



RINGERS ROAD, BROMLEY
DELIVERY AND SERVICING PLAN

05 May 2023



RINGERS ROAD, BROMLEY

DELIVERY AND SERVICING PLAN

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1. Introduction

1.1. Context

1.1.1. Evoke Transport Planning Consultants Ltd (Evoke) has been commissioned by Ringers Road Properties Ltd to produce a Transport Assessment (TA) to support a planning application for the for the demolition of existing buildings and construction of a mixed use development comprising residential units, ancillary residents' facilities (including co-working space) and commercial floor space (Use Class E) across two blocks, along with associated hard and soft landscaping, amenity spaces, cycle and refuse storage. The local planning authority (LPA) and local highway authority (LHA) are the London Borough of Bromley (LBB).

1.2. Objectives

1.2.1. This DSP sets out the principles that will be adhered to in relation to delivery and servicing movements at the site. This DSP has been developed to outline the site-specific delivery and service management arrangements that residents will have to adhere to. The agreed contents of the DSP should be complied with unless otherwise agreed LBB in advance.

1.2.2. DSPs developed through the planning process seek to support sustainable development. This DSP has taken in to consideration the 'Transport for London (TfL) Delivery and Servicing Plans – Making freight work for you' guidance together with the Freight and Servicing Action Plan (2019) and the Deliveries Toolkit. The Action Plan states:

➤ "Road and kerb space is limited with many competing demands from different road users, business and residents. We need to ensure local businesses and households can receive the goods and services they need with the least impact on the street environment and other road users."

1.2.3. This DSP will therefore seek to achieve the following objectives:

➤ Demonstrate that goods and services can be delivered at the site and the site can be serviced with waste removed, in a safe, efficient and environmentally friendly way;

➤ Reduce the impact of freight activity on local residents, neighbouring properties, traffic and the environment;

➤ Consolidate deliveries and reduce delivery and servicing vehicular activity; and

➤ Manage deliveries and servicing of the site to off peak period where feasible.

1.2.4. DSPs aim to provide a framework for fully considering the potential impact of delivery and servicing activity associated with a development. DSPs provide a framework to efficiently manage all types of freight vehicle movement to and from individual buildings.

1.2.5. A DSP can help to improve the safety, efficiency and reliability of deliveries to a Site. It also identifies unnecessary journeys and deliveries that could be made by more sustainable modes, helping to reduce congestion on the surrounding highway and minimise the environmental impact of freight activity.

1.2.6. The key aim of this DSP will be to reduce any impact on the on-street network. The DSP will also aid in reducing CO₂ emissions, congestion and road collisions by improving relationships between building operators and their supply chain.

1.3. Previous Application Plan

1.3.1. A planning application was submitted in November 2021 (Ref: 21/05585/FULL1) for the demolition of the existing buildings on site (2-4 Ringers Road and 5 Ethelbert Road), and construction of two new

buildings which will provide a combined total of 94 residential units. Block A will comprise a 14-storey building fronting Ringers Road which will contain 45 residential units with Block B comprising a 12-storey building fronting Ethelbert Road which will contain 49 residential units. A breakdown of the unit types proposed has been provided below:

- 37 x one-bedroom apartments;
- 57 x two-bedroom apartments.

- 1.3.2. In addition to this, a café (160sqm) will also be provided within Block B at ground and first floor level and a total of 389.4sqm co-working office space will be provided at basement and first floor level across both Blocks.

1.4. Proposed Revised Plans

- 1.4.1. On 14th February 2023 the Greater London Authority (GLA) announced, with immediate effect, that all planning applications for residential buildings over 30 metres must include at least two staircases to be considered by the Mayor of London for approval. As such the plans have been revised to accommodate a second stair case.

- 1.4.2. The revised proposals still seek the demolition of the existing buildings and construction of two new buildings which will provide a combined total of 94 residential units. Block A will comprise a 14-storey building fronting Ringers Road which will contain 45 residential units with Block B comprising a 12-storey building fronting Ethelbert Road which will contain 49 residential units. A breakdown of the unit types proposed has been provided below:

Block A:

- 37 x one-bedroom apartments;
- 8 x two-bedroom apartments;

Block B:

- 13 x one-bedroom apartments;
- 36 x two-bedroom apartments.

- 1.4.3. In addition to this 97sqm of flexible use class E space will be provided in Block A at basement and ground floor level and 413 sqm of flexible use class E space will be provided in Block B at basement, ground and first floor level.

- 1.4.4. Drawings of the proposed site layout and plans of the buildings are attached at **Appendix A**. With the exception of the disabled car parking space and accessible car club space which will be provided along the site frontage on Ethelbert Road, the proposals will be car-free as such no vehicle accesses to the site will be provided.

- 1.4.5. To encourage the uptake of active travel from the outset, high quality public realm will be provided, integrating the site to any future Churchill Quarter proposals for access to and from Bromley High Street. High quality cycle parking will also be provided from the outset, in accordance with the London Plan and London Cycling Design Guidance, further reducing any barriers to cycling for future residents.

1.5. Report Structure

- 1.5.1. Following this introductory section, the remainder of this Delivery & Servicing Plan is structured as follows:

- **Chapter 2:** Policy and Existing Situation;
- **Chapter 3:** Proposed Development;

- **Chapter 4:** Servicing Trip Generation;
- **Chapter 5:** Management Strategy; and
- **Chapter 6:** Summary and Conclusions.

2. Policy and Existing Situation

2.1. Policy

2.1.1. The key transport policy documents at a national and Local level have been considered when assessing the development proposals, these include the key policy documents outlined below:

- National Planning Policy Framework (July 2021);
- Planning Practice Guidance Travel Plans, Transport Assessments and Statements in Decision-Taking' (March 2014);
- National Design Guide (October 2019);
- The London Plan (March 2021);
- TfL's Healthy Streets for London;
- Mayor of London's Transport Strategy (MTS, 2018);
- LBB Local Plan (January 2019);
- LBB Third Local Implementation Plan (LIP3) 2019;
- LBB Residential Design Guide (2004);
- LBB The Storage and Collection of Refuse from Residential and Commercial Buildings (October 2011).

2.1.2. The London Freight and Servicing Action Plan aims to create a safer, cleaner, quieter and more efficient freight network to serve the capital.

2.1.3. A DSP is described as providing a 'framework to make sure that freight vehicle activity to and from your building is working effectively' (p 2). DSPs can be used to:

- Manage deliveries to reduce the number of delivery and servicing trips, particularly in the morning peak; and
- Identify and promote where safe and legal loading can take place

2.1.4. Other advantages to developing and implementing a DSP include time and cost savings, reduced congestion, improved reliability, improved safety and a reduction in the Site's impact on the environment.

2.1.5. London Borough of Bromley's Third Local Implementation Plan (LIP3) was approved in April 2019. The Plan recognises that freight and servicing play a vital role in the Borough economy

- "Freight and servicing play a vital role in the Borough economy, allowing shops and restaurants to support vibrant town centres and allowing residents to get the goods they need for work and leisure when they need them".
- "Making deliveries more efficient is vitally important to reduce the impact of freight on congestion, air quality and safety."

2.1.6. LIP3 states that any development that is likely to create a significant number of trips will, where necessary, be required to submit and implement a Delivery Servicing Plans.

2.2. Context Maps

2.2.1. The following maps show the area around the development site. Figure 1 shows a regional plan with the location of the site in the context of greater London and the road network. Figure 2 shows the location of the site in relation to the surrounding local area.

Figure 1 – Greater London Context

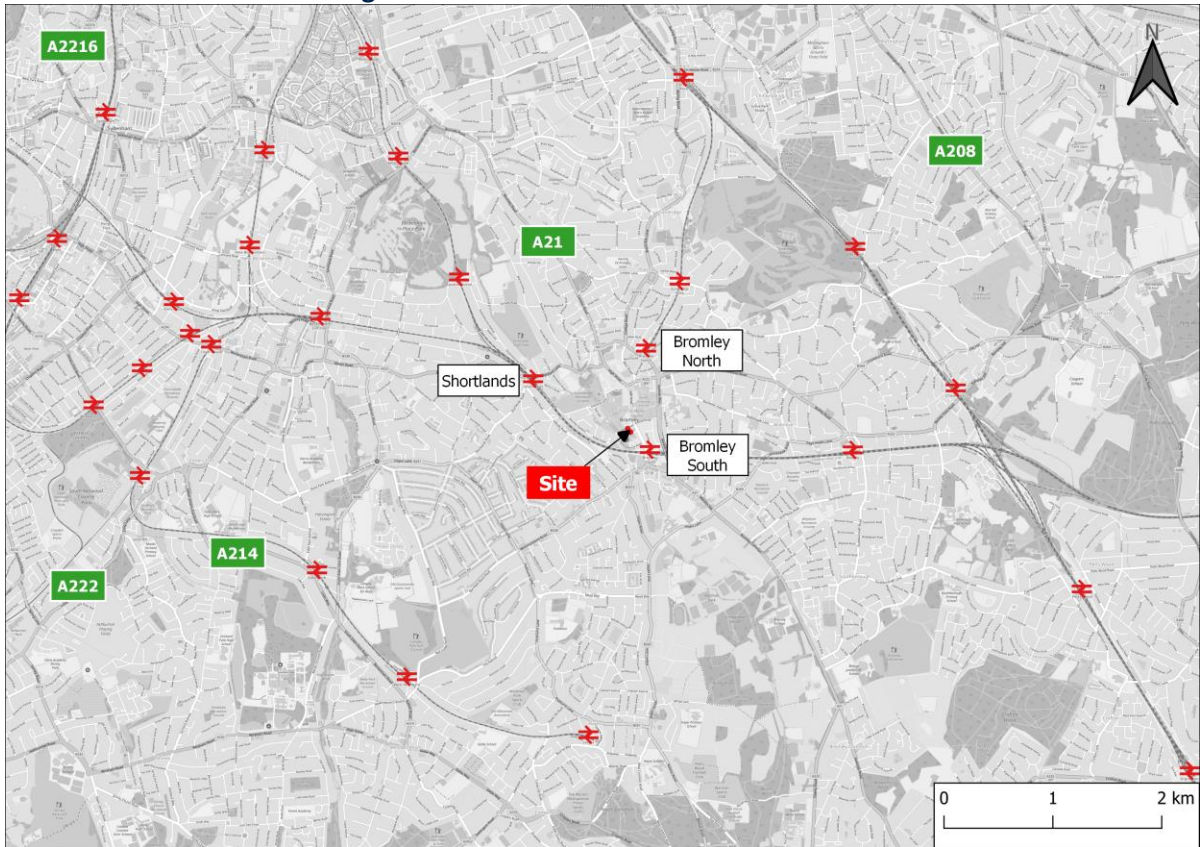
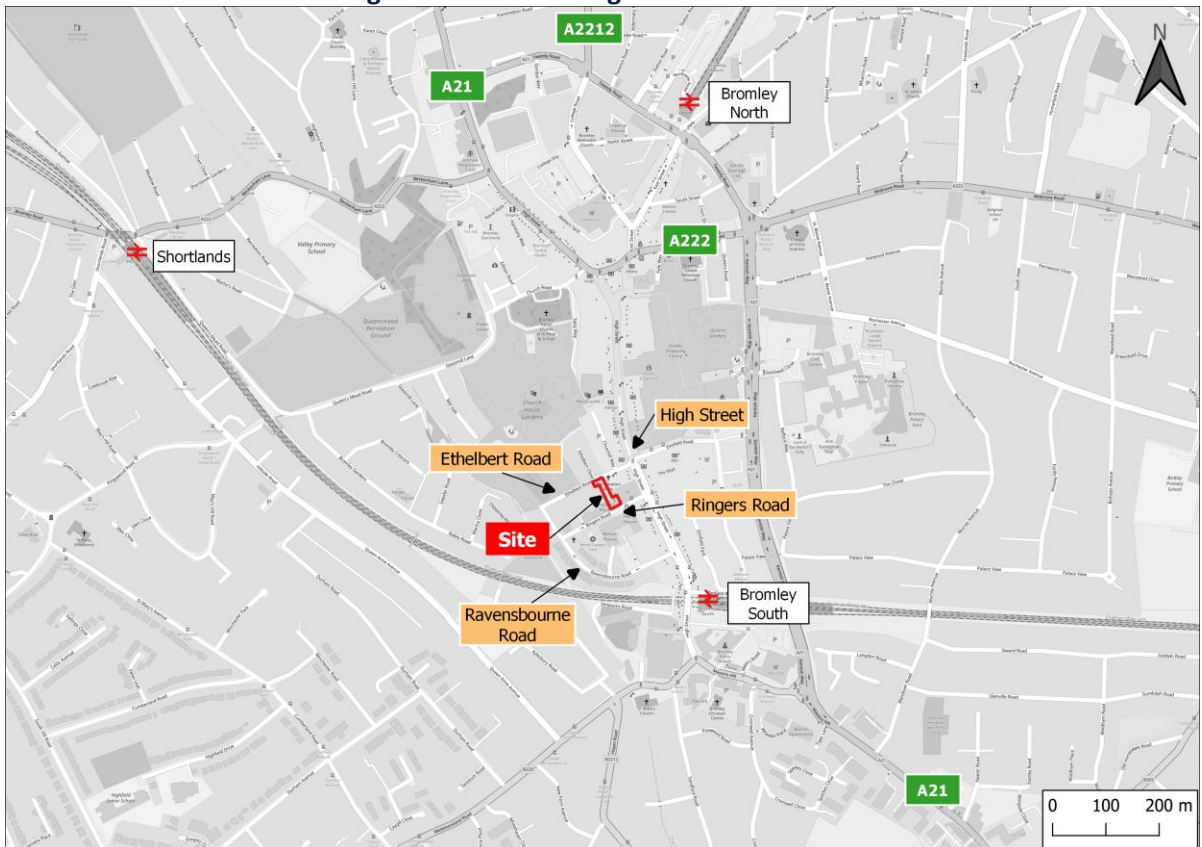


Figure 2 – Surrounding Local Area



2.3. Road Network

- 2.3.1. Ethelbert Road lies to the north of the site and connects the High Street to Ravensbourne Road. It is a single carriageway road subject to 20mph speed limit restriction and is a one-way street facilitating the movement of traffic southwest from the High Street towards Ravensbourne Road. The carriageway measures approximately 8.5m in width and has parking bays line both sides of the carriageway. Along the northern border of the site, Ethelbert Road is lined with single yellow lines restricting parking outside the site.
- 2.3.2. Ringers Road borders the site to the south and provides a one-way route from Ravensbourne Road northeast towards High Street. It is a single carriageway road that is subject to 20mph speed limit restrictions and coach parking bays line the northern side of the carriageway directly to the south of the site. The carriageway measures approximately 7.8m in width. Notably the coach bays were occupied by cars during the site visit as outlined in Figure 3.

