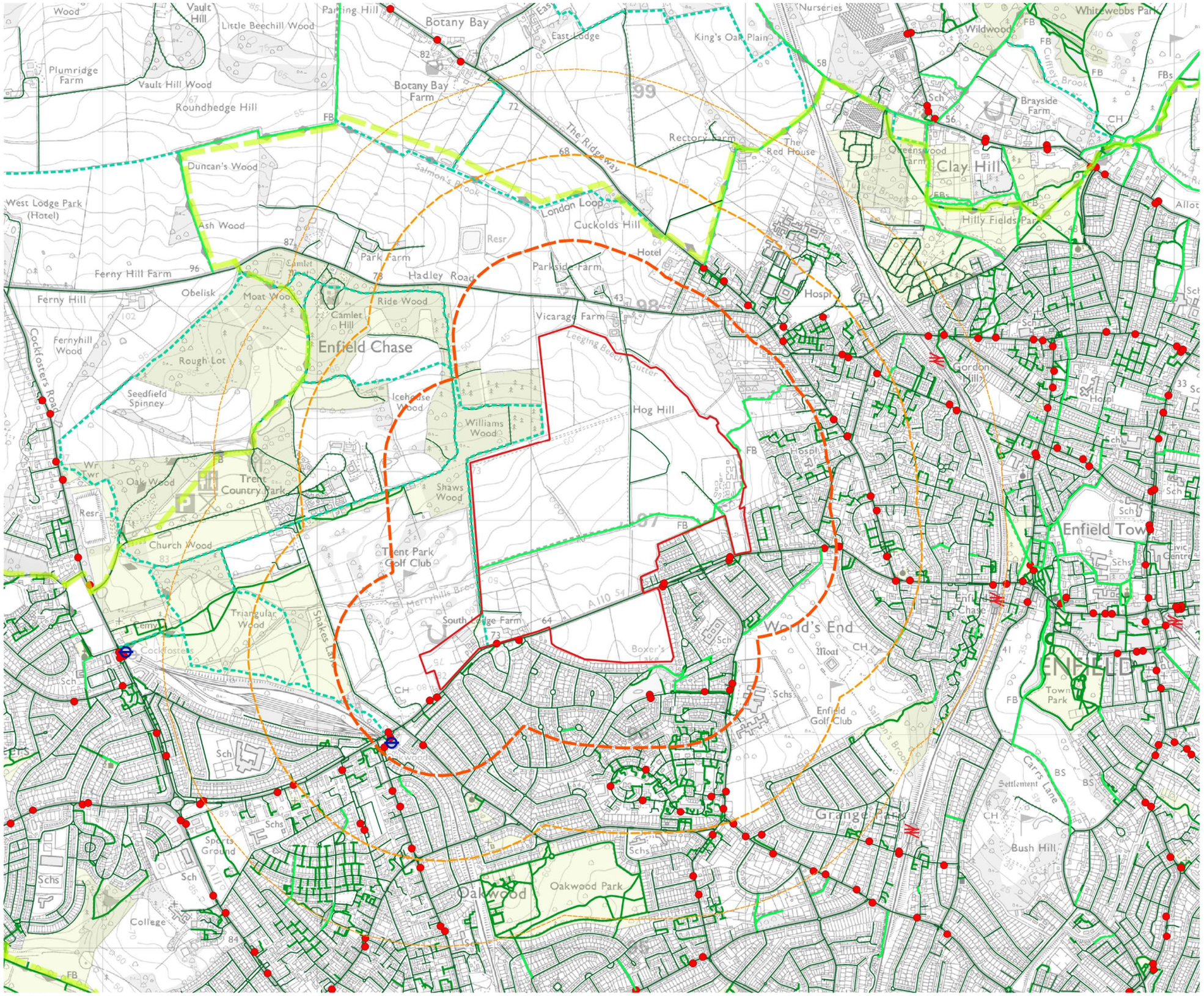


Footpath

Bridleway

Byway Open to All Traffic

Figure 7-1 Enfield Council Rights of Way



N

0 0.25 0.5 0.75 1 km

1:17,500

- Site Boundary - Chase Park
- 400m / 5 min walk
- 800m / 10 min walk
- 1200m / 15 min walk
- Public Highway (Footways)
- Public Rights of Way
- Permissive paths
- Other Paths
- Enfield Green Loop
- London Rail Stations
- Underground Stations
- Bus Stops