Figure 3 – Ringers Road Coach Bay



- 2.3.3. High Street runs north to south and is located to the east of the site. It is a dual carriageway road with a paved central reservation. The western side of the carriageway consists of a single lane routing northbound and measures approximately 3.6m in width. A taxi rank, able to accommodate circa 11 taxis, is located on the western side of the carriageway, north of its junction with Ringers Road and to the south of Ethelbert Road as shown in Figure 4.

Figure 4 – High Street Taxi Rank



- 2.3.4. The eastern side of the carriageway consists of two lanes routing southbound, one of which is a bus lane that routes approximately 38m south of Ethelbert Road. This lane then becomes open to all traffic and south of its junction with Ravensbourne Road, bus stops line both sides of the carriageway of High Street.
- 2.3.5. Ravensbourne Road routes southeast from the western extent of Ethelbert Road, past Ringers Road, and routes eastwards to connect to High Street. Between Ethelbert Road and Ringers Road it is a one-way road permitting traffic to travel southbound towards Ringers Road. Between Ringers Road and the High Street the one way flow of traffic also routes towards Ringers Road, westbound from the High Street.
- 2.3.6. Churchill Way lies to the northeast of the site, branching north from Ethelbert Road, and provides vehicle access to the rear of a number of retail units along High Street. The carriageway measures approximately 5.5m in width and provides a motorcycle bay and four car parking bays along the western side of the carriageway. When leaving Churchill Way, vehicles must turn left onto Ethelbert Road to adhere with the one-way flow of traffic.
- 2.3.7. Figure 5 below outlines the parking restrictions within 50m of the site.

Figure 5 – Parking Restrictions



2.4. Walking, Cycling and Local Amenities

Pedestrian Network

- 2.4.1. To enable an assessment of the viability of walking between the site and key destinations in the local area, it is appropriate to establish the maximum distance that people are generally prepared to walk and the destinations that exist within these distances. As detailed above, the site is located within

Bromley Town Centre, therefore the proximity to a wide range of facilities and the associated routes have been analysed.

- 2.4.2. The IHT’s guidance, Guidelines for Providing for Journeys on Foot (2000) states in paragraph 3.32 and Table 3.2 that the preferred maximum walking distance to facilities and local services is circa 2km. The distances for various land uses, are summarised in Table 1.

Table 1 – IHT’s Acceptable Walking Distances

Definition	Town Centres	Commuting / School	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

- 2.4.3. Footways measuring approximately 2.0m in width are provided on either side of the carriageway along Ethelbert Road and they are also provided with street lighting. Lit footways measuring 2.0-2.4m in width are also provided along either side of the carriageway on Ringers Road. The footways on Ethelbert Road and Ringers Road are outlined below in Figure 6.

Figure 6 – Ethelbert Road and Ringers Road Footways



- 2.4.4. A public footpath (Figure 7) is located to the southwest of the site and provides a route from Ravensbourne Road southwest, over the footbridge that crosses the railway line past St Mark’s C of E Primary School and down to Winchester Road.

Figure 7 – Footpath Connection



- 2.4.5. A network of pedestrian footpaths are provided throughout Bromley Park which provide connections north to Glassmill Lane and the High Street.
- 2.4.6. To the east of the site, wide footways measuring 5.0m in width are provided along either side of the carriageway along the High Street. Formal signalised pedestrian crossings are provided at the junction with Elmfield Road and just north of the junction with Ravensbourne Road in the form of pelican crossings that facilitate the safe movement of pedestrians across the carriageway.
- 2.4.7. To the north of Ethelbert Road and Elmfield Road, High Street becomes pedestrian-only (Figure 8), routing north until it joins the A222 Market Square. Cyclists must dismount whilst using the pedestrianised area. High Street provides access to a wide range of shops, facilities and services and the car-free nature of this street makes it a safe place for people to walk and shop.

Figure 8 – Bromley High Street

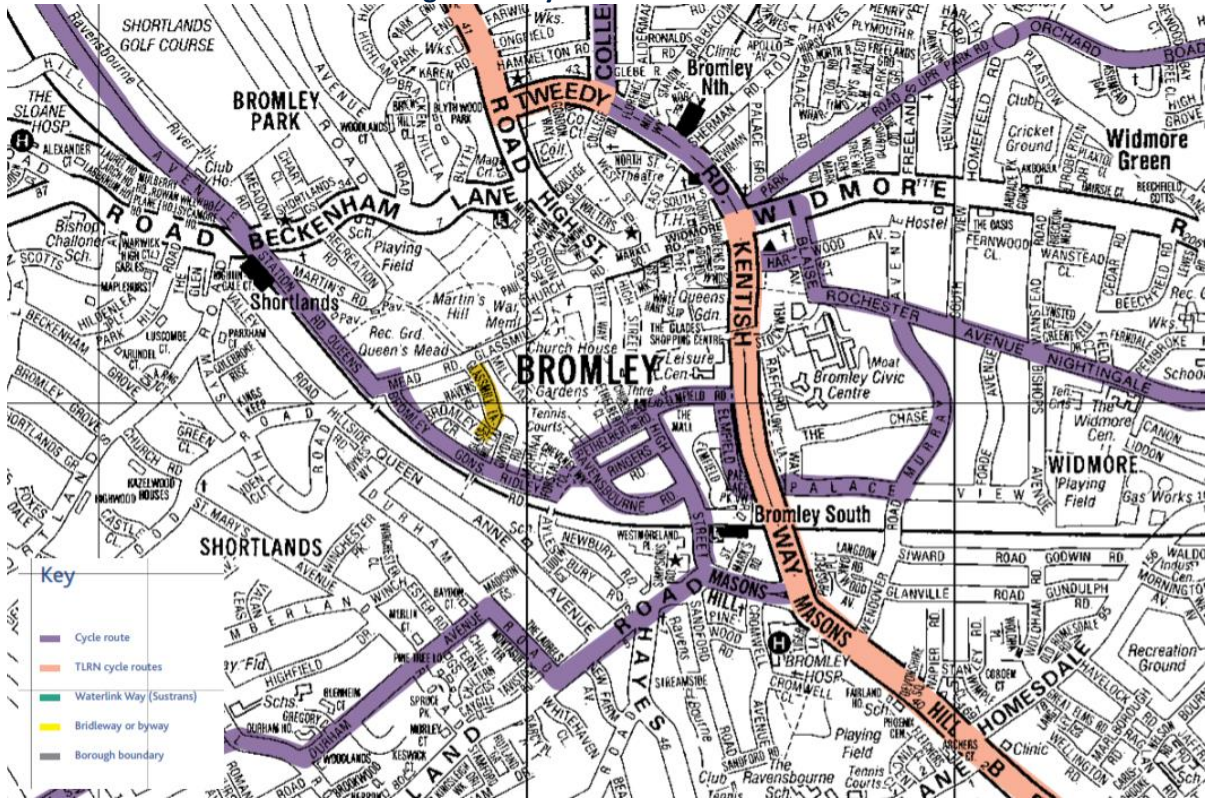


- 2.4.8. The site is well connected by good pedestrian routes and facilities. Legible London signs are provided throughout Bromley Town Centre which assist pedestrians with getting around and signposting key destinations.
- 2.4.9. Further to this, the number of retail stores, services and public transport connections that can be reached within a reasonable walking distance ensure that walking is a viable mode to and from the site for potential residents and can readily form part of a multi-modal trip.

Cycle Network

- 2.4.10. Cycling is considered an important mode of sustainable travel and is generally considered suitable for distances of up to three miles (4.8km) for regular journeys in urban areas and five miles (8.0km) for commuting journeys (source: LTN2\08, Cycle Infrastructure Design). LBB have produced a map outlining cycle routes within the borough, this has been reproduced in Figure 9 below.

Figure 9 – Cycle Network



Source: London Borough of Bromley

- 2.4.11. Figure 9 demonstrates that the site is well-connected in terms of cycle routes and cycle infrastructure. On-road cycle routes run along Ethelbert Road, Ringers Road, Ravensbourne Road and High Street to the east and south of the site, providing cycle links to Bromley South Station. Along High Street, the eastern side of the carriageway that routes south provides a bus lane outside its junction with Ringers Road that also permits cyclists to cycle in.
- 2.4.12. Further east of the site, Kentish Way makes up part of the TLRN Cycle Network and provides shared cycle/footways along with side of the carriageway that provides a safe off-road route for cyclists. This route provides a connection north to Bromley North Station.
- 2.4.13. Cycle parking is provided at strategic points throughout Bromley Town Centre, at Bromley South Station and at Bromley North Station. It is considered that the site already benefits from good cycle connections to an array of services and amenities, ensuring that the opportunities for future residents to travel via sustainable modes of transport will be maximised.

Local Amenities

- 2.4.14. In transport planning terms, the most sustainable sites are those generating the lowest number of private vehicle trips, which would be achieved by enabling a greater proportion of walking, cycling and public transport journeys.
- 2.4.15. As aforementioned, the IHT’s ‘Guidelines for Providing Journeys on Foot’ (2000) provides guidance when considering accessibility of specific locations by foot. The IHT suggests an average walking speed of 4.8km/h, or 5 minutes for every 400m. The ‘maximum’ distances represent a walk of 10 minutes (town centres), 25 minutes (work / education / leisure) and 15 minutes elsewhere.
- 2.4.16. A range of services, facilities and amenities are located within the ‘preferred maximum’ walking distance from the site recommended by IHT. Table 2 provides a summary of nearby local amenities,

their distance from the site and their associated walking and cycling times. It should be of note that the amenities outlined in Table 2 does not provide an exhaustive list of all facilities available within the vicinity of the site.

Table 2 – Local Amenities

	Location	Distance (m)	Journey Times (minutes)	
			Walk	Cycle
EDUCATION / EMPLOYMENT				
Primary School:	St Mark's C of E	400	5	2
Secondary School:	Ravensbourne School	1,100	14	4
College:	London South East Colleges	2,400	30	10
Business:	Bromley Town Centre	150	2	1
	Bromley Civic Centre	510	7	2
	Regus, Elmfield Park	300	4	1
HEALTH & COMMUNITY				
Hospital:	The Sloane Hospital	1,700	21	6
	Princess Royal Hospital	5,400	67	20
Doctors:	Dysart Surgery	260	3	1
Dentist:	Bromley Dental Studio	600	8	2
Pharmacy:	Boots, High Street	150	2	1
Library:	Bromley Central Library	270	3	1
SHOPPING/RETAIL				
Post Office:	Bromley Post Office	350	4	1
Convenience Store:	Sainsbury's Local	160	2	1
Shopping Centre:	The Mall	110	1	1
	The Glades	160	2	1
Supermarket:	Waitrose	550	7	2
Town Centre:	High Street	250	3	1
LEISURE				
Cinema:	Vue Cinema	600	8	2
Leisure Centre:	Pavilion	550	7	2
Hotel:	Travelodge London Bromley Town Centre	240	3	1
Gym:	Pure Gym	100	1	1
Public House:	The Richmal Crompton	350	4	1
EXISTING PUBLIC OPEN SPACES				
Recreation Ground:	Queensmead Recreation Ground	700	9	3
	Bromley Park	185	2	1
TRANSPORT				
Bus Stop:	Ringer's Road (Stop C)	42	1	1
Car Club:	Elmfield Park	320	4	1
Season Ticket Car Park:	The Mall	110	1	1
Railway Station:	Bromley South	270	3	1
	Bromley North	800	10	3

2.4.17. It is evident from Table 2 that there are a wide range of facilities such as education, employment, retail, health and leisure uses close to the site, the majority of which are within a reasonable two kilometre walking or five kilometre cycling distance. On that basis, it is clear that the location of the

site is exceptionally well placed to maximise the number of shorter distance trips that can be undertaken by alternative methods of travel to the car.

- 2.4.18. Notably the only two amenities within Table 2 that exceed a two kilometres walking distance are London South East Colleges at Rookery Lane and Princess Royal University Hospital at Farnborough Common. Both are accessible via the 261 and 358 bus services which provide direct bus services to both within 11 minutes.

2.5. Public Transport

Public Transport Accessibility

- 2.5.1. Public Transport Accessibility Levels (PTALs) are a measure of accessibility from a point of interest at a site to the local public transport network. The measure takes into account the walk access time to a station or stop as well as the wait time and reliability of local public transport services. A PTAL rating is defined by a score of 1a to 6b. A rating of 1a ('Very Poor') is the lowest level obtainable, whilst 6b ('Excellent') is the highest level achievable.
- 2.5.2. The site's PTAL rating has been calculated using TfL's WebCAT tool, displaying that the site has a PTAL rating of 6b with the southern extent of the site falling within the 6a category, which demonstrates an excellent level of accessibility to public transport services within the vicinity of the site. Figure 10 shows the PTAL map.