CHASE PARK TRANSPORT BASELINE	
WALKING ROUTES	
1875/220/SK008	
APRIL 2023	Alan Baxter

8.0 Existing Movement Profile

In order to understand the existing movement profile at the site, census data can be analysed. Both the 2011 and 2021 census are available. Although 2021 is more recent, and could in theory accord with trends towards more sustainable transport usage in London, it was also of course undertaken during the Covid 19 pandemic when movement profiles were atypical. Thus studying both is helpful.

The dataset for 2011 is "QS701EW - Method of travel to work", and for 2021 is "TS061 - Method used to travel to work". This is selected for Super Output Area – Mid Layer: Enfield 013 (see Figure 8-1). This includes residential communities in the vicinity of Oakwood Station, and also communities close to of Enfield Chase Hill station.

As can be seen in Figure 8-2, Figure 8-3, and Table 8-1, a notable proportion of residents in the area travelled using sustainable modes (public transport, walking, cycling), with 37%. Whilst this decreased to 16% in 2021, this was of course influenced by the pandemic, with working from home increasing significantly, and vehicle-based travel also decreasing. The census data, particularly from 2011, suggests that the movement profile in the area is amenable to sustainable modes.

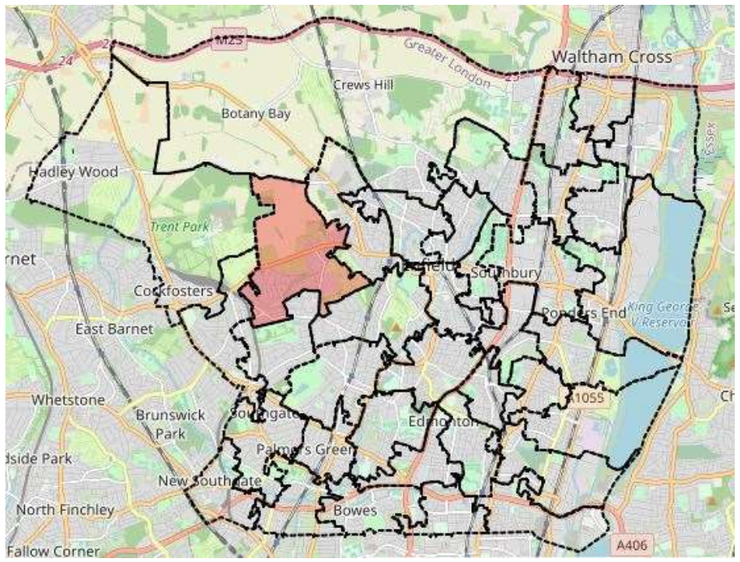


Figure 8-1 Super Output Area – Mid Layer: Enfield 013

Figure 8-2 Travel to Work: 2011 Census

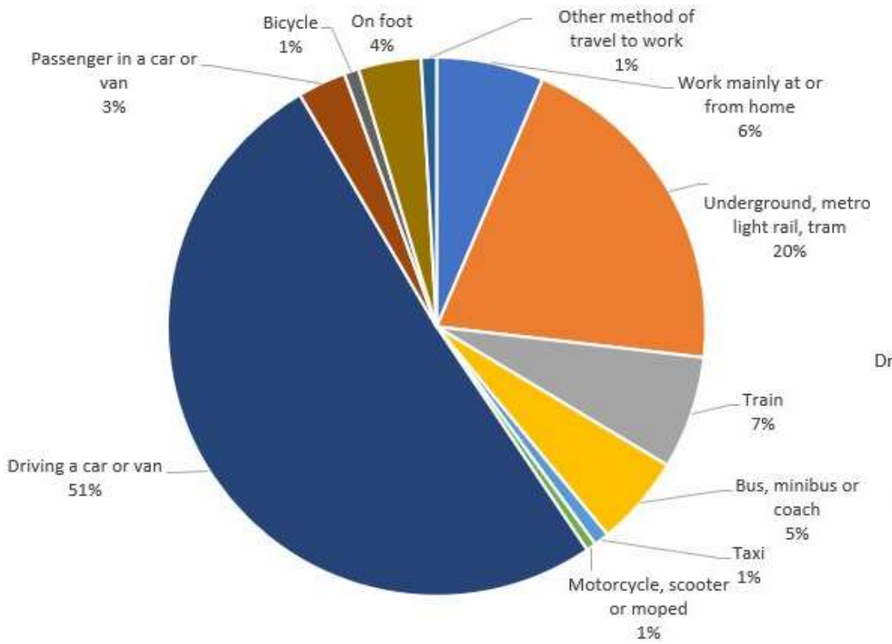


Figure 8-3 Travel to Work: 2011 Census

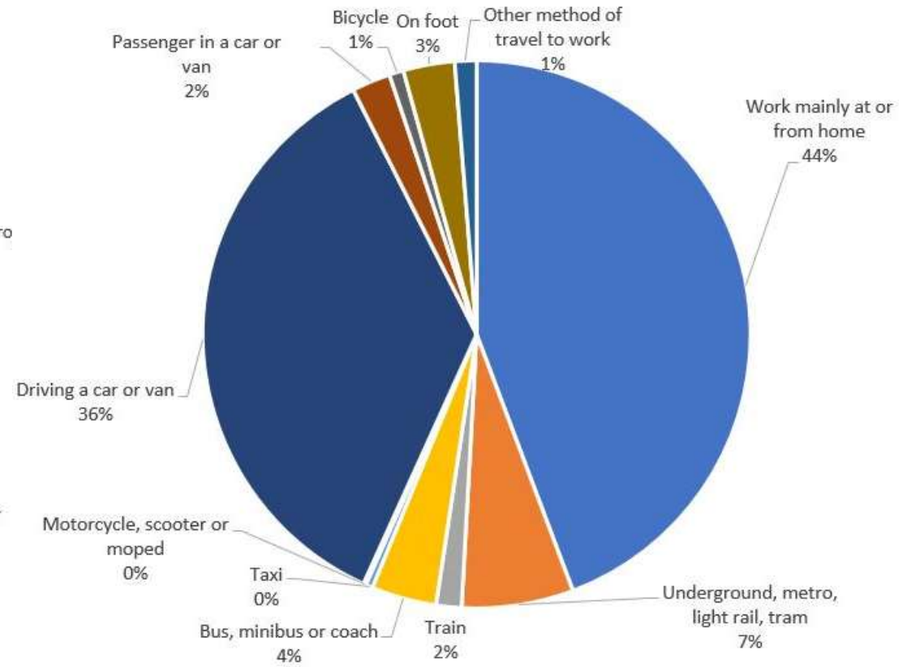


Table 8-1 Travel to Work Summary

Mode:	2011 Census	2021 Census
Work mainly at or from home	6.5%	44.3%
Underground, metro, light rail, tram	20.4%	6.6%
Train	6.8%	1.5%
Bus, minibus or coach	5.4%	3.8%
Taxi	0.9%	0.4%
Motorcycle, scooter or moped	0.6%	0.2%
Driving a car or van	51.0%	35.8%
Passenger in a car or van	2.9%	2.3%
Bicycle	0.9%	0.8%
On foot	3.8%	3.0%
Other method of travel to work	0.9%	1.3%
Summary:		
Work mainly at or from home	6.5%	44.3%
Sustainable Travel Modes	37.2%	15.7%
Vehicle-Based	56.3%	40.0%