Figure 10 – PTAL Map



Source: TfL WebCAT

- 2.5.3. The PTAL score does not take into consideration the location of site adjacent to excellent walking and cycling links or its proximity to a number of services and amenities in Bromley Town Centre. A range of key destinations can be accessed by a number of travel modes providing potential site users with a real and genuine choice of travel modes without needing to rely on the private car.

Bus

- 2.5.4. PTAL guidance considers that people are willing to walk up to eight minutes in order to access bus stop infrastructure. It also assumes that, on average, pedestrians will walk at a speed of 4.8 kilometres per hour (3 miles per hour) whilst travelling to a bus stop. This equates to a walking speed of 80 metres per minute. Thus, TfL consider that bus stops within 640 metres of a development (80 metres x 8 minutes) are considered to be accessible. The closest bus stop to the site is located along Ringers Road (Stop C) on the northern side of the carriageway and are accessible with a 60m walk northeast of the site. The bus stop is provided with a bus flag and timetable information and is outlined below in Figure 11.

Figure 11 – Ringers Road Bus Stop



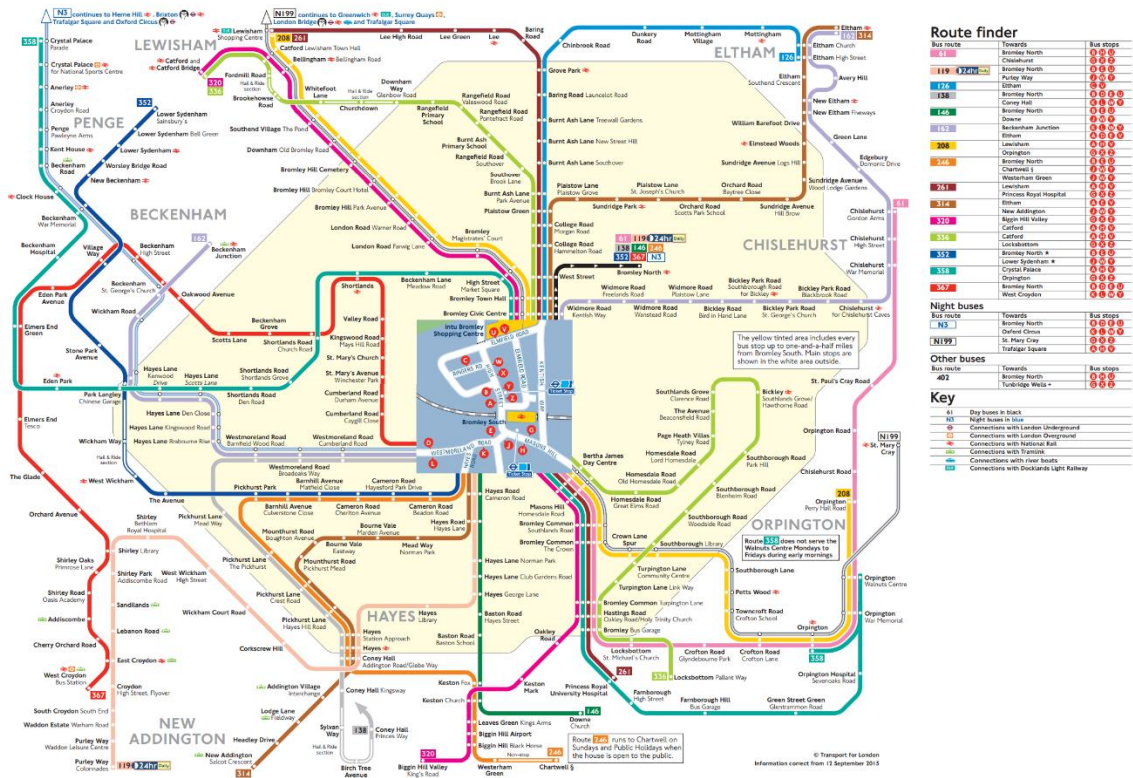
- 2.5.5. Additional bus stops are located along High Street (Bromley High Street / The Mall W and X) and at Bromley South Station that are provided with seating, shelters and timetable information and are all accessible within a 260m walk from the site. Table 3 outlines the frequency of the services available from the stops along Ringers Road, High Street and by Bromley South Station whilst the TfL bus spider map is shown in Figure 12.

Table 3 – Bus Frequencies

No.	Route	Weekday Frequency			Weekend Frequency	
		Frequency	First Bus	Last Bus	Saturday	Sunday
61	Bromley North– Chislehurst / Gordon Arms	16 mins	05:12	00:04	15 mins	20 mins
119	Bromley North– The Colonnades / Croydon Airport	10-14 mins	00:02	23:47	10-12 mins	15 mins
126	Ringers Road – Eltham High Street / Foots Cray Rd	6-11 mins	05:25	23:55	8-11 mins	20 mins
138	Bromley North – Chestnut Avenue	20 mins	05:32	00:22	20 mins	30 mins
146	Bromley North – Downe Church	Hourly	07:30	23:56	Hourly	Hourly
162	Beckenham Jct. / Rectory Road – Eltham Bus Station	15 mins	05:40	00:35	15 mins	20 mins
208	Lewisham Station – Orpington / Perry Hall Road	10-13 mins	05:34	01:11	11-13 mins	15 mins
261	Lewisham Station – Princess Royal Hospital	10-13 mins	05:28	01:31	11-13 mins	15 mins
314	Eltham Bus Station – Salcot Crescent	11-13 mins	05:52	00:49	11-13 mins	30 mins
320	Biggin Hill Valley – Catford Bridge Station	9-12 mins	05:39	23:54	11-14 mins	20 mins
336	Thomas Lane – Locksbottom / Pallant Way	15 mins	06:03	00:37	15 mins	20 mins
352	Bromley North Station – Bell Green / Sainsbury’s	20 mins	05:53	00:02	20 mins	30 mins
358	Orpington Bus Station – Crystal Palace Parade	9-13 mins	04:41	01:00	11-14 mins	19-20 mins
367	Bromley North Station – West Croydon Bus Station	20 mins	05:32	00:12	20 mins	30 mins
638	Addington Rd / Glebe Way – Kemnal Tech College	12 services	07:27	16:44	No Service	No Service
N3	Bromley North– Margaret Street / Oxford Circus	30 mins	23:47	05:17	20 mins	30 mins
N199	St Mary Cray Station – Trafalgar Sq. / Charing Cross	30 mins	00:37	04:07	20 mins	30 mins

Source: TfL July 2021

Figure 12 – Bromley South Bus Routes



Source: National Rail



- 2.5.6. All these routes are accessible within acceptable walking distance from the site, based on the IHT guidance and provide access to a variety of areas. All TfL bus routes are served by low-floor vehicles with dedicated wheelchair space and access ramps. The buses are accessible with wheelchair spaces and priority seats available on all vehicles. Drivers will also pull in close to the kerb at stops to reduce the gap, lower the bus to reduce the step up and deploy the wheelchair ramps where necessary.
- 2.5.7. The level and frequency of bus services available within the vicinity of the site to a range of locations allows bus travel to and from the site to be able to readily form part of a multi-modal journey for residents and visitors.

Rail

- 2.5.8. The PTAL calculation takes account of all railway stations within 960 metres. Bromley South Station is located approximately 270m southeast of the site and is accessible within a four-minute walk or a three-minute cycle. Services from this station run to a number of destinations including London Victoria, London Blackfriars, Sevenoaks, Orpington, Ramsgate, Gillingham (Kent) and Ashford International. Bromley South Station is managed by South Eastern and underwent upgrades in 2011 meaning that the station now provides step free access to all platforms via lifts and ramps are provided for boarding trains. A total of 107 cycle parking spaces are provided outside the station to the right-hand side of the building.
- 2.5.9. Additionally, Bromley North Station is situated approximately 800m northeast of the site and is accessible within a 10-minute walk or a four-minute cycle. Bromley North Station is also managed by South Eastern and provides step free access to all platforms via lifts and ramps are provided for boarding trains. The station provides a total of 10 cycle parking spaces at the station concourse. Services from this station run to Grove Park.

2.6. Summary

- 2.6.1. This section has demonstrated that the site is in an extremely accessible location with high quality pedestrian and cycle links into Bromley Town Centre and to a range of public transport services. The closest bus stops provide regular services to a wide range of locations within London, including to local schools and employment. Additionally, Bromley South and Bromley North Stations are both located within walking distance of the site and they provide frequent rail services to a number of destinations both within and outside London.
- 2.6.2. An array of local amenities and facilities including employment, healthcare and educational facilities are also all located within short walking and cycling distances of the site. The site is therefore considered accessible in highway terms.

3. Proposed Development

3.1. Context

- 3.1.1. This section of the DSP provides a summary of the development proposals, including a breakdown of the accommodation schedule, access provision for all modes, car and cycle parking provision and delivery and servicing strategy.

3.2. Development Proposals

- 3.2.1. The proposed redevelopment will demolish the existing buildings on site (2-4 Ringers Road and 5 Ethelbert Road), and construct two new buildings which will provide a combined total of 94 residential units. Block A will comprise a 14-storey building fronting Ringers Road which will contain 45 residential units with Block B comprising a 12-storey building fronting Ethelbert Road which will contain 49 residential units. A breakdown of the unit types proposed has been provided below:

3.2.2. Block A:

- 37 x one-bedroom apartments;
- 8 x two-bedroom apartments;

3.2.3. Block B:

- 13 x one-bedroom apartments;
- 36 x two-bedroom apartments.

- 3.2.4. In addition to this 97sqm of flexible use class E space will be provided in Block A at basement and ground floor level and 413 sqm of flexible use class E space will be provided in Block B at basement, ground and first floor level. Drawings of the proposed site layout and plans of the buildings are attached at **Appendix A**.

3.3. Access Arrangements

- 3.3.1. With the exception of the disabled car parking space and the accessible car club bay, which will be provided along the site frontage on Ethelbert Road through the conversion of two on-street bays, the proposals will be car-free. Access to these car parking bays will be provided via the existing dropped kerb arrangement along the site frontage. Owing to the car free nature of the scheme, no formal vehicular access to the site has been provided.
- 3.3.2. As the proposals will be car-free, with the exception of the disabled bay and accessible car club bay, the redevelopment provides an opportunity to maximise the public realm offering along the site frontage and prioritise provision for pedestrians and cyclists.
- 3.3.3. The two residential blocks will be accessed independently with Block A accessed via a residential entrance off Ringers Road which will also provide a route to the internal lifts and stairways in addition to the cycle store. For Block B, access will be provided off Ethelbert Road which provides a route to the internal lifts and stairways in addition to the cycle store. High quality public realm space will be provided between the existing footways and the residential entrances, providing further useable space for pedestrians along the site frontage.
- 3.3.4. As detailed in Chapter three, pedestrian facilities within the vicinity of the site are of high quality with minimum footway widths of at least 2.0m provided on both Ringers Road and Ethelbert Road. However, at present the provision of signage and an access ramp to the existing restaurant space reduces the useable footway width along the site frontage to between 1.6m-1.8m, which is below the minimum requirement as outlined within MfS. The proposals will remove this pinch point by

reinstating the space as footway to ensure that footway widths of at least 2.0m will be retained along the entirety of Ringers Road. This will further help to reduce any existing barriers to active travel for all site users, regardless of age or mobility.

- 3.3.5. The measures outlined above comply with the overall health and wellbeing agenda behind the Healthy Streets Approach by encouraging residents to walk and cycle to the range of key destinations outlined within the Active Travel Zone (ATZ).

3.4. Car Parking Provision

- 3.4.1. Considering the excellent accessibility to a range of employment, educational, leisure and retail facilities within walking and cycling distance of the site, coupled with the excellent PTAL rating of 6b, the site represents a prime opportunity to promote car-free development. Notably the London Plan Policy T6 states that ‘car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport’. As such, there will be no on-site car parking facilities.
- 3.4.2. However, to ensure that parking is available for eligible disabled residents who require access to a car, it is proposed to convert two on-street parking spaces on Ethelbert Road directly outside the site to provide one disabled parking space and one accessible car club bay.
- 3.4.3. The removal of these two on-street parking bays will be subject to a Traffic Regulation Order (TRO) and will result in the loss of revenue of these two bays. As such it has been agreed with LBB that the applicant will pay LBB an appropriate amount (c.£95,120) towards the consultation of the TRO and the loss of revenue to convert the two on-street bays.
- 3.4.4. The parking survey data analysed in Chapter Three demonstrates that there is sufficient capacity in the network to accommodate the loss of two on-street parking spaces. Further to this, it should be noted that the existing residential units at 5 Ethelbert Close are currently able to apply for parking permits, equating to a demand for six car parking spaces.
- 3.4.5. A parking permit restriction will be conditioned within a S106 Agreement to remove the ability of future residents obtaining on-street parking permits in the existing CPZ area. As such, the proposals would create a net reduction in demand of four parking permit spaces, further ensuring that there is sufficient capacity for the conversion of two bays.
- 3.4.6. Policy T6.1 of the London Plan states that for three percent of dwellings at least one designated disabled persons parking bay per dwelling is available from the outset with the potential for an additional seven percent to be provided in the future. For a scheme of 94 units this equates to three spaces from Day 1 and the potential for an additional seven spaces in the future, a total of 10 disabled spaces.
- 3.4.7. There could be up to five disabled parking bays within 50m of the site, which combined with the one on-street bay and accessible car club bay proposed as part of the scheme equates to a total of seven bays. Notably two of these bays will provide access to accessible car club vehicles. As such it is considered that this combined with the highly accessible location of the site and the taxi rank within 50m of the site will ensure that access to the site by those with mobility difficulties is provided. Nonetheless 152 additional disabled parking spaces are provided within public car parks within close proximity of the site. Bromley outline that any Blue Badge Holder can:
- Park on Yellow Lines (single or double) for up to three hours;
 - Park in on-street paid for parking bays and council operated car parks free of charge and without time limit unless signs indicate otherwise;
 - Park in on-street disabled bays in shopping and residential areas;

- 3.4.8. The parking survey information included in the Transport Statement shows that there is ample reserve parking on Ethelbert Road (maximum occupancy of 65.3%), Ravensbourne Road (maximum of 52.7%) and Ringers Road (maximum of 76.2%). As such the removal of two bays to accommodate the disabled bay and car club bay would be imperceptible and there is ample reserve capacity to accommodate any displacement.
- 3.4.9. Furthermore with the everchanging nature of the area as a result of the forthcoming development, it is considered that on-street parking demand will only reduce further with each of the forthcoming developments being restricted for applying for on-street parking permits and with the introduction of numerous car club vehicles. The existing site includes six studio flats on Ethelbert Road, all of which are entitled to on-street parking permits. As such the removal of these flats alone has the potential to reduce on-street parking demand.
- 3.4.10. In order to ensure that the proposed development does not impact on local streets, future residents will be prohibited from applying for parking permits for the local Controlled Parking Zones (CPZ).
- 3.4.11. It is considered that that the proposed parking strategy is reflective of the highly accessible location of the site, and maximises public realm and cycle parking (including wheelchair adapted cycle parking spaces and e-bike spaces) over the use of vehicles. Nonetheless it is considered that there is reserve parking capacity in the area to meet the 3% from day one requirement and the 7% future capacity in the unlikely event that this is needed but the provision of an accessible car club will help to ensure that a vehicle is available for occasional usage.
- 3.4.12. For those residents that do rely on the use of the private car, as identified within Chapter Three there are approximately 1,615 car parking spaces within walking distance of the site which are eligible for season ticket applications. At the time of writing, the Mall Car Park which is located approximately 350m / four-minute walk from the site has availability for 11 season ticket spaces with other car parks including The Hill, Station Road and Bromley North Station currently accepting applications for new season tickets. As such, there are considered to be ample opportunities for residents to park within the vicinity of the site, should they rely on private car use.
- 3.4.13. However, through restricting car parking to two disabled parking bays from the outset, the proposals further promote the uptake of sustainable travel from the outset, in accordance with the Mayor's Transport Strategy and TfL's Healthy Streets Approach.
- 3.4.14. The car club bays will be available to hire by future occupiers of the proposed development considered under this application. Whilst the majority of daily trips, including employment, leisure, retail, health and educational needs can be undertaken on foot, by bicycle or by public transport, the car club bays provide a further opportunity for future residents to access a car for essential trips without the need of owning their own.
- 3.4.15. The Carplus "Car Clubs in Property Developments" 2015 report explicitly states that reducing the levels of car parking helps to make car clubs viable;
- "The experiences of operators suggests that a ratio of 0.8 car parking spaces per residential unit or less creates the conditions in which a car club and parking levels are mutually complementary"
 - "The car club works best if not all residents have access to a private car parking space as well as others choosing the service as a lifestyle choice or out of preference as a first or second car."
- 3.4.16. It is of note that the nearby and comparable site at 66-70 High Street (Ref. 21/03231/FULL) for the demolition of 66-70 High Street to provide a new 12 storey mixed-use residential building comprising 47 residential dwellings and 256sqm of retail floorspace is also car free with the exception of disabled parking. Given the similarities of this scheme to this application, in terms of accessibility and location

in addition to the total development quantum, it is considered that the same principles of car-free development should be applicable at this site.

- 3.4.17. Overall, the car-free nature of the scheme is considered entirely appropriate and policy compliant whilst also achieving the key principles to promote sustainable travel and encourage healthy lifestyles, both of which are at the core of the Mayors Transport Strategy (2019) and TfL’s Healthy Streets Approach.

3.5. Cycle Parking Provision

- 3.5.1. Cycle parking provision should take account of the London Plan (2021). Table 4 below summarises these standards and calculates the cycle parking requirements of the proposed development.

Table 4 – Cycle Parking Requirements

Use		Bicycle Parking Standards		Proposed Development (Required)	
		Long Stay Standard	Short Stay Standard	Long Stay	Short Stay
C3	1 bed / 1 person	1 per dwelling	5-40 Dwellings = 2 spaces Thereafter = 1 per 40 dwellings	0	4
	1 bed / 2 person	1.5 per dwelling		75	
	All Other Dwellings	2 per dwelling		88	
A2-A5	Café	1 per 175 sqm (GEA)	1 space per 20 sqm (GEA)	1	8
B1	Business offices	1 space per 75 sqm	First 5,000 sqm: 1 space per 500 sqm	5	1
Total Provision				169	13

- 3.5.2. Evidently the proposed development quantum would require a minimum of 169 long stay cycle parking spaces and 13 short-stay cycle parking spaces. In accordance with the London Cycle Design Standards 5% (10 spaces) should be suitable for accommodating adapted cycles.

- 3.5.3. The proposed redevelopment will provide a number of separate cycle stores at basement and ground floor level which together will provide a total of 201 cycle parking spaces;

- Block A Residential – Basement level cycle store for residents providing 70 long stay spaces (two tier stackers) and four enlarged Sheffield stands for adapted bikes and e-bikes;
- Block A Commercial – Three Sheffield stands at basement level providing six long stay spaces;
- Block A Short Stay – 12 Sheffield stands at ground floor level for short stay use by residents and the commercial uses;
- Block B Residential – Basement level cycle store for residents providing 91 long stay spaces (two tier stackers) and five enlarged Sheffield stands for adapted bikes and e-bikes;
- Block B Commercial – Three Sheffield stands at ground floor level providing five long stay spaces;
- Block B Short Stay – 8 Sheffield stands at ground floor level for short stay use by residents and the commercial uses;

- 3.5.4. This equates to a total of 201 long-stay cycle parking spaces provided at basement level. It is noted that there is an overprovision of both short-stay and long-stay cycle parking compared to the minimum standards outlined in the London Plan. It is noted that the co-working space will be primarily for residents, however the provision of additional short-stay and long-stay cycle parking will appease any concerns over shortages of cycle parking should the co-working space be used by external site users in the future.

- 3.5.5. Access to the cycle stores will be provided to all residents, however the use of a key fob entry system / access code will be utilised to provide additional security benefits for the cycle stores.
- 3.5.6. The provision of high quality and accessible cycle parking for all residents will help to encourage more residents to consider cycling as their first mode of choice, either for formal commuting or educational purposes or for leisure cycling trips.

3.6. Refuse Storage

Residential

- 3.6.1. The LBB Notes for Developers and Architects: The Storage and Collection of Refuse from Residential and Commercial Buildings (October 2011) states that apartment blocks with six or more dwellings should provide bulk storage at the following rates;
- General Waste: one 1100 Eurobin per six apartments;
 - Recyclables - Paper: one 240 litre wheeled bin per six apartments;
 - Recyclables - Glass / Plastic / Cans: one 240 litre wheeled bin per six apartments; and
 - Recyclables - Food Waste: one 240 wheeled bin for food waste per 20 dwellings.
- 3.6.2. The proposed development seeks to provide 94 residential apartments, of which 50 would be one-bed apartments (37 in Block A and 13 in Block B) and 44 two-bed apartments (8 in Block A and 36 in Block B). This would equate to the quantum outlined in Table 5.

Table 5 – Residential Refuse Calculations

Block A	Quantum (Litres)	Weekly Collection	
General Waste:	8250	8	Eurobins
Paper	1800	2	Eurobins
Glass / Plastic	1800	2	Eurobins
Food	540	3	240 litre bins
Block B	Quantum (Litres)	Weekly Collection	
General Waste:	8983	9	Eurobins
Paper	1960	2	Eurobins
Glass / Plastic	1960	2	Eurobins
Food	588	3	240 litre bins

- 3.6.3. The plans attached at **Appendix A**, show that at basement level bin stores have been provided in each Block with the stores providing sufficient capacity to accommodate the above quantum.
- 3.6.4. Where the bins are stored at basement level, a lift is provided to transport the bins to street level. Given the distance from the bin stores to the kerb side a storage area for an electric bin tug machine has been provided to assist with the movement of the bins.

Commercial Use

- 3.6.5. The commercial use (café and co-working space) is proposed to be ancillary uses for the residents and therefore it is proposed to share the bin stores with the residential use. To ensure that there is sufficient reserve storage capacity a minor uplift in the storage using the BS5906 Waste Management calculations for office waste and use of the HCA employment density guide to estimate staff and waste volumes.

- 3.6.6. Based on the 97sqm in Block A and the 413sqm in Block B this would equate to a maximum of 7 employees in Block A and 32 employees in Block B, when applying the HCA guidance of 13sqm per employee. BS5906 Waste Management estimates 50 litres of waste per employee and assumes a split of 75% of this total being general waste and 50% being recyclables. As such this equates to the following;
- 263 litres of refuse for Block A
 - 175 litres of recycling for Block A (Assuming Equally Split of Paper / Glass / Food)
 - 58litres of Paper
 - 58litres of Glass / Plastic
 - 58litres of Food
 - 1200litres of refuse for Block B
 - 800litres of recycling for Block B (Assuming Equally Split of Paper / Glass / Food)
 - 267litres of Paper
 - 267litres of Glass / Plastic
 - 267litres of Food
- 3.6.7. Adding these refuse calculations to the residential quantum shown in Table 5 shows that the proposed storage would be sufficient to accommodate any uplift from the ancillary commercial uses.
- 3.6.8. The proposed redevelopment would be served by a LBB council operated collection service, with the maintenance staff at the site assisting with bringing bins up to ground floor level on collection days.
- 3.6.9. As detailed above, refuse vehicles will be able to utilise the proposed single yellow line sections on Ethelbert Road and Ringers Road.
- 3.6.10. Whilst the proposed redevelopment will generate an uplift in the number of residential units at the site, it is not considered that this would give rise to an increase in the number of refuse and recycling vehicles required to serve the existing route. As such, the proposals are considered to fall within the existing routes currently operated by LBB Waste team and therefore no new vehicular trips would be created as a result of refuse and recycling collection.

4. Delivery and Servicing

4.1. Introduction

4.1.1. This section provides a summary of the servicing trip generation analysis that has been undertaken for the proposed development.

4.2. Servicing Trip Generation

4.2.1. Deliveries to the residential units will primarily consist of the following:

- Refuse vehicles;
- Post, parcel and mail deliveries and collections;
- Ad-hoc grocery deliveries / other courier services;
- Occasional Maintenance vehicles; and
- Removals vehicles.

4.2.2. It is of note that the types of delivery and servicing trips outlined above are already likely to be operating at neighbouring sites along both Ringers Road and Ethelbert Road as well as at the existing residential units at the site. This will include both refuse collection as well as postal / courier deliveries. As such, these would not constitute 'new' trips onto the network. To further reduce the dwell time that servicing vehicles will spend at the site, a number of design features have been proposed:

- Provision of communal post boxes at the entrance to the residential units to allow post and parcels to be delivered quickly and safely;
- Provision of oversized cycle parking spaces to accommodate cargo bikes;
- Provision of e-bike charging areas;
- Provision of a electric-tug vehicle for easy and quick transport of bins.

4.2.3. There is likely to be the occasional removals vehicle when residents move into / out of properties. This will be most notable when the development is first occupied, subsequent to which, these movements will be infrequent.

Table 6 – Residential Servicing Trip Generation

Delivery	Vehicle	Time of Day	Approx. Frequency
Post	Post Van	09:00-17:00	Daily
Parcel / Couriers	Transit Van	07:00-22:00	1-4 per day
Groceries	Transit Van	07:00-22:00	1-4 per day
Refuse Collection	Small Refuse Vehicle	07:30-17:00	Weekly / Bi-weekly
Recycling Collection	Small Refuse Vehicle	07:30-17:00	Weekly / Bi-weekly
Maintenance Vehicles	Transit Van / Box Van	09:00-17:00	1-2 timer per year
Removals Vehicles	Pantechnicon	09:00-17:00	Infrequent

4.2.4. Based on this, it is anticipated that the residential element of the proposed development is likely to generate 6-13 delivery and servicing trips per day, equating to less than one trip per hour across core delivery hours. It is likely that the majority of delivery and servicing trips will take place outside of the network peak hours.

4.2.5. For the café and co-working space, it is anticipated that these uses will generate up to three delivery and servicing trips per day combined, through the delivery of food/goods, cleaning products and other essential produces and refuse collection. The occupiers will seek to co-ordinate and consolidate

deliveries to minimise the number of delivery and servicing trips associated with the site. It is also likely that the majority of delivery and servicing trips associated with these uses will take place outside of the network peak hours.

- 4.2.6. Based on this, the total development is anticipated to generate between 9-16 delivery and servicing trips per day.

4.3. Delivery and Servicing Locations

- 4.3.1. Vehicular access for delivery and servicing purposes will be undertaken on-street, using both Ringers Road and Ethelbert Road with changes made to existing highway layout to enhance the operation and safety for delivery and servicing vehicles.