9.0 Existing/Ongoing Transport Studies

Two notable transport studies being undertaken at present are briefly summarised as follows:

London Borough Enfield Local Plan Strategic Transport Assessment (WSP, 2021- Ongoing)

This borough-wide study includes a quantitative review of of the potential impacts and associated mitigation effectiveness on the highways and public transport networks through the use of the Transport for London (TfL) strategic modelling suite including:

- MoTioN, a Multi-modal strategic transport 'mode of travel' in London model
- LoHAM, a strategic London-wide highway assignment model
- Railplan, a public transport strategic model

The model is to 2041, and assumes a population increase of 57k residents, or 17%; an increase in the number of cars by 14%; and an employment increase of 11k jobs, or 9%. A number of highway and public transport schemes are assumed in the model.

Additionally, the study includes a qualitative review of the transport networks, with a focus on:

- Alignment with National, London and Local policy frameworks, their underpinning evidence and emerging best practice in sustainable transport planning.
- Review of the site allocation Strategic Housing Land Availability Assessment (SHLAA) and Employment Land Availability Assessment and growth scenarios on the basis of their Public Transport Accessibility Levels (PTAL) and amenities access.
- Review of the committed, planned and 'aspirational' mitigation measures which could support the planned growth.

The study is extensive and spans several documents, with the modelling sitting behind this. The most recent version currently available is from 2021. Ultimately, the Executive Summary suggests preliminary mitigation schemes are upgrades to an M25 junction, an increase to 4tph on the West Anglia Mainline, a range of TfL/GLA plans for transport upgrades (tube, underground, bus, cycle), and other improvements. It is understood that the model is currently subject to further updates.

Draft Infrastructure Delivery Plan (LBE, 2021)

This is a draft delivery document to guide infrastructure across the borough to 2039. It contains sections on various areas (e.g. energy, education, healthcare), and projects are categorise as critical/essential/important/desirable. With regards to transport, there are the following key proposals suggestions:

- Rail services are proposed to be increased to 4tph at all times. Step-free access is proposed to be Increased. Devolution of Great Northern services to TfL is also proposed.
- Regarding buses, there are a number of improvement projects. The general plan is to improve east-west connectivity, and serve/facilitate development. In relation to Chase Park, rapid transit bus lanes are proposed on the corridor of Ponders End-Enfield Town-Enfield Chase-Oakwood-Barnet, which would include the A110 passing through the site.
- In terms of walking and cycling, a general challenge is east-west barriers. General improvements such as increases to cycle parking are proposed. Overall it is proposed to increase cycling by 5x current levels.
- In terms of highways, improvement are proposed at the junction of the M25 and A10 (now delivered).

The IDP will be further developed during the next stage of the Local Plan (regulation 19) process, following further research and engagement, and based on the preferred growth scenario.