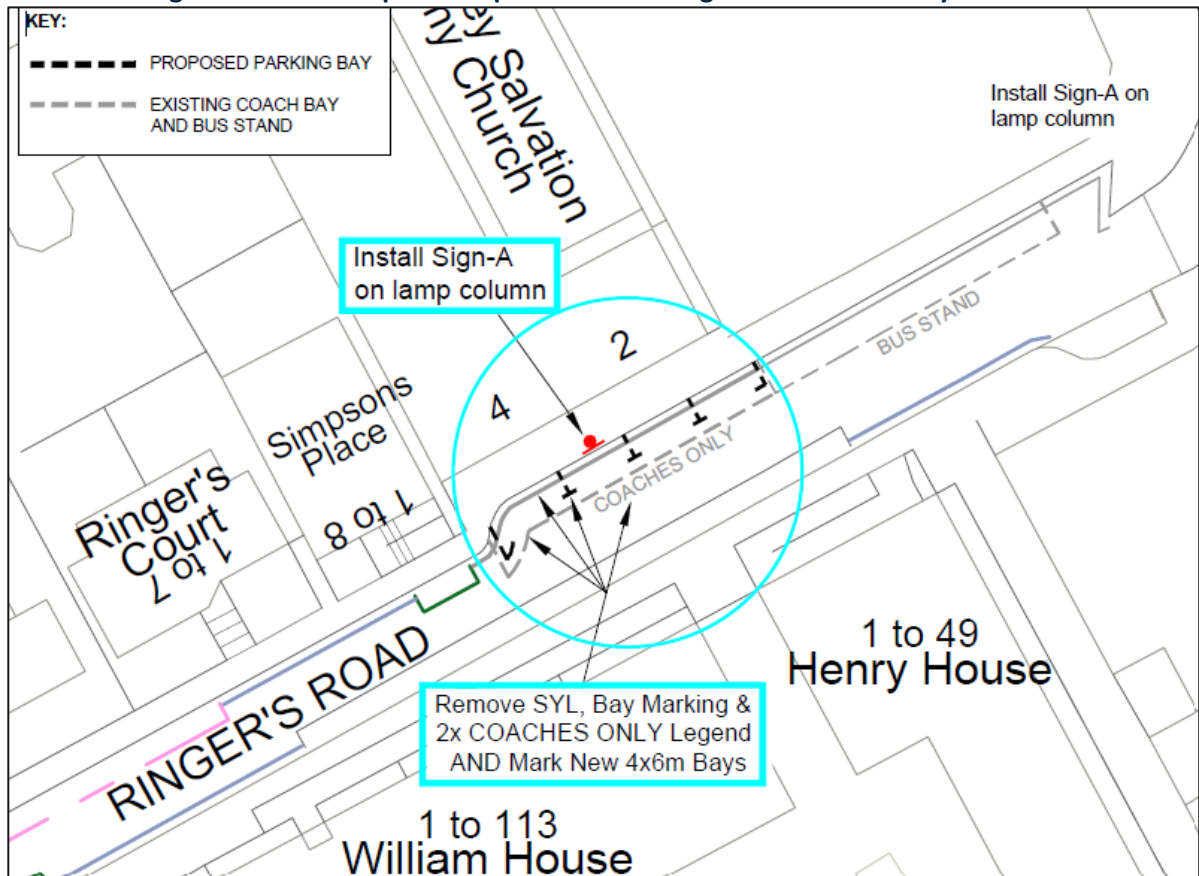
Ethelbert Road

- 4.3.2. At present the existing site has a servicing entrance on to Ethelbert Road, with deliveries and servicing activity all taking place here utilising the on-street single yellow line section. Given the constant use of the two parking bays on-site the use of the single yellow lines on Ethelbert Road for loading / unloading activity are primarily restricted to site users only. The proposed development will remove the need to maintain vehicle access to the site at all times and will ensure that the single yellow line section on Ethelbert Road can be used by other neighbouring sites on Ethelbert Road.
- 4.3.3. Swept path analysis has been undertaken of the existing single yellow line section on Ethelbert Road, which shows that large refuse vehicles struggle to utilise the single yellow line section there.
- 4.3.4. As such this single yellow line section can only really be used by smaller refuse vehicles, delivery vans and box vans at present. It is proposed to suspend part of the bay to the north of the single yellow line section to reduce the parking bays from three bays to two bays, for which we are proposing one disabled bay and one car club bay here.
- 4.3.5. This would ensure that a single yellow line in excess of 12m is provided and therefore this would be able to accommodate all servicing movements which would be of benefit to the site and neighbouring uses on Ethelbert Road. The proposed arrangement is attached at **Appendix B**. In line with LBB guidance, loading and unloading of unwieldy and heavy goods is permitted on single yellow lines for periods of up to 40 minutes. This is considered entirely suitable for the types of delivery and servicing trips anticipated at the site.

Ringers Road

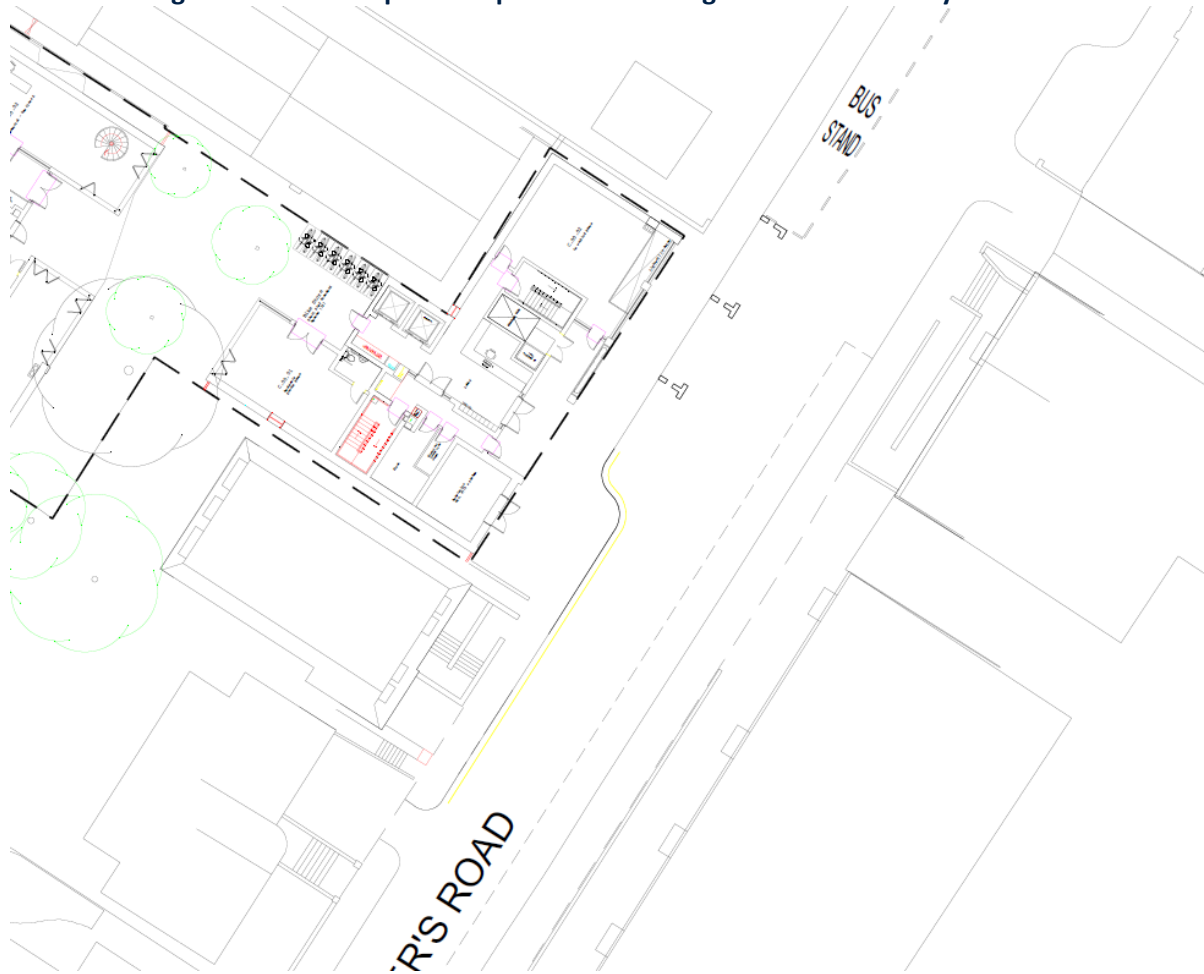
- 4.3.6. A coach bay measuring approximately 25m in length is currently provided along the site frontage on Ringers Road. Discussions have taken place with LBB highways officers (Nojan Rastani) together with their traffic team (Buki Sobanjo) to discuss potential changes to the arrangements on Ringers Road. Notably the coach bay on Ringers Road was only provided as a temporary bay and LBB are currently proposing to convert the bay back to four pay and display parking bays, with their plans included at **Appendix B** and shown below in Figure 13.

Figure 13 – LBB Proposed Replacement of Ringers Road Coach Bay



- 4.3.7. The LBB proposed amendments have been investigated to see if a more suitable option could be provided that provides an enhanced servicing strategy on Ringers Road which could serve the proposed site as well as neighbouring uses.
- 4.3.8. The proposed amendments seek to remove one of the proposed parking bays on Ringers Road and relocate the permit holder only bay outside 6 Ringers Road to provide three bays where the coach bay was together with an extended single yellow line section that could be used for deliveries and servicing at the site as well as other neighbouring uses. The proposed amended layout is attached at **Appendix B** together with swept path analysis and shown below in Figure 14.

Figure 14 – LBB Proposed Replacement of Ringers Road Coach Bay



4.3.9. It is considered that this provides an enhancement to Ringers Road as it increases the number of parking bays on Ringers Road by two net spaces from the former coach bay but also provides an enhanced servicing area.

Summary

4.3.10. The proposed servicing strategy and amendments to Ringers Road and Ethelbert Road have been discussed in detail with LBB and agreed.

4.3.11. Overall the proposed changes on Ethelbert Road and Ringers Road would result in the removal of three bays on Ethelbert Road to provide a car club, disabled bay and enhanced servicing and the removal of one bay on Ringers Road to provide an enhanced servicing area. These three bays on Ethelbert Road are currently pay at machine bays in operation Monday to Saturday 08:00-20:00 whilst the bay on Ringers Road is a permit holder only bay.

4.3.12. In total however the removal of the coach bay would result in an additional three on-street parking bays meaning there would be a loss in total of one on-street bay.

4.3.13. It is considered that the provision of two enhanced servicing areas, one additional disabled bay and an accessible car club bay far outweigh and negative impacts associated with the loss of one bay. Notably these two single yellow line sections proposed could also be used at evenings and night times (20:00-08:00) when demand for on-street bays is likely to be highest by residents.

4.4. Refuse Collection and Management

- 4.4.1. The proposed redevelopment would be served by a LBB council operated collection service, with the maintenance staff at the site assisting with bringing bins up to ground floor level on collection days. Designated residential bin stores will be provided within each block at basement level. Where the bins are stored at basement level, a lift is provided to transport the bins to street level. Given the distance from the bin stores to the kerb side a storage area for an electric bin tug machine has been provided to assist with the movement of the bins.
- 4.4.2. It is anticipated that all general refuse, recycling and food waste for all elements of the site will be coordinated and will be collected on a weekly basis.
- 4.4.3. It is likely that a code or fob entry system will be provided to the bin store to ensure than only residents at the site and maintenance staff can access it.
- 4.4.4. On collection day the maintenance staff will bring the bins up to street level and present the bins for collection. The refuse collection vehicle will be able to stop in the designated loading areas on Ethelbert Road and Ringers Road on collection day and empty the bin. Following collection the maintenance staff will wash the bins and return them to the basement.

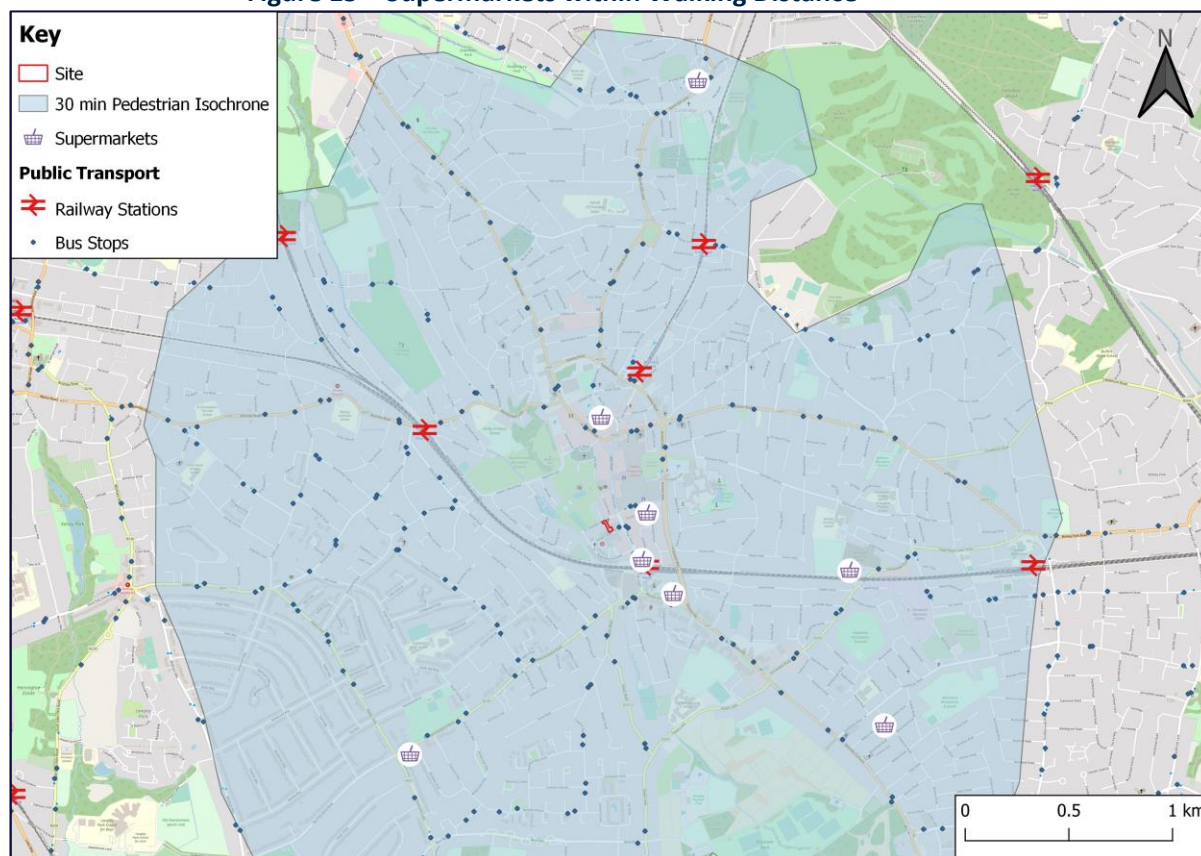
4.5. Post, Parcels and Mail Deliveries

- 4.5.1. Post will be delivered to the communal post boxes located at the entrance of each residential unit. The provision of communal post boxes will help to minimise the delivery times for courier vehicles and will reduce the number of failed deliveries. It is expected that post and courier delivery companies are likely to consolidate their orders and therefore reduce the number of servicing trips. As such it is anticipated that the number of daily deliveries will be marginal and already exist on the highway network as they are associated with neighbouring buildings.