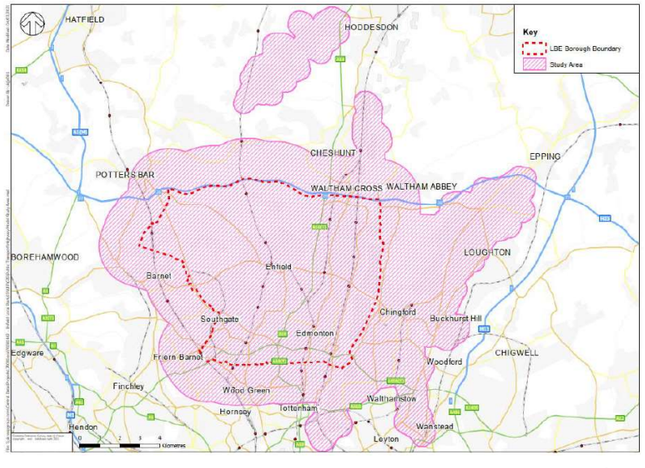


Figure 9-1 Strategic Transport Assessment Proposed Study Area – Highway Model

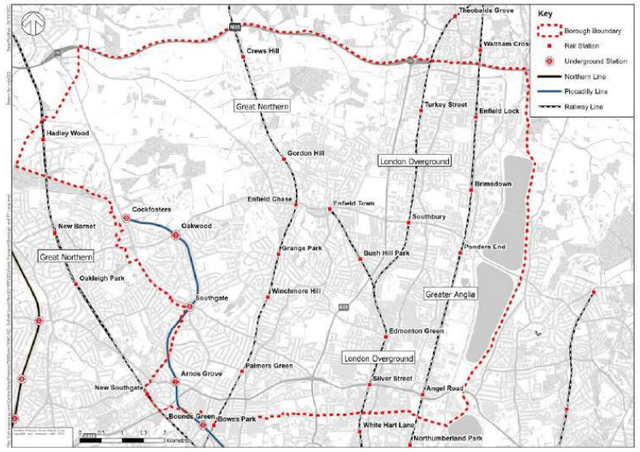


Figure 9-2 Strategic Transport Assessment Proposed Study Area – Public Transport Model