4.6. Groceries and Deliveries to Residents

- 4.6.1. Residents may organise grocery deliveries amongst themselves, for delivery at a time convenient to them. Delivery vans will be able to pull up and temporarily park on the single yellow line along the site frontage onto Ethelbert Road or within the coach parking bay / single yellow lines along Ringers Road before exiting in forward gear. An intercom system will likely be in place at each block entrance so that residents can allow deliveries access to the building. Residents will then transport their groceries to their respective unit.
- 4.6.2. Figure 15 below demonstrates that there are a total of eight supermarkets located within a 30-minute walk of the site. Given the number of supermarkets within walking distance of the site, it is considered that the majority of food shopping trips will be undertaken by foot or by public transport.

Figure 15 – Supermarkets within Walking Distance



Source: QGIS

- 4.6.3. Furthermore, the provision of a number of car clubs within a short walking distance of the site will help to minimise the need for residents to own a car. The car club vehicles could be used on an ad-hoc basis by residents when undertaking large grocery shops or other bulky shops.
- 4.6.4. The 2019 Internet Access – Households and Individuals data estimates that 82% of people bought goods or services online in the last 12 months. Of these people 15% did it less than monthly (1-2 times in 3 months), 26% did it monthly (3-5 in 3 months), 24% did it every other week (6-10 times in 3 months) and 35% did it weekly (11+ times in 3 months).
- 4.6.5. As such it is considered that of the 94 units, approximately 77 units would undertake shopping online with 27 of these units doing so on a weekly basis, 18 units every other week, 20 units monthly and the remainder less than monthly.
- 4.6.6. Based on the above it is considered that there could be approximately 40 deliveries per week or approximately 5-6 deliveries per day. The majority of these trips would be by undertaken by transit vans or 3.5 tonne box vans used by supermarkets. Moreover, it is likely that some takeaway deliveries may be undertaken by Mopeds / Motorbikes or bikes and therefore will require minimal space within the servicing locations.
- 4.6.7. Six of the long-stay cycle parking spaces will allow for adapted cycles or cargo bikes which will help to encourage people to undertake their shopping by bicycle. Further to this a number of cargo bike hire schemes are available in Bromley such as Carryme Bikes www.carryme.org.uk.
- 4.6.8. Furthermore the cycle parking includes some electric power points which will allow residents to charge e-bikes / e-scooters. This will help to maximise the opportunities for residents to travel further distances to access goods and services.

4.7. Maintenance Vehicles

- 4.7.1. It is likely that there will be infrequent visits to the site by maintenance vehicles. These visits are likely to be off-peak. Maintenance vehicles would be required to temporarily park along the site frontages on Ethelbert Road or Ringers Road. Maintenance visits would be infrequent and on an ad-hoc basis.

4.8. Removals

- 4.8.1. Specifically, with regard to the initial “moving in” period, it is expected that the developer (where possible) will stagger the occupation dates so that the number of removals vehicles present at any one time is managed. It is also possible that not all units will be sold prior to the development completing, which would mean the “moving in” period would be spread over a greater time period and happen on an ad-hoc basis. However, with the exception of when residents first occupy the site, it is considered that these deliveries would be infrequent and on an ad-hoc basis which is likely to fluctuate from day to day. Removals vehicle would likely wait along the site frontages on Ethelbert Road and Ringers Road in the aforementioned single yellow lines.

4.9. Deliveries to the Café and Co-working Space

- 4.9.1. For the café and co-working space, it is anticipated that deliveries to these uses will primarily comprise the delivery of food/goods, cleaning products and other essential products. The occupiers will seek to co-ordinate and consolidate deliveries to minimise the number of delivery and servicing trips associated with the site. It is also likely that the majority of delivery and servicing trips associated with these uses will take place outside of the network peak hours.
- 4.9.2. As previously mentioned, these deliveries will likely utilise the single yellow line sections on Ringers Road and Ethelbert Road. Given the short dwell time for delivery and servicing vehicles to load / unload, this is considered to provide a suitable loading area for the proposed site. In the highly unlikely event that the two loading areas were already occupied then there are other locations along Ringers Road, most notably the 19m long section of single yellow lines on Ringers Road approximately 9m south of the site that could be utilised.

5. Management Strategy

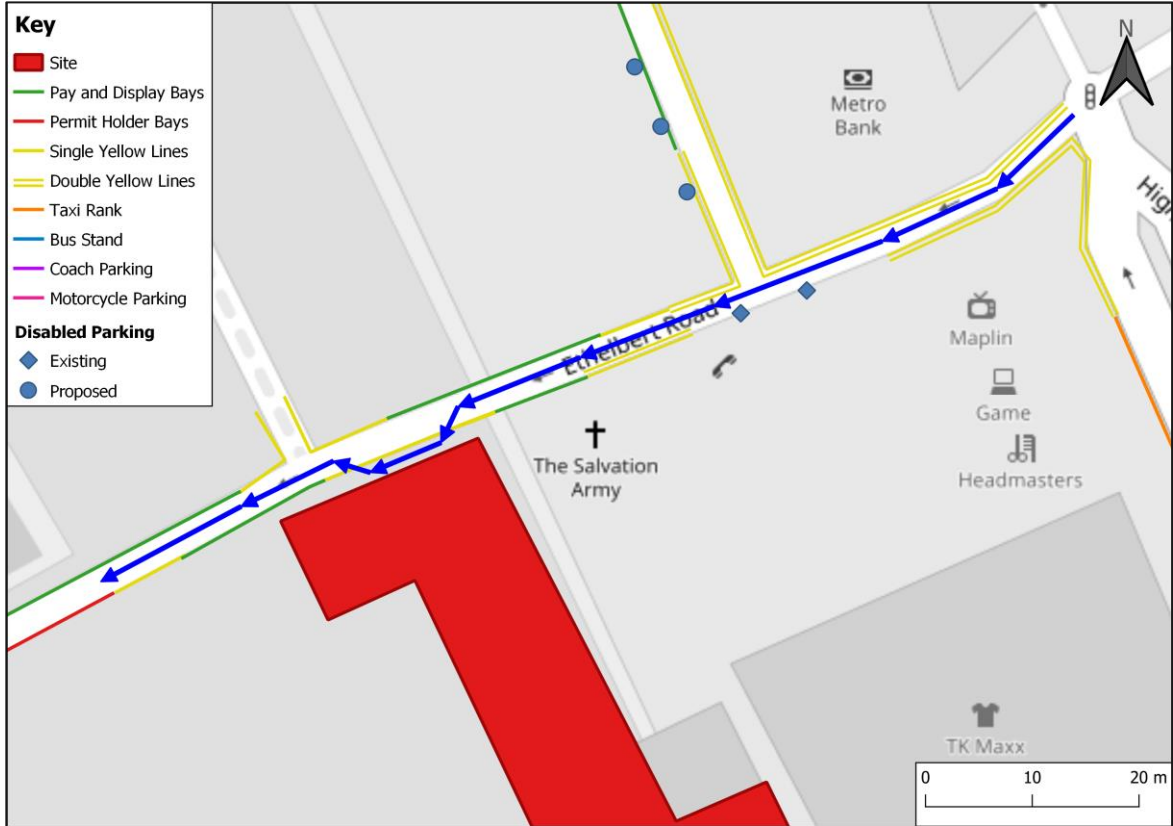
5.1. Introduction

- 5.1.1. This section of the DSP outlines the proposed delivery and servicing strategy for the proposed development. The DSP aims to ensure that servicing of the site can be undertaken efficiently whilst minimising any effects on the local highway network and other developments within the vicinity of the site.
- 5.1.2. The DSP therefore seeks to achieve the following objectives:
- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally-friendly way;
 - Improve the reliability of deliveries to the site;
 - Reduce the operating costs; and
 - Reduce the impact of freight activity on local residents and the environment.

5.2. Servicing Access and Routing

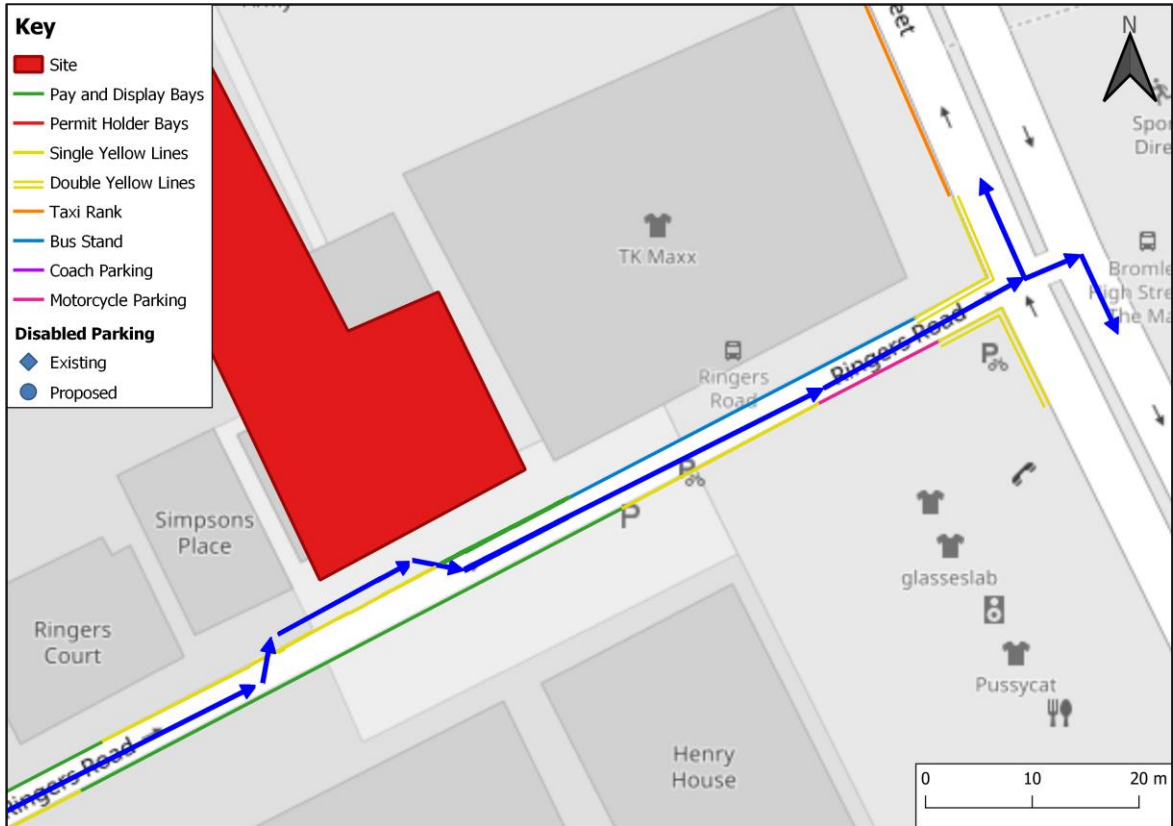
- 5.2.1. As detailed above, refuse collection and all other delivery and servicing activities will be undertaken along the site frontages. The provision of the proposed single yellow line sections on both Ringers Road and Ethelbert Road ensure that vehicles can load / unload without adversely impacting the free flow of traffic on the highway network.
- 5.2.2. Figure 16 and Figure 17 demonstrate the proposed routing of delivery and servicing vehicles. The vehicles will access Ethelbert Road from the East (either from High Street or Elmfield Road) and then travel westbound along Ethelbert Road. When accessing the site from the north, delivery and servicing vehicle will pull up along the single yellow line along the site frontage and then pull out in forward gear and continue travelling along Ethelbert Road westbound (as shown in Figure 16) and onto Ravensbourne Road and then Ringers Road. When servicing the site from the south, the vehicles will approach from the west along Ringers Road and pull into the proposed single yellow line section and exit in forward gear to carry on along Ringers Road. Vehicles will then turn either north or south onto the High Street and continue their journey.

Figure 16 – Ethelbert Road Servicing Route



Source: QGIS

Figure 17 – Ringer Road Servicing Route



Source: QGIS

- 5.2.3. It is anticipated that the majority of servicing associated with the site will be undertaken by Light Goods Vehicles with a short duration of stay. It is not expected that longer-term deliveries will be required for the residential units, other than the occasional maintenance vehicle.
- 5.2.4. In the unlikely event that there is no room within the loading areas, then it is considered that delivery vehicles would stop further along Ethelbert Road or Ringers Road on areas of the carriageway marked with single yellow lines.