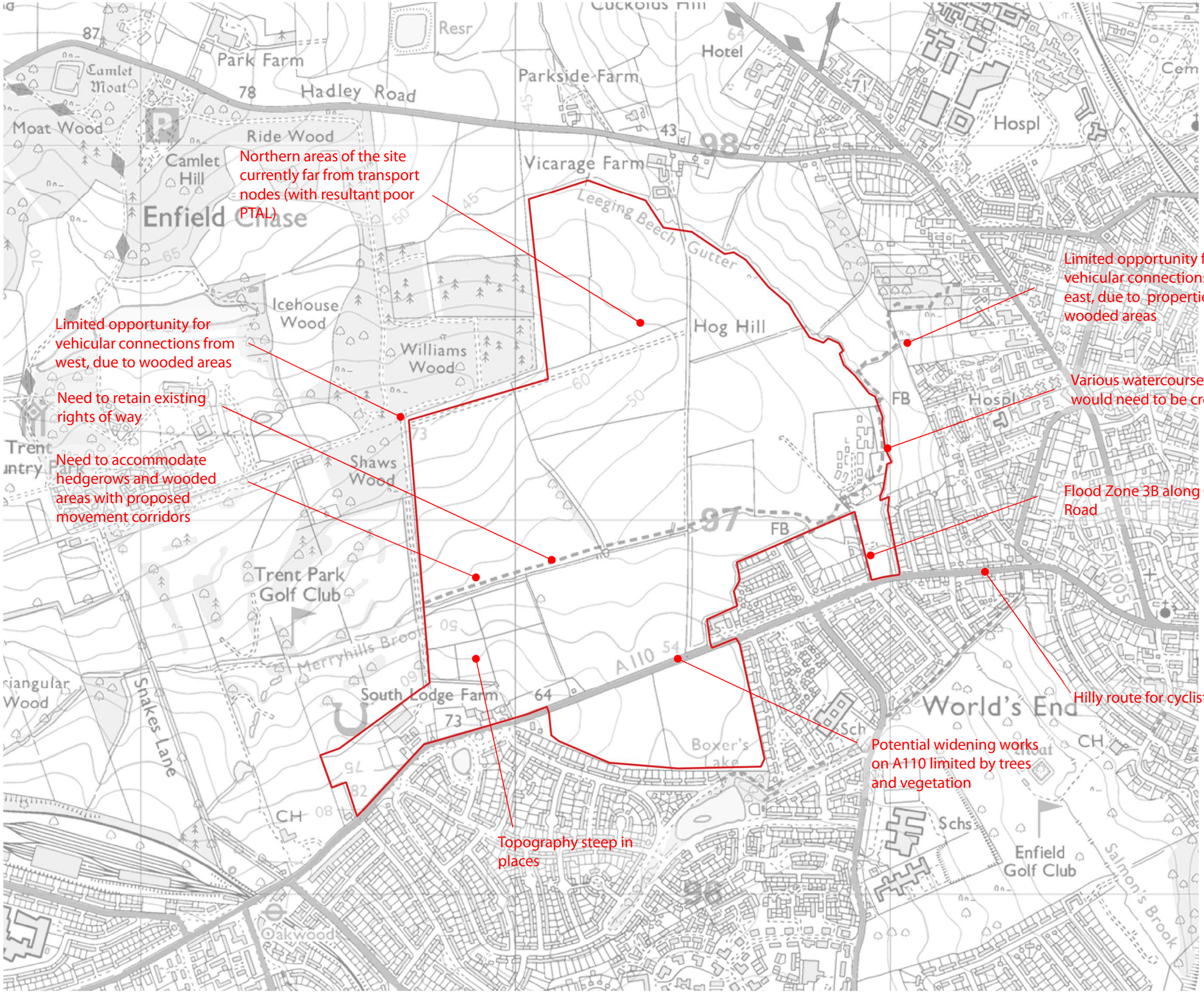
10.0 Conclusions

In reviewing the baseline movement conditions at Chase Park, the following key points can be summarised:

- The existing PTAL is low across the majority of the site. This is in part due to a lack of existing paths through the site. However, PTAL increases towards Oakwood and Enfield Chase stations.
- Oakwood underground station has high quality service, with 18 trains per hour and connections to many other services. Enfield Chase railway station has additional good services.
- Generally, all railway corridors are radial in nature, and serve to facilitate commuting journeys to/from Central London.
- There is a notable bus corridor along the A110, which is one of two heavily used east-west bus corridors through the borough (the other being the North Circular).
- The "Enfield Transit Corridor" study was previously undertaken, in which the A110 and the North Circular were identified as suitable for east-west bus corridor infrastructure improvements.
- Generally, buses in Enfield serve a more local, borough-wide function, in comparison to rail, likely with many purposes.
- There has been an increase of cycle infrastructure in the last 5-10 years within Enfield. Recent investment in cycling infrastructure has been directed elsewhere in the borough as a cycle route already existed along the A110. However, as this cycle route is now of some age it has been identified by LB Enfield as suitable for upgrade to current standards.
- Many local destinations are within a 20-minute cycle/4800m distance of the site, including local schools and town centres (e.. Enfield Town, Oakwood).
- National Cycle Network Route 12 passes to the north of the site and shares a route with the London Loop in places. This is a long-distance cycling route suitable for leisure usage.
- Many walking routes and rights of way are in the vicinity of the site, including the Enfield green loop/London Loop.
- The A110/Enfield Road is the key highway to the south of the site, and it is also part of the Strategic Road Network. Other notable highways are Hadley Road to the north and The Ridgeway to the east. Apart from this the site is relatively inaccessible by vehicle.

In terms of the transport constraints and opportunities of the site, these are summarised in drawings 1870/220/SK009 and SK010 overleaf. These consider PTAL, vehicle connections, rights of way, cycle routes, sustainable transport corridors, topography, watercourses, and various local conditions. These transport constraints and opportunities may inform the proposals for the site moving forward.