5.3. Scheduling of Deliveries

- 5.3.1. With the exception of Royal Mail, there will be no regular daily deliveries to the residential site. There will be ad-hoc deliveries made to the site by courier companies, determined by the supplier of the products being delivered (e.g. Yodel, UPS or Supermarkets etc.). Whilst some suppliers will deliver during a predetermined time slot, it is often difficult to plan for such deliveries.
- 5.3.2. For the café and co-working space, it is anticipated that these uses will generate approximately three to four delivery and servicing trips per week combined, through the delivery of food/goods, cleaning products and other essential produces and refuse collection. The occupiers will seek to co-ordinate and consolidate deliveries to minimise the number of delivery and servicing trips associated with the site. It is also likely that the majority of delivery and servicing trips associated with these uses will take place outside of the network peak hours.

5.4. Vehicle Types

- 5.4.1. As detailed previously, it is anticipated that the majority of delivery and servicing trips (apart from refuse) to the site will be made by Light Goods Vehicles (LGVs) such as transit vans and 3.5 tonne box vans used by supermarkets.
- 5.4.2. The use of electric vehicles for delivery and servicing trips will be encouraged where suitable, particularly for smaller deliveries. Vehicles that meet the highest emission standards possible will be used.

5.5. Timings, Safety and Noise

- 5.5.1. It is anticipated that the majority of deliveries will avoid the peak hours (08:00-09:00 and 17:00-18:00) to help minimise the impact on the surrounding highway network and reduce delays to delivery drivers.

- 5.5.2. The applicant will inform any maintenance or couriers vehicles making regular visits to the site of the presence of the DSP. To minimise the impact of deliveries associated with the development, all suppliers will be given the following instructions:

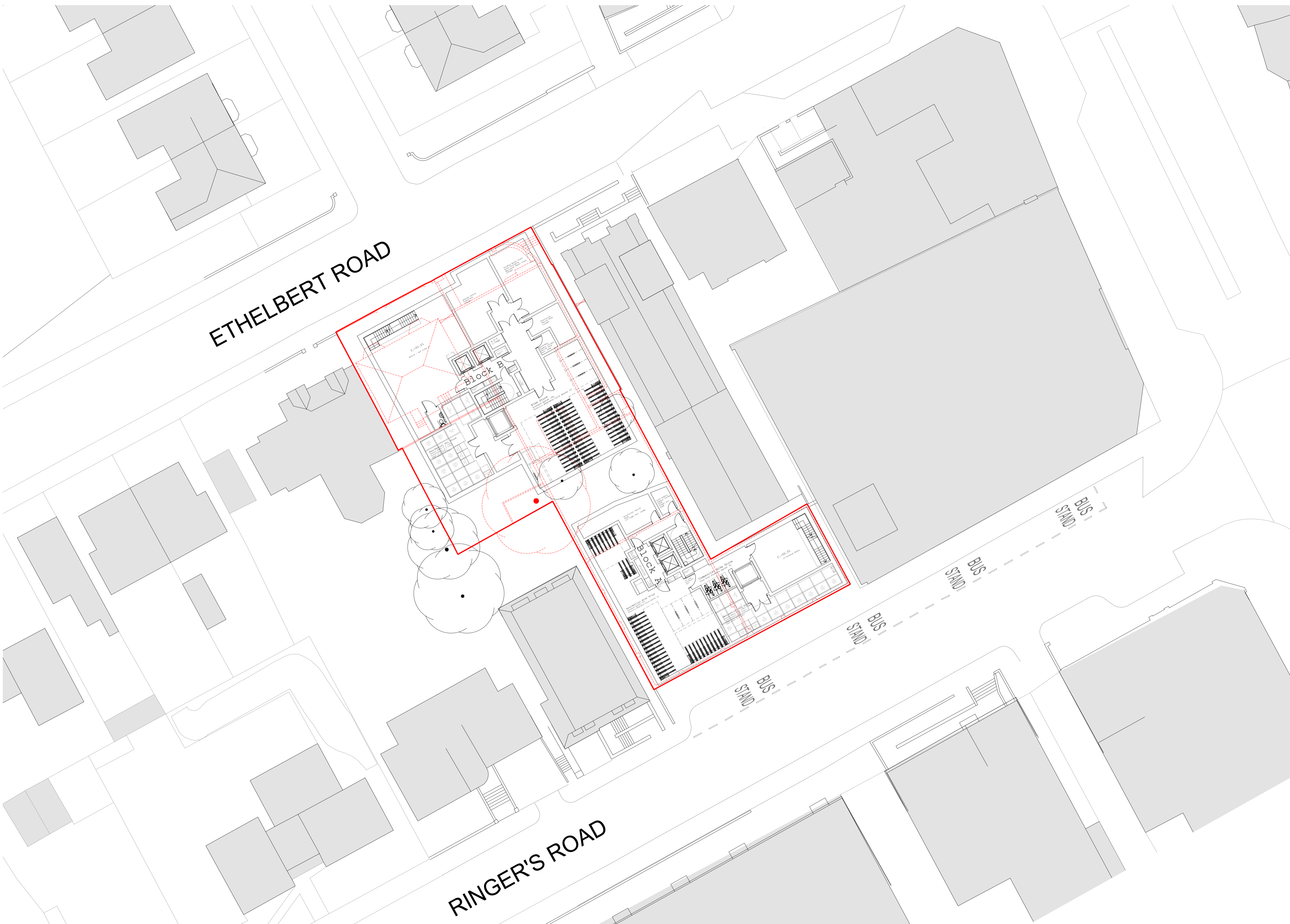
- Switch off any external tannoy systems;
- Switch off the radio when delivery point doors are open;
- Do not sound your horn;
- Engines should be switched off immediately when not manoeuvring, however, try to minimise start-ups and avoid over-revving;
- If the radio is on, ensure the cab windows are closed and switch the radio off before opening the door;
- Minimise the frequency of opening and closing vehicle doors, and do so quietly;
- Allow extra time if needed to load / unload as quietly as possible;
- Lower flaps on tail-lifts carefully and quietly;
- Do not whistle or shout to get the attention of others;

- When moving gates, locks and load restraint bars ensure they are placed gently in their resting position/stowage point – do not drop or drag them on the ground;
- When safe to do so, use sidelights rather than headlights while off-road and manoeuvring, to minimise light intrusion;
- Minimise excessive air brake noise;
- When finished unloading/loading, close up the vehicle quietly; and
- Show the same consideration when leaving the site as when arriving.

6. Summary and Conclusion

- 6.1.1. Evoke Transport Planning Consultants Ltd (Evoke) has been commissioned by Ringers Road Properties Ltd (“the Client”) to produce a Delivery and Servicing Plan to accompany a planning application for the demolition of existing buildings and construction of a mixed use development comprising residential units, ancillary residents’ facilities (including co-working space) and commercial floor space (Use Class E) across two blocks, along with associated hard and soft landscaping, amenity spaces, cycle and refuse storage. The local planning authority (LPA) and local highway authority (LHA) are the London Borough of Bromley (LBB).
- 6.1.2. The total proposed development is anticipated that the proposed development is likely to generate 7-14 delivery and servicing trips per day, equating to less than one trip per hour across core delivery hours. It is likely that the majority of delivery and servicing trips will take place outside of the network peak hours.
- 6.1.3. Refuse collection and other delivery and servicing activities will be undertaken along the site frontages onto Ethelbert Road and Ringers Road. The provision of the single yellow line sections outside the site on Ethelbert Road and Ringers Road ensure that vehicles can load / unload without adversely impacting the free flow of traffic on the highway network. It is anticipated that the majority of servicing associated with the site will be undertaken by Light Goods Vehicles with a short duration of stay. It is not expected that longer-term deliveries will be required for the residential units, other than the occasional maintenance vehicle.
- 6.1.4. In the unlikely event that there is no room within the loading areas, then it is considered that delivery vehicles would stop further along Ethelbert Road or Ringers Road on areas of the carriageway marked with single yellow lines.
- 6.1.5. The measures set out within the DSP are intended to inform LBB of the ways in which the efficiency, safety and reliability of deliveries and servicing activity at the site will be maintained.
- 6.1.6. The developer will liaise with LBB should circumstances arise where significant amendments to this DSP will be required. This DSP will be complied with unless otherwise agrees in writing by LBB.
- 6.1.7. The proposed delivery and servicing strategy has been developed with the aim of minimising the impacts on the surrounding transport and highway networks

Appendix A – Proposed Plans



ETHELBERT ROAD

RINGER'S ROAD

- Site Boundary
- Demolition

R1	Alterations to internal layouts	LC	21.07.07
R2	General amendments following comments from fire consultant	LC	21.09.10
R3	Updates for Planning Submission	OH	27.10.2021
R4	Amendments to Floor Plans following comments	OH	05.10.2022
R5	Addition of 2nd Stair	OH	23.02.2023
R6	Amendments for Planning resubmission	LC	28.04.2023

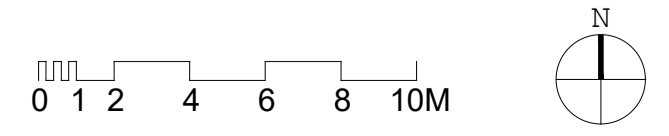
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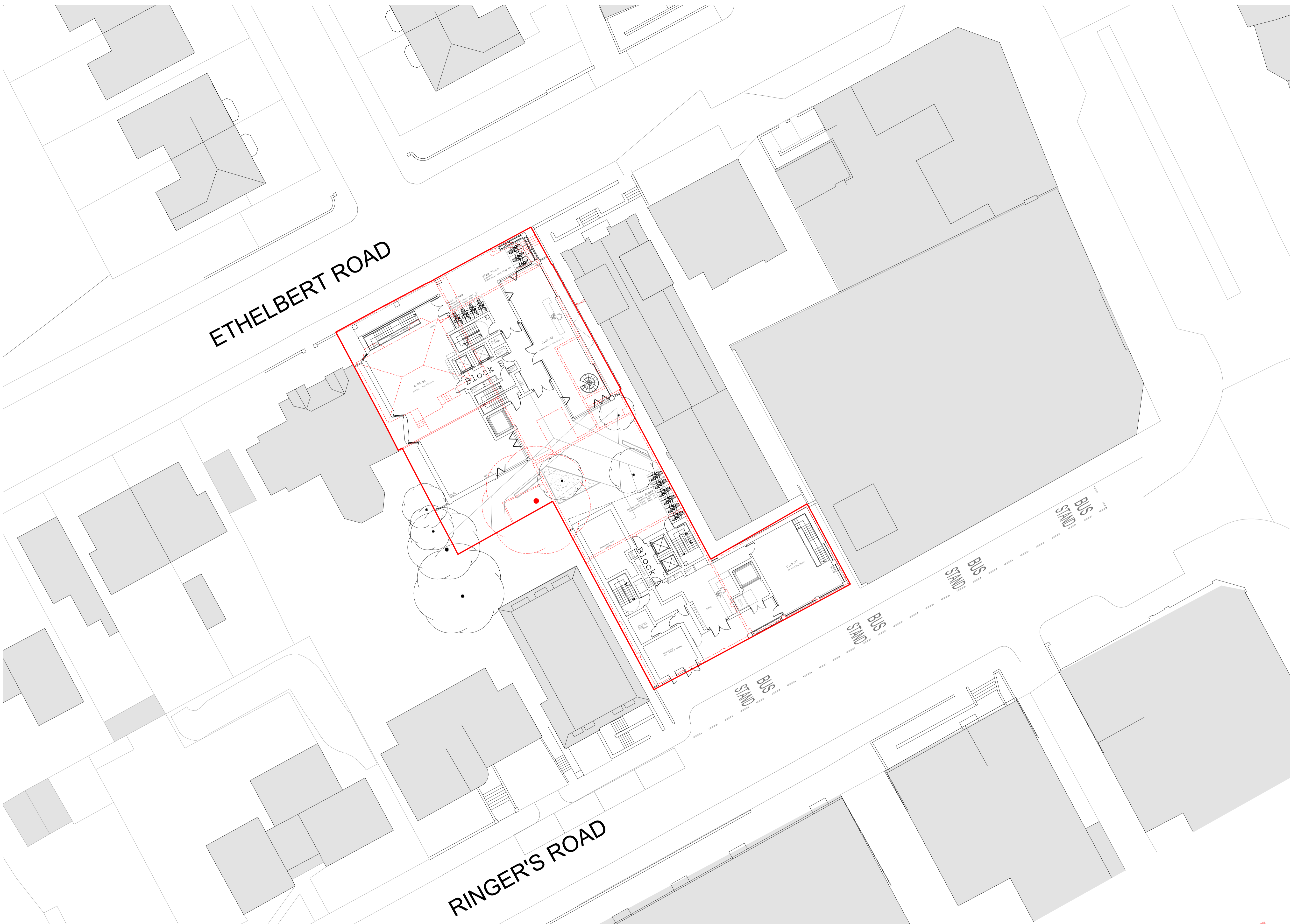
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 T +44 (0)1303 260 515 | E kent@hollawaystudio.co.uk | www.hollawaystudio.co.uk

Project | Ringers Road
Bromley
Client | The Substantia Group
Title | Proposed Lower Ground Floor Site Plan
Status | PLANNING

Scale: A1 | 1:200 Date | 21.01.21 Drawn | GG Chk'd | LC

Project Number
18.085
 Drawing Number
100.03
 Revision
R6





ETHELBERT ROAD

RINGER'S ROAD

- Site Boundary
- Demolition

R3	Updates for Planning Submission	27.10.2021
R4	Updates for Planning Submission	20.01.2022
R5	Amendments to Floor Plans following comments	05.10.2022
R6	Addition of 2nd Storey	23.02.2023
R7	Amendments for Planning resubmission	28.04.2023