Figure 10-1



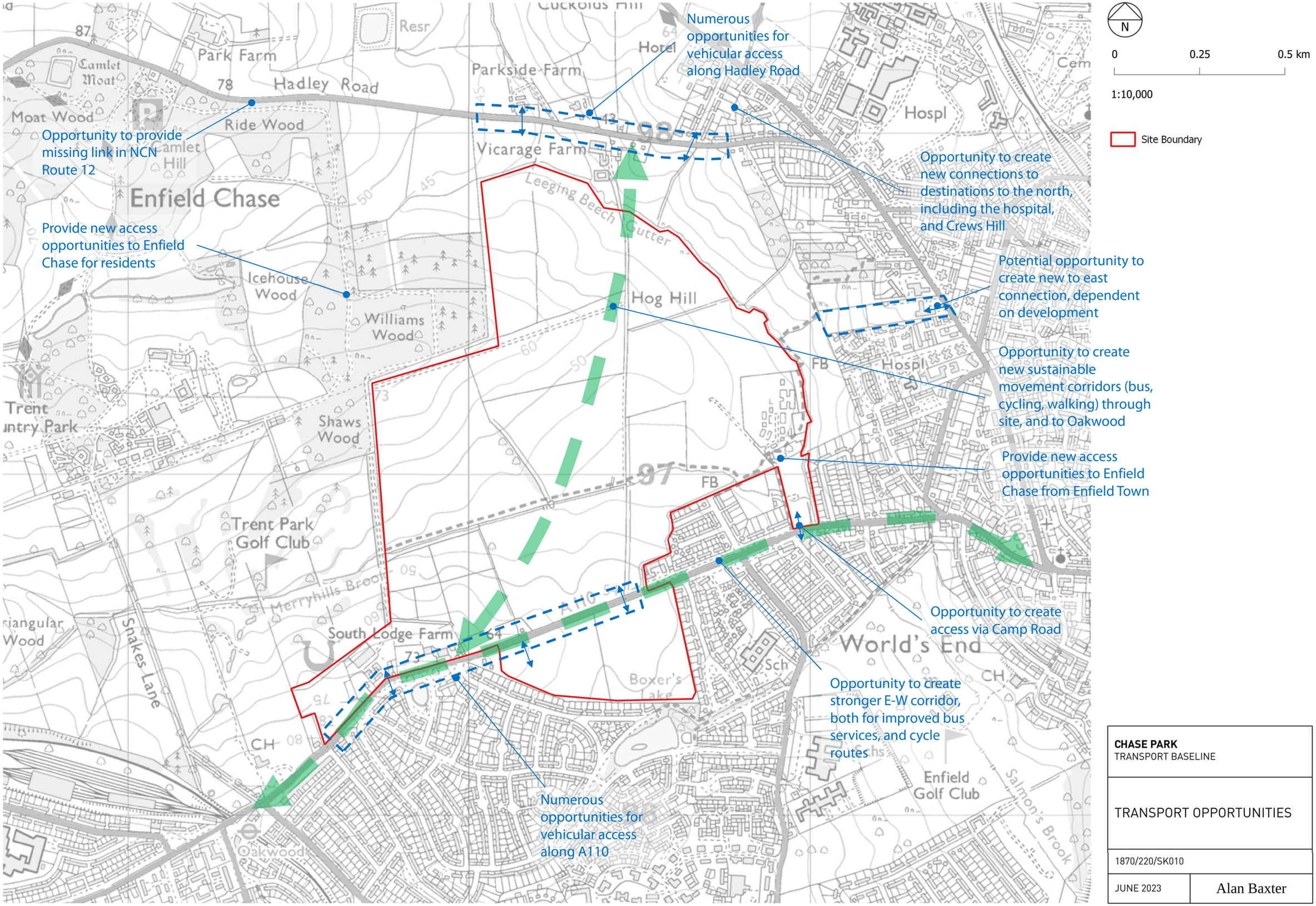
N

0 0.25 0.5 km

1:10,000

Site Boundary

CHASE PARK TRANSPORT BASELINE	
TRANSPORT CONSTRAINTS	
1870/220/SK009	
JUNE 2023	Alan Baxter



CHASE PARK TRANSPORT BASELINE	
TRANSPORT OPPORTUNITIES	
1870/220/SK010	
JUNE 2023	Alan Baxter

Alan Baxter

Prepared by	MBr
Reviewed by	TWm/SHs
Issued	23.10.2023 v4

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