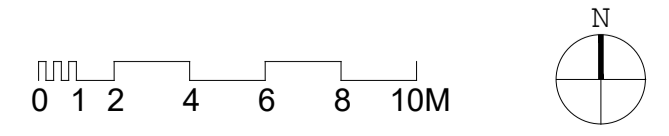
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Project | Ringers Road
Bromley
Client | The Substantia Group
Title | Proposed Ground Floor Site Plan
Status | PLANNING

Scale: A1 | 1:200 | Date | 21.01.21 | Drawn | GG | Chk'd | LC

Project Number | Drawing Number | Revision
18.085 | **100.04** | **R7**
 Blm Number





ETHELBERT ROAD

RINGER'S ROAD

BUS STAND
 BUS STAND
 BUS STAND

Site Boundary
 Demolition

R3 Updates for Planning Submission 27.10.2021
 R4 Amendments to Plans following Comments 05.10.2022
 R5 Addition of 2nd Stair 23.02.2023
 R6 Amendments for Planning resubmission 28.04.2023

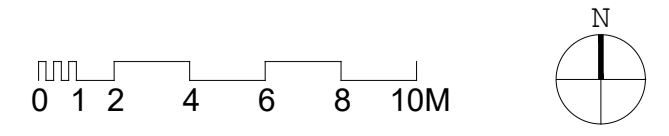
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Project | Ringers Road
 Bromley
 Client | The Substantia Group
 Title | Proposed Typical Floor Site Plan
 Status | PLANNING

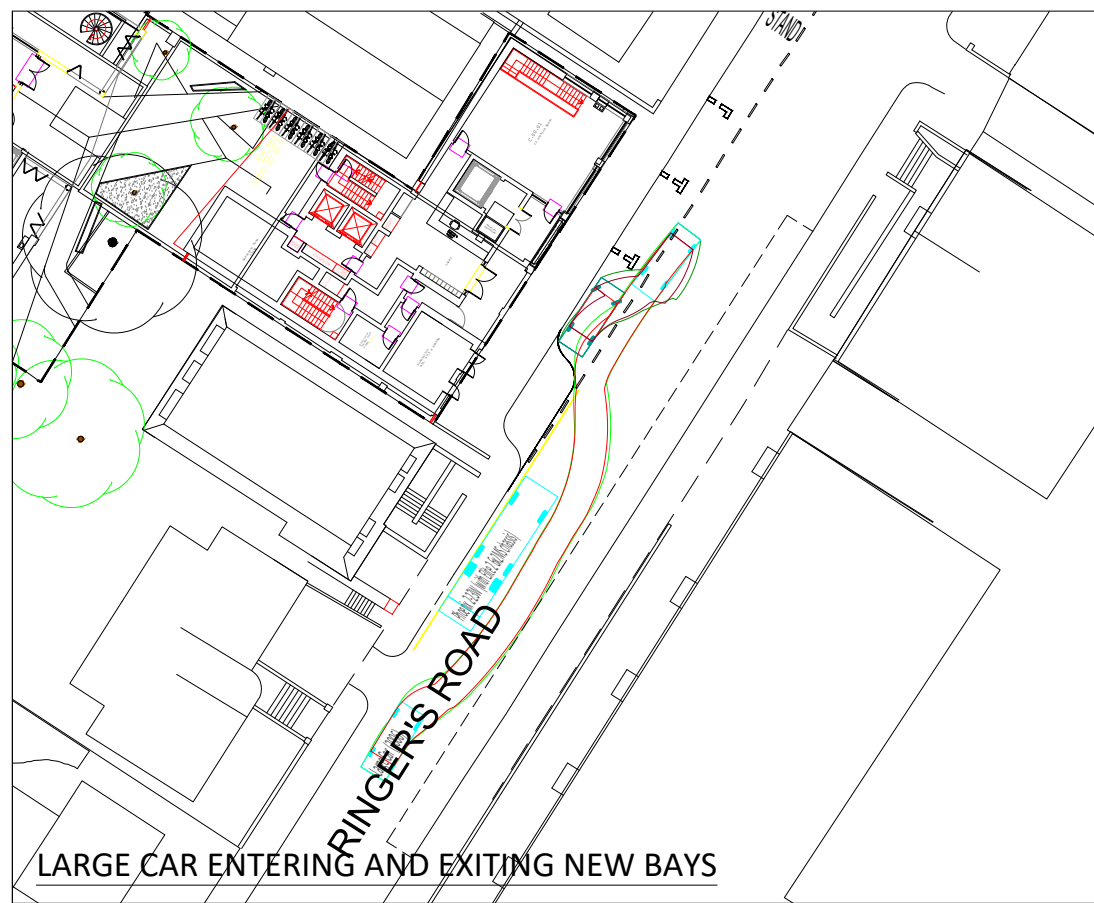
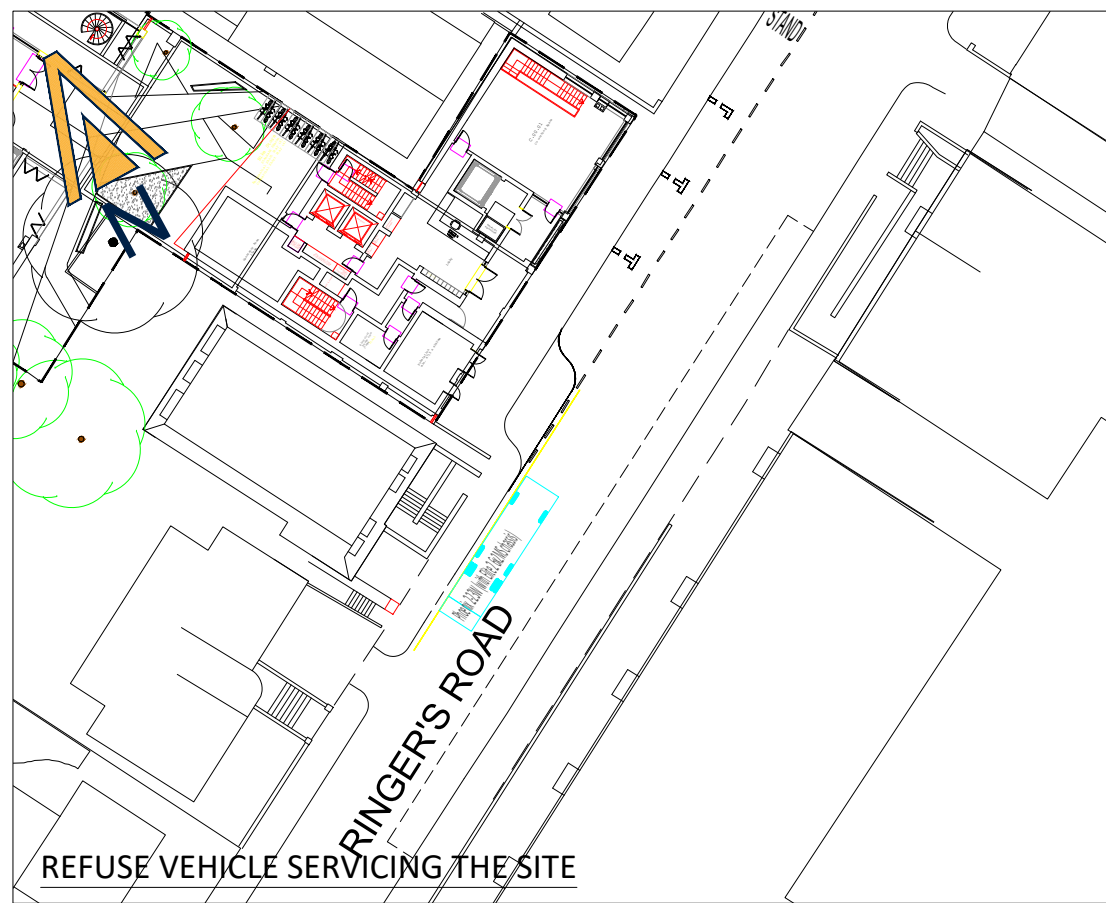
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Project Number 18.085 Drawing Number 100.06 Revision R6
 Blm Number



Appendix B – Swept Path Analysis

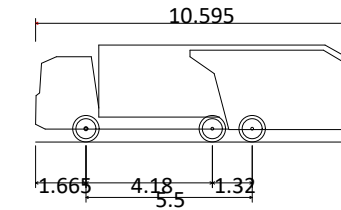
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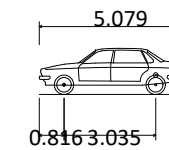
NOTES

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VEHICLE PROFILES



Phoenix 2-23W (with Elite 2 6x2MS chassis)
 Overall Length 10.595m
 Overall Width 2.530m
 Overall Body Height 3.205m
 Min Body Ground Clearance 0.410m
 Track Width 2.500m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 10.150m



Large Car (2006)
 Overall Length 5.079m
 Overall Width 1.872m
 Overall Body Height 1.525m
 Min Body Ground Clearance 0.310m
 Max Track Width 1.831m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 5.900m

A	UPDATED PLANS	OH	DF	05.05.23
-	FIRST ISSUE	OH	DF	05.10.22
Rev	Amendment	Drn	App	Date

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Scale	Job No	
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Drawing No	Rev	
R-20-0049/SP01	A	

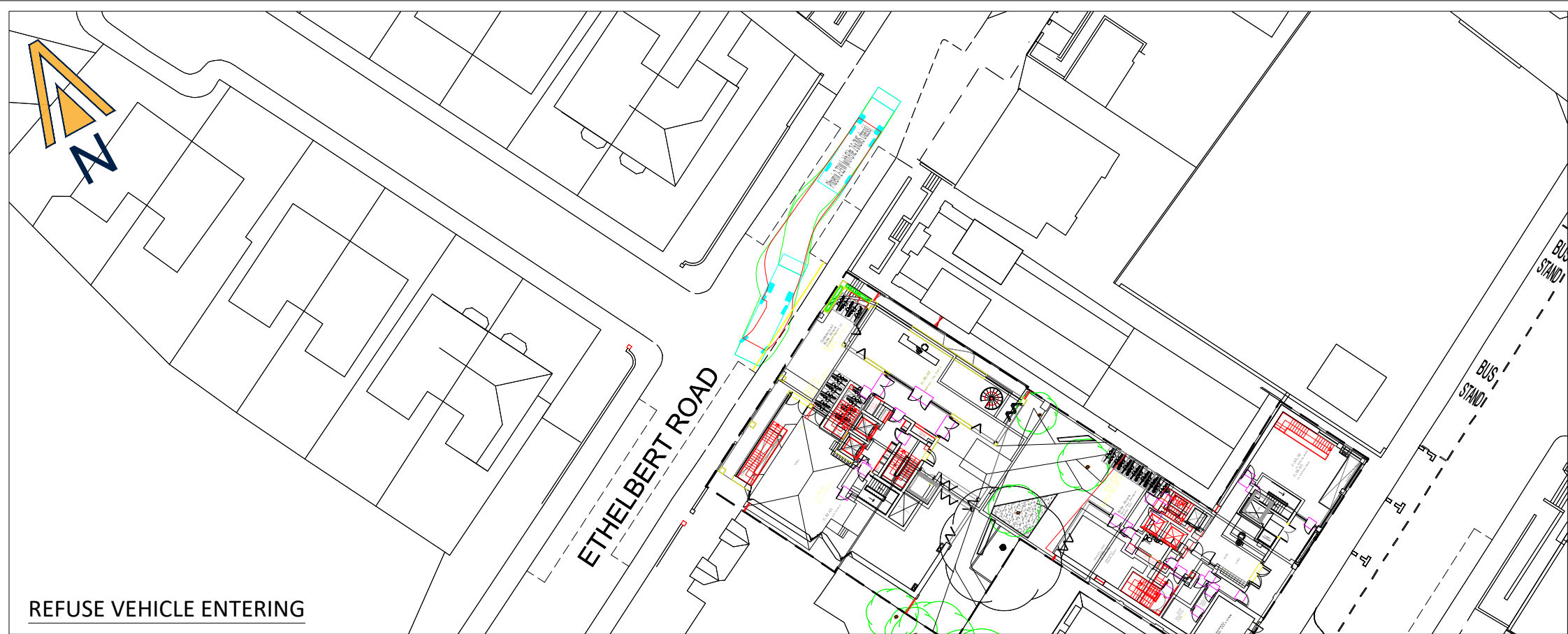


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 Reading, RG1 1AZ
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Project Name
**RINGERS ROAD
 BROMLEY**
 Drawing Title
**SWEPT PATH ANALYSIS OF PROPOSED PARKING
 ARRANGEMENTS ALONG RINGERS ROAD**

Client
**RINGERS ROAD
 PROPERTIES LTD**

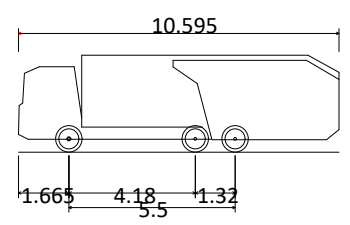
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REFUSE VEHICLE PROFILE



Phoenix 2-23W (with Elite 2 6x2MS chassis)	10.595m
Overall Length	2.530m
Overall Width	3.205m
Overall Body Height	0.410m
Min Body Ground Clearance	2.500m
Track Width	4.00s
Lock to lock time	10.150m
Kerb to Kerb Turning Radius	

A	UPDATED PLANS	OH	DF	05.05.23
-	FIRST ISSUE	OH	DF	05.10.22
Rev	Amendment	Drn	App	Date

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Project Name
**RINGERS ROAD
 BROMLEY**

Drawing Title
**SWEPT PATH ANALYSIS OF PARKING
 ARRANGEMENTS ALONG ETHELBERG ROAD**

Client
**RINGERS ROAD
 PROPERTIES LTD**

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Scale 1:500 @ A3	Job No R-20-0049	
Drawing No R-20-0049/SP02	Rev A	